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H. D. THOMAS, E. TREVAWAS, R. J. WHITTICK, AND THE IMPERIAL INSTITUTE
OF ENTOMOLOGY.

EDITED BY

W. L. SCLATER, M.A., F.Z.S.

Explore solum : sic fit via certior ultra.

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PREFACE.

THE seventy-third Volume of the Zoological Record will be ready for distribution in January. It is the first time since its present Editor has been in charge that it has not been published within the year following that for which it is dated. The delay has been unavoidable, and is much regretted by the Editor.

The Record continues to grow larger each year. The present volume contains 1,764 pages of bibliographical matter, an increase of 336 pages as compared with the previous volume for 1935. The number of new genera also shows a considerable increase this year.

There have been a good many changes in the recording staff this year. Dr. Burton found he could no longer undertake the Pisces, though he was willing to continue to record the Porifera (his own special group), as well as the Protochordata. As regards the Pisces, his place has been taken by Miss Trevawas, now on the staff of the Natural History Museum.

Mr. A. K. Totton has handed over the Coelenterata to Dr. H. D. Thomas and Miss Susan Finnegan (now Mrs. Campbell Smith) the Arachnida to Mr. R. J. Whittick, who has recently joined the staff of the Natural History Museum and is now in charge of that group.

Finally, Miss Muir Wood cannot any longer find time to record the Brachiopoda and has been succeeded by Mr. J. K. S. St. Joseph, of the Sedgwick Museum at Cambridge.

To the list of genera is appended a second supplementary list of new periodicals, most of which are new ventures—chiefly from Russia, China and Japan. The last complete list was published in 1935 and contained the names of upwards of 1,500 journals now in course of publication containing papers of zoological importance.

The thanks of the Editor and of the Zoological Record Committee are again due to several specialists who have kindly undertaken the duty of reading the proofs or have helped in supplying references to obscure papers. These are Mr. A. T. Hopwood (Mammals), Dr. E. Mayr and Mr. H. G. K. Molineux (Birds), Mr. J. R. Norman (Fishes), Mrs. Campbell Smith and Mrs. Hughes (Arachnida), Miss I. Gordon (Crustacea), and Mr. J. R. le B. Tomlin (Mollusca).

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EXPLANATORY.

This Volume is printed in the Divisions enumerated on p. vii.

The pagination of each Division is separate, and is given at the top corner of the pages. The number and name of the Division is given as a heading on each page. The date 1936 corresponding to the bulk of the literature indexed is given at the top of each page.

In the Subject Index of each Division authors are quoted by name only. The full references will be found in the Title Section of the Division.

The Literature indexed is mainly that of 1936 but includes entries for earlier years that have been received too late for inclusion in previous volumes.

CONTENTS.

[The prices in brackets are those of Separate Divisions.]

- I. COMPREHENSIVE ZOOLOGY. By W. L. SCLATER, M.A.
Pp. 1-37. [3s.]
- II. PROTOZOA. By CECIL A. HOARE, D.Sc. (Lond.), and MISS
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INDEX TO NAMES OF NEW GENERA AND SUBGENERA, IN-
CLUDING NEW NAMES FOR GENERA PREVIOUSLY ESTABLISHED,
RECORDED IN THIS VOLUME FOR 1935. SUPPLEMENTARY
LIST OF ABBREVIATIONS WITH TITLES OF PERIODICALS, CON-
TAINING PAPERS DEALING WITH MATTERS OF ZOOLOGICAL
IMPORTANCE. By W. L. SCLATER, M.A. Pp. 1-27.
[2s. 6d.]

I. COMPREHENSIVE ZOOLOGY

ARRANGED BY

W. L. SCLATER, M.A.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to Zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special records complete each subject. A few memoirs included in the special records are repeated in this division as well as the literature on the Genetics of *Drosophila* and some other insects used as a vehicle for these special researches.

CONTENTS.

| | PAGE |
|--------------------------|------|
| I. TITLES | 2 |
| II. SUBJECT-INDEX | 30 |

I.—TITLES.

1.—Abel, O. Henry Fairfield Osborn† pp. 5-10; Kálmán Lambrecht† pp. 11-17 portr. bibliogr. *Palaeont. Z.* Berlin 18 1936.

2.—Adelmann, H. B. The problem of Cyclopia. *Quart. Rev. Biol.* Baltimore 11 1936 pp. 161-182, 284-304 34 figs.

3.—Agar, W. E. Whitehead's philosophy of organism. An introduction for biologists. *Quart. Rev. Biol.* Baltimore 11 1936 pp. 16-34.

4.—Ahlstrom, E. H. The deep-water plankton of Lake Michigan, exclusive of the Crustacea. *Trans. Amer. micr. Soc. Menasha* 55 1936 pp. 286-299 map.

5.—Ahrens, W. Das dynamische Verhalten der Chromatinschleifen im Stadium des Buketts und das Reduktionsproblem. *Verh. Deutsch. zool. Ges. Leipzig* 38 1936 pp. 172-173.

6.—Ahrens, W. Das dynamische Verhalten der Chromatinschleifen im Stadium des Buketts und das Reduktionsproblem. *Zool. Anz. Leipzig* 116 1936 pp. 49-62 4 figs.

7.—Alexander, W. B. [and others]. Survey of the River Tees. II. The estuary chemical and biological. Dpt. Scient. Ind. Res. Water Poll. Res. Tech. Pap. 5 London (Stationery Office) 1935 pp. 1-171 maps 62 figs.

8.—Allen, C. E. The course and significance of sexual differentiation. *Trans. Wisc. Acad. Sci. etc.* 29 1935 pp. 195-202.

9.—Altenburg, E. The production of mutations by the polar cap method of treatment. *J. Biol. Moscou* 5 1935 pp. 27-34. [English, with Russian rés.]

10.—Alverdes, F. Grundzüge der Vererbungslehre. Pp. viii + 143. Leipzig (Hirzel) 1935 8vo. [N.V.]

11.—Amaral, A. do. Nota de filologia zoológica. *Bol. biol. S. Paulo* 2 1935 pp. 103-107.

Amstein, E. G. *vide* Fox.

12.—D'Acona, U. e L. V. II plancton del Lago di Nemi prima e dopo l'abbassamento del suo livello. *Verh. int. Vereinig. Limnol. Beograd* 7 1935 pp. 497-506 3 figs.

d'Ancona, U. *vide* Volterra.

13.—Anderson, E. M. Catalogue of types and figured specimens of fossils in the Geological Survey collections now exhibited in the Royal Scottish Museum, Edinburgh. Pp. 1-77. London (Stationery Office) 1936 8vo.

14.—Anon. Catalogue of Polish scientific literature. Vol. XVII 1923-1926 pp. 1-487. Kraków (Polish Academy) 1934 8vo. [In Polish.]

15.—Apstein, C. Nochmals die Orthographie in zoologischen Veröffentlichungen. *Verh. Deutsch. zool. Ges. Leipzig* 38 1936 pp. 287-290.

16.—Apstein, C. Nochmals die Orthographie in zoologischen Veröffentlichungen. *Zool. Anz. Leipzig* 116 1936 pp. 156-159.

17.—Arlt, T. Die Entwicklung der Kontinente und ihrer Lebewelt. 2te Aufl. Erster Teil. Pp. 1-448 14 maps. Berlin (Borntraeger) 1936 8vo.

18.—Aron, M. et Grassé, P. Précis de biologie animale. Pp. 1016. Paris (Masson) 1936 8vo. [N.V.]

19.—Asher, L. Physiologie der inneren Sekretion. Pp. xiv + 397 2 pls. 94 text-figs. Wien (Deuticke) [1936]. [N.V.]

20.—Ashworth, J. H. Charles Darwin as a student in Edinburgh, 1825-1827. *Proc. roy. Soc. Edinb.* 55 1935 pp. 97-113 3 pls.

Baas, J. *vide* Schertz.

21.—Baehr, W. [and others]. Jan Grochmalicki. *Zool. Polon. Lwów* 1 1936 pp. 95-98 portr. [Polish and French.]

22.—Baldowsky, A. T. On the question of the productivity of the plankton and benthos of the Khanka Lake (Far Eastern Region, U.S.S.R.). *Vestnik Far East Branch Acad. Sci. U.R.S.S.* no. 10 1934 pp. 53-76 map. [Russian, with English rés.]

- 23.—Baldwin, E. An introduction to comparative biochemistry. Pp. xviii + 112 Cambridge (Univ. Press) 1936 8vo.
- 24.—Baldwin, E. Arginase. *Biol. Rev. Cambridge* 11 1936 pp. 247-268.
- 25.—Barbour, T. [and others]. Notes concerning the history and contents of the Museum of Comparative Zoology by members of the staff. Pp. 1-89 photos and plans. Cambridge Mass. (Harvard Univ.) 1936.
- 26.—Barge, J. A. J. Forme et fonction. La nature du problème. *Folia Biotheoret. Leiden (B)* 1 1936 pp. 13-26.
- 27.—Bargmann, W. Friedrich Ziegler†. *Anat. Anz. Jena* 83 1936 pp. 156-158.
- 28.—Barigozzi, C. I rapporti fra assetto cromosomico e sistematica. *Arch. Zool. Torino* 23 Suppl. 1936 pp. 1-52 5 figs.
- 29.—Barnard, J. W. A phylogenetic study of the visceral afferent areas, associated with the facial glossopharyngeal and vagus nerves and their fiber connections. The afferent, facial nucleus. *J. comp. Neurol. Philad.* 65 1936 pp. 505-602 24 figs.
- 30.—Barteneff, A. Ueber die pontische Fauna. *Zool. J. Moscow* 14 1935 pp. 762-784. [Russian, with German rés.]
- 31.—Bauer, K. Verhalten embryonaler Gewebe nach schädigenden Einwirkungen. *Verh. anat. Ges. Jena* 43 1936 pp. 129-136 1 pl. 8 text-figs.
- 32.—Bautzmann, H. Ueber Versuche zur Regulationsfähigkeit der Organisationsgebiete. *Verh. anat. Ges. Jena* 43 1936 pp. 118-125.
- 33.—Becker, Z. E. A comparison between the action of carbonic acid and other acids upon the living cell. *Protoplasma Leipzig* 25 1936 pp. 161-175 2 figs.
- 34.—Becking, L. G. B. and Drion, E. F. On the origin of frequency distributions in biology. *Acta Biotheor. Leiden* 1 1935 pp. 133-150 8 figs.
- 35.—Beebe, W. and Wailes, G. H. Bermuda Oceanographic Expeditions. Individual nets and data, 1932-1935 pp. 69-73 Plankton pp. 75-8. *Zoologica New York* 21 1936.
- 36.—Bělehrádek, J. Temperature and living matter (Protoplasma-Monographien, vol. 8). Pp. x + 277 70 figs. Berlin (Borntraeger) 1935 8vo. [Review *Nature* 136 p. 412. N.V.]
- 37.—Benazzi, M. e Benazzi-Lentati, G. Ulteriori ricerche sul metabolismo degli idrati di carbonio negli invertebrati. *Riv. Biol. Firenze* 21 1936 pp. 161-175.
- 38.—Benl, G. Lehrbuch der Vererbungslehre. Pp. 78. Leipzig (Thieme) 1936 8vo. [N.V.]
- 39.—Bennington, N. L. and Dildine, G. C. Equipment for the study of aquatic animals under controlled conditions of temperature and light. *Ecology Brooklyn* 17 1936 pp. 322-324 2 figs.
- 40.—Berger, A. und Schmid, J. Das Reich der Tiere: Das Tier in seinem Lebensraum. Bd. II: Die Tiere der Wälder. Pp. 557 36 pls. Berlin (Ullstein Verlag) 1936. [N.V.]
- 41.—Bernard, F. et Fage, L. Recherches quantitatives sur le plancton méditerranéen. *Bull. Inst. océanogr. Monaco* 701 1936 pp. 1-20 1 fig.
- Berrill, N. J. *vide* Cohen.
- 42.—Berrill, N. J. and Huskins, C. L. The "resting" nucleus. *Amer. Nat.* 70 1936 pp. 257-261.
- 43.—Berthoumeyroux, M. Recherches sur le pouvoir réducteur des liquides du milieu intérieur de quelques Invertébrés marins. *Bull. Sta. biol. Arcachon* 32 1935 pp. 111-153.
- 44.—Bhattacharya, D. R. and Srivastava, M. D. L. The vacuome hypothesis. Allahabad Univ. Studies 12 1936 pp. 97-103 3 pls.
- 45.—Bialaszewicz, K. et Kupfer, C. De la composition minérale des muscles des animaux marins. *Arch. int. Physiol.* 42 1936 pp. 398-404.
- Bien, M. N. *vide* Young.
- 46.—Bissonette, T. H. Sexual photoperiodicity. *Quart. Rev. Biol. Baltimore* 11 1936 pp. 371-386.
- 47.—Blum, H. F. [and others]. Studies of orientated movements of animals in light fields. *Univ. Calif. Pub. Physiol.* 8 1936 pp. 107-118 11 figs.

48.—Bodian, D. A new method for staining nerve fibers and nerve endings in mounted paraffin sections. *Anat. Rec. Philadelphia* **65** 1936 pp. 89-97 1 fig.

49.—Bohn, G. Leçons de zoologie et biologie générale. 7. Vertébrés supérieurs (oiseaux et mammifères). Pp. 131. Paris (Hermann) 1935 8vo. [N.V.]

50.—Bohn, G. Leçons de zoologie et biologie générale. 4. Les Invertébrés. Pp. 132. Paris (Hermann) 1935 8vo. [N.V.]

51.—Böker, H. Einführung in die vergleichende biologische Anatomie der Wirbeltiere. Bd. I. Pp. 228. Jena (G. Fischer) 1935 8vo. [N.V.]

52.—Böker, H. Artumwandlung durch Umkonstruktion, Umkonstruktion durch aktives reagieren der Organismen. *Acta Biotheor. Leiden* **1** 1935 pp. 17-34.

53.—Böker, H. Form und Funktion im Lichte der vergleichenden biologischen Anatomie. *Folia Biotheoret. Leiden (B)* **1** 1936 pp. 27-41 4 figs.

54.—Boldori, L. Ricerche in caverne italiane (IV. Ser.—1934-1935). *Natura Milano* **27** 1936 pp. 106-114.

55.—Bolk, L. [and others]. Handbuch der vergleichenden Anatomie der Wirbeltiere. Bd. IV. Pp. xii + 1016 696 figs. Berlin etc. (Urban & Schwarzenberg) 1936 8vo.

56.—Borissenko, E. [and others]. Genetische Analyse der Heterosis. *J. Biol. Moscou* **4** 1935 pp. 643-652. [Russian, with German rés.]

57.—Borutzky, E. W. Die vertikale Verteilung des Benthos in den Seeablagerungen und die Bedeutung dieses Faktors bei der Wertung des Futterreichtums des Wasserbeckens. *Arb. limnolog. Sta. Kossino* **20** 1935 pp. 129-149 8 figs. [Russian, with German rés.]

58.—Boulineau, P. Les jardins animés; Etude technique et documentaire des Parcs zoologiques. Pp. 1-555 many photos. Limoges (Desvilles) 1934 8vo.

59.—Bowkiewicz, J. Zur typologie der Seen des Suwalki-Gebietes pp. 99-107. Zur typologie der Polessjanseen pp. 163-169. *Arch. Hydrobiol. Ichthyol. Suwalki* **9** 1935. [Polish, with German rés.]

60.—Brachet, A. *Traité d'embryologie des Vertébrés*. 2me éd. revue et complétée par A. Dalcq et P. Gérard. Pp. 690. Paris (Masson) 1936 8vo. [N.V.]

61.—Brachet, J. La reaction de Feulgen est-elle utilisable pour la dosage de l'acide thymonucleique en biochimie. *Mem. Mus. Hist. Nat. Belg.* (2) **3** 1936 pp. 481-487.

62.—Braestrup, F. W. The distinctness of the Eremian faunal region. *Forh. skand. naturf. Møte* **19** 1936 pp. 482-483.

63.—Brandt, W. Biotypologie. I. Die Formbildung als Gestaltungsphänomen. *Acta Biotheor. Leiden* **2** 1936 pp. 123-140.

64.—Breder, C. M. Tissue culture and explantation in nature: a review of certain experiments and possibilities. *Zoologica New York* **21** 1936 pp. 115-124.

65.—Brehm, V. Ueber die Tiergeographischen Verhältnisse der circumantarktischen Süßwasserfauna. *Biol. Rev. Cambridge* **11** 1936 pp. 477-493 8 maps.

66.—Brewster, W. October farm from the Concord journals and diaries of W. B., with an introduction by D. C. French. Pp. xvi + 285 photos. Cambridge, Mass. (Harvard Univ. Press) 1936 8vo.

67.—Bridges, C. B. The bar "gene" a duplication. *Science, New York* **83** 1936 pp. 210-211 1 fig.

68.—Bridges, C. B., Skoog, E. N. and Li, J. C. Genetical and cytological studies of a deficiency (notopleural) in the second chromosome of *Drosophila melanogaster*. *Genetics Menasha* **21** 1936 pp. 788-795 2 figs.

69.—Brien, P. Régénération et régulation. *C.R. Congr. Sci. Bruxelles* 1935 pt. 2 pp. 1086-1091.

70.—Broch, H. Die Bedeutung der Dröbak-Schwelle für die Bodenfauna der Garnelen-Felder. *Avh. Norske Vid. Akad. Oslo for* **1935** no. 5 1936 pp. 1-32 8 figs. 1 map.

71.—Broch, H. Some zoogeographical problems of the northern Pacific. *Science* **83** 1936 pp. 101-103.

- 72.—**Brodsky, K.** Contribution to the knowledge of invertebrate fauna of the mountain streams of Central Asia. *Acta Univ. Asiae Med. Tashkent* (Zool.) no. 15 1935 pp. 3–112 4 pls. 22 text-figs. [Russian, with English rés.]
- 73.—**Broek, A. J. P. van den.** Das Nierensystem der Vertebraten eine theoretische Betrachtung. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 467–509 16 figs.
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- 77.—**Brunelli, G. e Canicci, G.** Notizie preliminari sulle caratteristiche chimiche e biologiche del Lago di Massacincoli. *Rend. Acc. Lincei* (6) 22 1935 pp. 598–604.
- 78.—**Buchalowa, W.** Zur hydrobiologischen Erforschung des oberen Dons. *Acta Univ. voroneg.* 8 no. 3 1935 pp. 27–37 1 fig. [Russian, with German rés.]
- 79.—**Buchsbaum, R.** Methods of tissue culture in vitro, and outlines of histological methods with special reference to tissue culture by C. G. Loosli. Pp. vi + 81. Chicago (Univ. Chicago Press) 1936 8vo.
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- 83.—**Büren, G. v.** Der Gerzensee. *Mitt. naturf. Ges. Bern* for 1935 1936 pp. 29–94 2 pls. 3 text-figs.
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- 85.—**Buytendijk, F. J. J. und Plessner, H.** Die physiologische Erklärung des Verhaltens. Eine kritik an der Theorie Pawlows. *Acta Biotheor.* Leiden 1 1935 pp. 151–172.
- 86.—**Cabrera, A.** Los envios de Felix de Azara al Real Gabinete de Historia Natural de Madrid. *An. Asoc. esp. progr. Ciencias Madrid* 1 1934 pp. 98–100.
- 87.—**Calestani, V.** Fisiologia degli animali acquatici. *Boll. Soc. venez. Stor. nat.* 1 7–8 1935 pp. 137–155.
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- 89.—**Canella, F.** Quelques recherches sur la vision monoculaire. *C.R. Soc. Biol. Paris* 122 1936 pp. 1221–1224.
- Canicci, G. vide Brunelli.**
- 90.—**Cannon, H. G.** A method of illustration for zoological papers. Pp. x + 36 14 figs. Norwich (Assoc. Bt. Zool.) 1936 8vo.
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- 92.—**Carpenter, G. D. H.** Three unpublished letters of Charles Darwin. *Nature, London* 137 1936 p. 400.
- 93.—**Cattell, M.** The physiological effects of pressure. *Biol. Rev. Cambridge* 11 1936 pp. 441–476.
- 94.—**Caullery, M.** Les conceptions modernes de l'hérédité. Pp. 1–312 49 figs. Paris (Flammarion) 1935 8vo. [See *Nature* 138 p. 633.]
- 95.—**Caullery, M.** La morphogenèse et les progrès récents de la biologie. *Rev. suisse Zool. Genève* 43 1936 pp. 467–488.
- 96.—**Cazalet, M.** Recherches bionomiques sur l'estuaire du Frémur (Limite des Côtes-du-Nord et de l'Ille-et-Vilaine). *Bull. Soc. sci. Bretagne* 12 1935 pp. 205–237 map.
- 97.—**Chang, M.-C.** A formol-thionin method for the fixation and staining of nerve cells and fiber tracts. *Anat. Rec. Philadelphia* 65 1936 pp. 437–441 1 fig.

98.—Chappars, M. S. Catalog of the type specimens of fossils in the University of Cincinnati Museum. Ohio J. Sci. **36** 1936 pp. 1-45.

Claus, P. E. *vide* Guyer.

99.—Cochrane, F. Observations on eye-colour development in *Drosophila pseudo-obscura*. J. Genet. Cambridge **32** 1936 pp. 183-187 1 fig.

100.—Cohen, A. and Berrill, N. J. Cell division and differentiation in the growth of specialized Vertebrate tissues. J. Morph. Philadelphia **60** 1936 pp. 243-259 7 figs.

101.—Collin, R. Domaine de la biologie théorique. Acta Biotheor. Leiden **1** 1935 pp. 35-40.

102.—Cori, C. J. Biologische Tiere: Entwicklung, Bau und Leistung des Tierkörpers. Pp. 280. Berlin u. Wien (Urban & Schwarzenberg) 1935 8vo. [N.V.]

103.—Crabb, E. D. Faulty titles of zoological papers. Univ. Colo. Stud. **23** 1936 pp. 293-304.

104.—Crew, F. A. E. and Lamy, R. The "plexus" chromosome of *Drosophila pseudo-obscura* race A. J. Genet. Cambridge **32** 1936 pp. 5-15 2 pls. 1 text-fig.

105.—Crow, W. B. The periodic classification of animals and plants. Chemical News London **145** 1932 pp. 101-108, 113-119.

106.—Crozier, W. J. Exposés de biométrie et de statistique biologique. 7. Déterminisme et variabilité dans le comportement des organismes. Pp. 57. Paris (Hermann) 1935. [N.V.]

107.—Cuénot, L. L'espèce. Pp. ix + 310 12 figs. Paris (Doin) 1936 8vo. [Notice Nature **138** p. 742.]

Cushing, H. *vide* Fulton.

108.—Dalcq, A. L'organisation de l'œuf chez les chordés: étude d'embryologie causale. Pp. viii + 322. Paris (Gauthier-Villars) 1935 4to. [N.V.]

109.—Dalcq, A. La régulation aux premiers stades de l'ontogenèse et son interprétation. C.R. Congr. Sci. Bruxelles 1935 pt. 2 pp. 1054-1061.

110.—Dalloni, M. Mammifères et Oiseaux en: Mission au Tibesti. Mém. Acad. Sci. Paris **62** 1936 pp. 41-43, 46.

111.—Dantschakoff, W. Geschlechtlicher Determinismus und Umwelt bei der Geschlechtsrealisation im höheren Wirbeltier. Biol. Zbl. Leipzig **56** 1936 pp. 605-629.

112.—Dantchakoff, V. La crise méiotique dans un ovaire induit, chez le male, est elle l'effet d'une déficience hormonique ou génétique? Pp. 166-168. Sur la capacité de la folliculine à transformer, chez la poule, le rudiment gonadique droit (testicule potentiel) en ovaire. Pp. 168-169. C.R. Soc. Biol. Paris **122**.

113.—Dantchakoff, V. Sur les facteurs de l'histogenèse chez les hermaphrodites. C.R. Soc. biol. Paris **123** 1936 pp. 856-858.

114.—Dantchakoff, V. [and others]. Exposés de biologie: la cellule germinale dans l'ontogenèse et l'évolution. 6. Histoire d'un coq, sa cinétique sexuelle. Pp. 42 2 pls. Paris (Hermann) 1936 8vo. [N.V.]

115.—Darlington, C. D. Recent advances in cytology, 2nd ed. Pp. xvi + 671 16 pls. 160 text-figs. London (Churchill) 1936 8vo.

116.—Daubenmire, R. F. The use of the terms coenocyte and syncytium in biology. Science **84** 1936 p. 533.

117.—Davis, D. D. and Gore, U. R. Clearing and staining skeletons of small Vertebrates. Field Mus. Nat. Hist. Chicago (Tech. Ser.) no. 4 1936 pp. 1-15 3 figs.

118.—Decksbach, N. K. Benthos, Bestände und Bodenablagerungen der Petrowski-Seen im Torfmassive Orscha, Gebiet Kalinin. Arch. Hydrobiol. Stuttgart **30** 1936 pp. 115-121 maps.

Degtiarewa, M. *vide* Popowa.

Delbrück, M. *vide* Thomas.

119.—Demel, K. Études sur la faune benthique et sa répartition dans les eaux polonaises de la Baltique. Arch. Hydrobiol. Ichthyol.-Suwalki **9** 1935 pp. 239-311 21 pls. 5 text-figs. [Polish with French rés.]

120.—Dementiev, G. P. Sur les predecesseurs de Bergmann. Bull. Soc. Nat. Moscou Sect. Biol. **44** 1935 pp. 338-340. [Russian, with French rés.]

121.—Demerec, M. and Hoover, M. E. Deficiencies in the forked region of the x-chromosome of *Drosophila melanogaster*. Amer. Nat. New York 70 1936 p. 47.

Demidova, Z. A. *vide* Heptner.

Derickson, S. H. *vide* Hostetter.

122.—Detwiler, S. R. Neuroembryology: an experimental study. Pp. x + 218. New York (Macmillan Coy.) 1936. [N.V.]

Detwiler, S. R. *vide* Miller.

Devillers, C. *vide* Parat.

123.—Diebschlag, E. Das Tier als Individualität in der Grosshirnforschung. SitzBer. Ges. Naturw. Marburg 71 2 1936 pp. 29–45.

Dildine, G. C. *vide* Bennington.

124.—Diver, C. An ecological survey of the plants and animals of South Haven Peninsula, Studland Heath, Dorset: the study of a changing environment. Proc. Bournemouth nat. Sci. Soc. 28 1936 pp. 57–61.

125.—Dobbrick, W. Tiere als Wetterpropheten. Ber. westpreuss. bot.-zool. Ver. 58 1936 pp. 9–16.

126.—Dobzhansky, T. Position effects on genes. Biol. Rev. Cambridge 11 1936 pp. 364–384.

127.—Dobzhansky, T. The persistence of the chromosome pattern in successive cell divisions in *Drosophila pseudo-obscura*. J. exp. Zool. Philadelphia 74 1936 pp. 119–135 18 figs.

128.—Dolgo-Saburoff, B. Ueber die Erforschung der Knochenstruktur an den Ursprungs- und Insertionsstellen der Muskeln. Gegenbaurs morph. Jahrb. Leipzig 78 1936 pp. 517–522.

129.—Donald, H. P. New mutants and linkage data for *Drosophila pseudo-obscura*. J. Genet. Cambridge 32 1936 pp. 229–242 1 pl.

130.—Donald, H. P. On the genetical constitution of *Drosophila pseudo-obscura*, race A. J. Genet. Cambridge 33 1936 pp. 103–122 2 figs.

131.—Donald, H. P. On the suppression of tangled in *Drosophila pseudo-obscura*. Proc. roy. Soc. Edinburgh 56 1936 pp. 109–127 2 pls. 1 graph.

132.—Donnan, F. G. Integral analysis and the phenomena of life. Acta Biotheor. Leiden 2 1936 pp. 1–13.

133.—Dorff, P. Biologie des Eisen- und Mangankreislaufs. Pp. 106. Berlin (Verlagsges. Ackerbau) 1935. [N.V.]

Dotti, L. V. *vide* Riddle.

134.—Driesch, H. Zur Kritik des "Holismus." Acta Biotheor. Leiden 1 1935 pp. 185–202.

Drion, E. F. *vide* Becking.

135.—Dubinin, N. P. Experimental alteration of the number of chromosome pairs in *Drosophila melanogaster*. [In Russian with English summary.] Biol. J. Moscow 5 1936 pp. 833–850 12 figs.

136.—Dubinin, N. P. A new type of position effect. [In Russian, with English summary.] Biol. J. Moscow 5 1936 pp. 851–874 22 figs.

137.—Dubinin, N. P. [Genetic-automatic processes and their significance for the mechanism of organic evolution.] J. Biol. Exp. Moscou 7 5–6 1931 pp. 463–479 3 figs. [Russian only.]

138.—Dubinin, N. P. [Investigation of step allelomorphism. IX. Allelomorph Achaete⁶. Scute⁴⁵.] J. Biol. Exp. Moscou 7 1931 pp. 525–551. [Russian only.]

139.—Dubinin, N. P. [Investigation of step allelomorphism. X. Regularities of the central structure of step allelomorphs Scute and Achaete.] J. Biol. Exp. Moscou 7 1931 pp. 601–615. [Russian only.]

140.—Dubinin, N. P. A new type of position effect. Biol. Zh. Moscow 5 1936 pp. 851–874 22 figs. [Russian, with Engl. rés.]

141.—Dubinin, N. P. and Frisen, G. G. [Impossibility of explaining the case of step allelomorphism Scute from the point of view of physiological theory of heredity of R. Goldschmidt.] J. Biol. Exp. Moscou 7 1931 pp. 625–635 4 figs. [Russian only.]

142.—Dubinin, N. P. and Khvostova, V. V. The mechanism of the occurrence of complex chromosome rearrangements. J. Biol. Moscou 4 1936 pp. 935–975 34 figs. [Russian, with English rés.]

143.—Dubinin, N. P. [and others]. A cytogenetic study of position effect. *J. Biol. Moscou* 4 1935 pp. 707–720 4 figs. [Russian, with English rés.]

144.—Dubinin, N. P. and Gol'dat, S. Yu. A new case of bar mutation. [In Russian, with English summary.] *Biol. J. Moscow* 5 1936 pp. 881–884 1 fig.

145.—Dubinin, N. P. and Shaskolskii, A. V. The role of gene material of sexual chromosomes in the genetic structure of population. [In Russian.] *Proc. zool.-biol. Inst. scient. Res., Kharkov* 1 1936 pp. 162–168 1 fig.

146.—Du Bois, A. M. L'évolution de la génétique. *Bull. Soc. neuchâtel. Sci. nat.* 59 1934 pp. 9–18.

147.—Dubovskii, N. V. Analysis of a new dominant autosomal gene lyre in *Drosophila melanogaster* Meig. [In Russian, with English summary.] *Proc. zool.-biol. Inst. scient. Res. Kharkov* 1 1936 pp. 88–107.

148.—Dubuisson, M. Exposés de biologie générale en rapport avec la cytologie. 4. Les ionogrammes de la contraction musculaire (technique d'enregistrement et résultats). Pp. 35 4 pls. Paris (Hermann) 1935 8vo. [N.V.]

149.—Duggar, B. M. [Edited by]. Biological effects of Radiation. 2 vols. pp. x + 1343. London (McGraw-Hill) 1936 8vo. [See *Nature* 138 p. 620.]

150.—Duncker, H. Die stofflichen Grundlagen der Vererbung. Eine Würdigung des Lebenswerks Thomas Hunt Morgans, das Nobelpreisträgers. für 1933. *Bremer Beitr. Bremen.* 2 1934 pp. 80–109 portr. 5 figs.

151.—Duran-Reynals, F. The invasion of the body by animal poisons. *Science* 83 1936 pp. 286–287.

152.—Dürken, B. Entwicklungsbiologie und Ganzheit: ein Beitrag zur Neugestaltung des Weltbildes. Pp. 207. Leipzig & Berlin (Teubner) 1936. [N.V.]

153.—East, E. M. Genetic aspects of certain problems of evolution. *Amer. Nat.* 70 1936 pp. 143–158.

154.—Eggleton, F. E. The deep-water bottom fauna of Lake Michigan. *Pap. Mich. Acad. Sci.* 21 1936 pp. 599–612 3 photos 2 maps.

155.—Ehrenberg, K. Streifzüge durch einige paläontologische Arbeits-

gebiete als Beitrag zu dem Thema: Photographie und Forschung. *Photogr. u. Forsch. Dresden* 1936 pp. 202–215 17 figs.

156.—Emelianow, S. W. Die Morphologie der Tetrapodenrippen. *Zool. Jahrb. Jena Anat.* 62 1936 pp. 173–273 49 figs.

English, J. E. *vide* Schmeichel.

157.—Ephrussi, B. Exposés de biologie (embryologie et histogenèse). 4. Phénomènes d'intégration dans les cultures des tissus. Pp. 24 Paris (Hermann) 1935 8vo. [N.V.]

158.—Ephrussi, B. and Beadle, G. W. A technique of transplantation for *Drosophila*. *Amer. nat. New York* 70 1936 pp. 218–225 1 fig.

159.—Eriksson-Quensel, I. B. and Svedberg, T. The molecular weights and PH stability regions of the hemocyanins. *Biol. Bull. Woods Hole* 71 1936 pp. 498–546 45 figs.

160.—Ezhikov, J. Individuelle Variabilitäts und Optimum. *Biol. Generalis Wien* 12 1936 pp. 89–103.

161.—Fage, L. Influence sur la faune pélagique de l'entrée des eaux atlantiques dans la Méditerranée et dans la Manche. *C.R. Soc. Biogéographique Paris* 13 no. 108 1936 pp. 23–26.

Fage, L. *vide* Bernard.

162.—Falkenström, G. Systematik und Genetik. *Biol. generalis Wien* 11 1935 pp. 159–191.

163.—Feller, A. und Sternberg, H. Ueber die Entwicklungsmechanik der Wirbelsäule auf Grund teratologischer und experimenteller Untersuchungen. *Rev. suisse Zool. Genève* 43 1936 pp. 701–703.

164.—Findenegg, I. Beiträge zur Kenntnis des Ossiacher Sees. *Carinthia II* 123–124 1934 pp. 61–78 6 text-figs. 1 photo.

165.—Findenegg, I. und Turnowsky, F. Limnologische Untersuchungen im Gebiete der Turracher Höhe. *Carinthia II* 125 1935 pp. 33–57.

166.—Fischer, F. G. [and others]. Zur Kenntnis der Induktionsmittel in der Embryonalentwicklung. *Nachr. Ges. Wiss. Göttingen* (6) no. 1 *Biol.* 1933 pp. 394–400.

167.—Fischer-Piette, E. Le laboratoire maritime du Muséum National d'Histoire naturelle à Dinard. Bull. Lab. Maritime Dinard 15 1936 pp. 1-7 plans photos.

168.—Fisher, R. A. [Edited by]. Biological measurements. Being a revised edition of the recommendations of the British Association Committee on biological measurements first published in their report for 1927. Pp. 1-20. London (Brit. Assoc.) 1935 8vo.

169.—Florian, J. Homologisierung des Blastoporus der Archi-, Disco- und Epigastrula. Verh. anat. Ges. Jena 43 1936 pp. 104-117 16 figs.

170.—Ford, E. B. Natural Selection. Nature London 138 1936 pp. 1053-1054.

171.—Forrest, J. E. [and others]. The Natural History of Barra, Outer Hebrides. The results of a scientific expedition organized by the Biological Society of the University of Edinburgh 1st to 14th July, 1935. Proc. phys. Soc. Edinb. 22 1936 pp. 241-296 map.

172.—Fortuyn, A. B. D. Natürliche Zuchtwahl, aber wie? Sci. Rep. Nat. Univ. Peking 1 no. 1 1936 pp. 1-7.

173.—Fox, D. L. and Amstein, E. G. Concerning a name for bottom mud food [Hydrophow]. See also A. de Sales and A. Willey p. 439. Science 84 1936 p. 437.

174.—Fox, H. M. Metabolism of cold-blooded animals in different latitudes. Nature London 137 1936 pp. 903-904.

175.—Franz, V. Der biologische Fortschritt. Die Theorie der organismengeschichtlichen Vervollkommnung. Pp. vii + 82 50 figs. Jena (Fischer) 1935 8vo. [N.V.]

French, D. C. *vide* Brewster.

176.—Frenzel, G. Untersuchungen über die Tierwelt des Wiesenbodens. Jena (Fischer) 1936. [N.V.]

177.—Friesen, H. Die Kosmischen Strahlen und der Mutationsprozess. C.R. Acad. Sci. Moscow 1936 vol. 1 pp. 183-186. [German.]

Frisen, G. G. *vide* Dubinin.

178.—Fritsch, R. H. Vergleichend-physiologische Beobachtungen der Blutgerinnung bei Kaltblütern. Zool.

Jahrb. Jena (Allg. Zool.) 57 1936 pp. 129-156.

Froman, D. K. *vide* Holcomb.

179.—Fulton, J. F. and Cushing, H. A bibliographical study of Galvani and the Aldini writings on animal electricity. Ann. Sci. London 1 1936 pp. 239-267 9 pls.

180.—Gaddum, J. H. Gefässerweiternde Stoffe der Gewebe. Pp. xii + 200. Leipzig (Thieme) 1936. [N.V. see Nature 138 p. 267.]

181.—Gates, R. R. Mutations and natural selection. Amer. Nat. 70 1936 pp. 505-516.

182.—Gates, R. R. Recent researches in blood group investigations. Genetica 's-Gravenhage 18 1936 pp. 47-65.

183.—Gause, G. A. Stereoisomeric nature of oxidation and fermentation. Nature London 138 1936 pp. 245-246.

184.—Gause, G. F. Raumaufbau des Protoplasmas. Ergebn. Biol. Berlin 13 1936 pp. 54-92 2 figs.

185.—Gause, G. F. The principles of bio-coenology. Quart. Rev. Biol. Baltimore 11 1936 pp. 320-336 10 figs.

186.—Gause, G. F. and others. Further studies of interaction between predators and prey. J. Animal Ecol. 5 1936 pp. 1-18 6 figs.

187.—Gavrilov, K. Contributions à l'étude de l'autofécondation chez les Métazoaires hermaphrodites. Bull. Assoc. Russe Rec. sci. à Prague 2 1935 pp. 163-216. [In French.]

Gavrilova, A. A. *vide* Khvostova.

188.—Gemelli, A. Lo studio del comportamento in psicologia animale. Scientia Bologna 60 1936 pp. 271-285, 339-352. [Fr. transl. Suppl. p. 108-120.]

189.—Geptner, V. G. General Zoogeography. Pp. 548. Moscow and Leningrad 1936. [In Russian.] [N.V.]

190.—Gérard, P. Comparative histophysiology of the Vertebrate nephron. J. Anat. London 70 1936 pp. 354-379 8 figs.

191.—Gerber, E. Verzeichnis der palaeontologischen Originalien und abgebildeten oder beschriebenen Arten im Naturhistorischen Museum Bern. Mitt. naturf. Ges. Bern für 1935 1936 pp. 1-23.

192.—Giacomo, C. Primo elenco di animali marini in vendita presso l'Istituto Centrale di Biologia marina in Messina. Mem. Com. talassogr. ital. no. 222 1935 pp 1-21.

193.—Glembotzkiĭ, Ya L. Comparative rate of direct and reverse mutations in the loci of yellow, achaete-scute, white and forked in *Drosophila melanogaster*. Biol. J. Moscow 5 1936 pp. 813-832. [In Russian, with English summary.]

194.—Goetsch, W. Expediciones informativas por el pais para el estudio de la fauna chilena. An. Univ. Chile (2) 8 1930 pp. 1437-1481.

195.—Goetsch, W. Studien über die regionale Verteilung der chilenischen Tierwelt. Verh. Deutsch Wiss. Ver. Santiago de C. 1 1931 pp. 35-59.

196.—Goldat, S. J. Direct and reverse mutations in the loci of yellow achaeete and seute. Biol. Zh. Moscow 5 1936 pp. 803-812 3 figs. [Russian, with English rés.]

Gol'dat, S. Yu *vide* Dubinin.

Gorbunowa, G. P. *vide* Tokin.

Gore, V. R. *vide* Davis.

197.—Goldsmith, J. B. An apparatus suitable for injecting organs and embryos. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 257-259 1 pl. 1 text-fig.

198.—Gordon, C. The frequency of heterozygosis in free living populations of *Drosophila melanogaster* and *Drosophila subobscura*. J. Genetics Cambridge 33 1936 pp. 25-60.

199.—Gostkowski, S. Die Bodenfauna und das Trockenlegen der Teiche. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 423-431 3 figs.

200.—Grandón, A. F. Darwin en Chile. A cien años de un viaje famoso. An. Univ. Chile 91 pt. 4 1933 pp. 82-114 4 portrs.

201.—Gräper, L. Erkennung von Stellen besonderer Entwicklungsenergie durch Vitalfarbung (Induktion?). Verh. anat. Ges. Jena 43 1936 pp. 125-129.

202.—Grandidier, G. Bibliographie de Madagascar 1904-1933. Pp. viii + 759-1350. Paris (Soc. d'éditions) 1935 8vo. [Zoology pp. 1334-1342.]

Grassé, P. *vide* Aron.

203.—Gregory, W. K. On the meaning and limits of irreversibility of evolution. Amer. Nat. 70 1936 pp. 517-528.

204.—Gregory, W. K. The transformation of organic designs: a review of the origin and deployment of the earlier Vertebrates. Biol. Rev. Cambridge 11 1936 pp. 311-344 10 figs.

205.—Greil, A. Das Wesen der "Organisator"-Wirkung, ein Beitrag zur Determinationsanalyse. Anat. Anz. Jena 82 1936 pp. 292-300.

206.—Gressitt, J. L. Notes on collecting in Hainan Island with data on localities. Lingnan Sci. Journ. Canton 15 1936 pp. 465-470.

207.—Gripenburg-Schee, W. Kluetherhöhle, Bismarck- und Rentropshöhle bei Milspe und ihre Tierwelt. Abh. Westfäl. Provinzial-Mus. Munster i W. 6 1935 pp. 1-46 4 figs. map.

208.—Griffin, F. J. [and others]. A catalogue of papers concerning the dates of publication of Natural History books. J. Soc. Bibliogr. Nat. Hist. London 1 1936 pp. 1-30.

209.—Grimalski, V. Die Seen der im unteren Donaugebiet gelegenen St. Georg Insel. Notat. biol. București 3 1935 pp. 17-77 17 figs. map. [German only.]

210.—Grindley, G. C. The intelligence of animals. London (Methuen) 1936 8vo. [N.V.]

211.—Grossfield, H. Scarica del protoplasma per sottrazione degli elettroliti dal mezzo ambiente in cellule di tessuti coltivate "in vitro." Rend. Acc. Lincei (6) 23 1936 pp. 948-950.

212.—Grüneberg, H. A case of complete reversion of a chromosomal rearrangement in *Drosophila melanogaster*. Nature London 138 1936 p. 508.

213.—Gruvel, A. Faune générale du canal de Suez en: Contribution à l'étude . . . du Canal de Suez. Mem. Inst. Egypt 29 1936 pp. 138-189 41 figs.

214.—Gunawardena, D. C. Contributions to a biography of John Ray (1627-1705). Proc. Linn. Soc. London 1935-36 1936 pp. 71-73.

215.—**Gunther, E. R.** A report on oceanographical investigations in the Peru coastal currents. "Discovery Repts." Cambridge **13** 1936 pp. 107–276 3 pls. 71 figs.

216.—**Günther, H.** Die Variabilität der Organismen und ihre Normgrenzen. Zugleich ein kurzer Leitfaden der Variationsstatistik. Pp. 132. Leipzig (Thieme) **1935** 8vo. [N.V.]

217.—**Gurwitsch, A. und L.** Der Feldbegriff in seiner Anwendung auf das Problem der Zellteilung. Acta biotheor. Leiden **2** 1936 pp. 77–92.

218.—**Guye, C. E.** Les frontières de la physique et de la biologie. Arch. Sci. phys. nat. Genève (5) **18** 1936 pp. 5–20 154–171.

219.—**Guyer, M. F. and Claus, P. E.** Recovery changes in transplanted anterior pituitary cells stratified in the ultra-centrifuge. Biol. Bull. Woods Hole **71** 1936 pp. 462–468 1 pl.

220.—**Gyul'bekyan, Kh. G.** Variation in the frequency of mutations produced by X-raying of the spermatozoons in the male and in the seminal receptacle of the females. Biol. J. Moscow **5** 1936 pp. 35–38. [Russian, with English rés.]

221.—**Gyul'bekyan, Kh. G.** Inducing lethal mutations by X-raying the head of *Drosophila melanogaster*. Biol. J. Moscow **5** 1936 pp. 39–46. [Russian, with English rés.]

222.—**Gyul'bekyan, Kh. G.** The dependence of the frequency of mutations in *Drosophila melanogaster* on the developmental stage and the method of irradiation. Biol. J. Moscow **5** 1936 pp. 47–56. [Russian, with English summary.]

223.—**Haberman, H.** Data concerning the fauna of the bottom and the shores of Pühajärv Lake. Ann. Soc. Rebus Nat. Tartu **42** 1935 pp. 39–62 map 3 photos. [Estonian, with English rés.]

224.—**Hadži, J.** Kurze zoogeographische Uebersicht Jugoslaviens. Verh. int. Vereinig. Limnol. Beograd **7** 1935 pp. 36–45 2 maps.

225.—**Haldane, J. B. S.** Natural selection. Nature London **138** 1936 p. 1053.

226.—**Haldane, J. S.** The philosophy of a biologist. Pp. xii + 155 Oxford (Clarendon Press) 1935 8vo.

227.—**Haldane, J. S.** The physiology of Descartes and its modern developments. Acta biotheor. Leiden **1** 1935 pp. 5–16.

228.—**Hall, F. G.** [and others]. Comparative physiology at high altitudes. J. cell. comp. Physiol. **8** 1936 pp. 301–313 2 figs.

229.—**Hall, R.** Faunal corridors. Vict. Nat. Melbourne **53** 1936 pp. 42–46 map.

230.—**Hanna, G. D.** Permanent preservation of small zoological specimens. Science **84** 1936 pp. 463–464 1 fig.

231.—**Hardy, A. C.** Observations on the uneven distribution of the oceanic plankton. Discovery Rpts. Cambridge **11** 1936 pp. 511–538 18 figs.

232.—**Hardy, A. C.** The arctic plankton collected by the Nautilus expedition, 1931. Part i General account. J. Linn. Soc. London **39** 1936 pp. 391–403 map.

233.—**Hardy, A. C.** Plankton ecology and the hypothesis of animal exclusion. Proc. Linn. Soc. London **1935–36** 1936 pp. 64–70.

234.—**Hardy, E.** Effect of Bird-life on pond life. Naturalist London **1936** pp. 6–7.

235.—**Harnley, M. H. and M. L.** The effects of the gene on growth and differentiation as shown by the temperature responses of pennant and its heterozygote in *D. melanogaster*. J. exp. Zool. Philadelphia **74** 1936 pp. 41–59 4 figs.

236.—**Harris, H. A.** Atrophy, burial, suppression or total loss in evolution. Nature London **138** 1936 pp. 928–929 5 photos.

237.—**Harrow, B. and Sherwin, C. P.** [edited by]. A textbook of Biochemistry Pp. 1–797 Philadelphia (Saunders) 1935 8vo. [Notice Nature 137 p. 513.]

238.—**Hartmann, M.** Wesen und Wege der biologischen Erkenntnis. Naturwissenschaften Berlin **24** 1936 pp. 705–713.

239.—Haupt, O. Andere Wirbeltiere des Neozoikums. Pp. 1–103 Berlin Borntraeger) 1935 also Fossilkatalog Berlin Lief 4 1935.

240.—Hawkins, H. L. Palaeontology and humanity. Nature London **138** 1936 pp. 534–537 also Pan-Amer. Geol. **66** 1936 pp. 161–178, 264–278.

241.—Hecker, R. Zur Organisation von paläobiologischen, paläontologischen und paläoökologischen Forschungen loin der U.S.S.R. in: Problems of Ecol. & Biocenol. Moscow 1934 pp. 43–55 3 figs. [Russian, with German rés.]

242.—Heidenhain, M. Herkunft und Bedeutung der Worte Epithelium und Endothelium. Z. mikr. anat. Forsch. Leipzig **39** 1936 pp. 545–554 3 figs.

243.—Heim de Balsac, H. Les éléments tropicaux (mammifères et oiseaux) de la faune de Syrie et de Palestine. C.R. Soc. Biogéographie Paris **13** no. 109–110 1936 pp. 34–36.

244.—Helms, O. Linné som Naturforsker og læge. Naturens Verden 1935 pp. 1–39. [N.V.]

245.—Helwig, E. R. The frequency of reciprocal translocations in irradiated germ cells of *Crotchetx verruculatus* (Orthoptera). Anat. Rec. Philadelphia **67** 1936 suppl. 1 p. 63.

246.—Hentschel, E. Ueber das Winterplankton im Süden von Island. Rapp. Cons. Explor. Mer Copenh. **99** no. 1 1936 pp. 1–33 15 figs.

247.—Heptner, M. A. and Demidova, Z. A. Relation between the dosage of X-rays and mutations of single genes in *Drosophila melanogaster*. Biol. J. Moscow **5** 1936 pp. 541–550 2 graphs. [Russian, with English rés.]

248.—Herr, O. Einführung in die Zwillingsforschung. Abh. naturf. Ges. Görlitz **32** Hft. 3 1936 pp. 111–291 12 pls. 23 text-figs.

249.—Hesse, R. Abstammungslehre und Darwinismus. 7th ed. pp. 4 + 108 64 figs. Leipzig (Teubner) 1936 8vo.

250.—Hirschler, J. Ueber die Beziehung des fuso problems zur Venerungslehre. Zool. Polon. Lwow **1** 1935 pp. 31–51 3 pls.

251.—Hoepli, R. J. C. Methods of illustrating scientific papers. Chin. med. J. Suppl. i 1936 pp. 474–518 14 pls.

252.—Hoerr, N. L. Cytological studies by the Altmann-Gersh freezing-drying method. Anat. Rec. Philad. **65** 1936 pp. 293–317 2 pls. 2 text-figs., also pp. 417–435 2 pls.

253.—Hoerr, N. L. Histological studies on lipins. Anat. Rec. Philad. **66** 1936 pp. 149–171 8 figs., pp. 317–342 6 figs.

254.—Holcomb, R. and Froman, D. K. A graphical method for the rapid estimation of the standard deviation. Canad. J. Res. Ottawa **14** Sec. D 1936 pp. 15–20.

255.—Honigmann, H. L. Die zoologischen Kenntnisse des Rabalais. Z. Naturw. Halle **89** 1929 pp. 49–60.

Hoover, M. E. *vide* Demerec.

256.—Hopkins, Sir F. G. The influence of chemical thought on biology. Science **84** 1936 pp. 255–260.

257.—Hora, S. L. Nature of substratum as an important factor in the ecology of torrential fauna. Proc. nat. Inst. Sci. India **2** 1936 pp. 45–47 map 2 photos.

258.—Hostetter, D. R. and Derickson, S. H. Preliminary biological survey of Lake Conewago, Mount Gretna, Pennsylvania. Proc. Penn. Acad. Sci. **7** 1933 pp. 8–24 photo 2 maps.

Howell, A. B. *vide* Straus.

259.—Humphries, C. F. An investigation of the profundal and sublittoral fauna of Windermere. J. Animal Ecol. **5** 1936 pp. 29–52.

260.—Hundt, R. Eine Monographie der Lebensspuren des Unteren Mitteldevons Thüringens. Pp. 1–69 128 figs. Leipzig (Weg) 1931. [N.V.]

261.—Hunter, R. H. Mechanism and vitalism. Proc. Belfast Nat. Field-Club 1934–35 1936 pp. 1–24.

Huskins, C. L. *vide* Berrill.

262.—Husson, R. Sur la faune des cavités souterraines artificielles. C.R. Acad. Sci. Paris **203** 1936 pp. 823–825.

263.—Huxley, J. S. Natural selection and evolutionary progress. Nature London **138** 1936 pp. 571–573, 603–605.

Huxley, J. S. *vide* Wolsky.

264.—Huxley, J. S. and Teissier, G. Zur Terminologie des relativen Grössenwachstums. *Biol. Zbl. Leipzig* 56 1936 pp. 381–383.

265.—Huxley, J. S. et Teissier, G. Terminologie et notation dans la description de la croissance relative. *C.R. Soc. Biol. Paris* 121 1936 pp. 934–937.

266.—Huxley, J. S. and Teissier, G. Terminology of relative growth. *Nature London* 137 1936 pp. 780–781.

267.—Iežikov, J. Einige Betrachtungen über die Typen der Entwicklung von Metazoen aus dem Ei. *C.R. Acad. Sci. Moscou* 1936 vol. 2 pp. 405–407. [German.]

268.—Ihering, R. von. Dicionario dos animais do Brasil. *Bol. Agric. S. Paulo* 36 1935 pp. 199–318 many figs.

269.—Inukai, T. Saburo Hatta (1865–1935). *J. Fac. Sci. Hokkaido Univ. Zool.* 5 1936 pp. 1–4 portr.

Iohansen, B. G. *vide* Popowa.

270.—Irving, L. and Manery, J. F. The significance of the chlorides in tissues and animals. *Biol. Rev. Cambridge* 11 1936 pp. 287–310.

271.—Jacoby, F. The growth and morphology of fibroblasts in vitro in relation to certain properties of the plasma coagulum. *J. exp. Biol. London* 13 1936 pp. 393–409 3 pls. 10 text-figs.

272.—Jacot, A. P. Quantitative litter sampling. *Ecology Brooklyn* 17 1936 pp. 327–328.

273.—Jaeger, E. C. The California Deserts. Pp. x + 207 maps and illustr. Stanford (University Press) 1933 8vo.

274.—Janisch, E. Ueber die Wertung der Variabilität bei mathematischen Erfassung biologischer Gesetzmässigkeiten. *Acta Biotheor. Leiden* 1 1935 pp. 47–58 5 figs.

275.—Jeffrey, E. C. On the structure of the chromosomes. *Science* 84 1936 pp. 372–373.

276.—Jenkin, P. M. Reports on the Percy Sladen Expedition to some Rift Valley lakes in Kenya in 1929. VII. Summary of the ecological results with special reference to the alkaline lakes. *Ann. Mag. Nat. Hist.* (10) 18 1936 pp. 133–181 1 pl. 2 maps.

277.—Jennings, H. S. Genetics. Pp. 351 London (Faber) 1935 8vo. [N.V.]

278.—Jennings, H. S. Fundamental units in biology. *Science* 84 1936 pp. 445–450.

279.—Jeschikov, J. Metamorphose, Cryptometabolie und direkte Entwicklung. *Zool. Anz. Leipzig* 114 1936 pp. 141–152.

280.—Jones, D. F. Atypical growth. *Amer. Nat.* 70 1936 pp. 86–92.

281.—Jones, F. W. The McCoy Society's expedition to Lady Julia Percy Island [off Victoria]. *Nature London* 138 1936 pp. 906–908 photo.

282.—Jones, T. The structure and mode of innervation of capillary blood-vessels. *Amer. J. Anat.* 58 1936 pp. 227–257 3 pls. 1 text-fig.

283.—Jordan, H. J. Das Problem der "Ganzheit" in der Biologie. *Acta Biotheor. Leiden* 1 1935 pp. 100–111.

284.—Joyet-Lavergne, P. Sur la localisation de la vitamine A dans les globules rouges du sang des Vertébrés au cours de l'évolution de ces globules. *C.R. Acad. Sci. Paris* 202 1936 pp. 1101–1102.

285.—Jucci, C. L'ontogenesi dal punto di vista embriologico e dal punto di vista genetico. *Mem. Mus. Hist. nat. Belg.* (2) 3 1936 pp. 407–412.

286.—Just, E. E. A single theory for the physiology of development and genetics. *Amer. Nat.* 70 1936 pp. 267–312.

287.—Just, E. E. Protoplasmic specificity. *Science* 84 1936 pp. 351–352.

288.—Kahmann, H. Ueber das foveale Sehen der Wirbeltiere. II. Gesichts. *SitzBer. Ges. naturf. Fr. Berlin* for 1935 1936 pp. 361–376 5 figs.

289.—Kappers, C. V. A. and others. The comparative anatomy of the nervous system of Vertebrates, including Man. Vol. i pp. xviii + 864 422 figs.; vol. ii pp. xii + 865–1845 288 figs. New York (Macmillan Co.) 1936 8vo. [Review *Nature* 139 p. 650.]

290.—Karp, M. L. The number and distribution of genes in the third chromosome of *D. melanogaster*, affecting the number of sternal bristles. C.R. Acad. Sci. U.R.S.S. Moscow 1 1936 pp. 43-46 2 figs.

291.—Karp, M. L. The distribution of the sternal bristle in the chromosome of *Drosophila melanogaster*. Zool. J. Moscow 15 1936 pp. 26-47 5 figs. [Russian, with English rés.]

292.—Karsinkin, G. Theorie der biologischen Produktivität der Gewässer als Arbeitsmethode. Zool. J. Moscow 15 1936 pp. 245-251. [Russian, with German rés.]

293.—Kashkarov, D. N. A zoological sketch of the eastern part of the Betpak-dala desert. Acta Univ. Asiae Med. Tashkent. (8a Zool.) no. 20 1935 pp. 3-30 5 figs. [Russian, with English rés.]

294.—Kashkarov, D. An ecological survey of the vertebrate fauna in Arslanbob, North Ferghana in: Problems of Ecol. & Biocenol. Moscow 1934 pp. 56-114 19 figs. [Russian, with English rés.]

295.—Katznelson, Z. S. Zur Frage der Neubildung von quergestreiften Muskelfasern in der postembryonalen Periode. Anat. Anz. Jena 82 1936 pp. 379-390 4 figs.

296.—Katznelson, Z. S. Die Teilung der Kerne in der Myogenese. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 427-442 11 figs.

297.—Kaufmann, B. P. Evidence of pre-reduction in *Drosophila melanogaster*. Amer. Nat. New York 70 1936 pp. 54-55.

298.—Kaufmann, B. P. The chromosomes of *Drosophila aranassae*. Science New York 83 1936 p. 39.

299.—Kempermann, C. T. Am Wendepunkt der Stammesgeschichte. Pp. 1-32 1 fig. Jena (Fischer) 1936 8vo. [N.V.]

Kendall, J. I. vide Scott.

300.—Khvostova, V. V. Detection of translocations in the proximal region of the X-chromosome of *Drosophila melanogaster* by means of the method of "position effect." Biol. J. Moscow 5 1936 pp. 875-880 3 figs. [Russian, with English rés.]

301.—Khvostova, V. V. and Gavrilova, A. A. A new method for discovering translocations. J. Biol. Moscou 4 1935 pp. 905-916 7 figs. [Russian, with English rés.]

Khvostova, V. V. vide Dubinin.

302.—Kies, C. H. M. H. Nature protection in the Netherlands Indies. Spec. Pub. Amer. Comm. intern. wild Life Prot. Cambridge Mass. no. 8 1936 pp. 11-73 map.

303.—Kinsey, A. C. New introduction to biology. Pp. 863. London (Harrup) 1936 8vo. [N.V.]

304.—Kirikoff, S. Der südliche Ausläufer des Ural als zoogeographische Grenze. Zool. J. Moscow 15 1936 pp. 292-306 3 maps. [Russian, with German rés.]

305.—Kirjanova, E. S. Zur Frage über die vertikale und horizontale Verteilung der Fauna der Wirbellosen in den Erdschichten der Umgegend von Tashkent. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 309-352 2 pls. 5 text-figs. [Russian, with German rés.]

306.—Kirpitchenkov, V. S. The rôle of non-hereditary variability in the process of natural selection. (A hypothesis of indirect selection.) J. Biol. Moscou 4 1935 pp. 775-801 4 figs. [Russian, with English rés.]

307.—Klaauw, C. J. van der. Zur Aufteilung der Ökologie in Autökologie und Synökologie im Lichte der Ideen als Grundlage der Systematik der zoologischen Disziplinen. Act. Biotheor. Leiden (A) 2 1936 pp. 195-241.

308.—Knisely, M. H. A method of illuminating living structures for microscopic study. Anat. Rec. Philadelphia 64 1936 pp. 499-524 5 figs.

Koba, K. vide Okada.

309.—Koller, P. C. Structural hybridity in *Drosophila pseudo-obscura*. J. Genet. Cambridge 32 1936 pp. 79-102 1 pl. 13 text-figs.

310.—Kolosváry, G. de. Reflexions sur l'"adaptation" des organismes dans les grottes. Acta Biotheor. Leiden 2 1936 pp. 19-22.

311.—Kolosváry, G. v. Generisches System der Lebenserscheinungen. Festschrift Embrik Strand Riga 1 1936 pp. 185-248.

312.—Kolosváry, G. v. Ueber die biologischen Probleme des Troglodytismus. *Folia zool. hydrobiol.* Riga 9 1936 pp. 72–76 1 fig.

313.—Kolosváry, G. v. und Szalai, T. Die Veränderungen des Erdkörpers und die Evolution des Lebens. Festschrift E. Strand Riga 1 1936 pp. 84–97.

314.—Koltzoff, N. K. Physiologie de développement et génétique. Pp. 56 Paris (Hermann) 1935 8vo. [N.V.]

315.—Koltzoff, N. K. The rôle of the gene in the physiology of development. *J. Biol. Moscou* 4 1935 pp. 753–774 16 figs. [Russian, with English rés.]

316.—Kondakova, A. A. Einfluss des Jods auf das Auftreten letaler Mutationen im ii. Chromosome von *Drosophila melanogaster*. *J. Biol. Moscou* 4 1935 pp. 721–726. [Russian, with German rés.]

317.—Koneff, A. A. An iron-hematoxylin-analin-blue staining method for routine laboratory use. *Anat. Rec. Philad.* 66 1936 pp. 173–179 2 pls.

318.—Korovin, E. Essai de la rekonstruction paleoecologique du Turkestan in: Problems of Ecol. & Biocenol. Moscow 1934 pp. 16–42 7 figs. [Russian, with French rés.]

319.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. Bd. i pp. xx + 536 560 figs. Bd. ii pp. 537–1314 752 figs. Jena (Fischer) 1936 8vo.

320.—Kosikov, K. V. The influence of the age and sex of the germ cells on the frequency of mutations in *Drosophila simulans*. *C.R. Acad. Sci. U.R.S.S. Moscow* 2 1936 pp. 115–118.

321.—Kosikov, K. V. A new duplication in the x-chromosome of *Drosophila melanogaster* and its evolutionary significance. *C.R. Acad. Sci. U.R.S.S. Moscow* 2 1936 pp. 299–302 3 figs.

322.—Kövessi, F. Ueber das an Lebenwesen im allgemeinsten beobachtbare biophysikalische Gesetz, zugleich eine Zusammenfassung meiner, sich auf die den Entwicklungsgang der Lebewesen lenkenden biophysikalischen Faktoren bestehenden bisherigen Forschungen. *Acta Biotheor. Leiden* 1 1935 pp. 113–132.

323.—Kozhevnikov, B. F. Experimentally produced karyotypical isolation. *Biol. J. Moscow* 5 1936 pp. 727–752 6 figs. [Russian, with English rés.]

324.—Kožminski, Z. Ueber die Eigentümlichkeiten des Zooplanktons des Ohridsees. *Verh. int. Vereinig. Limnol. Beograd* 7 1935 pp. 245–254.

325.—Krafta, J. A textbook of histology. Pp. vii + 292. London (Ballière) 1936 8vo. [N.V.]

326.—Krogh, A. and Spärck, R. On a new bottom-sampler for investigation of the microfauna of the sea bottom with remarks on the quantity and significance of the benthonic microfauna. *Biol. Meddel. Kjøbenhavn* 13 no. 4 1936 pp. 1–12 2 figs.

327.—Kronacher, C. Handbuch der Vererbungswissenschaft. Bd. 3 Genetik und Tierzüchtung. Pp. vii + 280 Berlin (Borntraeger) 1934. [N.V.]

328.—Krumbiegel, I. Morphologische Untersuchungen über Rassenbildung, ein Beitrag zum Problem der Artbildung und geographischen Variation, pp. 106–179 1 pl. 23 text-figs. Sinnes-physiologische Untersuchungen an geographischen Rassen, pp. 179–204 7 figs. *Zool. Jahrb. Jena Syst.* 68 1936.

329.—Kühn, A. Ueber Farbensinn bei Tieren. *Bremer Beitr. Bremen* 1 1933 pp. 159–168 5 figs.

330.—Kühn, A. Goethe und die Naturforschung. *Nachr. Ges. Wiss. Göttingen* (6) 1 *Biol.* 1933 pp. 47–69.

331.—Kuntze, R. Die subspezifische Systematik und die Naturschutzidee. *Ochr. Przyr. Krakow* 15 1935 pp. 142–156. [Czech, with German rés.]

Kupfer, C. *vide* Bialaszewicz.

332.—Kuroda, N. A glimpse of the animal and plant life at Shiobara, Prov. Shimotsuke. *Botany & Zool. Tokyo* 4 1936 pp. 71–76, 395–401, 551–560.

333.—Lalla, G. di. La sede di produzione degli ormoni sessuali. ii Determinismo dei caratteri sessuali secondari. *Riv. Biol. Firenze* 21 1936 pp. 426–452.

334.—Lameere, A. Précis de Zoologie. Vols. i–iv 1927–1936 Bruxelles (Inst. Zool. Torley-Rousseau).

335. — Lameere, A. Coelome et système circulatoire. C.R. XII Congr. intern. Zool. Lisboa 1936 pp. 144-153.

336. — Lameere, A. Histoire de l'expression "biologie." C.R. Congr. Sci. Bruxelles 1935 vol. i pp. 128-130.

Lamy, R. *vide* Crew.

337. — Lange, D. de. The head problem in Chordates. J. Anat. London 70 1936 pp. 515-547 17 figs.

338. — Laughlin, H. H. The coiling spring properties of chromosomes. *Genetica 'sGravenhage* 18 1936 pp. 126-145.

339. — Lautenschlager, F. Experimentelle Untersuchungen über den biologischen Einfluss der mit der Wünschelrute gemuteten sog. Erdstrahlen. *Biol. Zbl. Leipzig* 56 1936 pp. 356-378 2 figs.

340. — Lederer, E. Exposés de chimie biologique 3. Les caroténoïdes des animaux. Pp. 62 Paris (Hermann) 1935 8vo. [N.V.]

341. — Lehrmann, F. E. Selektive Beeinflussung frühembryonaler Entwicklungsvorgänge bei Wirbeltieren. *Naturwissenschaften Berlin* 24 1936 pp. 401-405.

342. — Lerma, B. de. L'attività endocrina negli Invertebrati. *Arch. zool. Torino* 23 Suppl. 1936 pp. 83-135 21 figs.

343. — Leruth, R. Exploration biologique des cavernes de la Belgique et du Limbourg hollandais. *Natuurh. Maandbl. Maastricht* 25 1936 pp. 8-10, 17-21, 29-32, 45-48, 52-56, 66-68, 80-82, 95-98, 116-118 1 fig., 125-127, 130.

344. — Lever, R. J. A. W. Notes on the fauna of San Cristobal Island, Solomon Islands. *Proc. Linn. Soc. London* 1935-36 1936 pp. 82-83.

Li, J. C. *vide* Bridges.

345. — Linder, C. Neuvième contribution à la limnologie du lac de Barberine (Valais) 1935 pp. 26-36. Note sur la faune microscopique des lacs de Lona (Valais) pp. 36-38. *Bull. Murith. Sion* 53 1936.

346. — Lindroth, A. Die Assoziationen der marinen Weichböden. Ein Kritik auf Grund von Untersuchungen im Gullmars-Fjord. *Zool. Bidr. Uppsala* 15 1936 pp. 331-368 5 figs.

347. — Liosner, L. D. und Woronzowa, M. A. Regeneration des Organs mit transplantierten ortsfremden Muskeln. *Zool. Anz. Leipzig* 115 1936 pp. 55-58.

348. — Lison, L. Histo-chimie animale: méthodes et problèmes. Pp. vi + 320 Paris (Gauthier-Villars) 1936 4to. [N.V.]

349. — Litzelmann, E. Die Tierwelt des Kaiserstuhls in: *Der Kaiserstuhl* pp. 269-401 many illustr. Freiburg im Breisgau 1933 8vo.

350. — Long, J. A. Apparatus for the dissection and study of embryos. *Univ. Calif. Pub. Zool.* 41 1936 pp. 101-116 1 fig.

351. — Longley, W. H. Species studies and the species problem. *Amer. Nat.* 70 1936 pp. 97-109 1 fig.

352. — Lönnberg, E. On the occurrence of carotenoid pigments in the eyes of certain animals. *Ark. Zool. Stockholm* 28 A no. 4 1935 pp. 1-14.

353. — Lönnberg, E. Note on the presence of carotenoids in the "liver" organs of Invertebrates. *Ark. Zool. Stockholm* 28A no. 6 1935 pp. 1-4.

354. — Lönnberg, E. Några faunistika notiser från Kristinebergs Zoologiska Station. *Fauna och Flora Uppsala* 1936 pp. 193-199 photo.

Loosli, C. G. *vide* Buchsbaum.

355. — Löwenstein, O. The equilibrium function of the Vertebrate labyrinth. *Biol. Rev. Cambridge* 11 1936 pp. 113-145 10 figs.

356. — Ludwig, W. Bestimmung und Vererbung der Asymmetrieform (Rechts - Links - Problem). *Verh. Deutsch. zool. Ges. Leipzig* 38 1936 pp. 21-73 17 figs.

357. — Lüers, H. Shaker, eine erbliche Bewegungsstörung bei *Drosophila funebris*. *Z. indukt. Abstamm.-u. Vererb.-Lehr. Leipzig* 72 1936 pp. 119-126.

358. — Lukin, E. I. The factors of the evolution of fresh water fauna. *Proc. zool.-biol. Inst. Scient. Res. Charkov* 1 1936 pp. 130-143. [Russian, with English rés.]

359. — Lull, R. S. Fossils. What they tell us of plants and animals in the past. Pp. vii + 114 58 illustr. New York (University Society) [1935] 8vo.

360. — Lumer, H. The relation between b and k in systems of relative growth functions of the form $y = bx^k$. Amer. Nat. 70 1936 pp. 188–191.

361. — Lundbeck, J. Untersuchungen über die Bodenbesiedlung der Alpenrandseen. Arch. Hydrobiol. Stuttgart Suppl. 10 no. 2 1936 pp. 205–357 2 pls. 33 figs.

362. — Lundbeck, J. Untersuchungen über die Mengenverteilung der Bodentiere in den Lunzer Seen. Int. Rev. Hydrobiol. Leipzig 33 1936 pp. 50–72 8 figs.

363. — Luria, S. Ricerche sulla colorazione vitale con colori acidi di gangli sensitivi e simpatici. Monit. zool. ital. Firenze 47 1936 pp. 83–91 6 figs.

364. — McAtee, W. L. The rôle of fitness in evolution, pp. 239–241. The postulated resemblance of natural to artificial selection, pp. 242–252. Ohio J. Sci. 36 1936.

365. — MacBride, E. W. Natural selection. Nature London 138 1936 pp. 884–885.

366. — Machowka, W. W. [and others]. Wirkung von hochfrequenten Feldern auf die Spermatozoen. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 282–297 4 figs.

McMasters, J. H. *vide* Schenk.

367. — Madsen, H. Investigations on the shore fauna of east Greenland with a survey of the shores of other Arctic regions. Medd. Grønland 100 no. 8 1936 pp. 1–79 17 figs.

368. — Maloeuf, N. S. R. The neuro-genic basis of "crawling." Biol. Zbl. Leipzig 56 1936 pp. 379–380.

369. — Mancuso, B. L'azione del soleggiamento sugli insetti, aracnidi e anfibi. Rev. Biol. Firenze 21 1936 pp. 10–15.

Manery, J. F. *vide* Irving.

370. — Margolis, O. S. The facet relations in dorsal and ventral lobes of bar-eyed *Drosophila*. Amer. Nat. New York 70 1936 pp. 55–56.

371. — Margolis, O. Studies on the bar series of *Drosophila*. III. The facet relations in dorsal and ventral lobes of the eye. Genetics Menasha 21 1936 pp. 817–831 1 graph.

372. — Marietan, I. La réserve d'Aletsch et ses environs. Bull. Murith. Sion 53 1936 pp. 71–115 map.

373. — Maritano, C. Su i fenomeni di reazione agli stimoli e di morimento degli organismi. Natura Milano 27 1936 pp. 33–58.

374. — Marshall, F. H. A. Sexual periodicity and the causes which determine it. Nature London 137 1936 pp. 1056–1057.

Maschke, K. *vide* Pax.

375. — Mather, K. Competition between bivalents during chiasma formation. Proc. roy. Soc. London 120B 1936 pp. 208–227.

376. — Mathis, J. und G. Bemerkungen zu Villanis Ausführungen über die Histologie der Linse. Anat. Anz. Jena 82 1936 pp. 200–202.

377. — Merciai, G. Note di limnologia trentina e di Alto Adige. I laghi di Torel Valdurna e Anterselva. Mem. Mus. Stor. nat. Venez. trident. VI 3 2 1936 pp. 287–318 14 figs.

378. — Mercier, G. Le transformisme et les lois de la biologie. Pp. 88. Paris (Alcan) 1936 8vo. [N.V.]

379. — Merker, E. Beruht der Lichtschutz gegen kurzwellige Strahlen im Auge der Wirbeltiere auf Anpassung. Biol. Zbl. Leipzig 56 1936 pp. 495–517 7 figs.

380. — Meurer, H. Das Epithel gespannter und entspannter seröser Häute. Anat. Anz. Jena 83 1936 pp. 223–229 5 figs.

381. — Meyer, A. Krisenepochen und Wendepunkte des biologischen Denkens. Pp. vii + 62 fig. Jena (Fischer) 1935 8vo. [N.V.]

382. — Meyer, A. Zwischen Scylla und Charybdis. Holistische Antikritik von Mechanismus und Vitalismus. Acta Biotheor. Leiden 1 1935 pp. 203–218.

383. — Meyer, A. Eine regionale Protoplasma-Zentrierung als Ursache der Formbildung. Biol. Generalis Wien 11 1935 pp. 122–134 1 pl. 3 text-figs.

384. — Meyer, A. W. An analysis of the De Generatione Animalium of William Harvey. Pp. xix + 167 12 figs. Stanford (Univ. Press) 1936.

385.—Meyer, P. Contributions à la physiologie physico-chimique comparée. I. La pression colloïdo-osmotique du milieu intérieur des animaux marins. *J. Physiol. Path. gen. Paris* **34** 1936 pp. 5–16, also pp. 448–453.

386.—Meyer, P. Colloid osmotic pressure in the haemolymphs of some terrestrial Invertebrates. *Nature London* **137** 1936 pp. 401–402.

387.—Meyer, P. Colloid osmotic pressure of the body fluids of freshwater animals. *Nature London* **138** 1936 pp. 287–288.

388.—Michels, N. A. The structure of capillaries and the unmyogenic character of Rouget cells (pericytes) in the omentum of Rabbits and in the web of living Frogs. *Anat. Rec. Philad.* **65** 1936 pp. 99–125 11 figs.

389.—Miller, R. A. and Detwiler, S. R. Comparative studies upon the origin and development of the brachial plexus. *Anat. Rec. Philadelphia* **65** 1936 pp. 273–292 11 figs.

390.—Minder, L. Untersuchungen am Bielersee. Studien über die Nutzbarmachung des Sees zu Wasserversorgungszwecken. *Vjschr. naturf. Ges. Zurich* **81** 1936 pp. 107–176 4 figs.

Miydi, D. *vide* Yoshimura.

391.—Moon, H. P. A shallow littoral region of a Bay at the north-west end of Windermere. *Proc. zool. Soc. London* **1936** pp. 491–515 1 pl. 1 text-fig.

392.—Mordvilko, A. Artbildung und evolution. *Biol. generalis Wien* **12** 1936 pp. 245–269 14 figs.

393.—Morgan, T. H. The relation of genetics to physiology and medicine. *Rep. Smithson. Instn. for 1935* 1936 pp. 345–359 2 pls.

394.—Moriwaki, D. A preliminary experiment on crossing over in the female of *Bombyx mori*. *Proc. imp. Acad. Japan Tokyo* **11** 1935 pp. 453–454.

395.—Moriwaki, D. Artificially induced crossing over in the male of *Drosophila ananassae*. *Zool. Mag. Tokyo* **48** 1936 pp. 285–286.

396.—Moriwaki, D. The genetics of *Drosophila ananassae*. [In Japanese, with English summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 693–704 2 pls. 2 figs.

397.—Morosov, N. The factors of biological evolution. *Bull. Inst. sci. Lesshaft Leningrad* **19** 2 1936 pp. 1–26 25 figs.; see also S. Lebedkin pp. 27–28. [Russian only.]

398.—Moyne, Lord [Guinness, W. E.]. Walkabout. A journey in lands between the Pacific and Indian Oceans. Pp. xvi + 366 many photos and other illustr. London (Heinemann) 1936 8vo.

399.—Müller, G. L'aquario della Città di Trieste. Descrizione dell'impianto e degli altri tecnici. *Atti Mus. Stor. nat. Trieste* **12** 1934 pp. 3–37 8 pls. 6 text-figs.

400.—Muller, H. J. and others. Unequal crossing-over in the bar mutant as a result of duplication of a minute chromosome section. *C.R. Acad. Sci. Moscou* **1936** vol. i pp. 87–88. [English.]

401.—Mumford, E. P. Terrestrial and freshwater fauna of the Marquesas Islands. *Ecology Brooklyn* **17** 1936 pp. 143–157.

402.—Muravejsky, S. Materials on the hydrobiology of the rivers of the U.S.S.R. I. Belaja Kalitra river. [Donetz basin.] *Bull. Soc. Nat. Moscou Sect. Biol.* **45** 1936 pp. 233–238. [Russian, with English res.]

403.—Murray, P. D. F. Bones: A study of the development and structure of the Vertebrate skeleton. Pp. x + 203 44 figs. Cambridge (University Press) 1936 8vo.

404.—Nabours, R. K. Species from a genetic standpoint. *Amer. Nat.* **70** 1936 pp. 191–192.

405.—Nabours, R. K. and Stebbins, F. M. A translocation to the sex-chromosome in *Apotettix eurycephalus* Hancock (Grouse locusts). *Amer. Nat. New York* **70** 1936 pp. 57–58.

406.—Nagel, A. Die mechanischen Eigenschaften der Bindegewebshülle peripherer Nervenfasern, sowie der Myelinscheide und der Ranvierschen Schnürringe. *Z. mikr. anat. Forsch. Leipzig* **39** 1936 pp. 415–426.

407.—Needham, J. Order and life. Pp. x + 175 45 figs Cambridge (Univ. Press) 1936. [Notice Nature **138** p. 863.]

408.—Neuhaus, M. E. Crossing-over between X- and Y-chromosomes in females of *Drosophila melanogaster*. Zool. J. Moscow 15 1936 pp. 63-74 4 figs. [Russian, with English rés.]

409.—Neuhaus, M. J. Crossing-over between the X- and Y-chromosomes in the female of *Drosophila melanogaster*. Z. indukt. Abstamm.- u. Vererb. Lehre Leipzig 71 1936 pp. 265-275 4 figs.

410.—Newbigin, M. I. Plant and animal geography. Pp. xv + 298 39 illustr. and maps London (Methuen) 1936 8vo. [Notice Nature 138 p. 782.]

411.—Nicol, E. A. T. The brackish-water lochs of North Uist. Proc. roy. Soc. Edinb. 56 1936 pp. 169-195 7 figs.

412.—Nicol, E. A. T. The fauna of Loch Bee [S. Uist]. Scot. Nat. Edinb. 1936 pp. 131-134.

413.—Nishi, B. Keiji Okajima. † Anat. Anz. Jena 82 1936 pp. 411-414 portr. bibl.

414.—Noltenius, F. Das Kausalitätsproblem in der Biologie. Acta Biotheor. Leiden 2 1936 pp. 59-76.

415.—Norman, J. R. Zoological classification. School Sci. Rev. 70 1936 pp. 236-248.

416.—Noujdin, N. Influence of the Y-chromosome and of the homologous region of the X on mosaicism in *Drosophila*. Nature London 137 1936 pp. 319-320.

417.—Noüy, Le Comte du. Biological time. Pp. x + 180 London (Methuen) 1936 8vo. [Notice Nature 139 p. 94.] [N.V.]

418.—Novikoff, M. L'homomorphie comme base methodologique d'une morphologie comparée. Bull. Assoc. Russe Rec. sci. à Prague 4 1936 pp. 1-31.

419.—Nowikoff, M. Über die Analogien (Homomorphien) im Bau der Augen von Achordaten und Chordaten. Mem. Soc. zool. Tchecoslov. Prague 2 1935 pp. 1-2 [sep. pag. ?]. [German.]

420.—Novikoff, M. Die Erscheinungen der Homomorphie in verschiedenen Wissenschaften. Mem. Soc. zool. Tchecoslov. Prague 3 1936 pp. 1-5. [Czech, with German rés.]

421.—Occhipinti, G. Il significato delle cellule adipose plurinucleari e di quelle plurivacuolari. Arch. Anat. Hist. Embryol. 20 1935 pp. 295-324 7 figs.

422.—Ochoterena, I. Interdependencia entre la evolucion filogenia del cerebro y las manifestaciones psicologicas. Reseñ. cient. Soc. esp. Hist. nat. 10 1935 pp. 73-84.

423.—O'Donoghue, C. R. James Hartley Ashworth D.Sc., F.R.S. Proc. phys. Soc. Edinb. 22 1936 pp. 298-300.

424.—Oelze, E. und Schmith, O. Transzendente Grundlagen der Biologie. Pp. 36 Leipzig (Barth) 1937 8vo. [N.V.]

425.—Offermann, C. A. Branched chromosomes as symmetrical duplications. J. Genet. Cambridge 32 1936 pp. 103-116 9 figs.

426.—Ohle, W. Der schwefelsaure Tonteich bei Reinbek. Monographie eines idiotrophen Weihers. Arch. Hydrobiol. Stuttgart 30 1936 pp. 604-662 2 pls. 14 text-figs.

427.—Okada, Y. Studies on the fauna of hot springs in Japan. Botany & Zool. Tokyo 4 1 1936 pp. 95-102 5 figs. * [Japanese only.]

428.—Okada, Y. and Koba, K. The limnological observations on some lakes in Hokkaido. Botany & Zool. Tokyo 4 1936 pp. 53-62, 377-382 figs. [Japanese only.]

429.—Okada, Y. and Koba, K. Notes on the mixed fauna of tropical and boreal animals in Honsyū, Japan. Proc. Imp. Akad. Tokyo 9 1933 pp. 443-445.

430.—Painter, T. S. and Patterson, J. T. Localization of gene loci in the third chromosome of *Drosophila melanogaster*. Amer. nat. New York 70 1936 p. 59.

431.—Pales, L. Paléopathologie et pathologie comparative. Pp. vii + 352 63 pls. Paris (Masson) 1930 8vo.

Pannier, R. vide Verrier.

432.—Panšin, I. B. A demonstration of the specific nature of position effects. C.R. Acad. Sci. Moscou 1936 vol. i pp. 83-86. [English.]

- 433.—Paramonow, S. J. Das Problem der Artbildung und das Areal. *Trav. Mus. Zool. Kiev* 15 1935 pp. 5-26 2 maps. [Russian, with German rés.]
- 434.—Parat, M. et Devillers, C. Sur les associations animales des côtes de l'île Jan Mayen. *C.R. Acad. Sci. Paris* 202 1936 pp. 90-92.
- 435.—Park, O. and Strohecker, H. F. Studies in nocturnal ecology. *Ohio J. Sci.* 36 1936 pp. 46-54.
- 436.—Parker, G. H. Color changes of animals in relation to nervous activity. Pp. ix + 74. Philadelphia (Univ. Pennsylvania Press) 8vo. [N.V.]
- 437.—Parks, H. B. Cleavage pattern in *Drosophila* and mosaic formation. *Ann. ent. Soc. Amer. Columbus* 29 1936 pp. 350-392 11 pls.
- 438.—Paschinger, H. und Puschnig, R. Vom Waidischsee. *Carinthia* II 125 1935 pp. 87-94 1 fig.
- 439.—Pasteels, J. Centre organisateur et glycogénolyse. *Arch. Anat. micr.* Paris 32 1936 pp. 303-314 2 figs.
- 440.—Pax, F. Bibliographie der schlesischen Zoologie. Teil 2: 1928-1934. Pp. 158 Breslau (Priebatsch) 1935 8vo. [N.V.]
- 441.—Pax, F. Rie Reyersdorfer Tropfsteinhöhle und ihre Tierbevölkerung. *Mitt. Höhlen- und Karstf. Berlin* 1936 pp. 97-122 3 figs.; see also H. J. Stammer pp. 125-129.
- 442.—Pax, F. und Maschke, K. Die Tierwelt der Quellen. *Pax. Beitr. Biol. Glazier Schneeberges* Hft. 2 Breslau 1936 pp. 135-171 10 figs.
- 443.—Pearse, A. S. The migrations of animals from sea to land. Pp. x + 176 4 figs. Durham N.C. (Duke Univ. Press) 1936 8vo.
- 444.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina. *J. Elisha Mitchell sci. Soc. Chapel Hill* 52 1936 pp. 174-222 4 photos.
- 445.—Pearse, A. S. Results of survey of Cenotes in Yucatan. *Pub. Carnegie Instn. Washington* no. 457 1936 pp. 17-28 4 photos.
- 446.—Peattie, D. C. Green laurels. The lives and achievements of the Great Naturalists. Pp. xxiii + 368. New York (Simon & Schuster) 1936. [N.V.]
- 447.—Peter, K. Die finale Betrachtung der Entwicklungsbedingungen. *Anat. Anz. Jena* 81 1936 pp. 318-333.
- 448.—Peter, K. Abhängige und unabhängige Entwicklung in finaler Betrachtung. *Mitt. naturw. Ver. Greifswald* 62 1935 pp. 88-186.
- 449.—Peters, H. Chromosomen-Studien. *Mikrokosmos Stuttgart* 29 1936 pp. 142-143.
- 450.—Petersen, H. Anatomie und Kultur. *Z. Anat. Entwickges.* 106 1936 pp. 1-10.
- 451.—Petrunkévitch, A. and Pickford, G. E. On the relative acidity of histological fixing fluids. *Anat. Rec. Philad.* 65 1936 pp. 461-465.
- 452.—Pfeiffer, H. H. Evidence for linear units in protoplasm. *Nature London* 138 1936 p. 1054.
- 453.—Picardo, C. et Rotter, W. Precipitines anti-glandes endocrines et longévité chez quelques espèces de Vertébrés. *C.R. Soc. biol. Paris* 123 1936 pp. 869-871.
- Pickford, G. E. *vide* Petrunkevitch.
- 454.—Pictet, A. La zoogéographie expérimentale dans ses rapports avec le génétique. *Mem. Mus. Hist. nat. Belg.* (2) 3 1936 pp. 233-282 3 pls.
- 455.—Pieh, S. Ueber die Beziehungen zwischen Atmung, Osmoregulation und Hydratation der Gewebe bei euryhalinen Meeresevertebraten. *Zool. Jahrb. Jena.* (Allg. Zool.) 56 1936 pp. 129-160.
- 456.—Pierantoni, L. Gli studi sulla endosimbiosi ereditaria nelle origini e nei più recenti sviluppi. *Arch. Zool. Torino* 23 Suppl. 1936 pp. 137-195 13 figs.
- 457.—Plate, L. Hypothese einer variablen Erbkraft bei polyallelen Genen und bei Radikalen, ein weg zur Erklärung der Vererbung erworbener Eigenschaften. *Acta Biotheor. Leiden* 2 1936 pp. 93-124.
- Plessner, H. *vide* Buytendijk.
- 458.—Poliakov, I. M. The problem of trend (directness) of the processes of organic evolution. *Proc. Zool. Biol. Inst. Scient. Res. Charkov* 1 1936 pp. 65-87. [Russian, with English rés.]

- 459.—Popov, A. M. The fauna of Avacha Bay and its distribution into communities. C.R. Acad. Sci. Moscou 1935 vol. 4 pp. 373-376. [English.]
- 460.—Popowa, T. G. und Iohansen, B. G. Wasserbecken des mittleren Ob-Gebiets. Trav. Inst. Scient. Biol. Tomsk 1 1935 pp. 108-141 map. [Russian, with German rés.]
- 461.—Popowa, T. G. und Degtiarewa, M. Der Utschumsee (Siberien). Trav. Inst. Scient. Biol. Tomsk 1 1935 pp. 197-221 1 pl. [Russian, with German rés.]
- 462.—Pora, E. A. Quelques données analytiques sur la composition chimique et physico-chimique du sang de quelques Invertébrés et Vertébrés marins. C.R. Soc. Biol. Paris 121 1936 pp. 291-293.
- 463.—Porto, C. Transformisme et hérédité: les organismes et la milieu terrestre. Pp. viii + 328 4 pls. Paris (Corti) 1935 8vo. [N.V.]
- Portugalow, W. W. *vide* Wermel.
- Postnikova, E. D. *vide* Trofimov.
- 464.—[Prashad, B.] Indian Science Abstracts. VIII. Zoology. Indian Sci. Abstr. 1935 pt. 1 1936 no. 8 pp. 1-32.
- 465.—Prat, H. Remarques sur la distribution des organismes dans les eaux littorales des Bermudes. Bull. Inst. océanogr. Monaco no. 705 1936 pp. 1-23 6 figs.
- 466.—Pratt, H. S. A manual of land and freshwater vertebrate animals of the United States (exclusive of Birds). 2nd ed. Pp. xvii + 416 Philadelphia (Blakiston) 1935 8vo.
- 467.—Pratt, H. S. A manual of the common Invertebrate Animals, exclusive of Insects. Revised ed. xviii + 854 974 figs. Philadelphia (Blakiston) 1935 8vo.
- 468.—Proptov, A. N. [Influence of ultra-violet rays on the appearance of hereditary variations in *Drosophila melanogaster*.] J. Biol. Exp. Moscou 7 1936 pp. 552-569. [Russian only.]
- 469.—Przibram, H. Quantenmässiges Wachstum bei Wirbeltieren. Anz. Akad. Wiss. Wien 72 1935 pp. 171-173.
- Puschnig, R. *vide* Paschinger.
- 470.—Pycraft, W. P. Some new aspects of evolution. Trans. Norfolk Norw. Nat. Soc. 14 1936 pp. 1-30 3 pls.
- 471.—Quignon, G. Ambroise Paré, naturaliste, Bull. Nat. Mons 15-16 1932-34 pp. 91-107.
- 472.—Rabaud, E. Commentaires sur l'hérédité. Bull. biol. France-Belg. 70 1936 pp. 407-455.
- 473.—Rabaud, E. Préhensibilité et moyens de préhension chez Vertébrés. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 43-52.
- 474.—Rahn, O. Invisible radiations of organisms. With an introduction to the physics of radiation by S. W. Barnes. Pp. x + 215 Berlin (Borntraeger) 1936. [N.V.]
- 475.—Ranson, G. Le rôle de la matière organique dissoute dans l'eau et les théories de Pütter. Bull. Mus. Hist. nat. Paris 7 1935 pp. 359-366 8 1936 pp. 160-172.
- 476.—Rao, H. S. Senescence and death in Invertebrate Animals. Curr. Sci. Bangalore 5 1936 pp. 252-255.
- 477.—Rashevsky, N. Physico-mathematical methods in biological sciences. Biol. Rev. Cambridge 3 1936 pp. 345-363.
- 478.—Reck, B. Untersuchungen über Faktorenaustausch am X-Chromosom von *Drosophila melanogaster*. Z. indukt. Abstamm.-u. Vererb. Lehre Leipzig 72 1936 pp. 138-205 21 figs.
- 479.—Redfield, A. C. The distribution of physiological and chemical peculiarities in the "natural" groups of organisms. Amer. Nat. 70 1936 pp. 110-122.
- 480.—Reeves, E. D. Manual of the Vertebrate Animals of north-eastern and central China, exclusive of Birds. Pp. xxxii + 806 168 figs. Shanghai (Chung Hwa) 1933 8vo.
- 481.—Regan, C. T. [and others]. Natural History. Pp. 1-896 16 col. pls. 1,000 photos. London (Ward, Lock) 1936 8vo.
- 482.—Rensch, B. Die Geschichte des Sundabogens. Eine tiergeographische Untersuchung. Pp. viii + 318 20 figs. Berlin (Borntraeger) 1936 8vo. [See Nature 138 p. 622.]
- Renouf, L. P. W. *vide* Stork.

483.—Richards, O. W. Analysis of the constant differential growth ratio. Pap. Tortugas Lab. Carn. Instn. 29 1935 pp. 171–183 5 figs.

Richards, O. W. *vide* Robson.

484.—Richter, R. Beschränkung der Typus-Sorten, aber Unterscheidung in Dokumente und Nicht-Dokumente. Senckenbergiana Frankfurt 17 1935 pp. 263–264.

485.—Riddle, O. The confusion of tongues. Science 83 1936 pp. 41–45 69–74.

486.—Riddle, O. and Dotti, L. B. Blood calcium in relation to anterior pituitary and sex hormones. Science 84 1936 pp. 557–559.

487.—Ries, E. Zelldifferenzierungen und vitale Färbung. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 245–252.

488.—Rjabinin, A. N. Grundzüge per Paläontologie (Palaözoologie. I. Abt. Invertebrata). Pp. xii + 1056 2,001 figs. Leningrad 1934 8vo. [Russian only founded on Zittel.]

489.—Robertson, W. R. B. The chromosomes of Nabours and Stebbins's sex-linked translocation in *Apotettix eurycephalus*. Amer. Nat. New York 70 1936 pp. 61–62.

490.—Robson, G. C. and Richards, O. W. The variation of animals in nature. Pp. xvi + 425 2 pls. 30 text-figs. London (Longmans) 1936 8vo. [Review Nature 137 p. 680.]

491.—Rocha, F. da. H. Walter Bates. Bol. biol. S. Paulo 2 1936 pp. 121–129.

492.—Roche, J. Essai sur la biochimie générale et comparée des pigments respiratoires. Pp. 170 Paris (Masson) [1936]. [See Nature 138 p. 666.] [N.V.]

493.—Rokitzkii, P. F. On the appearance of heritable variations with a narrow-limited field of action under the influence of X-rays. Zool. J. Moscow 15 1936 pp. 48–62 5 figs. [Russian, with English rés.]

Rotter, W. *vide* Picado.

494.—Roux, P. Contribution à l'étude de l'épiphyse ou glande pinéale. Bull. Soc. sci. Bretagne 10 1934 pp. 158–165.

495.—Rumjantzew, A. Accumulation granulaire des colorants acides et

basiques dans le protoplasme des cellules mésenchymateuse. Arch. Anat. micr. Paris 32 1936 pp. 409–436 1 pl.

496.—Runnström, S. Die Anpassung der Fortpflanzung und Entwicklung mariner Tiere an die Temperaturverhältnisse verschiedener Verbreitungsgebiete. Bergens Mus. Aarb. 1936 no. 3 pp. 1–36.

497.—Russell, E. S. Form and function. A historical note. Folia Biotheoret. Leiden (B) 1 1936 pp. 1–12.

498.—Russell, F. S. Observations on the distribution of plankton animal indicators made on Col. E. T. Peel's yacht "St. George" in the mouth of the English Channel, July, 1935. J. Mar. biol. Ass. Plymouth 20 1936 pp. 507–522 6 figs.

499.—Russell, F. S. A review of some aspects of zooplankton research. Rapp. Cons. Explor. Mer Copenh. 95 1936 pp. 3–30 9 figs.

500.—Russell, F. S. Submarine illumination in relation to animal life. Rapp. Cons. Explor. Mer Copenh. 101 Pt. 2 No. 1 1936 pp. 1–12; see also H. H. Poole and other nos. 2–6.

501.—Rylov, W. M. Zur Kenntniss des Zooplanktons des Issyk-Kul-Sees. Results Lake Issyk-Kul Exped. 1 1930 pp. 111–136. [Russian, with German rés.]

502.—Rzóska, J. Oekologische Untersuchungen über die Verbreitung der Litoralfauna zweier polnischer Seen. (Kiekrzsee Wigrysee). Prace Kom. mat.-przr. pozn. Tow. Przyj. Nauk. (B) 7 no. 6 1935 pp. 1–152. [Polish, with German rés.]

503.—Saint-Hilaire, C. Fauna der Gewässer des Gouv. Woronesh nach den Erforschungen in den Jahren 1922–25. Acta Univ. Voroneg. 2 1925 pp. 320–361. [Russian, with German rés.]

504.—Saint-Hilaire, C. Ueber die Resultate der Expedition zum Weissen Meer im Sommer 1934. Acta Univ. Voroneg. 8 no. 3 1935 pp. 6–25 map. [Russian, with German rés.]

505.—Saint-Hilaire, C. Ein Versuch der Faunaerforschung in Biberschutzforste bei Woronesh 1933. Acta Univ. Voroneg. 8 no. 3 1935 pp. 38–55. [Russian, with German rés.]

506.—Saez, F. A. Una era nueva en el estudio de las ciencias naturales. An. Soc. cient. argent. Buenos Aires 121 1936 pp. 291-305.

507.—Sakharov, V. V. The character mottled (w^{mt}) in *Drosophila* as a result of the "position effect." J. Biol. Moscow 5 1936 pp. 293-302 7 figs. [Russian, with English rés.]

508.—Sakharov, V. V. The interaction of non-analogous genes in *Drosophila melanogaster*. J. Biol. Moscow 5 1936 pp. 537-540 3 figs. [Russian, with English rés.]

Sales, A. de. vide Fox.

509.—Sapper, K. Das Biologie als autonome Wissenschaft i und ii. Acta Biotheor. Leiden 1 1935 pp. 41-46 2 1936 pp. 12-18.

510.—Sauer, F. C. Mitosis in the neural tube. J. comp. Neurol. 62 1935 pp. 377-405 4 pls.

511.—Savory, T. H. Mechanistic biology and animal behaviour. Pp. xv + 182 London (Watts) 1936 8vo. [See Nature 140 p. 49.]

512.—Scharrer, E. Vergleichende Untersuchungen über die zentralen Anteile des vegetative Systems. Z. Anat. Entwges. 106 1936 pp. 169-192 16 figs.

513.—Schenk, E. T. and McMasters, J. H. Procedure in taxonomy: including a reprint of the International rules of Zoological Nomenclature with summaries of Opinions rendered to the present date, completely indexed. Pp. vii + 72 Stamford Univ. (Univ. Press) 1936 8vo.

514.—Schindewolf, O. H. Paläontologie Entwicklungslehre und Genetik: Kritik und Synthese. Pp. vi + 108 34 figs. Berlin (Borntraeger) 1936 8vo.

515.—Schlieper, C. Die Abhängigkeit der Atmungsintensität des Organismen vom Wassergehalt und kolloidalen Zustand des Protoplasmes. Biol. Zbl. Leipzig 56 1936 pp. 87-94 2 figs.

Schmassmann, W. vide Suchlandt.

516.—Schmeichel, N. L. and English, J. E. The demonstration of intact nervous systems of invertebrates by maceration of whole animals. Science New York 83 1936 pp. 377-378.

517.—Schmid, B. Begegnung mit Tieren. Pp. 775 München (Knorr. & Hirth) 1936 8vo. [N.V.]

Schmid, J. vide Berger.

518.—Schmidt-Ries, H. Grundsätzliches zur Zentrifugenmethode. Arch. Hydrobiol. Stuttgart 29 1936 pp. 553-616 24 tables.

Schmith, O. vide Oelze.

519.—Schmucker, T. Geschichte der Biologie. Forschung und Lehre. Göttingen. Pp. 296 Göttingen (Vandenhoeck & Ruprecht) 1936 8vo.

520.—Schneider, K. M. Professor Dr. Georg Grimpe. Zool. Garten Leipzig 8 1936 Hft. 4-6 no. pag. portr.

521.—Schröder, G. Das Sammeln, Konservieren und Aufstellen von Wirbeltieren: Leitfaden für Sammler, Liebhaber und Fachleute nach neuzeitlichen Gesichtspunkten. Pp. viii + 93 32 pls. Berlin (Parey) 1936 8vo.

522.—Schröder, V. Ueber die Natur der elektrischen Ladung bei lebenden Zellen. Biol. Zhurnal Moscou 5 1936 pp. 657-689 4 figs. [Russian, with German rés.]

523.—Schultz, W. Erhöhung der Zelltemperatur auf etwa 35° vermindert die Farbstoffbildung in den verschiedensten Klassen der Lebewesen und zerstört farbstoffbildendes Ferment. Arch. Entw. Mech. Org. Berlin 134 pp. 294-312.

524.—Schulze, F. E. [and others]. Nomenclator animalium generum et subgenerum. Im Auftrage des Preuss. Akad. Wiss. Berlin 4 Lief 21 pp. 2889-3052 1935 5 Lief 22 pp. 3053-3212 1936.

525.—Schoorman, C. J. Het levensprobleem in de biologie. Natuurk. Tijdschr. Ned.-Ind. 96 1936 pp. 151-165.

526.—Schwenkel, H. Die württembergischen Naturschutzgebiete. Veröff. St. Natursch. Stuttgart 11 1935 pp. 5-36.

527.—Schwidetzky, G. Einige Grundbegriffe naturwissenschaftlicher Sprachforschung. Schr. Deutsch. Ges. Tier- und Ursprachenforsch. no. 6 1936 pp. 1-16.

528.—Scott, G. G. and Kendall, J. I. The microscopic anatomy of Vertebrates. Pp. 1-306 167 illustr. London (Kimpton) 1935 8vo.

Scott, R. *vide* Thomas.

529. — Scott, W. The aquatic habitat. *Proc. Indiana Acad. Sci.* 45 1936 pp. 26-34.

530.—Seeler, T. Ueber eine quantitative Untersuchung des Planktons der deutscher Ströme unter besonderer Berücksichtigung der Einwirkung von Abwässern und der Vorgänge der biologischen Selbstreinigung. *Arch. Hydrobiol. Stuttgart* 30 1936 pp. 85-114, 379-400 4 pls. 16 figs.

531.—Séguy, E. Code universel des couleurs. Pp. 68 55 pls. (720 colours). Paris (Lechevalier) 1936.

532.—Seifriz, W. Protoplasm. Pp. x + 584 179 figs. New York (McGraw-Hill) 1936 8vo. [Review *Nature* 138 p. 1077.]

533.—Seifriz, W. The structure of protoplasm. *Latv. biol. Biedr. Raksti* 5 1935 pp. 87-99 6 figs. [English, with Latvian rés.]

534. — Serebrovskij, A. S. An attempt at a new method of genetic analysis of quantitative characters. *C.R. Acad. Sci. Moscow* 1936 vol. 2 pp. 49-51. [English.]

Shaskol'skii, A. V. *vide* Dubinin.

535.—Shelford, V. E. Life zones and modern ecology in: Problems of Ecology, etc. Moscow 1934 pp. 3-15 3 figs. [Russian, with English rés.]

536.—Sherborn, C. D. An index to the authors (other than Linnaeus) mentioned in the catalogue of the works of Linnaeus preserved in the libraries of the British Museum, second edition, 1933. Pp. 1-59. London (Trustees Bt. Mus.) 1936 4to.

Sherwin, C. P. *vide* Harrow.

537.—Shibata, E. [and others]. Eine neue Theorie über das Leuchten der leuchtenden Organismen. *Botany & Zoology Tokyo* 4 no. 8 1936 pp. 1323-1329 1 fig. [Japanese, with German rés.]

538.—Shiras, G. Hunting wild life with camera and flashlight. A record of sixty-five years' visits to the woods and waters of North America. Vol. I. Lake Superior region. Pp. xxiv + 450.

Vol. II. Wild life of coasts, islands and mountains. Pp. x + 450. Washington D.C. (Nat. Geogr. Soc.) 1935. [Notice *Nature* 138 p. 780.]

539.—Shorthose, W. T. A criticism of Mr. Collier's "Notes on the preservation of the fauna of Nigeria." *Nigerian Field* 5 1936 pp. 60-68.

540.—Shoup, C. S. A bibliography of the zoology of Tennessee. *J. Tenn. Acad. Sci.* 11 1936 pp. 53-67.

Shrock, R. R. *vide* Twenhofel.

541.—Shull, A. F. Evolution. Pp. x + 312 64 figs. New York (McGraw-Hill) 1936 8vo.

542.—Siderow, B. H. The mutability of the yellow achaete and scute genes in the stocks of scute and yellow. Relation between the mutation frequency of the gene and its position in system. *J. Biol. Moscou* 5 1936 pp. 3-26. [Russian, with English rés.]

543.—Sidorow, B. N. [and others]. Crossing-over in heterozygoten Inversionen. I. Einfaches Crossing-over. *Genetica's Gravenhage* 18 1936 pp. 291-312 6 figs.

544.—Siderov, B. N. [and others]. Studies of crossing-over in heterozygous inversions. I. Single crossing-over. *J. Biol. Moscou* 4 1935 pp. 673-686 6 figs. [Russian, with English rés.]

Skoog, E. *vide* Bridges.

545.—Slizyński, B. M. A chromosomal basis of tumours. *Nature London* 137 1936 pp. 536-537.

546.—Slome, D. The diabetogenic hormone of the pituitary gland. *J. exp. Biol. Cambridge* 13 1936 pp. 1-10 2 figs.

547.—Smuts, J. C. Holism and evolution, 3rd ed. Pp. xiii + 358. London (Macmillan) 1936 8vo.

548.—Sokolowa, M. Das plankton des Ladoga-Sees in der Umgegend des Leuchtturmes Ossinowezki. *Trans. Inst. biol. Péterhoff* nos. 13-14 1935 pp. 124-149 9 figs. [Russian, with German rés.]

549.—Sotka, A. J. Theorie analytique des associations biologiques. Part I. Principes. Pp. 1-45. Paris (Hermann) 1934. [N.V.]

550.—Späreck, R. Review of the Danish investigations of the quantitative composition of the bottom fauna in Iceland and East Greenland waters. Rapp. Cons. Explor. Mer Copenh. **99** no. 5 1936 pp. 1-5 1 map.

551.—Späreck, R. Ueber die geographische Bedeutung der Petersenschen Tiergemeinschaften. Zoogeogr. Jena **3** 1936 pp. 132-144.

Späreck, R. *vide* Krogh.

552.—Sparr, E. Bibliografía de la Geología, Minerología y Paleontología de la República Argentina. Parte VII. Años 1932-1935. Bol. Acad. Cienc. Córdoba **33** 3 1936 pp. 221-280.

553.—Spemann, H. Experimentelle Beiträge zu einer Theorie der Entwicklung. Pp. viii + 296. Berlin (Springer) 1936 8vo. [N.V.] [Review Nature **139** p. 982.]

554.—Spencer, W. P. A teaching model of crossing-over in the X-chromosome of *Drosophila hydei*. Amer. Nat. New York **70** 1936 pp. 68-69.

Srivastava, M. D. L. *vide* Bhattacharya.

555.—Ssacharow, W. W. Jod als chemischer Faktor der auf den Mutationsprozess von *Drosophila melanogaster* wirkt. Genetica's Gravenhage **18** 1936 pp. 193-216.

556.—Stadler, H. Pflanzen- und Tierwelt des Flusssohle des Mains. Verh. int. Vereinig. Limnol. Beograd **7** 1935 pp. 487-496.

Stammer, H. J. *vide* Pax.

557.—Stangenberg, M. Limnologische Charakteristik der Seen des Suwalki-Gebiets auf Grund der hydrochemischen Seenverlandung. Trav. Inst. Rech. Forêts Dom. Warszawa (A) no. **19** 1936 pp. 7-85 6 photos map 12 text-figs. [Polish and German.]

558.—Steenberg, C. M. Johan Erik Vesti Boas. Ein Lebensbild. Gegenbaurs morph. Jahrb. Leipzig **78** 1936 pp. 253-265 portr. bibliogr.

559.—Stefanelli, A. Indagini comparative sulla natura (somatica ed autonoma) delle fibre nervose e dei loro apparati espansionali nella cute, cavita orale e muscoli striati volontari. Rev. Biol. Firenze **21** 1936 pp. 48-75 6 pls.

560.—Steinberg, A. G. The effect of autosomal inversions on crossing-over in the X-chromosome of *Drosophila melanogaster*. Genetics Menasha **21** 1936 pp. 615-624 1 graph.

561.—Steiniger, F. Die Biologie der sog. "tierischen Hypnose." Ergebn. Biol. Berlin **13** 1936 pp. 348-451 46 figs.

562.—Stejneger, L. Georg Wilhelm Steller. The pioneer of Alaskan Natural History. Pp. xxiv + 623 map and illustr. Cambridge Mass. (Harvard Univ. Press) 1936 8vo.

563.—Stern, C. Genetics and ontogeny. Amer. Nat. **70** 1936 pp. 29-35.

564.—Stern, C. Interspecific sterility. Amer. Nat. **70** 1936 pp. 123-142 7 figs.

565.—Stern, K. Somatic crossing-over and segregation in *Drosophila melanogaster*. Genetics Menasha **21** 1936 pp. 625-730 14 figs.

Sternberg, H. *vide* Feller.

566.—Stevens, W. L. The analysis of interference. J. Genet. Cambridge **32** 1936 pp. 51-64.

567.—Stieve, H. [Editor]. Nomina anatomica. Zusammengestellt von der im Jahre 1923 gewählten Nomenklatur-Kommission etc. Verh. anat. Ges. Jena **43** 1936 pp. 323-461 5 figs.

568.—[Stiles, C. W. (Editor).] Opinions rendered by the International Commission on Zoological Nomenclature. Opinions 124 to 133. Smiths. misc. Coll. **73** no. 8 1936 pp. 1-34; see also Science **84** 1936 pp. 459-460.

569.—Stiles, C. W. Suggested cases for suspension of rules in nomenclature. Nature London **138** 1936 pp. 34-35.

570.—Stiles, C. W. Notice of possible suspension of rules of nomenclature in certain cases. Science **83** 1936 pp. 552-553.

571.—Stiles, C. W. Notice of proposed suspension of rules of nomenclature in the case of Bohadach 1761. Science **84** 1936 p. 158.

572.—Stiles, C. W. Opinions rendered by the International Commission on Zoological Nomenclature. Opinions 124 to 133. Smithsonian. misc. Coll. **73** no. 8 1936 pp. 1-44.

573.—Stolte, H. A. Das Werden der Tierformen. Eine Einführung in die Grundfragen der Entwicklungsphysiologie. Pp. vii + 112 71 figs. Stuttgart (Enke) 1936 8vo.

574.—Stolte, H. A. Die Herkunft des Zellmaterials bei regenerativen Vorgängen der Wirbellosen Tiere. *Biol. Rev. Cambridge* 11 1936 pp. 1-48 12 figs.

575.—Stork, J. W. and Renouf, L. P. W. Fundamentals of biology, 2nd ed. pp. xv + 454 187 figs. London (Murray) 1935 8vo.

576.—Strand, E. Miscellanea nomenclatorica zoologica et palaeontologica. IX. Folia zool. hydrobiol. *Riga* 9 1936 pp. 167-170.

577.—Straus, W. L. and Howell, A. B. The spinal accessory nerve and its musculature. *Quart. Rev. Biol. Baltimore* 11 1936 pp. 387-405.

578.—Ströer, W. F. H. The gene, its function and its meaning in genetics. *Quart. Rev. Biol. Baltimore* 11 1936 pp. 57-69 5 figs.

579.—Stroesco, G. Une nouvelle série "d'allèles multiples" déterminant le caractère "scaloped" et localisée dans le chromosome sexuel, chez *Drosophila melanogaster*. *Bull. Biol. Paris* 70 1936 pp. 371-407 1 pl. 1 graph.

Strohecker, H. F. *vide* Park.

580.—Strohl, J. La bipolarité de la faune marine et les données actuelles de la génétique. Suivi de considérations générales sur les relations de la taxonomie avec la physiologie et la génétique. *Mem. Mus. Hist. nat. Belg.* (2) 3 1936 pp. 311-318.

Strunz, C. *vide* Schertz.

581.—Studnička, F. K. Joh. Ev. Purkinjes histologische Arbeiten. *Anat. Anz. Jena* 82 1936 pp. 41-66.

582.—Studnička, F. K. Das Mesostroma, der Gewebsschleim, die Desmofibrillen und die Grundsubstanz. Bemerkungen und Nachträge zu einigen meiner früheren Arbeiten. *Z. mikr. anat. Forsch. Leipzig* 39 1936 pp. 355-378.

Studnitz, G. v. *vide* Buddenbrock.

583.—Sturtevant, A. H. Preferential segregation in triplo-iv females of *Drosophila melanogaster*. *Genetics Menasha* 21 1936 pp. 444-466 5 figs.

584.—Sturtevant, A. H. and Beadle, G. W. The relations of inversions in the X-chromosome of *Drosophila melanogaster* to crossing-over and disjunction. *Genetics Menasha* 21 1936 pp. 554-604 7 figs.

585.—Subramanian, M. K. On the shape of the golgi bodies in Invertebrate eggs. *Curr. Sci. Bangalore* 4 1936 pp. 859-861 1 fig.

586.—Suche, W. M. Crossing-over and disjunction in translocations. *Amer. Nat. New York* 70 1936 pp. 69-70.

587.—Suchlandt, O. und Schmassmann, W. Limnologische Beobachtungen an acht Hochgebirgsseen der Landschaft Davos. *Rev. Hydrol. Aarau* 7 1935 pp. 1-201.

588.—Šule, K. O Symbiose. *Výroční Zpráva Brno* no. 7 1931 pp. 13-18.

Svedberg, T. *vide* Eriksson-Quensel.

589.—Swezy, O. Hormones and evolution. *Amer. Nat.* 70 1936 pp. 498-500.

590.—Szabó, I. Senescence and death in Invertebrate animals. *Riv. Biol. Firenze* 19 1935 pp. 377-436 16 figs.

591.—Szalai, T. Der Einfluss der Gebirgsbildung auf die Evolution des Lebens. *Palaeont. Z. Berlin* 18 1936 pp. 113-122.

Szalai, T. *vide* Kolosváry.

592.—Szarski, K. On the structure and development of the accessory glands (Glandulae accessoriae) of the urinogenital ducts of the White Mouse. *Arch. Tow. nauk. Lwow* (3) 6 no. 14 1935 pp. 1-148 4 pls. 18 text-figs. [Polish, with English rés.]

593.—Szepsenwol, J. Causalité de la différenciation de la cellule nerveuse et détermination de la croissance de ses prolongements. *Arch. Anat. micr. Paris* 32 1936 pp. 1-104 18 figs.

594.—Tan, C. C. Genetic maps of the autosomes in *Drosophila pseudoobscura*. *Genetics Menasha* 21 1936 pp. 796-807 1 fig.

595.—Tanaka, Y. "Mottled striped," a mutable type due to the chromosome translocation. *Bult sci. Fak. terk. Kjuu Univ.* 6 1935 pp. 404-414 1 pl. [In Japanese, with English summary.]

596.—**Tasnádi-Kubacska, A.** Schlussmitteilung (X) über pathologische Untersuchungen an ungarländischen Versteinerungen. *Ann. hist.-nat. Mus. Hung.* 30 1936 pp. 118–150 4 pls. 2 text-figs. [2nd pag.]

597.—**Tasnádi-Kubacska, A.** Phylogenetisch bedeutungsvolle Kampfsuren bei ausgestorbenen Wirbeltieren. *Math. term. Ért. Budapest* 54 1936 pp. 979–990 1 pl. [German, with Magyar rés.]

598.—**Tauson, A. O.** Lake Dikoya and its biology. *Scient. Mem. M. Gorky Sta. Univ. Perm* 1 no. 2–3 1935 pp. 3–55 3 maps. [Russian, with English rés.]

599.—**Tauson, A. O.** A hydrobiological review of the lakes and rivers of the Garin district, Sverdlovsk Province and economical estimation of their fisheries. *Scient. Mem. M. Gorki Sta. Univ. Perm* 2 no. 1 1936 pp. 85–166 map. [Russian, with English rés.]

600.—**Taylor, W. P.** What is ecology and what good is it? *Ecology Brooklyn* 17 1936 pp. 333–346.

601.—**Taylor, W. P.** The principle of "diversification" in the wildlife field. *Science* 84 1936 pp. 350–351.

602.—**Teissier, G.** Croissance comparée des formes locales d'une même espèce. *Mem. Mus. Hist. nat. Belg.* (2) 3 1936 pp. 627–634.

Teissier, G. *vide* Huxley.

603.—**Thamdrup, H. M.** Beiträge zur Oekologie der Wattenfauna auf experimental Grundlage. *Medd. Komm. Havundersog. Kjøb. (Fiskeri)* 10 No. 2 1935 pp. 1–125 126 photos 94 figs.

604.—**Thomas, H. B. and Scott, R.** Zoology in: Uganda pp. 182–194. London (Oxford Univ. Press) 1935 8vo.

605.—**Thomas, H. H.** Cosmic rays and the origin of species. *Nature London* 137 pp. 51–53, 97–98; also *M. Delbrück etc.* pp. 358–359.

606.—**Thomas, M.** La notion de l'instinct, connaissance innée et sa tenue devant la méthode expérimentale. *Scientia Bologna* 59 1936 pp. 252–264.

607.—**Thomasset, J.** Les fossiles dans la légende et la tradition. *Bull. Soc. Hist. nat. Creusot* 3 1935 pp. 24–42.

608.—**Timoféeff-Rossovsky, N. W.** Ueber den Einfluss des genotypischen

Milieus und der Aussenbedingungen auf die Realisation des Genotyps. *Genmutation vti (venae transversae incompletae) bei Drosophila funebris*. *Nachr. Ges. Wiss. Göttingen Berlin Biol. (N.F.)* 1 1934 pp. 53–106 25 figs.

609.—**Timoféeff-Rossovsky, N. W.** [and others]. Ueber die Natur der Genmutation und der Genstruktur. *Nachr. Ges. Wiss. Göttingen* 1 no. 13 1935 pp. 189–245 11 figs.

610.—**Tokin, B. P.** Ontogenie der Zelle und Entwicklungsmechanik. *Mitt. IV. J. Biol. Moscou* 4 1935 pp. 807–824 [Russian, with German rés.]; see also *G. P. Gorbunowa* pp. 1077–1082.

611.—[**Trofimov, I. E. and Postnikova, E. D.**] The influence of the free end of the X-chromosome on crossing-over in *Drosophila*. *J. Biol. Moscow* 4 1936 pp. 993–996. [Russian, with English rés.]

612.—**Tsubina, M. G.** Do premutational processes exist in the gene? *J. Biol. Moscou* 4 1935 pp. 917–922. [Russian, with English rés.]

613.—**Tsubina, M.** Hypomorphic and antimorphic genes. *J. Biol. Moscou* 4 1936 pp. 997–1004. [Russian, with English rés.]

614.—**Tsubina, M. G.** Crossing-over in translocations. *Biol. J. Moscou* 5 1936 pp. 521–536 5 figs. [Russian, with English rés.]

615.—**Tsusaki, T.** Professor Keiji Okajima. Ein Nachruf. *Folia anat. japon.* 14 Hft. 3 1936 pp. (1–9) portr.

Turnowsky, F. *vide* Findenegg.

616.—**Twenhofel, W. H. and Shrock, R. R.** Invertebrate Paleontology. Pp. xvi + 511 175 illustr. New York & London (McGraw-Hill) 1935 8vo.

617.—**Tyler, A.** On the energetics of differentiation. III. Comparison of the temperature coefficients for cleavage and later stages in the development of the eggs of some Marine Animals, pp. 59–81 4 figs. IV. Comparison of the rates of oxygen consumption and of development of different temperatures of eggs of some Marine Animals, pp. 82–99. *Biol. Bull. Woods Hole* 71 1936.

618.—**Ubisch, Von.** Ueber die Herkunft des Wirbeltierstammes. *Bremer Beitr. Bremen* 2 1934 pp. 111–137 17 figs.

619.—Uéno, M. Zooplankton of the Sungari river, Manchoukuo. *Annot. zool. jap.* 15 1936 pp. 520-524 1 fig.

620.—Uéno, M. Preliminary report on the fauna of the Akan lake-group of Hokkaido. *Botany & Zool. Tokyo* 4 1936 pp. 383-394 figs. [Japanese only.]

621.—Uéno, M. Productivity of an extremely eutropic lake in middle Japan. *Proc. Imp. Acad. Tokyo* 12 1936 pp. 248-250.

622.—Umansky, E. Induction properties of the regenerational blastem. *Proc. Zool.-Biol. Inst. Scient. Res. Charkov* 1 1936 pp. 10-19. [Russian only.]

623.—Ungerer, E. Die Hypothese der Keimangmutationen. *Acta Biotheor. Leiden* 2 1936 pp. 23-58.

624.—Valkanov, A. Notizen über die Brackwässer Bulgariens. I. *Ann. Univ. Sofia* 31 no. 3 1935 pp. 249-303 figs. A-Z + 27. [Bulgarian, with German rés.]

625.—Valkanov, A. Notizen über die Brackwässer Bulgariens. 2. Versuch einer hydrographischen und biologischen Erforschung derselben. *Ann. Univ. Sofia* 32 livr. 3 1936 pp. 209-341 31 figs. [Bulgar, with German rés.]

626.—Van Cleave, H. J. Some interesting Pre-Linnacan names. *Trans. Illinois Acad. Sci.* 28 1936 pp. 263-265.

627.—Vandervael, F. Des modifications provoquées dans l'aspect histologique de la fibre musculaire striée par quelques liquides d'imbibition. *Arch. Biol. Liège* 47 1936 pp. 71-85.

628.—Vatova, A. Ricerche quantitative sulla fauna bentonica dell' Alto Adriatico e loro importanze per le biologia marina. *Not. Ist. Biol. mar. Rovigno* no. 19 1936 pp. 3-15 3 maps.

629.—Vatova, A. Ricerche preliminari sulle biocenosi del Golfo di Rovigno. *Thalassia* 2 no. 2 1935 pp. 1-30 4 text-figs. 8 tables.

630.—Veisig, S. J. [Fauna of the Shollar Springs.] *Ann. Lenin State Univ. Baku* 9 1930 pp. 173-185. [Russian only.]

631.—Vialli, M. Istofisiologia, istochimica e istofisica nelle loro applicazioni alla zoologia. *Arch. Zool. Torino* 23 Suppl. 1936 pp. 53-81.

632.—Volterra, V. et d'Acona, U. Les associations biologiques au point de vue mathématique. Pp. 97. Paris (Hermann) 1935. [N.V.]

633.—Waddington, C. H. How animals develop. Pp. 1-128 31 figs. London (Allen & Unwin) 1935 8vo.

634.—Waddington, C. H. Morphogenesis and the field concept. *Nature London* 138 1936 p. 809.

Wailles, G. H. *vide* Beebe.

635.—Walde, K. Die Tierwelt der Alpen: eine erste Einführung. Pp. v + 255. Wien (Springer) 1935 [N.V.]

636.—Walden, P. Goethe und die Naturwissenschaften. *Bremer Beitr. Bremen* 1 1933 pp. 1-53.

637.—Walker, C. E. Evolution and heredity: theories and problems. Pp. ix + 222. London (Black) 1936 8vo. [N.V.]

638.—Warren, E. R. Casualties among animals on mountain roads. *Science* 83 1936 p. 14.

639.—Watkins, A. E. Heredity and evolution. Pp. viii + 243 2 pls. London (Murray) 1935. [N.V.] [Notice *Nature* 137 p. 7.]

640.—Watson, D. M. S. [and others]. A discussion on the present state of the theory of Natural Selection. *Proc. roy. Soc. London* 121B 1936 pp. 43-73.

641.—Watzka, M. Ueber Gefäss-speren arteriovenöse Anastomosen und den Erythrocytenabbau im Rinderlymphknoten. *Z. mikr. anat. Forsch. Leipzig* 39 1936 pp. 250-262 8 figs.

642.—Weinstein, A. The theory of multiple-strand crossing-over. *Genetics Menasha* 21 1936 pp. 155-199 4 figs.

643.—Weiss, H. B. Rafinesque's Kentucky friends. Pp. 1-72 25 illustr. New Brunswick, N.J. (Author) 1936 8vo.

644.—Weiss, P. A convenient retractor for use in operations and dissections of small-sized animals. *Science* 84 1936 p. 164 1 fig.

645.—Welch, P. S. Limnological investigation of a strongly basic bog lake surrounded by an extensive acid-forming bog mat. *Pap. Mich. Acad. Sci.* 21 1936 pp. 727-751.

- 646.—Welch, P. S. A limnological study of a small Sphagnum—Leather leaf—Black Spruce bog lake with special reference to its plankton. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 310–312.
- 647.—Wermel, E. M. und Portugalow, W. W. Ueber proportionales (rhythmisches) Zellenwachstum. Wiss. Ber. Moskauer Staats Univ. 4 1935 pp. 14–21. [Russian, with German rés.]
- 648.—Wettstein, F. von. Ueber plasmatische Vererbung, sowie Plasma- und Genwirkung. Nachr. Ges. Wiss. Göttingen (6) 1 Biol. 1930 pp. 111–118.
- 649.—Wheeler, W. F. Inheritance and evolution. London (Methuen) 1936. [N.V.]
- 650.—Whiting, P. W. Dominant lethal genetic effects caused by neutrons. Science New York 84 1936 p. 68.
- 651.—Widmark, E. M. P. Begynnelsesstadiet vid digestionen av animalisk föda. K. fysiogr. Sällsk. Lund Förh. 5 1936 pp. 99–108 3 figs.
- 652.—Wiedemann, G. Modellversuche zur Selektionswirkung von Faktormutationen bei *Drosophila melanogaster*. Genetica 's Gravenhage 18 1936 pp. 277–290 9 figs.
- 653.—Wilbur, K. M. A method for the measurement of activity of small animals. Science 84 1936 p. 274 1 fig.
- Willey, A. *vide* Fox.
- 654.—Williams, A. B. The composition and dynamics of a Beech-Maple climax community. Scient. Pub. Cleveland Mus. Nat. Hist. 6 1936 pp. 1–92 16 figs; also Ecol. Monogr. Durham N.C. 6 no. 3 pp. 317–408 16 figs.
- 655.—Witschi, E. The bill of the Sparrow as an indicator for the male sex hormone. I. Sensitivity. Proc. Soc. Exp. Biol. New York 33 1936 pp. 484–486.
- 656.—Wolf, B. Animalium Cavernarum Catalogus. Pars 7. Bd. 2 pp. 225–272; Bd. 3 pp. 465–544. 's-Gravenhage (Junk) 1936 8vo.
- 657.—Wolff, E. Les bases de la teratogénèse expérimentale des Vertébrés amniotes d'après les résultats des méthodes directes. Arch. Anal. Hist. Embryol. Strasbourg 22 1936 pp. 1–375 3 pls. 105 text-figs.
- 658.—Wolsky, A. and Huxley, J. S. The structure of the non-faceted region in the Bar-eye Mutants of *Drosophila*, and its bearing on the analysis of genic action upon Arthropoden eyes. Proc. zool. Soc. London 1936 pp. 485–489 2 figs.
- 659.—Woodburne, R. T. A phylogenetic consideration of the primary and secondary centers and connections of the trigeminal complex in a series of Vertebrates. J. comp. Neurol. Philad. 65 1936 pp. 403–501 24 figs.
- 660.—Woodbury, A. M. Animal relationships of Great Salt Lake. Ecology Brooklyn 17 1936 pp. 1–8 map.
- Woronzowa, M. A. *vide* Liosner.
- 661.—Wright, S. Relatorio sobre uma investigação preliminar “Limnologia das aguas de São Paulo”. Arch. Inst. biol. São Paulo 7 1936 pp. 65–73. [Portuguese, with English rés.]
- 662.—Yoshimura, S. and Miyadi, D. Limnological observations of two Crater Lakes of Miyake Island, Western North Pacific. Japan J. Geol. Geogr. 13 1936 pp. 339–352 5 figs.
- 663.—Young, C. C. and Bien, M. N. Some observations on the Cenozoic Geology near Peiping. Bull. geol. Soc. China Peking 15 1936 pp. 207–216 5 figs.
- 664.—Zavattari, E. Prodrómo della Fauna della Libia. Pp. viii + 1234. Pavia (Tip. Cooperativa) 1934. [N.V.]
- 665.—Zawadowsky, M. M. Gene and its rôle in the realization of a character. Biol. Generalis Wien 12 1936 pp. 22–48.
- 666.—Želizko, J. V. Weitere neue Belege über die Ursachen des Massentodes rezenter Wirbeltiere. Palaeont. Z. Berlin 18 1936 pp. 122–128.
- Zenkewitch, L. *vide* Brotzky.
- 667.—Zirkle, C. Further notes on pangeneses and the inheritance of acquired characters. Amer. Nat. 70 1936 pp. 529–546.
- 668.—Zirpolo, G. I raggi di G. R. witschi. Arch. Zool. Torino 23 Suppl. 1936 pp. 197–250 14 figs.
- 669.—Zoccoli, F. G. I periodi della storia della zoologia. Natura Milano 27 1936 pp. 13–21.

II.—SUBJECT INDEX.

The full reference will be found under "Titles" by means of the author's name and number.

COMPREHENSIVE AND GENERAL.

General Works and Addresses.—Evolution, SHULL, 541; WATKINS, 639; Evolution and Natural Selection, HESSE, 249; HUXLEY, 263; Form and function, BÖKER, 53; Variation, ROBSON & RICHARDS, 490; Protoplasm, SEIFRIZ, 532; Morphology, CORI, 102; Frontiers of biology and physics, GUYE, 218; Descartes and modern physiology, HALDANE, 227; Recent advances in morphogenesis, CAULLERY, 95; Radiation and life, DUGGAR, 149; Stimuli to cell mitosis, GURWITSCH, 217; Effects of temperature, BÉLEHRÁDEK, 36; Right-left problems and asymmetry, LUDWIG, 356; Vertebrate anatomy, KAPPERS & OTHERS, 289; Biogeography, ARLDT, 17; NEWBIGIN, 410; Genetics, CAULLERY, 94; The species and its origin, CUÉNOT, 107; A colour guide with plates, SÉGUY, 531.

Textbooks.—General biology, ARON & GRASSÉ, 18; BOHN, 49, 50; KINSEY, 303; STORK & RENOUE, 575; Zoology, LAMEERE, 334; Vertebrate anatomy, BÖKER, 51; BOLK, 55; Vertebrate osteology, MURRAY, 403; Histology, KRAFT, 325; SCOTT & KENDALL, 528; Comparative physiology, v. BUDENBROCK & STUDNITZ, 81; Endocrinology, ASHER, 19; Physiological embryology, STOLTE, 573; Embryology, KORSCHULT, 319; Vertebrate embryology, BRACHET, 60; Biochemistry, BALDWIN, 23; HARROW & SHERWIN, 237; LISON, 348; Genetics, ALVERDES, 10; BENL, 38; JENNINGS, 277; KRONACHER, 327; Zoogeography, GEPTNER, 189; Russian palaeontology, RJABININ, 488; Invertebrate palaeontology, TWENHOFEL & SHROCK, 616.

General Biological Problems and Hyperzoology.—Whitehead's philosophy, AGAR, 3; The substructure and superstructure in empirical biology, COLLIN, 101; General principles, FRANZ, 175; HARTMANN, 238; NOVIKOFF, 418; OELZE & SCHMITH, 424; Problem of life, SCHUURMAN, 525; Philosophy of biology, HALDANE, 226; Holism and evolution, SMUTS, 547;

BÜNNING, 82; DRIESCH, 134; MEYER, 382; DÜRKEN, 152; JORDAN, 283; Mechanism and Vitalism, HUNTER, 261; Order and life, NEEDHAM, 407; Causality, NOLTENIUS, 414; Transformism, MERCIER, 378; Biophysical laws, KÖVESSL, 322; Biotypology, BRANDT, 63; Homomorphy, NOVIKOFF, 420; Effects of anatomical reconstruction, BÖKER, 52; Individuality and brain, DIEBSCHLAG, 123; Integral analysis of life, DONNAN, 132; Fundamental units, JENNINGS, 278; Ontogenetic mutation, UNGERER, 623; Directness, SAPPER, 509; Form and function, BARGE, 26; BÖKER, 53; BUSSELL, 497; Biological time, NOÛY, 417; Anatomy and culture, PETERSEN, 450.

General and Popular Works on Natural History.—BERGER & SCHMID, 40; REGAN, 481; SCHMID, 517; SPIRAS, 538; Zoological Gardens, BOULINEAU, 58; Vertebrates of China, REEVES, 480; Animals of U.S.A., PRATT, 466, 467; Travel in the East Indies, MOYNE, 398.

History.—General, SCHMUCKER, 519; ZOCCOLI, 669; Harvey's "De generatione animalium," MEYER, 384; Anticipation of Bergmann's theory, DEMENTIEV, 120; Fossils in legend and tradition, THOMASSET, 607.

Biography.—Sketches of great naturalists, PEATTIE, 446; Darwiniana, ASHWORTH, 20; CARPENTER, 92; GRANDÓN, 200; Linnaeana, HELMS, 244; Azara, CABRERA, 86; H. W. Bates, DA ROCHA, 491; W. Brewster, French, 66; L. Galvani, FULTON & CUSHING, 179; Goethe, KÜHN, 330; WALDEN, 636; A. Paré, QUIGNON, 471; J. E. Purkinje, STUDNÍČKA, 581; Rabelais, HONIGSMANN, 255; C. S. Rafinesque, WEISS, 643; J. Ray, GUNAWARDENA, 214; G. W. Steller, STEJNEGER, 562.

Obituaries.—J. H. Ashworth, O'DONOGHUE, 423; J. E. V. Boas, STEENBERG, 558; G. Grimpe, SCHNEIDER, 520; J. Grochmalichi, BAEHR, 21; S. Hatta, INUKAI, 269; K. Lambrecht, ABEL, 1; T. H. Morgan, DUNCKER, 150; K. Okajima, NISHI, 413; TSUSAKI, 615; H. F. Osborn, ABEL, 1; F. Ziegler, BARGMANN, 27.

Bibliography.—Silesian zoology, PAX, 440; Scientific work in Poland, ANON,

14; Madagascar, GRANDIDIER, 202; Indian Science abstracts, PRASHAD, 464; Argentine palaeontology, SPARN, 552; Tennessee zoology, SHOUP, 540; Works of J. E. V. Boas, STEENBERG, 558; Galvani, FULTON & CUSHING, 179; Bibliography of works dealing with publication dates, GRIFFIN, 208; Index of authors writing on Linnaeus, SHERBORN, 538.

Conservation.—General principles, TAYLOR, 601; In Wurttemberg, SCHWENKEL, 526; Switzerland, MARIELTAN, 372; Nigeria, SHORTHORSE, 539; Dutch East Indies, KIES, 302.

Methods; Microscopical and Laboratory.—Microscopical illumination, KNISELY, 308; Stains, KONEFF, 317; PETRUNKEVITCH & PICKFORD, 451; Nervous tissue staining, BODIAN, 48; CHANG, 97; Nervous tissue by maceration, SCHMEICHEL & ENGLISH, 516; Freezing and drying methods, HOERR, 252; Osmic acid method for lipins, HOERR, 253; Injecting apparatus, GOLDSMITH, 197; Tissue culture, BUCHSBAUM, 79; CAMERON, 88; Dissection methods, WEISS, 644; Dissection and photography of embryos, LONG, 350; Laboratory aquaria, BENNINGTON & DILDINE, 39.

Methods; Museum Work.—Preservation of small specimens, HANNA, 230; Preparation of Vertebrate skeletons, DAVIS & GORE, 117; Vertebrate collecting and taxidermy, SCHRÖDER, 521.

Methods; Miscellaneous.—Centrifuging in limnology, SCHMIDT-RIES, 518; Bottom-sampler for hydrology, KROGH & SPÄRCK, 326; Quantitative litter sampler in ecology, JACOT, 272; Measuring activity in living animals, WILBUR, 653; Mathematical analysis in genetics, SEREBROVSKIJ, 534; Physico-mathematical methods, RASHEVSKY, 477; Standards of biological measurements, FISHER, 168; Illustration of zoological papers, CANNON, 90; HOEPLI, 251; New methods in biological studies, SAEZ, 506.

Museums and Institutions.—Museum of Comparative Zoology at Harvard, BARBOUR, 25; Catalogue of type fossils in Edinburgh Museum, ANDERSON, 13; Of type-fossils in Berne Museum, GERBER, 191; The Marine

Laboratory at Dinard, FISCHER-PIETTE, 167; The Trieste Aquarium, MÜLLER, 399.

Ethics of Publication.—Misleading titles, CRABB, 103.

MORPHOLOGY.

Nervous System and Sense Organs.—General work, KAPPERS & OTHERS, 289; Pineal body, ROUX, 494; Vegetative portion of nervous system, SCHARRE, 512; Trigeminal nerve, WOODBURN, 659; Spinal Accessory, STRAUS & HOWELL, 577; Cytology of neurones, LURIA, 363; Vertebrate and Invertebrate eye, NOWIKOFF, 419; Eye pigments, LÖNNBERG, 352; Lens of eye, MATHIS, 376; Vertebrate labyrinth, LÖWENSTEIN, 355.

Osteology.—General works, BOLK, 55; MURRAY, 403; Ribs of Amniota, EMELIANOW, 156; Sites of muscle insertion, DOLGO-SABUROFF, 128.

Myology.—Muscle cytology, DUBUIS-SON, 148; Tetrapod rib muscles, EMELIANOW, 156.

Other Organs.—Vertebrate renal system, v. D. BROEK, 73; Histology of Vertebrate kidney, GÉRARD, 190; Structure and innervation of capillaries, T. JONES, 282; Valves at arterio-lymph junctions, WATZKA, 641; Accessory glands of the urinogenital-system, SZARSKI, 592.

Histology.—Text - books, KRAFTA, 325; SCOTT & KENDALL, 528; Nerve-muscle connections, STEFANELLI, 559; Peripheral nerve sheath, NAGEL, 406; Epithelia, MEURER, 380; Connective tissue, STUDNICKA, 582; Purkinje's work, STUDNICKA, 581; Terminology of epi- and endothelium, HEIDENHAIN, 242.

Cytology.—General work, DARLINGTON, 115; Ontogeny of cell, TOKIN, 610; Peripheral cell growth, WERMEL & PORTUGALOW, 647.

Cytology; Special Problems.—Cell growth in specialized tissues, COHEN & BERRILL, 100; Cell regeneration in Invertebrates, STOLTE, 574; Effects of staining, RUMJANTZEW, 495; Cell

differentiation and vital staining, RIES, 487; Nuclear division in myogenesis, KATZNELSON, 296; Stimuli in mitosis, GURWITZCH, 217; Study of embryologic and pathological material, BAUER, 31; Nerve cells, SZEPESENWOL, 593; Mitosis in neural tube, SAUER, 510; Pleurinuclear adipose tissue cells, OCCHIPINTI, 421; Rouget cells of the capillaries, MICHELS, 388; Lipins, HOERER, 253; The "resting" nucleus, BEHRILL & HUSKINS, 42; Gurwitsch mitogenetic rays, ZIRPOLO, 668; Viçnome hypothesis, BHATTACHARYA & SRIVASTAVA, 44; Vitamin A in erythrocytes, JOYET-LAVEIGNE, 284; Golgi bodies in ova, SUBRAMANIAN, 585; Chromatin in mitosis, AHRENS, 5; Dynamics of chromatin loops, AHRENS, 6; Permutations in genes, TSUBINA, 612; Chromosome problems, BARGOZZI, 28; JEFFREY, 275; LAUGHLIN, 338; OFFERMANN, 425; Chromosomes in tumours, SLIZYNSKI, 545.

Protoplasm. Structure and other problems, GAUNE, 184; GROSSFELD, 211; JUST, 237; MEYER, 383; PEEFFER, 452; SEIKRIZ, 532, 533.

PHYSIOLOGY.

General.—Marine forms, CALESTANI, 87; Of behaviours, critical remarks, BUYTENDIJK & PLESSNER, 85; Problems of histophysiology, VIALI, 631; Genetics and physiology, KOLTZOFF, 314; General work on animal temperature, BÉLÉNÉRADEK, 36.

Nervous System and Sense Organs.—Nerve-muscle connections, STEFANELI, 559; Reaction to stimulation, MARTANO, 373; Myogenic and neurogenic conduction, MALOEUF, 368; Afferent areas of cranial nerves, BARNARD, 29; Spinal Accessory nerve, STRAUS & HOWELL, 577; Vision problems, CANELLE, 89; KAHMANN, 288; KÜHN, 329; MERKER, 379; Function of Vertebrate labyrinth, LÖWENSTEIN, 355.

Muscles.—Muscle movement and changes, VANDERVAEL, 627; Movement in light fields, BLUM & OTHERS, 47; Prehension, RABAUD, 473.

Nutrition and Digestion.—General, WIDMARK, 651; In Invertebrates, BENAZZI & BENAZZI-LIENTATI, 37; In cold-blooded animals, FOX, 174;

Secretion of HCl in stomach, HOERER, 252; Origin of glycogen, PASTEELS, 439.

Respiration and Circulation.—Variation in intensity in respiration, SCHLIEPER, 515; Respiration in marine Invertebrates, PIERI, 455; At high altitudes, HALL, 228; Respiratory pigments, ROCHE, 492; Vaso-dilators, GADDUM, 180; Circulation and temperature in cold-blooded animals, FETSCH, 178.

Excretion. The Vertebrate kidney GÉRARD, 190.

Reproduction.—Autofecundation in hermaphrodite Metazoa, GAVRILOV, 187; Twinning, HERR, 248; Light and sex cycle, BISSONETTE, 46; Gonadal hormones, DANTEBAKOFF, 112.

Growth Problems.—In Vertebrates, PRZIBRAM, 469; Relative growth, LUMER, 360; RICHARDS, 483; Growth and the subspecies problem, TEISSIER, 602; Cell growth, WERMEL & PORTUGALOW, 647; Abnormal growth, D. F. JONES, 280; Terminology of growth, HUXLEY & TEISSIER, 264, 265, 286.

Endocrines and Other Glands.—Text-book, ASHER, 19; Activity in Invertebrates, DE LERMA, 342; Sex hormones and blood calcium, RIDDLE & DOTTI, 486; Pituitary hormones, SLOME, 546.

Miscellaneous.—Role of the gene, KOLTZOFF, 315; Physiology of the senses and geographical races, KRUMBHOLZ, 328; Colour changes, PARKER, 436; New theory of light emission, SHIBATA & OTHERS, 537.

Experimental Physiology.—Effects of sunlight, MANCUSO, 369; Electricity and living cells, SCHRÖDER, 522; Effects of high frequency on sperm cells, MACHOWKA & OTHERS, 363; Temperature on protoplasm, BÉLÉNÉRADEK, 36; On pigment-building ferments, SCHULTZ, 523; Actions of CO₂ on cells, BECKER, 33; Effects of pressure, CATTELL, 93; Centrifuging on neurones, BROWN, 75; Male hormones and colour of Sparrow's bill, WITSCHI, 655.

Experimental Physiology; Grafts and Tissue Culture.—BREIDER, 64; CAMERON, 88; JACOBY, 271; GUYER & CLAUD, 219; LÖNNER & WOBONZOWA, 347.

Biochemistry; General.—Textbooks, BALDWIN, 23; LISON, 348; HARROW & SHERWIN, 237; Address, HOPKINS, 256.

Biochemistry; Special Problems.—Carotinoids, LEDERER, 340; LÖNNBERG, 352, 353; Arginase, BALDWIN, 24; Glucose, BERTHOUMEYRoux, 43; Oxidate and fermentate, GAUSE, 183; Chlorides, IRVING & MANERY, 270; Iron and Manganese, DORFF, 133; Haemocyanins, ERIKSSON-QUENSEL & SVEDBERG, 159; Vaso-dilator substances, GADDUM, 180; Reaction of fuelgen and thymonuclear acid, BRACHET, 61; Blood of marine animals, PORA, 462; Muscles of marine animals, BIALASZEWICZ & KUPFER, 45; Action of CO₂ on living cell, BECKER, 33.

Biophysics.—Mitogenetic rays, RAHN, 474; Osmotic pressure in marine and freshwater animals, MEYER, 385, 386, 387.

Biomathematics.—Methods, RASHEVSKY, 477; Growth, LUMER, 360; Integral analysis of life, DONNAN, 132; Frequency distributions, BECKING & DRION, 34; Estimation of variability, HOLCOMB & FROMAN, 254; Interference in genetics, STEVENS, 566.

EMBRYOLOGY.

Textbooks.—KORSCHULT, 319; WADDINGTON, 633.

General Problems.—PETER, 447; STOLTE, 573; General morphogenesis, WADDINGTON, 634; Ontogeny of the cell, DANTCHAKOFF, 114; TOKIN, 810; General types of development, IERZIKOV, 267; Study of causal embryology, DALCQ, 108, 109; Organisers, GRILL, 205; BAUTZMANN, 32; Development centres revealed by vital staining, GRAPER, 201; Energetics of differentiation, TYLER, 617; Regenerational blastem, UMANSKY, 622; Ontogenesis and genetics, JUCCI, 285; Metamorphosis and direct development, JESCHIKOV, 279.

Early Stages.—Regulation, DALCQ, 108, 109; Homology of the blastopore in various gastrulae, FLORIAN, 169.

Organogeny.—Head problem in Chordata, LANGE, 337; Neuroembryology,

DETWILER, 122; Brachial nerve plexus, MILLER & DETWILER, 389; Mechanics of development of vertebrae, FELLER & STERNBERG, 163; Striped muscle, KATZNELSON, 295; Vertebrate renal system, v. D. BROEK, 73; Accessory glands of the urinogenital system, SZARSKI, 592; Histogenesis in hermaphrodites, DANTCHAKOFF, 113.

Experimental Embryology.—Integration in tissue culture, EHRUSI, 157; Induction methods, FISCHER, 166; Causal factors and selective influences, LEHRMANN, 341.

PALAEONTOLOGY.

General Works and Problems.—Text book of Invertebrates, TWENHOFEL & SHROEK, 616; Russian textbook, RJABININ, 488; Palaeontology, Embryology and Genetics a synthesis, SCHINDewolf, 514; General address, LULI, 359; Palaeontology and humanity, HAWKINS, 240; Palaeontology and ecology, HECKER, 241; Geological history and evolution, KOLOSARY & SZALAI, 313; Fossils in legend and tradition, THOMASSET, 607.

Special Problems.—Devonian trail markings in Thuringia, HUNDT, 260; Palaeontological reconstruction in Turkestan, KOROVIN, 318; Fossil types in Edinburgh Museum, ANDERSON, 13; in Berne Museum, GERBER, 191; In Cincinnati, CHAPPARS, 98; Bibliography of Argentine palaeontology, SPARN, 552.

Palaeopathology.—General work, PALES, 431; In Hungary, TASNADI-KUBACSKA, 596, 597.

ETHOLOGY.

Ecology; General Works.—FRENZEL, 176; NEWBIGIN, 410; SHELFORD, 535; TAYLOR, 600; Biocoenology, GAUSE, 185.

Ecology; Special Studies.—Quantitative, CARPENTER, 91; Syn- and autoecology, v. D. KLAUW, 307; Nocturnal studies, PARK & STROHECKER, 435; Geogr. relationships of bottom fauna communities, SPÄCK, 551; Prey and predators, GAUSE AND OTHERS, 186; Ducks and pond-life, HARDY, 234.

Ecology: Local Studies.—Dorset, DIVER, 124; Shore fauna, Windermere, MOON, 391; Estuarine, France, CAZELLE, 96; Mudbanks, Denmark, THAMDRUP, 603; Marine life, Sweden, LINDROTH, 346; Coastal, Jan Mayen I., PARAT & DEVILLERS, 434; Beaver reserve, Russia, SAINT-HILAIRE, 505; Morocco coast, BUROLLET, 84; Turkistan, KASHKAROV, 293, 294; Vertical distribution in Turkistan, KIRJANOVA, 305; Kamshatka, POPOV, 559; Great Salt Lake, Utah, WOODBURY, 660; Beach-maple forest, Ohio, WILLIAMS, 654; Estuarine N. Carolina, PEARSE, 444; Shore-fauna, E. Greenland, MADSEN, 367.

Limnology: General Works and Problems.—The aquatic habitat, SCOTT, 529; Evolution of freshwater fauna, LUKIN, 358; The effects of the drying up of lakes, GOSTKOWSKI, 199; Critical remarks on Pütter's theories, RANSON, 475; Bottom fauna of Alpine lakes, LUNDBECK, 361; Centrifuging methods in limnology, SCHMIDT-RIES, 518.

Limnology: Local Researches; Europe.—Windermere, HUMPHRIES, 259; MOON, 391; River Tees, ALEXANDER, 7; N. and S. Uist, NICOL, 411; Germany, OHLE, 426; River Rhine plankton, SEELEK, 530; Lunzer See, Austria, LUNDBECK, 362; Carinthia lakes, FINDENEGL, 164; FINDENEGL & TURNOWSKY, 165; PASCHINGER & PUCHNIG, 438; Swiss lakes, V. BÜREN, 83; LINDER, 345; MINDER, 390; SUCHLANDT & SCHMASSMANN, 587; Estonia, HABERMAN, 223; Poland, BOWKIEWICZ, 59; RZÓSKA, 502; STANGENBERG, 557; Russia, BORUTZKY, 57; BUCHALOWA, 78; DECKSBACH, 118; MURAVEJSKY, 402; SAINT-HILAIRE, 503; SOKOLOWA, 548; TAUSON, 598, 599; Italy, BRUNELLI & CANICCI, 77; MERGIAL, 377; Changes of level, Lake Nemi, D'ANCONA, 12; Yugoslavia, KÓZMIŃSKI, 324; Bulgaria, GRIMALSKI, 209; VALKANOV, 624, 625.

Limnology: Extra-European.—Turkistan, RYLOV, 501; Siberia, POPOVA & IOHANSEN, 460; POPOVA & DEGTAREWA, 461; Ussuri, BALDOWSKY, 22; Manchuria, UENO, 619; Japan, OKADA & KOBAYASHI, 428; UENO, 620, 621; Miyake I., Pacific, YOSHIMURA & MIYAI, 662; Alkaline lakes of Kenya, JENKIN, 276; Brazil, WRIGHT, 661;

Yucatan cenotes, PEARSE, 445; Bog lake in Michigan, WELCH, 645, 646; Lake Michigan, AHLSTROM, 4; EGGLETON, 154; Pennsylvania, HOSTETTER & DERICKSON, 258.

Oceanography: General Works and Problems.—Submarine illumination problems, RUSSELL & OTHERS, 500; Biological productiveness and population studies, BROTZKY & ZENKEWITCH, 74; KARSINKIN, 292; Distribution and fluctuations of zooplankton, HARDY, 231; A new bottom-sampler, KROGH & SPÄRCK, 326; Studies in Bermuda area, BEBE & WATLES, 35; In eastern Pacific, GUNTHER, 215.

Plankton Research.—General, RUSSELL, 498, 499; Arctic and antarctic plankton, HARDY, 232, 233; Winter plankton in N. Atlantic, HENTSCHEL, 246; Mediterranean plankton, BERNARD & PAGE, 41.

Oceanography: Benthos.—In Iceland and Greenland waters, SPÄRCK, 550; Baltic, DEMEL, 119; Oslo fjord, BROCH, 70; Adriatic, VATOVA, 628, 629.

Spelaeological Studies.—Catalogue cavernicolous fauna, WOLF, 656; Adaptation to cave life and other problems, DE KOLOSVARY, 310, 312; Artificial cave fauna, HUSSON, 262; Cave fauna of Belgium, LERUTH, 343; Westphalia, CHEPENBURG-SCHÉE, 207; Silesia, PAX, 441; Italy, BOLDORI, 54.

Other Miscellaneous Habitats.—Alpine, WALDE, 635; Main mud, STADLER, 556; Silesian underground waters, PAX & MASCHKE, 442; Hot springs in Japan, OKADA, 427; Mountain torrents, HORA, 257; Torrents in C. Asia, BRODSKY, 72.

Effects of Environment.—Change from marine to land habitat, PEARSE, 443; Effects of temperature on marine life, RUNNSTROM, 496.

Migration.—From sea to land, effects on structure, PEARSE, 443.

Longevity.—Action of endocrines, PICADO & ROTTER, 453; Senescence and death in Invertebrates, RAO, 476; SUABÓ, 590.

Psychology.—General, BUYTENDIJK & PLESSNER, 85; GRINDLEY, 210; DE KOLOSVARY, 311; SAVORY, 511; THOMAS, 606; Comportment, GEMELLI, 188; Hypnosis, STEINIGER, 561; Experiments with divining rod, LAUTENSCHLAGER, 339.

Miscellaneous.—Origin of speech, SCHWIDETZKY, 527; Autofecundation in hermaphrodites, GAVRILOV, 187; Animals as weather prophets, DOBRICK, 125.

AETIOLOGY.

Evolution: General and Critical Works and Addresses.—HESSE, 249; MCATEE, 364; MOROSOV, 397; PETER, 448; POLIAKOV, 453; SHULL, 541; SPEMANN, 553; WALKER, 637; WATKINS, 639; WHEELER, 649.

Evolution: Special Problems and Views.—Natural Selection, FORTUYN, 172; MACBRIDE, 365; HALDANE, 225; FORD, 170; WATSON & OTHERS, 640; Struggle for existence, v. BUDDENBROCK, 80; Hypothesis of indirect selection, KIRPITCHNIKOV, 306; Inheritance of acquired characters, PLATE, 457; ZIRKLE, 667; Recapitulation theory, MEYER, 381; Individual variation, JANISCH, 274; Use and disuse, PYCRAFT, 470; Effects of atrophy or degeneration, HARRIS, 236; Genetic aspects of evolution, EAST, 153; NEBOURS, 404; Hormones and evolution, SWEZY, 589; Interspecific sterility STERN, 564; Irreversibility law, GREGORY, 203; Cosmic rays and the origin of species, THOMAS, 605; Effects of mountain building on evolution, SZALAI, 591; Adaptation to cave life, DE KOLOSVÁRY, 310.

Evolution: Species and the Subspecies Problem.—CUÉNOT, 107; LONGLEY, 351; MORDVILKO, 392; PARAMONOW, 433; REDFIELD, 479.

Variation and Mutation.—General, EZHIKOV, 180; ROBSON & RICHARDS, 490; Variability statistics, H. GÜNTHER, 216; Variation and biometry, CROZIER, 106; Mutation and natural selection, GATES, 181; Mutation and the cosmic rays, FRIESEN, 177.

Genetics.—General works, CAULLERY, 94; DU BOIS, 146; KRONACHER, 327;

MORGAN, 393; PORTO, 463; RABAUD, 472; RIDDLE, 485; TIMOFÉEFF-RESSOVSKY, 609; v. WETTSTEIN, 648; Textbooks, ALVERDES, 10; BENI, 38; JENNINGS, 277; Morgan's work on genetics, DUNCKER, 150.

Genetics: Special Problems.—Genetics and ontogeny, STERN, 563; Genetics and systematics, FALKENSTRÖM, 162; Genetics and physiology of development, JUST, 286; Genes, their function and character, STRÖER, 578; ZAWADOWSKY, 665; Crossing-over, WEINSTEIN, 642; Fusion problems, HIRSCHLER, 250; Bivalents and chiasma formation, MATHER, 375; Variable inheritance power, PLATE, 457; Blood groups investigation, GATES, 182; Genetic analysis and quantitative characters, SEREBROVSKI, 534.

Genetics of Drosophila.—ALTERBURG, 9; BORISSENKO & OTHERS, 56; BRIDGES, 67; BRIDGES & OTHERS, 68; COCHRANE, 99; CREW & LAMY, 104; DEMEREC & HOOVER, 121; DOBHANSKY, 126, 127; DONALD, 129, 130, 131; DUBININ, 135, 136, 138, 139, 140; DUBININ & OTHERS, 141, 142, 143, 144, 145; DUBROVSKII, 147; EHRUSI & BEADLE, 158; GLEMBOTZKII, 193; GOLDAT, 196; GORDON, 198; GRÜNEBERG, 212; GYUL'BEKYAN, 220, 221, 222; HARNLY, 235; HEPTNER & DEMIDOVA, 247; KARP, 290, 291; KAUFMANN, 297, 298; KHVOSTOVA, 300; KHVOSTOVA & GAVRILOVA, 301; KOLLER, 309; KONDAKOVA, 316; KOSIKOV, 320, 321; KOZHEVNIKOV, 323; LÜERS, 357; MARGOLIS, 370, 371; MORIWAKI, 395, 396; MULLER & OTHERS, 400; NEUHAUS, 408, 409; NOUJIDIN, 416; OFFERMAN, 425; PAINTER & PATTERSON, 430; PAUSIN, 432; PARKS, 437; PROPTOV, 468; RECK, 478; ROKITZKII, 493; SAKHAROV, 507, 508; SIDEROW, 542; SIDEROW & OTHERS, 543, 544; SPENCER, 554; SSACHAROW, 555; STEINBERG, 560; STERN, 565; STROESCO, 579; STURTEVANT, 583; STURTEVANT & BEADLE, 584; SUCHE, 586; TAN, 594; TIMOFÉEFF-RESSOVSKY, 608; TROFIMOV & POSTNIKOVA, 611; TSUBINA, 613, 614; WIEDEMANN, 653; WOLSKY & HUXLEY, 658.

Genetics of other Insects.—*Apoteitix*, NABROUS & STEBBINS, 405; ROBERTSON, 489; *Bombyx*, MORIWAKI, 394;

TANAKA, 595; *Chironomus*, PETERS, 449; *Cirotettix*, HELWIG, 245; *Habrobracon*, WHITING, 650.

Problems of Sex.—Sex differentiation, ALLEN, 8; Sex determination, DANT-SCHAKOFF, 111; Sex hormones and secondary sex characters, LALLA, 333; Sex periodicity, MARSHALL, 374.

Regeneration.—BRIEN, 69; STOLTE, 574.

Biological Association.—Mathematical aspect, VOLTERRA & D'ANCONA, 632; Among marine animals, LINDROTH, 346; Symbiosis, ŠULC, 588; PIERANTONI, 456; Commensalism, ŠOTKA, 549.

Pathology.—Poisons, DURAN-REYNALS, 151.

Teratology.—Cyclopia, ADELMANN, 2; Experimental teratogenesis, WOLFF, 657.

Mortality.—Autos on roads, WARREN, 638; Catastrophic destruction of large numbers, ŽELÁZKO, 666.

Phylogeny.—General, KEMPERMANN, 299; Vertebrates, v. UBISCH, 618; Early Vertebrates, GREGORY, 204; Coelom, LAMEERE, 335; Chordate head, LANGE, 337; Brain and advance in psychological characters, OCHOTERNA, 422; Vertebrate renal system, v. D. BROEK, 73.

Taxonomy and Classification.—General principles, CROW, 105; NORMAN, 415; Modern systematics and nature protection, KUNTZE, 331; Taxonomy and evolution, KRUMBIEGEL, 328; Systematics and genetics, FALKENSTRÖM, 162.

Nomenclature.—International rules, SCHENK & McMASTERS, 513; Types and their classification, RICHTER, 484; Principles of nomenclatural orthography, APSTEIN, 15, 16; Opinions of the I.C.Z.N., STILES, 568, 572; Suggested suspension of rules, list of cases, STILES, 569, 570, 571; Miscellaneous corrections and changes, STRAND, 576; Prelinnean names, VAN CLEAVE, 626; Nomenclator animalium, SCHULZE, 524.

Terminology.—In biology, LAMEERE, 336; In anatomy, STEVE, 567; Zoological philosophy, AMARAL, 11; Relative growth, HUXLEY & TEISSIER, 264,

265, 266; Coenocyte and syncytium, DAUBENMIRE, 116; Epi- and Endothelium, HEIDENHAIN, 242; For "bottom mud food," FOX & AMSTEIN, 173.

GEOGRAPHY AND FAUNAS.

Zoogeography.—General Works, GEPTNER, 189; NEWBIGIN, 410.

Zoogeography: General Problems.—Land evolution of the continents, ARLDT, 17; Experimental zoogeography and genetics, PICTET, 454; Effects of mountain-elevation and the evolution of life, SZALAI, 591; Faunal corridors, HALL, 229; The Eremian (Sahara) region, BRAESTRUP, 62.

Zoogeography.—Local problems, Yugoslavia, HADŽI, 224; The S. Urals as a regional boundary, KIRIKOFF, 304; Origin of the circum-Black Sea fauna, BARTENEFF, 30; Limits of the Palaearctic and Oriental regions in Japan, OKADA & Koba, 429; Problems of the Greater Sunda Islands, RENSCH, 482; Life zones in Chile, GOETSCH, 195; Circum-antarctic freshwater life, BREHM, 65.

Zoogeography: Marine Problems.—North Pacific, BROCK, 71; Bipolarity, STROHL, 580; Problem of the benthos, SPÄRCK, 551; Influence of the Atlantic on the Channel and Mediterranean, PAGE, 161.

Palaearctic Region: Europe.—Dorset, DIVER, 124; Durham, ALEXANDER, 7; Westmoreland, HUMPHRIES, 259; Moon, 391; Hebrides, Scotland, FORREST & OTHERS, 171; NICOL, 411, 412; Belgium, LERUTH, 343; France, CAZALÉ, 96; Denmark, THAMDRUP, 603; Germany, LUNDBECK, 362; OHLE, 426; SEELER, 530; STADLER, 556; Westphalia, GRIEPENBURG-SCHÉE, 207; Silesia, PAX, 441; PAX & MASCHKE, 442; Baden, LITZELMANN, 349; Württemberg, SCHWENKEL, 526; Switzerland, v. BÜREN, 83; LINDER, 345; LUNDBECK, 361; MARIETAN, 372; MINDER, 390; SUCHLANDT & SCHMASSMANN, 587; WALDE, 635; Austria, FINDENEGG, 164; FINDENEGG & TURNOWSKY, 165; PASCHINGER & PUSHNIG, 438; Poland, BOWKIEWICZ, 59; RZÓSKA, 502; STANGENBERG, 557; Estonia, HABERMAN, 223; Russia,

BUCHALOWA, 78; BORUTZKY, 57; DECKSBACH, 118; KIRIKOFF, 304; MURAVEJSKY, 402; SAINT-HILAIRE, 503; SOKOLOWA, 548; TAUSON, 598, 599; VEISIG, 630; Italy, BOLDORI, 54; BRUNNELLI & CANICCI, 77; MERCIAI, 377; Yugoslavia, HADŽI, 224; KÓZ-MÍNSKI, 324; GRIMALSKI, 209; VALKANOV, 624, 625.

Palearctic Region: Extra-European.—Morocco, BUROLLET, 84; Lybia, ZAVATTARI, 664; Syria and Palestine, HEIM DE B., 243; Turkestan, KASHKAROV, 293, 294; KOROVIN, 318; RYLOV, 501; Siberia, POPOWA & IOHANSEN, 460; POPOWA & DEGTIAREWA, 461; Ussuri Prov., BALDOWSKY, 22; Manchuria, UENO, 619; China, REEVES, 480; Japan, OKADA, 427; OKADA & Koba, 428; KURODA, 332; UENO, 620, 621; Miyake Island, Japanese seas, YOSHIMURA & MIYDI, 662.

Ethiopian Region.—Tibesti, DALLONI 110; Kenya, JENKIN, 276; Uganda, THOMAS & SCOTT, 604; Madagascar, GRANDIDIER, 202.

Oriental Region.—Indo-Malayan Islands, KIES, 302; MOYNE, 398; RENSCH, 482; Hainan, GRESSITT, 206; China, REEVES, 480.

Australian Region.—Austro-Malayan Islands, RENSCH, 482; MOYNE, 398; Lady Julie Percy I., Australia, F. W.

JONES, 281; Solomon Is., LEVER, 344; Marquesas Is., MUMFORD, 401.

Neotropical Region.—Chile, GOETSCH, 194, 195; Brazil, v. IHERING, 268; WRIGHT, 661; Yucatan, PEARSE, 445.

Nearctic Region.—PRATT, 466, 467; SHIRAS, 538; California, JAEGER, 273; Utah, WOODBURY, 660; Michigan, AHLSTROM, 4; EGGLETON, 154; WELCH, 645, 646; Tennessee, SHOUP, 540; N. Carolina, PEARSE, 444; Pennsylvania, HOSTETTER & DERICKSON, 258; Massachusetts, BREWSTER, 66; Greenland, MADSEN, 367.

Oceans and Seas.—N. Atlantic, HENTSCHEL, 246; SPÄRCK, 550; Irish sea, BRUCE, 76; English Channel, RUSSELL, 498; Oslo Fjord, BROCH, 70; Kattegat, LÖNNBERG, 354; Baltic, DEMEL, 119; Mediterranean, BERNARD & FAGE, 41; GAIOMO, 192; Adriatic, VATOVA, 628, 629; Suez Canal, GRUVEL, 213; Bermuda seas, PRAT, 465; N. Pacific, BROCH, 71; Okhotsk Sea, POPOV, 459; E. Pacific, GUNTHER, 215; Spitsbergen seas, HARDY, 232; Jan Mayen seas, PARAT & DEVILLERS, 434; White Sea, SAINT-HILAIRE, 504.

Extinct Faunas.—Devonian, Thuringia, HUNDT, 260; Pleistocene Germany, HAUPT, 239; Post-Tertiary, N. China, YOUNG & BIEN, 663.

II. PROTOZOA

ARRANGED BY

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CONTENTS

| | PAGE |
|-------------------------------------|------|
| I. TITLES | 2 |
| II. SUBJECT INDEX:— | |
| Comprehensive and General | 51 |
| Economics | 52 |
| Miscellaneous | 56 |
| Structure | 58 |
| Reproduction and Life-Cycle... .. . | 61 |
| Physiology | 62 |
| Ethology | 68 |
| Genetics | 77 |
| Distribution | 77 |
| III. SYSTEMATIC INDEX:— | |
| General | 83 |
| 1. Mycetozoa | 83 |
| 2. Rhizopoda | 83 |
| 3. Mastigophora | 92 |
| 4. Sporozoa | 94 |
| 5. Ciliophora | 96 |

FOREWORD.

Papers dealing with Protozoa entirely from a medical or veterinary standpoint (clinical, therapeutic, etc.) are omitted, but notices of these will be found in *Tropical Diseases Bulletin* and *Veterinary Bulletin*.

I.—TITLES.

1.—Abé, T. H. Notes on the protozoan fauna of Mutsu Bay II. Genus *Peridinium*; subgenus *Archaeoperidinium*. Sci. Rep. Tôhoku Univ. (4) 10 1936 pp. 639–686 102 figs.

2.—Abé, T. H. Notes on the protozoan fauna of Mutsu Bay III. Genus *Peridinium*; subgenus *Protoperidinium*. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 19–48 50 figs.

3.—Abé, T. H. *Diplosalis* and its allied species. Zool. Mag. Tokyo 48 1936 pp. 747–752 3 figs. [Dinoflagellata.]

4.—Adams, A. R. D. Trypanosomiasis of stock in Mauritius. III. The diagnosis and course of untreated *T. vivax* infections in domestic animals. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 521–531.

5.—Adams, J. A. The firebrat, *Thermobia domestica* (Packard), and its gregarine parasites. Iowa St. Coll. J. Sci. 11 1936 pp. 23–25.

6.—Adler, S. and Ellenbogen, V. Remarks on the relationship between the Palestinian and Algerian pathogenic *Theileria*. Arch. Inst. Pasteur. Alger. 14 1936 pp. 66–68.

Alfonso, E. vide Froilano de Mello, I.

7.—Ahlstrom, E. A. The deep-water plankton of Lake Michigan, exclusive of the Crustacea. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 286–299 1 fig. [Rhizopoda, Flagellata, Ciliata.]

Aldao, J. F. A. vide Dios, R. L.

8.—Alexeieff, A. Sur le métabolisme du glycogène chez les *Trichomonas* et les entamibes. Bull. Soc. Path. exot. Paris 29 1936 pp. 116–118.

9.—Allen, E. A. *Tyzzeria perniciosa* gen. et sp. n., a coccidium from the small intestine of the Pekin Duck, *Anas domestica* L. Arch. Protistenk. Jena 87 1936 pp. 262–267 2 pls.

10.—Allen, E. A. A *Pentatrachomonas* associated with certain cases of enterohepatitis or "Blackhead" of poultry. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 315–322 1 pl.

11.—Allgén, C. Ueber eine neue, epizoisch auf einer *Desmodora* (Nematodes) lebende Art der Gattung *Thecacineta* Collin, *Th. donsi* n. sp. aus der Strandregion bei Tarva (Norwegen). J. Norske Vidensk. Selsk. Trondheim 8 1936 pp. 51–53.

Ancelot, A. vide Launoy, L.

12.—Andrews, J. The cultivation of *Trichomonas foetus* free from bacteria. J. Parasit. Urbana 22 1936 p. 539.

13.—Andrews, J. and Miller, F. W. Non-venereal transmission of *Trichomonas foetus* infection in cattle. Amer. J. Hyg. 24 1936 pp. 433–438.

14.—Andrews, J. and Rees, C. W. Experimental *Trichomonas foetus* infection in sheep. J. Parasit. Urbana 22 1936 p. 108.

15.—Andrews, J. and White, H. F. An epidemiological study of protozoa parasitic in wild rats in Baltimore, with special reference to *Endamoeba histolytica*. Amer. J. Hyg. 24 1936 pp. 184–206.

16.—Antequeda, E. S. Proliferación nodular de la mucosa del intestino delgado de los lanares, producida por coccidias. VIII. Reun. Soc. Argentina Patol. Region. Norte, Buenos Aires 2 1936 pp. 1013–1018 6 figs.

Arias, J. C. vide Mazza, S.

17.—Arkhipov, J. P. [The influence of succulent food upon the course of coccidiosis. (Preliminary communication).] [In Russian.] Works of Saratov Veterin. Res. Inst. 3 1936 pp. 177–180.

18.—Ascano, K. New foraminifera from the Kakegawa district, Tôtômi, Japan. Japan. J. Geol. Geogr. 13 1936 pp. 325–331 2 pls.

- 19.—Ashford, M. The nature of immunity to malaria in its relation to anti-malarial therapy. *Amer. J. Trop. Med. Baltimore* **16** 1936 pp. 665-678.
- 20.—Assinder, E. W. *Trichomonas* and vaginal discharge. *Brit. Med. J. London* **1936** (i) pp. 882-883 1 fig.
- 21.—Astre, G. Sur l'age des Orbito-lines de Pedra Forca et sur la structure de ce pic. *Bull. Soc. Hist. nat. Toulouse* **67** 1935 pp. 115-122 3 figs.
- 22.—Atchley, F. O. Experimental infections of rats with *Endamoeba histolytica*. *Amer. J. Hyg.* **23** 1936 pp. 410-414.
- 23.—Avnimelech, M., Doncieux, L. and Picard, L. Sur la découverte d'une série nummulitique au SE du Mont Carmel en Palestine. *C.R. Séances Soc. géol. Fr.* **3** 1936 pp. 41-43.
- 24.—Awakjan, A. Rats as carriers of dysenteric entamoebae. [Russian with English summary.] *Rev. Microbiol. Epidém. Parasitol. Saratov* **15** 1936 pp. 23-24.
- 25.—Awakjan, A. Rats as carriers of *Balantidium*. [Russian with English summary.] *Rev. Microbiol. Epidém. Parasitol. Saratov* **15** 1936 pp. 25-26.
- 26.—Awerinzew, G. W. Zur Biologie des Infusors *Lagenophrys*. *Arch. Protistenk. Jena* **87** 1936 pp. 131-141 3 figs.
- 27.—Baier, C. R. Über eine Flagellateninfektion in einer Hefenrohrkultur. *Arch. Protistenk. Jena* **88** 1936 pp. 27-35 3 figs.
- Bajkov, A. *vide* Bayer, E.
- Baker, F. C. *vide* Stratman-Thomas, W. K.
- 28.—Bakx, L. A. J. Making prints of foraminifera. *J. Paleont. Menasha, Wis.* **10** 1936 pp. 145-146 1 fig.
- Balmus, G. *vide* Slatineanu, A.
- Balmus, P. *vide* Slatineanu, A.
- 29.—Barber, M. A. Degeneration of sporozoites of the malaria parasite in anopheline mosquitoes in nature and its relation to the transmission of malaria. *Amer. J. Hyg.* **24** 1936 pp. 45-56 1 pl.
- 30.—Barber, M. A. A survey of malaria in Cyprus. *Amer. J. Trop. Med. Baltimore* **16** 1936 pp. 431-445.
- 31.—Barber, M. A., Mandekos, A. and Rice, J. B. The seasonal incidence of malaria transmission in Macedonia. *Amer. J. Hyg.* **24** 1936 pp. 249-267.
- 32.—Barber, M. A. and Rice, J. B. Methods of dissecting and making permanent preparations of the salivary glands and stomachs of *Anopheles*. *Amer. J. Hyg.* **24** 1936 pp. 32-40 3 figs. [*Plasmodium*.]
- 33.—Barber, M. A., Rice, J. B. and Mandekos, A. G. The relation of the density of the anopheline mosquitoes and the transmission of malaria. *Amer. J. Hyg.* **24** 1936 pp. 237-248.
- 34.—Barker, R. W. Micropaleontology in Mexico with special reference to the Tampico embayment. *Bull. Amer. Assoc. Petrol. Geol. Oklahoma* **20** 1936 pp. 433-456. [Foraminifera.]
- 35.—Barker, R. W. and Grimsdale, T. F. A contribution to the phylogeny of the orbitoidal foraminifera with descriptions of new forms from the eocene of Mexico. *J. Paleont. Menasha, Wis.* **10** 1936 pp. 231-247 9 pls. 2 figs.
- Baskakoff, W. P. *vide* Yakimoff, W. L.
- 36.—Bastianelli, G. Sulla cura della malaria. Immunità e terapia. [Italian with English summary.] *Riv. Malariol. Rome* (1) **15** 1936 pp. 1-13.
- Baumann, H. *vide* Schwetz, J.
- 37.—Bayer, E. and Bajkov, A. Výzkum heloplanktonu a Jeho Poměrů quantitativních (In Czech). *Bull. Ec. sup. Agrar. Brünn. (D)* **14** 1929 pp. 1-165 2 figs.
- 38.—Beach, T. de V. Evidence of binary fission of ring forms in *Plasmodium vivax* Grassi and Feletti. *Amer. J. trop. Med. Baltimore* **16** 1936 pp. 147-155 2 pls.
- Beams, H. W. *vide* Patten, R.
- 39.—Becker, E. R. and Morehouse, N. F. The effect of diet on the coccidian infection of the rat. *J. Parasit. Urbana* **22** 1936 pp. 60-67.
- 40.—Becker, E. R. and Morehouse, N. F. Vitamin G from different sources and coccidian infection. *Proc. Soc. exp. Biol.* **34** 1936 pp. 437-439.

41.—Becker, E. R. and Morehouse, N. F. Effect of vitamins B and G on coccidian infection in the rat. *Proc. Soc. exp. Biol.* **33** 1936 pp. 487-490.

Becker, E. R. *vide* Morehouse, N. F.

42.—Becquerel, P. La vie latente de quelques algues et animaux inférieurs aux basses températures et la conservation de la vie dans l'univers. *C.R. Acad. Sci. Paris* **202** 1936 pp. 978-981. [Rhizopoda, Ciliata.]

43.—Behrmann, R. B. Die Faltenbögen des Apennins und ihre paläogeographische Entwicklung. *Abh. Ges. Wiss. Göttingen* (3) **15** 1936 pp. 1-126 10 pls. 45 figs. [Foraminifera.]

Belayeva, K. *vide* Brodsky, A.

Belhommet, —. *vide* Schwetz, J.

44.—Beltrán, E. Some rare books on protozoology. *Science N.Y. N.S.* **83** 1936 p. 392.

Berghe, L. van den *vide* Bourguignon, G. C.

Berghe, L. van den *vide* Rodhain, J.

Bermúdez, P. J. *vide* Cushman, J. A.

Bermúdez, P. J. *vide* Palmer, D. K.

45.—Berrebi, J. La culture des leishmanies. *Arch. Inst. Pasteur, Tunis* **25** 1936 pp. 89-141.

46.—Berz, A. Recherches sur la distribution des Protozoaires et des Nématodes dans le sol de la réserve d'Aletsch. *Bull. Murith. Sion* **53** 1936 pp. 141-212.

47.—Bessemans, A. and Janssens, P. Essais complémentaires sur l'évolution, chez le cobaye, d'une trypanosomiase arsénorésistante soumise à l'influence magnétique des ondes courtes. *Ann. Soc. Belge Méd. Trop.* **16** 1936 pp. 447-455.

48.—Bevan, L. E. W. The tsetse-fly disease. *Rhodesia Agric. J.* **33** 1936 pp. 746-769 3 pls. [Trypanosomes.]

49.—Bevan, L. E. W. Notes on immunity in trypanosomiasis. *Trans. Soc. trop. Med. Hyg. Lond.* **30** 1936 pp. 199-206.

50.—Bhatia, B. L. Is *Piroplasma taylori* Sarwar a valid new species? *Ind. J. Vet. Sci. Delhi* **6** 1936 pp. 151-154.

51.—Bhatia, B. L. Protozoa: Ciliophora. In: *The Fauna of British India, including Ceylon and Burma* (London) **1936** xxii + 493 pp. 11 pls. 214 text-figs 1 map.

52.—Bhatia, B. L. and Setna, S. B. On some gregarine parasites from some polychaetes from the Andaman Islands. [Abstract.] *Proc. Indian Sci. Congr. Calcutta* **22** 1935 p. 312.

53.—Bianchi, L. Die Blutmilch als Nährboden für Leishmanien. *Arch. Schiffs. Tropenhyg. Leipzig* **40** 1936 pp. 146-150 3 figs.

54.—Biecheler, B. Sur une chloromonadine nouvelle d'eau sumatre, *Chattonella subsalsa* n. gen., n. sp. *Arch. Zool. exp. gén. Paris (Notes et Revue)* **78** 1936 pp. 79-83 2 figs.

55.—Biecheler, B. Existence d'une cyclose chromatique chez les Péridiniens. *C.R. Acad. Sci. Paris* **201** 1935 pp. 503-505.

56.—Biecheler, B. Des conditions et du mécanisme de la prédation chez un Dinoflagellé à enveloppe tabulée, *Peridinium gargantua* sp. n. *C.R. Soc. Biol. Paris* **121** 1936 pp. 1054-1057.

57.—Biecheler, B. Sur la division de la chloromonadine *Chattonella subsalsa* Biecheler. *C.R. Soc. biol. Paris* **123** 1936 pp. 1126-1127 4 figs.

58.—Biecheler, B. Observation de la capture et la digestion des proies chez un Péridinien vert. *C.R. Soc. Biol. Paris* **122** 1936 pp. 1173-1175.

Biecheler, B. *vide* Chatton, E.

Bilfinger, F. *vide* Lépine, P.

59.—Birch-Hirschfeld, L. Die Bedeutung physikalischer Bedingungen bei der Kultur der *Entamoeba histolytica*. *Z. Hyg. Berlin* **118** 1936 pp. 361-368 13 figs.

60.—Birch-Hirschfeld, L. Über die Wirkung niederer Carbonsäuren und ihrer α -Oxyderivate auf *Entamoeba histolytica*. *Z. Hyg. Berlin* **119** 1936 pp. 91-102 1 pl.

61.—Bishop, A. Further observations upon a "*Trichomonas*" from pond water. *Parasitology, Cambridge* **28** 1936 pp. 443-445.

62.—Black, W. A. Some observations on ultra-violet irradiated *Amebas*. *Science N.Y.* **82** 1935 pp. 495–497.

63.—Black, W. A. Experimental modifications of the effect of ultra-violet light on protoplasm. I. *Amoeba proteus*. *Univ. Californ. Publ. Zool.* **41** 1936 pp. 75–100 2 pls.

Blakely, L. *vide* Kessel, T. F.

64.—Blanchet, F. Étude géologique des montagnes d'Escrions. *Trav. Lab. Géol. Univ. Grenoble* **19** 1936 pp. 1–183 22 pls. 8 figs. [Foraminifera.]

65.—Bogaert, L. van. Présence de lésions myéliniques dans la trypanosomiase expérimentale. *C.R. Soc. Biol. Paris* **121** 1936 p. 1387.

Bogaert, L. van *vide* Bourguignon, G. C.

66.—Bogatowa, S. [The parasitic fauna of native fish and of acclimatized whitefish in Lake Turgojak: the influence of acclimatization on the parasitic fauna.] [In Russian.] *Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology.* 1936 pp. 144–155.

67.—Bogdanovič, A. Ueber *Meandroculina bogatschovi* nov. gen., nov. sp. ein neues Foraminifer aus den Miocänschichten Transkaukasiens. *Bull. Acad. Sci. U.R.S.S.* **1935** 5 pp. 691–696 5 figs.

68.—Böhm, A. Dinoflagellates of the coastal waters of the Western Pacific. *Bull. Bishop Mus. Honolulu* **137** 1936 pp. 3–54 23 figs.

69.—Boisseau, R. and Nodenot, L. Un cas de toxoplasmosse spontanée du cobaye observé à l'Institut Pasteur de Brazzaville (A.E.F.). *Bull. Soc. Path. Exot. Paris* **29** 1936 pp. 135–141.

70.—Bold, H. C. Notes on the culture of some common algae (*Volvox*). *J. Tenn. Acad. Sci.* **11** 1936 pp. 205–212 1 fig.

Bonacci, H. *vide* Dios, R. L.

71.—Bondoïs, C. M. Contribution à l'étude de la coccidiose intestinale du pigeon-voyageur. *Trav. Lab. Zool. & Parasitol. Fac. Méd. Lille* **1935** 96 pp. 6 pls. [Thesis.]

72.—Bonestell, A. E. Inoculation experiments with *Trichomonas hominis*, *T. buccalis* and *T. vaginalis*. *J. Parasit. Urbana* **22** 1936 pp. 511–512.

73.—Bonte, A. Foraminifères à structure organique conservée. *Ann. Protistologie, Paris* **5** 1936 pp. 139–149 1 pl. 22 figs.

74.—Bonte, A. Observations sur les foraminifères du Tuffeau landénien de Lille (Porte de Gand). *Ann. soc. géol. Nord, Lille* **59** 1934 pp. 67–82 8 figs.

75.—Boomgaart, L. and Vroman, J. Smaller Foraminifera from the Marl zone between Sonde and Modjokerto (Java). *Proc. K. Akad. Wet. Amsterdam.* **39** 1936 pp. 419–425 6 figs.

76.—Bornand, M. Sur quelques affections parasitaires des animaux sauvages du District franc des Diablerets. *Bull. Soc. vaud. Sci. nat. Lausanne* **59** (239) 1936 pp. 27–32. [Coccidia.]

Bos, A. *vide* Nieschulz, O.

77.—Bouček, B. Die Plankton-fauna der böhmischen Graptolithenschiefer (Radiolaria). *Cbl. Min. Geol. Paläont. Stuttgart* **7** 1936 pp. 291–296 2 figs.

78.—Bourguignon, G. C., Berghe, L. van den and Bogaert, L. van. La trypanosomiase expérimentale du cynocéphale par voie intrarachidienne. *Ann. Soc. Belge Méd. Trop.* **16** 1936 pp. 9–36 12 figs.

Bovet, D. *vide* Brumpt, E.

79.—Boyd, M. F. and Kitchen, S. F. The comparative susceptibility of *Anopheles quadrimaculatus*, Say, and *Anopheles punctipennis*, Say, to *Plasmodium vivax*, Grassi and Feletti, and *Plasmodium falciparum*, Welch. *Amer. J. trop. Med. Baltimore* **16** 1936 pp. 67–71.

80.—Boyd, M. F. and Kitchen, S. F. Is the acquired homologous immunity to *P. vivax* equally effective against sporozoites and trophozoites? *Amer. J. trop. med. Baltimore* **16** 1936 pp. 317–322.

81.—Boyd, M. F. and Kitchen, S. F. On the efficiency of the homologous properties of acquired immunity to *Plasmodium vivax*. *Amer. J. trop. Med. Baltimore* **16** 1936 pp. 447–457.

82.—Boyd, M. F., Kitchen, S. F. and Muench, H. On the localization of the geographical distribution of the McCoy strain of *Plasmodium vivax*. Amer. J. trop. Med. Baltimore 16 1936 pp. 583-587.

83.—Boyd, M. F., Kitchen, S. F. and Muench, H. Seasonal variations in the characteristics of *vivax* malaria. Amer. J. trop. Med. Baltimore 16 1936 pp. 589-592.

84.—Boyd, M. F., Kitchen, S. F. and Mulrennan, J. A. On the relative susceptibility of the inland and coastal varieties of *A. crucians*, Wied., to *P. falciparum*, Welch. Amer. J. trop. Med. Baltimore 16 1936 pp. 157-159-161.

85.—Boyd, M. F. and Stratman-Thomas, W. K. The transmission of quartan malaria through two consecutive human-anopheline passages. Amer. J. Trop. Med. Baltimore 16 1936 pp. 63-65.

86.—Boyd, M. F., Stratman-Thomas, W. K. and Kitchen, S. F. On acquired immunity to *Plasmodium falciparum*. Amer. J. trop. Med. Baltimore 16 1936 pp. 139-145.

87.—Boyd, M. F., Stratman-Thomas, W. K. and Kitchen, S. F. On the duration of infectiousness in anophelines harboring *Plasmodium falciparum*. Amer. J. Trop. Med. Baltimore 16 1936 pp. 157-158.

88.—Boyd, M. F., Stratman-Thomas, W. K. and Kitchen, S. F. On the duration of acquired homologous immunity to *Plasmodium vivax*. Amer. J. trop. med. Baltimore 16 1936 pp. 311-315.

89.—Boyd, M. F., Stratman-Thomas, W. K. and Kitchen, S. F. Modifications in a technique for the employment of naturally induced malaria in the therapy of paresis. Amer. J. Trop. Med. Baltimore 16 1936 pp. 323-329.

90.—Boyd, M. F., Stratman-Thomas, W. K. and Muench, H. The occurrence of gametocytes of *Plasmodium vivax* during the primary attack. Amer. J. trop. Med. Baltimore 16 1936 pp. 133-138.

91.—Brachon, S. Sur la structure infracellulaire de l'infusoire hétérotriche *Fabrea salina* Henneguy. C.R. Soc. Biol. Paris 122 1936 pp. 61-63 5 figs.

92.—Brachon, S. Sur l'enkystement, le dékystement et la structure du kyste de la *Fabrea salina* (cilié hétérotriche). C.R. Soc. Biol. Paris 122 1936 pp. 1234-1237 3 figs.

Brachon, S. vide Chatton, E.

Bradley, G. H. vide Kitchen, S. F.

93.—Bragg, A. N. Some morphological variations in *Paramecium bursaria* (Ehrbg.). Arch. Protistenk. Jena 88 1936 pp. 69-75 10 figs.

94.—Bragg, A. N. Observations on the initial movements of the food vacuoles of *Paramecium multimicro-nucleata* Powers and Mitchell with comments on conditions in other species of the Genus. Arch. Protistenk. Jena 88 1936 pp. 76-84.

Brambel, C. E. vide Cowles, R. P.

Éramlette, M. N. vide Woodring, W. P.

95.—Brandt, B. B. Parasites of certain North Carolina Salientia. Ecol. Monogr. Durham, N.C. 6 1936, pp. 493-532.

96.—Brandwein, P. F. and Cohen, A. J. Culturing protozoa (*Vorticella*, *Blepharisma*, *Spirostomum*). Amer. Nat. 70 1936, p. 408.

97.—Brodsky, A. L. Soil protozoa and their relative importance on soil activity. (Soil protozoa of Central Asia). [English summary.] Bull. Univ. Tachkent 20 1935 pp. 99-182.

98.—Brodsky, A. and Belayeva, K. Materials for the knowledge of the protisto-fauna of the soils of Betpak-dala. [English summary.] Acta Univ. Asiae Med. Tashkent (7a) Pedologia 4 1935 pp. 41-48.

99.—Brohmer, P. Mikroskopische Schülerübungen bei der Untersuchung den Lebensgemeinschaft See. Mikrokosmos, Stuttgart 29 (1) 1935 pp. 13-16 4 figs. [*Volvox*, *Ceratium*.]

100.—Broom, J. C., Brown, H. C. and Hoare, C. A. Studies in microcata-phoresis. II.—The electric charge of haemoflagellates. Trans. Soc. trop. Med. Hyg. Lond. 30 1936 pp. 87-100 4 figs.

Broom, H. C. vide Brown, J. C.

101.—Brotzen, F. Foraminiferen aus dem Schwedischen untersten Senon von Eriksdal in Schonen. Sverig. geol. Undersökn. Arsb. C 30 (3) 1936 pp. 1-205 14 pls. 69 figs.

102.—Brouardel, J. Phénomènes nucléaires de la conjugaison chez *Trichodina patellae* Cuénot. C.R. Acad. Sci. Paris 203 1936 pp. 818-820 1 fig.

103.—Brown, H. C. and Broom, J. C. Studies in microcataphoresis. I.—Technique. Proc. Roy. Soc. London (B) 119 1936 pp. 231-244 2 figs.

Brown, H. C. *vide* Broom, J. C.

104.—Brown, R. H. J. Effect of large centrifugal forces on *Paramecium*. Nature, London 158 1936 p. 843.

105.—Browning, C. H. Chemotherapy—The progress of thirty years and the prospect. Trans. Roy. Med. Chirurg. Soc. Glasgow 30 (Glasgow Med. J., Nov.) 1935 pp. 1-16.

106.—Browning, C. H. and Gulbransen, R. Immunity following cure of experimental *Trypanosoma brucei* infection by a chemotherapeutic agent. J. Path. Bact. London 43 1936 pp. 479-486.

107.—Browning, C. G., Gulbransen, R., and McCartney, W. The trypanocidal action of certain styryl selenazole compounds. J. Pharmac. & Exp. Therap. (U.S.A.) 54 1935 pp. 367-370.

108.—Brownlee, A. An organism showing the characters of the genus *Sarcocystis* present in the central nervous system of the sheep. J. comp. Path. London 49 1936 pp. 263-267 1 fig.

109.—Bruce, J. R. Faunistic notes and records. Rep. Mar. biol. Sta. Port Erin 48 1935 p. 26. [*Gymnodinium*, *Folliculina*.]

110.—Brug, S. L. On particular binucleate bodies often found in human faeces. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 33-35 1 fig.

111.—Brug, S. L. The nuclear division of *Dientamoeba fragilis*. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 283-285 1 pl.

112.—Brug, S. L. A simple method of plotting logarithmic growth-curves of protozoal cultures. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 357-359.

113.—Brug, S. L. Observations on *Dientamoeba fragilis*. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 441-452.

114.—Brug, S. L. Die Eosinmethode bei der Stuhluntersuchung auf Protozoen. Arch. Schiff. Tropenhyg. Leipzig 40 1936 pp. 522-523.

115.—Brumpt, E. Étude expérimentale du *Plasmodium gallinaceum*, parasite de la poule domestique. Transmission de ce germe par *Stegomyia fasciata* et *Stegomyia albopicta*. Ann. Parasitol. Paris 14 1936 pp. 597-620 10 figs.

116.—Brumpt, E. Réceptivité de divers oiseaux domestiques et sauvages au parasite (*Plasmodium gallinaceum*) du paludisme de la poule domestique. Transmission de cet hématozoaire par le moustique *Stegomyia fasciata*. C.R. Acad. Sci. Paris 203 1936 pp. 750-752.

117.—Brumpt, E. Précis de parasitologie. 5me éd. Paris (Masson & Cie) 1 1936 xii + 1082 pp. 4 pls. 1085 text-figs.

118.—Brumpt, E. and Bovet, D. Action des médicaments antimalariques sur les calcats infestés simultanément par le *Plasmodium paddae* et par *Vhaemoproteus oryzivora*. Ann. Parasit. Paris 14 1936 pp. 457-463.

119.—Brumpt, E. and Lavie, G. Sur l'hyperparasitisme d'Opalines par des amibes. Ann. Parasitol. Paris 14 1936 pp. 349-358 2 figs.

120.—Brunetti, B. Ricerche sui Protozoi del terreno. IV. I protozoi del terreno di Volterra. Mem. Soc. tosc. Sci. nat. 45 1935 pp. 282-300 5 figs.

121.—Brutsaert, P. and Henrard, C. La culture des trypanosomes pathogènes. [In Flemish, with French summary.] Ann. Soc. Belge Méd. Trop. 16 1936 pp. 457-481.

122.—Bubnoff, S. V. Tabellen zur Einführung in die Palaeontologie der Wirbellosen für Anfänger. Mitt. Geol.-palaeont. Inst. Greifswald 10 1935 pp. 1-98. [Foraminifera.]

123.—Buck, A. de. Some results of six years' mosquito infection work. Amer. J. Hyg. **24** 1936 pp. 1-18. [*Plasmodium*.]

Buck, A. de *vide* Swellengrebel, N. H.

124.—Büren, G. v. Der Gerzensee, eine limnologische Studie. Mitt. naturf. Ges. Bern. **1935** 1936 pp. 29-93 2 pls. 3 figs. [Rhizopods, Flagellates and Ciliates.]

125.—Buley, H. M. Consumption of diatoms and dinoflagellates by the Mussel. Bull. Scripps. Inst. Oceanogr. Tech. Ser. **4** 1936 pp. 19-27.

126.—Bullington, W. E. Morphology and taxonomy of Ciliata. Yearb. Carnegie Inst. Washington **34** 1935 pp. 77-78.

127.—Bundesen, H. N., Conolly, J. I., Rawlings, I. D., Gorman, A. E., McCoy, G. W. and Hardy, A. V. Epidemic amebic dysentery. The Chicago outbreak of 1933. Nation. Inst. Health Bull. Washington **166** 1936 pp. xi + 187 35 figs. 2 diag.

128.—Burova, L. [On the effect of atebirin (acrichine) on *Plasmodium relictum* in vitro.] [In Russian.] Med. Parasitol. & Parasit. Dis. Moscow **5** 1936 pp. 617-618.

129.—Burrows, R. B. Further observations on parasitism in the starfish. Science, N.Y. N.S. **84** 1936 p. 329. [Ciliate.]

130.—Burt, E. A simple and rapid method for extraction of the salivary ducts of tsetse-fly, suitable for trypanosomiasis examinations. Ann. Trop. Med. Parasit. L'pool. **30** 1936 p. 265.

131.—Buxtorf, A. and Reichel, M. Ueber das Alter der Lithothamnienkalke von Montorfano bei Como. Verh. schweiz. naturf. Ges. **117** 1936 pp. 289-290. [Foraminifera.]

132.—Bychowskaja, I. [The effect of the size of the water-reservoir upon the parasitic fauna of fish.] [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 163-166.

133.—Byrd, E. E. On the incidence of intestinal parasites in 537 individuals on the relief rolls in the City of

Athens, Georgia, and vicinity. Amer. J. trop. Med. Baltimore **16** 1936 pp. 39-45.

134.—Byrd, E. E. Studies in parasitology. V. The intestinal parasites in 257 college freshmen. J. Parasit. Urbana **22** 1936 pp. 301-302.

135.—Caballero, E. Parasitos intestinales en los niños de Actopan, Hgo. [Spanish with English summary.] An. Inst. Biol. Mexico **7** 1936 pp. 373-384 8 figs.

Cable, R. M. *vide* Headlee, W. H.

136.—Cailleau, R. Sur les caractères cultureux de *Trichomonas (Trichomonastix) colubrurum*. C.R. Soc. Biol. Paris **121** 1936 pp. 108-110.

137.—Cailleau, R. Le cholestérol facteur de croissance pour le flagellé *Trichomonas columbae*. C.R. Soc. Biol. Paris **121** 1936 pp. 424-425.

138.—Cailleau, R. L'activité de quelques stérols envisagés comme facteurs de croissance pour le flagellé *Trichomonas columbae*. C.R. Soc. Biol. Paris **122** pp. 1936 1027-1028.

139.—Calwell, H. G. Attempted transmission of *T. rhodesiense* through *G. brevipalpis*. Conference on Co-Ordination Tsetse and Trypanosomiasis Res. E. Africa. Nairobi 1936 pp. 56-59.

140.—Calwell, H. G. The pathology of Rhodesian trypanosomiasis in the human brain. Conference on Co-Ordination Tsetse and Trypanosomiasis Res. E. Africa. Nairobi 1936 pp. 60-62.

141.—Caminopetros, J. Reproduction de la leishmaniose cutanée humaine chez le spermophile *Citellus citellus*. C. R. Soc. Biol. Paris **122** 1936 pp. 45-47.

Campbell, A. S. *vide* Cushman, J. A.

142.—Candeias, A. Nota sobre algumas espécies de *Tintinninea* da costa norte de Portugal. An. Fac. Ciênc. Porto. **17** 1932 pp. 163-175 2 pls.

Cannon, P. R. *vide* Taliaferro, W. H.

143.—Carbonell, A. Nota sobre los depósitos de foraminíferos terciarios de Córdoba. Bol. Inst. Geol. Esp. **47** 1926, pp. 283-288.

144.—Carbonell, J. J. Some micrographic observations of the waters of the River Plate. Verh. int. Vereinig. Linnol. Beograd. 7 1935 pp. 513-516. [Rhizopoda, Ciliata, Flagellata.]

145.—Carini, A. Sur une *Isospora* de l'intestin de l'*Hemidactylus mabujae*. Ann. Parasit. Paris 14 1936 pp. 444-446 2 figs.

146.—Carini, A. Un cas d'amibiase cutanée. Considérations sur les localisations extra-intestinales de l'amibiase et spécialement sur l'amibiase cutanée. Bull. Soc. Path. Exot. Paris 29 1936 pp. 584-597.

147.—Carmichael, J. Report on progress made on programme of research drawn up by the 1933 Conference. Conference on Co-ordination Tsetse and Trypanosomiasis Res. E. Africa. Nairobi 1936 pp. 36-39. [Trypanosomes.]

Carmichael, J. vide Mettam, R. W. M.

148.—Carpano, M. Sur un trypanosome observé chez un oiseau du genre *Pyrrhula* (*Trypanosoma faridi* n. sp.). Ann. Parasitol. Paris 14 1936 pp. 290-294 3 figs.

149.—Carpano, M. *Trypanosoma* observed in a bird of the genus *Pyrrhula* (*Trypanosoma faridi*). Bull. Minist. Agric. Egypt No. 165 5 pp. 3 pls. 1 fig. [Non vidi.]

150.—Casini, G. Sul così detto fenomeno dell'eliminazione dei globuli polari nei gametociti dei parassiti malarigeni. Riv. Malariol. Rome (I) 15 1936 pp. 88-98 2 pls.

151.—Casini, G. Azione di alcuni preparati antimalarici sugli infusori. Riv. Malariol. Rome (I) 15 1936 pp. 153-160.

152.—Caudri, C. M. B. Tertiary Deposits of Soemba 1934 pp. 1-223 5 pls. 20 figs. [Foraminifera.]

153.—Cauthen, G. Studies on *Trichomonas columbae*, a flagellate parasitic in pigeons and doves. Amer. J. Hyg. 23 1936 pp. 132-142.

Cavell, K. vide Kessel, T. F.

154.—Cayeux, L. Le microplankton des phosphates de la Tunisie et de l'Est algérien. C.R. Acad. Sci. Paris 203 (9) 1936 pp. 477-480. [Radiolaria, Silicoflagellates.]

155.—Chadefaud, M. Les protistes trichocystifères ou protogastreales. Ann. Protistologie, Paris 5 1936 pp. 323-341. 1 pl.

156.—Chagas, E. Infection expérimentale de l'homme par le *Schizotrypanum cruzi*. C.R. Soc. Biol. Paris 121 1936 pp. 769-771.

157.—Chagas, E. Visceral leishmaniasis in Brazil. Science N.Y. N.S. 84 1936 pp. 397-398.

Chagas, E. vide Cunha, A. M. da.

158.—Chakravarty, M. On the morphology of *Balantidium depressum* (Ghosh) from a mollusc, *Pila globosa*, with a note on its nuclear reaction and cytoplasmic inclusions. Arch. Protistenk. Jena 87 1936 pp. 1-9 7 figs. 1 pl.

159.—Chakravarty, M. Note on a ciliate, *Nyctotherus kempi* Ghosh, from the intestine of a gastropod (Mollusca), *Pila globosa* Swainson. Arch. Protistenk. Jena 87 1936 pp. 155-158 4 figs.

160.—Chakravarty, M. Studies on Sporozoa from Indian millipedes. V. Life-history of a cephaline gregarine, *Hyalosporina rayi* n. sp. Arch. Protistenk. Jena 88 1936 pp. 116-120 5 figs.

Chakravorty, M. vide Ray, H. N.

161.—Chalkley, H. W. The behaviour of the karyosome and the "peripheral chromatin" during mitosis and interkinesis in *Amoeba proteus* with particular reference to the morphologic distribution of nucleic acid as indicated by the Feulgen reaction. J. Morph. Philadelphia 60 1936 pp. 13-29 2 pls. 13 figs.

162.—Chalkley, H. W. The mechanism of cytoplasmic fission in *Amoeba proteus*. Protoplasma, Leipzig 24 1935 pp. 607-621 8 figs.

163.—Chang, H. C., Ch'en, K. C. and Chou, S. K. Further observations on the diagnosis of amebic dysentery. Chin. Med. J. 50 1936 pp. 17-26.

Chang, K. vide Smyly, H. J.

164.—Chaoulitch, S. La multiplication du *Plasmodium falciparum* (Welch, 1897) par scission binaire. Bull. Soc. Path. Exot. Paris 29 1936 pp. 716-722 1 fig.

165.—Chapman, F. The species nightmare: an absorbing scientific problem. [Contribution to the *Melbourne Age*, Feb. 8, 1936.] *Nature*, London **138** 1936 p. 539. [Foraminifera.]

166.—Chapman, F. Opinions rendered by the international commission on zoological nomenclature. Suspension of rules for *Lepidocyclina* Gümbel 1868, type *Nummulites mantelli*. *Smithson. misc. Coll.* **73** 8, 1936 pp. 23–28.

Chapman, F. *vide* Mawson, D.

167.—Chapman, F. and Crespin, I. The palaeontology of the Plantagenet beds of Western Australia. *J. Roy. Soc. W. Aust.* **20** 1936 pp. 103–129 6 pls. [Foraminifera.]

168.—Chapman, F. and Parr, W. J. Foraminifera and Ostracoda from soundings made by the trawler "Bon-thorpe" in the Great Australian Bight. *J. Roy. Soc. W. Aust.* **21** 1935 pp. 1–6 1 pl.

169.—Chapman, F. and Parr, W. J. A classification of the Foraminifera. *Proc. Roy. Soc. Victoria N.S.* **49** 1936 pp. 139–151

170.—Chatton, E. Les migrateurs horizontalement polarisés de certains Peritriches. *Mém. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 913–940 11 figs.

171.—Chatton, E. and Biecheler, B. Documents nouveaux relatifs aux Coccidinides (Dinoflagellés parasites). La sexualité du *Coccidinium mesnili* n. sp. *C.R. Acad. Sci. Paris* **203** 1936 pp. 573–576 1 fig.

172.—Chatton, E. and Brachon, S. Le cinétome de l'*Opalina ranarum*, sa continuité génétique et son importance en égard à l'évolution des appareils ciliaires. *C.R. Acad. Sci. Paris* **202** 1936 pp. 713–716 8 figs.

173.—Chatton, E. and Brachon, S. Sur un protiste parasite du cilié *Fabrea salina* Henneguy: *Gregarella fabreorum*, n. gen., n. sp. et son évolution. *C.R. Acad. Sci. Paris* **203** 1936 pp. 525–527.

174.—Chatton, E. and Brachon, S. Discrimination, chez deux infusoires du genre *Glaucoma*, entre système argentophile et infraciliature. *C.R. Soc. Biol. Paris* **118** 1935 pp. 399–403 3 figs.

175.—Chatton, E. and Brachon, S. Les relations du chondriome avec l'infraciliature chez divers ciliés. Mito-chondries ciliaires et parabasaux. *C.R. Soc. Biol. Paris* **118** 1935 pp. 958–962 8 figs.

176.—Chatton, E. and Brachon, S. Les deux formes du *Paramaecium dubosqui* Chatton et Brachon après trois années de culture. *C.R. Soc. Biol. Paris*, **121** 1936 pp. 711–714.

177.—Chatton, E. and Lwoff, A. Les remaniements et la continuité du cinétome au cours de la scission chez les Thigmatriches Ancistrumidés. *Arch. Zool. exp. gén. Paris* (Notes et Revue) **78** 1936 pp. 84–91 8 figs. [Protistologica lix.]

178.—Chatton, E. and Lwoff, A. Les *Pilisuctoridae* Ch. et Lw., ciliés parasites des poils sécréteurs des Crustacés Edriophthalmes. Polarité, orientation et desmodexie chez les infusoires. *Bull. biol. France-Belg.* **70** 1936 pp. 86–144 2 pls. 7 text-figs.

179.—Chatton, E. and Lwoff, A. Techniques pour l'étude des protozoaires, spécialement de leurs structures superficielles. *Bull. Soc. franç. micr. Paris* **5** 1936, pp. 25–39 4 figs.

180.—Chatton, E. and Lwoff, A. La constitution primitive de la strie ciliaire des Infusoires. La desmodexie. *C.R. Soc. Biol. Paris* **118** 1935 pp. 1068–1072.

181.—Chatton, E. and Villeneuve, F. La sexualité et le cycle évolutif des *Siedleckia* d'après l'étude de *S. caulleryi*, n. sp. Hologrégarines et Blastogrégarines, Sporozoaires Hologamétogènes et Blastogamétogènes. *C.R. Acad. Sci. Paris* **203** 1936 pp. 505–508 1 fig.

182.—Chatton, E. and Villeneuve, F. Le cycle évolutif de l'*Eleutheroschizon dubosqui* Brasil. Preuve expérimentale de l'absence de schizogonie chez cette forme et chez la *Siedleckia caulleryi* Ch. et Villen. *C.R. Acad. Sci. Paris* **203** 1936 pp. 833–836 1 fig.

183.—Chejfec, M. Das Verhalten von *Paramecium caudatum* in Glucose-lösungen. [Polish with German summary.] *Acta. Biol. Experiment. Warsaw* **9** (3) 1935 pp. 69–90.

Ch'en, K. C. *vide* Chang, H. C.

184.—Chen, T. T. Observations on mitosis in Opalinids (Protozoa, Ciliata). I. The behaviour and individuality of chromosomes and their significance. II. The association of chromosomes and nucleoli. Proc. Nation. Acad. Sci. Washington **22** 1936 pp. 594-602 10 figs; pp. 602-607 1 pl.

185.—Chen, T.-T. and Stabler, R. M. Further studies on the endamoebae parasitizing opalinid ciliates. Biol. Bull. Woods Hole **70** 1936 pp. 72-77 2 pls. 1 fig.

Chen, T. T. *vide* Stabler, R. M.

Cheng, P. S. *vide* Nie, D.

186.—Chopra, R. N. and Das Gupta, B. M. A preliminary note on the treatment of neuro-syphilis with monkey-malaria. Ind. Med. Gaz. **71** 1936 pp. 187-189.

187.—Chopra, R. N., Das Gupta, B. M. and Roy, A. C. On the mode of action of atebirin on *Plasmodium knowlesi*.—A preliminary note. Ind. Med. Gaz. **71** 1936 pp. 710-712.

188.—Chopra, R. N., Ganguly, S. K. and Roy, A. C. Studies on the action of antimalarial remedies on monkey malaria. The relationship between the concentration of atebirin in the circulating blood and parasite count. Ind. Med. Gaz. **71** 1936 pp. 443-445.

Chou, S. K. *vide* Chang, H. C.

Chu, J. H. *vide* Jung Sun, C.

189.—Chu, T. C., Lin, B. C., Ling, C. Y. and Zee, G. F. A survey of intestinal parasites in the rural experimental health area at Kao-Chiao, Shanghai. Chin. Med. J. **50** 1936 pp. 1243-1254.

190.—Chung, H. L. Studies on the resistance of Leishman-Donovan bodies to various physical, chemical and biological agents. Part I. The resistance of Leishman-Donovan bodies to certain physical agents, namely, X-ray, heating, chilling and drying. Chin. Med. J. **50** 1936 pp. 1039-1050.

191.—Cizancourt, Mme. de. Matériaux pour la stratigraphie du nummulitique dans le désert de Syrie. Bull. Soc. géol. Fr. **5** IV 1935 pp. 737-757 3 pls.

192.—Clarke, C. H. D. Fluctuations in numbers of ruffed grouse, *Bonasa*

umbellus (Linné), with special reference to Ontario. Univ. Toronto Stud. Biol. **41** 1936 pp. 3-118. [Protozoa: pp. 82-85.]

193.—Clemens, W. A. Red "water-bloom" in British Columbia waters. Nature, London **135** 1935 p. 473. [Ciliata.]

194.—Cleveland, L. R. The centriole and its rôle in mitosis as seen in living cells. Science, N.Y. N.S. **81** 1935 pp. 598-600. [Flagellates.]

195.—Coatney, G. R. A check-list and host-list of the genus *Haemoproteus*. J. Parasit. Urbana **22** 1936 pp. 88-105.

196.—Coatney, G. R. and Roudabush, R. L. A catalog and host-index of the genus *Plasmodium*. J. Parasit. Urbana **22** 1936 pp. 338-353.

Cohen, A. J. *vide* Porandwein, P. F.

Cohen, A. *vide* Drouet, F.

Cohen, B. M. *vide* Sonneborn, T. M.

Colas-Belcour, J. *vide* Roubaud, E.

Cole, W. S. *vide* Vaughan, T. W.

197.—Colom, G. Los foraminiferos de las margas azules de Enguera (prov. de Valencia). Bol. Soc. esp. Hist. nat. **36** 1936 pp. 205-226 5 pls. 9 figs.

198.—Comandon, J. and Fonbrune, P. de. Ingestion et digestion de bacilles par une amibe: *Amoeba phagocytoidea* Gauducheau. C.R. Soc. Biol. Paris **123** 1936 pp. 1072-1074.

199.—Comandon, J. and Fonbrune, P. de. Amibe mycophage. Enregistrement cinématographique. C.R. Soc. biol. Paris **123** 1936 pp. 1169-1170.

200.—Comandon, J. and Fonbrune, P. de. Mécanisme de l'ingestion d'Oscillaires par des Amibes. Enregistrement cinématographique. C.R. Soc. biol. Paris **123** 1936 pp. 1170-72.

201.—Combiér, M. Carte géologique de Dakar (Foraminifera). Publ. Com. hist. sci. A.O.F. (B) **1** 1935 pp. 1-39 6 pls.

Cornsia, O. *vide* Zolog, M.

202.—Condit, D. D., Raggatt, H. G. and Rudd, E. A. Geology of Northwest Basin, Western Australia. Bull. Amer. Assoc. Petrol. Geol. Oklahoma **20** 1936 pp. 1028-1070 7 figs. [Foraminifera.]

203.—Conference on co-ordination of tsetse and trypanosomiasis (animal and human) research in East Africa; held at Entebbe, 29th to 31st Jan. 1936. Nairobi 1936 87 pp.

204.—Conference on Co-ordination of Veterin. Res. Brit. E. Africa. Nairobi 1936. [Protozoal diseases: pp. 51-62.]

Conolly, J. I. *vide* Bundesen, H. N.

205.—Conrad, W. Étude systématique du genre *Lepocinclis* Perty. Mem. Mus. Hist. nat. Belg. (2) 1 1935 pp. 1-84 84 figs.

206.—Corbet, A. S. Biological processes in tropical soils. Biol. Processes in Tropical Soils. Cambridge 1935 pp. 1-158 10 figs. [Soil protozoa.]

207.—Corcuff, C. Deux observations d'*Isospora belli* au Maroc. Ann. Parasit. Paris 14 1936 pp. 440-443.

208.—Corradetti, A. Osservazioni sul ciclo schizogonico del *Plasmodium vivax*. [Italian with English summary.] Riv. Malariol. Rome (1) 15 1936 pp. 14-22 1 pl.

209.—Corson, J. F. The influence of repeated transmissions in animals on the virulence of *Trypanosoma rhodesiense* and *Trypanosoma brucei*. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 211-220.

210.—Corson, J. F. Experimental transmission of *Trypanosoma gambiense* by *Glossina morsitans* through monkeys. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 389-400.

211.—Corson, J. F. Experimental transmission of *Trypanosoma rhodesiense* by *Glossina morsitans* from man to sheep and back to man. J. trop. Med. London 39 1936 pp. 125-126.

212.—Corson, J. F. A note on hyrax and dikdiks (*Rhynchotragus*) from areas inhabited by tsetse flies. J. Trop. Med. London 39 1936 p. 138. [Trypanosomes.]

213.—Corson, J. F. Antelopes as reservoirs of *Trypanosoma gambiense* (Correspondence). Trans. Soc. trop. Med. Hyg. London 29 1936 p. 690.

214.—Corson, J. F. A second note on a high rate of infection of the salivary glands of *Glossina morsitans* after feeding on a reed buck infected with *Trypanosoma rhodesiense*. Trans.

Soc. trop. Med. Hyg. Lond. 30 1936 pp. 207-212.

215.—Corson, J. F. Are experiments with trypanosomes in laboratories in tropical Africa vitiated by accidental infections? Trans. Soc. trop. Med. Hyg. London 30 1936 pp. 309-312.

216.—Cowles, R. P. and Brambel, C. E. A study of the environmental conditions in a bog pond with special reference to the diurnal vertical distribution of *Gonyostomum semen*. Biol. Bull. Woods Hole 71 1936 pp. 286-298 2 figs.

217.—Craig, C. F. The necessity for more accurate statistics regarding the distribution and incidence of tropical diseases in the United States. Amer. J. trop. Med. Baltimore 16 1936 pp. 15-24. [Malaria and amoebiasis.]

218.—Craig, C. F. Some unsolved problems in the parasitology of amoebiasis. J. Parasit. Urbana 22 1936 pp. 1-13.

219.—Craig, G. M. Relation of hydrogen ion concentration to growth and encystment of *Entamoeba histolytica* in cultures. Amer. J. Hyg. 23 1936 pp. 114-121.

220.—Craig, G. M. A modification of Cleveland's medium for *Entamoeba histolytica*. Arch. Protistenk. Jena 87 1936 pp. 296-298.

Crespin, I. *vide* Chapman, F.

Cross, S. X. *vide* Herrick, C. A.

221.—Crouch, H. B. The animal parasites of the woodchuck (*Marmota monax* L.) with special reference to Protozoa. Iowa St. Coll. J. Sci. 11 1936 pp. 48-50.

Crump, L. M. *vide* Cutler, D. W.

222.—Cunha, A. M. da and Chagas, E. Études sur la leishmaniose viscérale du Brésil. Vérification du parasite par ponction de la rate et du foie; culture et aspect morphologique; considérations d'ordre général. C.R. Soc. Biol. Paris 123 31 1936 pp. 709-711 1 fig.

223.—Cunha, A. M. da and Freitas, G. de. Division et réorganisation chez les ciliés de la famille des Cyathodiniidae. C.R. Soc. Biol. Paris 123 1936 pp. 436-438 1 fig.

- 224.—Cunha, A. M. da and Freitas, G. de. Division et réorganisation chez les ciliés de la famille Cyathodiniidae C.R. Soc. Biol. Paris **123** 1936 pp. 711–713 1 fig.
- 225.—Cunha, A. M. da and Muniz, J. Conjugaison et endomixie chez des ciliés du genre *Balantidium*. C.R. Soc. Biol. Paris **121** 1936 pp. 776–778.
- 226.—Cushman, J. A. Geology and paleontology of the Georges Bank Canyons. Part IV. Cretaceous and late tertiary foraminifera. Bull. Geol. Soc. America—Washington, D.C. **47** 1936 pp. 413–435 5 pls.
- 227.—Cushman, J. A. Notes on some American cretaceous Foraminifera. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 11–22 2 pls.
- 228.—Cushman, J. A. Some American cretaceous species of *Ellipsonodosaria* and *Chrysalogonium*. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 51–55 1 pl.
- 229.—Cushman, J. A. Some new species of *Nonion*. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 63–69 1 pl.
- 230.—Cushman, J. A. Cretaceous Foraminifera of the family *Chilostomellidae*. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 71–78 1 pl.
- 231.—Cushman, J. A. Some new species of *Elphidium* and related genera. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 78–89 1 pl.
- 232.—Cushman, J. A. and Bermúdez, P. J. The foraminiferal genus *Amphimorphina* in the eocene of Cuba. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 1–3 1 pl.
- 233.—Cushman, J. A. and Bermúdez, P. J. New genera and species of Foraminifera from the eocene of Cuba. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 27–38 2 pls.
- 234.—Cushman, J. A. and Bermúdez, P. J. Additional new species of Foraminifera and a new genus from the eocene of Cuba. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 55–63 2 pls.
- 235.—Cushman, J. A. and Campbell, A. S. A new *Siphogenerinoides* from California. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 91–92 1 pl.
- 236.—Cushman, J. A. and Hanzawa, S. New genera and species of Foraminifera of the late tertiary of the Pacific. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 45–48 1 pl.
- 237.—Cushman, J. A. and Jarvis, P. W. Three new Foraminifera from the Miocene (Bowden Marl) of Jamaica. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 3–5 1 pl.
- 238.—Cushman, J. A. and McMasters, J. H. Middle eocene foraminifera from the Lajas formation, Ventura County, California. J. Paleont. Menasha, Wis. **10** 1936 pp. 497–517 4 pls. 4 figs.
- 239.—Cushman, J. A. and Parker, F. L. Notes on some cretaceous specimens of *Buliminella* and *Neobulimina*. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 5–10 1 pl.
- 240.—Cushman, J. A. and Parker, F. L. Some American eocene *Buliminas*. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 39–45 2 pls.
- 241.—Cushman, J. A. and Parker, F. L. Some species of *Robertina*. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 92–100 1 pl.
- 242.—Cushman, J. A. and White, E. M. *Pyrgoella*, a new genus of the Miliolidae. Contr. Cushman Lab. Foraminif. Sharon Mass. **12** 1936 pp. 90–91.
- 243.—Cutler, D. W. and Crump, L. M. Problems in soil microbiology (Rothamsted Monogr. on Agric. Sci.) Lond. **1935** pp. vii + 104.
- 244.—Cuvillier, J. Répartition et valeur stratigraphique de *Nummulites uroniensis* A. Heim (de la Harpe) en Egypte et dans le bassin Méditerranéen. C.R. Acad. Sci. Paris **200** 1935 pp. 483–485.
- 245.—Cuvillier, J. Valeur stratigraphique et répartition géographique de *Nummulites discorbina* Schl. en Egypte et dans le bassin Méditerranéen. C. R. Séances Soc. Géol. Fr. Paris **12** 1936 pp. 202–204.

Cuvillier, J. *vide* Doncieux, L.

246.—Czerniewski, Z. Über den Einfluss einiger Schlafmitteln und Alkaloiden auf *Spirostomum ambiguum* Ehrbg. [Polish with German summary.] Acta Biol. Experiment. Warsaw 9 (4) 1935 pp. 91-110.

247.—Daguin, F. À propos du Lutétien à grandes Nummulites du Synclinal de Gaas (Landes). C.R. Séances Soc. Géol. Fr. Paris 12 1936 pp. 199-200.

248.—Danks, W. B. C. and Daubney, R. A résumé of experiments on the chemotherapy of *T. congolense* infections in domestic animals. Conference on Co-ordination Tsetse and Trypanosomiasis Res. E. Africa. Nairobi 1936 pp. 47-53.

249.—Das Gupta, B. M. Some observations on vaginal *Trichomonas* (*T. foetus*) and the *Trichomonas* in the digestive tract of cows in culture. Ind. J. Med. Res. 24 1936 pp. 541-544 5 figs.

250.—Das Gupta, B. M. An abnormal *Entamoeba coli* cyst in the monkey (*Silenus rhesus*). Ind. J. Med. Res. 24 1936 p. 545.

251.—Das Gupta, B. M. A case of human infection with *Dientamoeba fragilis* Jepps and Dobell, 1918 in Calcutta. Ind. Med. Gaz. 71 1936 pp. 528-529 1 fig.

252.—Das Gupta, B. M. Observations on the flagellates of the genera *Trichomonas* and *Trichomastix*. Parasitology, Cambridge 28 1936 pp. 195-201 1 pl.

253.—Das Gupta, B. M. *Trichomonas* sp. from the gut of a corais snake. Parasitology Cambridge 28 1936 pp. 202-205 1 fig.

254.—Das Gupta, B. M. On *Eutrichomastix* of some African snakes. Parasitology Cambridge 28 1936 pp. 206-207 1 fig.

Das Gupta, B. M. vide Chopra, R. N.

Das Gupta, B. M. vide Knowles, R.

255.—Das Gupta, H. C. Palaeontological notes on the nummulitic rocks of Cherra-punji, Khasi Hills, Assam. J. Dpt. Sci. Univ. Calcutta 8 6 1927 pp. 1-10 6 pls.

Das Gupta, M. vide Ray, H. N.

256.—Datta, S. C. A. The etiology of enzootic bovine haematobia. [Abstract.]

Proc. Indian Sci. Congr. Calcutta 22 1935 p. 410. [Rhizopoda.]

Daubney, R. vide Danks, W. B. C.

257.—Davey, J. B. Trypanosomiasis. [Correspondence.] British Med. J. London 1936 (i) pp. 1321-1322.

258.—Davies, A. M. Tertiary faunas. A textbook for oilfield palaeontologists and students of geology. Vol. I. The composition of tertiary faunas. Tertiary faunas I 1935 pp. 1-406 565 figs. [Foraminifera.]

259.—Davis, A. G. The London Clay of Sheppey and the location of its fossils. Proc. Geol. Ass. London 47 4 1936 pp. 340-345 1 fig. [Foraminifera.]

260.—Dawson, J. A., Kessler, W. R. and Silberstein, J. K. Mitosis in *Amoeba dubia*. Biol. Bull. Woods Hole 69 1935 pp. 447-461 4 pls. 1 fig.

261.—Deb, S. Sur la découverte d'un Orbitoïde dans le grès d'Annot (Alpes Maritimes) et sur ses conséquences. C.R. Acad. Sci. Paris 201 1935 pp. 841-842. [Foraminifera.]

262.—Deb, S. Sur la découverte de nummulites dans les grès nummulitiques des Alpes-Maritimes et sur l'origine de cette série de couches. C.R. Acad. Sci. Paris 201 1935 pp. 973-975.

263.—Deflandre, G. Remarques sur le comportement des pseudopodes chez quelques Thécamoëbiens. Ann. Protistologie, Paris 5 1936 pp. 65-71 34 figs.

264.—Deflandre, G. Étude monographique sur le genre *Nebela* Leidy (Rhizopoda, Testacea). Ann. Protistologie Paris 5 1936 pp. 201-286 19 pls. 161 figs.

265.—Deflandre, G. Tintinnoidiens et Calpionelles. Comparaison entre les Tintinnoidiens, infusoires loriqués pélagiques des mers actuelles et les Calpionelles, microfossiles de l'époque secondaire. Bull. Soc. franç. micr. Paris 5 1936 pp. 112-122 39 figs.

266.—Deflandre, G. Présence de microdiaclasses dans les éclats de silex. Leur importance dans les colorations artificielles des microfossiles et en particulier des Foraminifères. C.R. Acad. Sci. Paris 200 11 1935 pp. 953-954.

267.—Deilandre, G. and Dusi, H. Description d'une euglène nouvelle, *Euglena mesnili* nov. spec. Arch. Zool. exp. gén. Paris Notes and Revue 77 1935 pp. 12-15 3 figs.

268.—Delamater, A. J. The effects of heavy water upon the fission rate and the life cycle of the ciliate *Uroleptus mobilis*. Biol. Bull. Woods Hole 71 1936 pp. 199-216 5 figs.

269.—Delphy, J. Quelques remarques sur les *Foettingeria*. Bull. Soc. Zool. Fr. 61 1936 pp. 450-53.

270.—Delpy, L. Agents pathogènes observés en Iran dans le sang des animaux domestiques. (Note préliminaire.) Bull. Soc. Path. Exot. Paris 29 1936 pp. 157-161.

271. — Dembowski, J. W poszukiwaniu istoty życia : Historia naturalna jednego pierwotniaka. [In search of the source of life : the natural history of a protozoan.] [In Polish.] Z Dziedzin Nauk i Techniki 1934 pp. xii + 356 8 pls. ("Mathesis Polska": Warsaw.) [Non vidi] [Paramaecium.]

272. — De Meillon, B. Nuclear division in sporozoites of *Plasmodium*. S. Afric. Med. J. Cape Town 10 1936 pp. 474 1 fig.

273.—Demina, N. La rapidité de la manifestation de l'effet parasitotrope et de la disparition du *Plasmodium vivax* du sang périphérique sous l'influence de l'acridine. [In Russian, with French summary.] Med. Parasitol. and Parasit. Dis. Moscow 5 1936 pp. 735-738.

De Rivas, G. T. vide Johnson, C. M.

274.—Derville, P. H. Observations et réflexions sur le genre *Nubecularia*. Bull. Soc. géol. Fr. 5 V 1935 pp. 621-628 1 pl.

275.—Deschiens, R. Perte de la virulence de deux souches d'amibes dysentériques en culture. Bull. Soc. Path. Exot. Paris 29 1936 pp. 576-584.

276.—Deschiens, R. Action comparée du sérum de lapin et du sérum de cheval sur les cultures de l'amibe dysentérique. C.R. Soc. Biol. Paris 121 1936 pp. 325-327.

277.—Deschiens, R. Comportement de différents sérums de lapin et de cheval envers des cultures d'amibes dysentériques. C.R. Soc. Biol. Paris 123 1936 pp. 422-423.

278.—Deschiens, R. Modifications expérimentales du pouvoir pathogène de l'amibe dysentérique. C.R. Soc. Biol. Paris 123 1936 pp. 783-785.

279.—Deschiens, R. and Flye-Sainte Marie, P. E. Comportement des cultures de l'amibe dysentérique en présence de certaines eaux d'égout C.R. Soc. Biol. Paris 122 1936 pp. 1032-1034.

Deschiens, R. vide Dopter, C.

280.—De Young, W. Sources of error in the laboratory diagnosis of amebiasis. J. Lab. Clin. Med. St. Louis 21 1936 pp. 1149-1154.

281.—Dias, E. O "signal de Romaña" e os novos progressos no estudo da doença de Chagas. Folha Medica Rio de J. 25 Jul. 1936 [sep. pag.] 2 figs.

Dias, E. vide Froilano de Mello, I.

282.—Diller, W. F. Nuclear re-organisation processes in *Paramecium aurelia* with descriptions of autogamy and "hemixis." J. Morph. Philadelphia 59 1936 pp. 11-51 8 pls. 2 figs.

283.—Dios, R. L., Sommerville, E. T. W. de, Bonacci, H. and Aldao, J. F. A. Indices de infestación del *Triatoma infestans* en la R. Argentina. Rev. Inst. Bact. Buenos Aires 8 1936 pp. 13-141. [*Trypanosoma cruzi*.]

284.—Dobell, C. Reminiscences of W. S. Perrin as a protozoologist. London Hospital Gazette 39 1936 pp. 103-107 1 fig.

285.—Dobell, C. Researches on the intestinal protozoa of monkeys and man. VIII. An experimental study of some simian strains of "*Entamoeba coli*." Parasitology Cambridge 28 1936 pp. 541-593.

286.—Dogiel, V. [Changes in the parasitic fauna of the eel with reference to its migrations.] [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 114-122.

287.—Dogiel, V. [The parasites of cod-fish from Lake Mogilnoje: On the parasitic fauna of relict animals.] [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 123–133.

288.—Dogiel, V. Le mode de conjugaison de *Polytoma uvella*. Arch. Zool. exp. gén. Paris. Notes et Revue 77 1935 pp. 1–8, 10 figs. [Protistologica LI.]

289.—Dogiel, V. and Nawtzewitsch, N. [Parasitic fauna of the house-martin: the origin of the parasites of migratory birds.] [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 80–113 2 figs.

290.—Dolgopolska, M. A. [Rate of reproduction of *Paramecium caudatum* in culture.] [In Ukrainian.] Trav. Soc. Nat. Kharkov 53 1930 pp. 59–60.

291.—Dolgopolska, M. A. [Effect of light upon rate of reproduction of *Paramecium caudatum*.] [In Ukrainian.] Trav. Soc. Nat. Kharkov 53 1930 pp. 61–63.

Donatien, A. *vide* Lestoquard, F.

Donatien, A. *vide* Sergent, Ed.

292.—Doncieux, L. and Cuvillier, J. Les foraminifères du lutétien inférieur dans le sud du désert arabe. C.R. Acad. Sci. Paris 200 1935 pp. 1873–1875.

Doncieux, L. *vide* Avnimelech, M.

293.—Dopter, C. and Deschiens, R. Action comparée du sérum humain normal et du sérum de dysentérique amibien sur l'amibe dysentérique en culture. C.R. Soc. Biol. Paris 123 1936 pp. 355–358.

294.—Dostrovsky, A. Relapses in cutaneous leishmaniasis. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 267–274 1 pl.

295. — Doudoroff, M. Studies in thermal death in *Paramecium*. J. exp. Zool. Philadelphia 72 1936 pp. 369–385.

296.—Doutkevitch, G. The stratigraphy of the middle carboniferous

of the Urals. [Abstract.] Geol. Zbl. Leipzig 8 2 1936 p. 90, No. 327. [Foraminifera.]

297.—Doyle, W. L. Observations on Zooxanthellae. Yearb. Carnegie Inst. Washington 34 1935 pp. 79–80. [Foraminifera.]

298.—Drbohlav, J. Sur l'épidémiologie du paludisme dans la Russie Subcarpathique de 1923 à 1936. Trav. Inst. Hyg. Publ. Tchecoslov. Prague No. 4 1936 pp. 1–17 22 pls.

299.—Drechsler, C. A *Fusarium*-like species of *Dactylella* capturing and consuming testaceous rhizopods. J. Wash. Acad. Sci. 26 1936 pp. 397–404 1 fig.

300.—Drouet, F. and Cohen, A. The morphology of *Gonyostomum semen* from Woods Hole, Massachusetts. Biol. Bull. Woods Hole 68 1935 pp. 422–439 2 pls.

301.—Dubinin, W. [Investigations on the parasitic fauna of grayling at different periods of its life.] [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 31–48.

302.—Dubois, A. Essai d'obtention d'une souche atoxyl-résistante au moyen d'un produit aromatique non arsenical et non trypanocide. Ann. Soc. Belge Méd. Trop. 16 1936 pp. 165–172.

303.—Dubois, A. La résistance des trypanosomes aux arsenicaux aromatiques s'étend à d'autres produits aromatiques non-arsenicaux. Ann. Soc. Belge Méd. Trop. 16 1936 pp. 173–176.

304. — Dubois, A. Utilisation des glucides par *Leishmania tropica*. C.R. Soc. Biol. Paris 123 1936 pp. 141–144.

Dufour, J. *vide* Nattan-Larrier, L.

305.—Duke, H. L. On the power of *Glossina morsitans* and *Glossina palpalis* to transmit the trypanosomes of the *brucei* group. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 37–38.

306.—Duke, H. L. [Note on prophylaxis of sleeping sickness with "Bayer 205".] Conference on Coordination Tsetse and Trypanosomiasis Res. E. Africa, Nairobi 1936 pp. 85–87.

307.—Duke, H. L. Arsenic resistance in trypanosomes. *Lancet*, London 1935 (i) pp. 903-904.

308.—Duke, H. L. On the prophylactic action of "Bayer 205" against the trypanosomes of man. Concluding observations. *Lancet* London 230 1936 (i) pp. 463-469.

309.—Duke, H. L. Studies of the effect on *T. gambiense* and *T. rhodesiense* of prolonged maintenance in mammals other than man; with special reference to the power of these trypanosomes to infect man. I. and II. *Parasitology* Cambridge 28 1936 pp. 381-390, 391-394.

310.—Duke, H. L. Antelopes as reservoirs of *Trypanosoma gambiense*. [Correspondence.] *Trans. Soc. trop. Med. Hyg. Lond.* 30 1936 pp. 129-131.

311.—Duke, H. L. Recent observations on the biology of the trypanosomes of man in Africa. *Trans. Soc. trop. Med. Hyg. Lond.* 30 1936 pp. 275-296.

312.—Duke, H. L. and Mellanby, K. A note on the infectivity of *Trypanosoma rhodesiense* in the crop of *Glossina palpalis*. *Ann. Trop. Med. Parasit. L'pool.* 30 1936 p. 39.

313.—Dunbar, C. O. and Skinner, J. W. *Schwagerina* versus *Pseudoschwagerina* and *Paraschwagerina*. *J. Paleont. Menasha Wis.* 10 1936 pp. 83-91 2 pls.

314.—Dunbar, C. O., Skinner, J. W. and King, R. E. Dimorphism in permian fusulines. *Bull. Univ. Texas Austin* 3501 1935 pp. 173-186 3 pls.

Dunbar, C. O. *vide* Longwell, C. R.

315.—Durieux, C. Sur la transmission de trois souches de *Bartonella muris* obtenues par splénectomie de la souris blanche. *Bull. Soc. Path. Exot. Paris* 29 1936 pp. 671-673.

Dusi, H. *vide* Deflandre, G.

Dusi, H. *vide* Lwoff, A.

316.—Du Toit, P. J. Trypanosomiasis of domestic animals. *Quart. Bull. Health Organiz., L. of N., Geneva* 5 1936 pp. 170-179.

317.—Du Toit, P. J. and Jackson, C. The life and work of Sir Arnold Theiler. *J. S. Afric. Vet. Med. Assoc.* 7 1936 pp. 135-186.

318.—Dymov, D. [On the life-cycle of *Trypanosoma lewisi*.] [In Russian.] *Med. Parasitol. and Parasit. Dis. Moscow* 5 1936 pp. 624-626.

319.—Dymov, D. [On the life-cycle of *Schizotrypanum cruzi*.] [In Russian.] *Med. Parasitol. and Parasit. Dis. Moscow* 5 1936 pp. 627-628 1 fig.

320.—Earland, A. Foraminifera. Additional records from the Weddell Sea sector from material obtained by the S.Y. "Scotia." *Disc. Reps. Cambridge* 13 1936 pp. 1-75 1 pl. 2 figs.

321.—Ehrmann, F. and Flandrin, J. Au sujet des grandes Lepidocyclines de l'éocène des Beni-Afeur. *C.R. Acad. Sci. Paris* 200 1935 pp. 152-154.

322.—Eichenberg, W. Die Erforschung der Mikroorganismen insbesondere der Foraminiferen der norddeutschen Erdölfelder. *Jber. Niedersächs. geol. Ver. Hanover* 27 (1936) 1935 pp. 1-40 7 pls.

323.—Eichenberg, W. Die Erforschung der Mikroorganismen, insbesondere der Foraminiferen der norddeutschen Erdölfelder. Teil I. Die Foraminiferen der Unterkreide. *Jber. Niedersächs. geol. Ver. Hanover* 26 (1934-5) 1935 pp. 150-190 8 pls.

Einhorn, E. *vide* Moldavskaya-Kritchevskaya, V.

324.—Eisenack, A. Dinoflagellaten aus dem Jura. *Ann. Protistologie Paris* 5 1936 pp. 59-63 1 pl. 5 figs.

325.—Eisenack, A. *Eodinia pachythea* n.g. n.sp. ein primitiver Dinoflagellat aus einem Kelloway-Geschiebe Ostpreussens. *Z. Geschiebeforsch. Berlin* 12 1936 pp. 72-75 6 figs.

326.—Eliot, C. P. The insect vector for natural transmission of *Eperythrozoon coccoides* in mice. *Science N.Y. N.S.* 84 1936 p. 397.

Ellenbogen, V. *vide* Adler, S.

327.—Elliott, A. M. The influence of pantothenic acid on growth of protozoa. (*Colpidium* and *Haematococcus*). *Biol. Bull. Woods Hole* 68 1935 pp. 82-92 4 figs.

328.—Entz, G. and Sebestyén, O. Morphologische, biologische und physicochemische Untersuchungen an *Peridinium aciculiferum* Lemmermann, mit

besonderer Berücksichtigung der *Gymnodinium*-form. [German summary.] Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 15-73 54 figs.

Esckridge, L. vide Hegner, R.

329.—Estrada, A. Les leishmanies peuvent se multiplier par schizogonie, Bull. Soc. Path. Exot. Paris 29 1936 pp. 722-726 1 fig.

330.—Fahrión, H. Die Mikrofauna des Unteren Doggers in Schwaben. [Abstract.] Geol. Zbl. Leipzig 8 1936 p. 254 No. 927. [Foraminifera.]

331.—Fantham, H. B. The evolution of parasitism among the Protozoa. Scientia Bologna 59 1936 pp. 316-324.

Farber, S. M. vide Theiler, H.

332.—Fauré-Fremiet, E. The *Folliculinidae* (Infusoria Heterotricha) of the Breton Coast. Biol. Bull. Woods Hole 70 1936 pp. 353-360 15 figs.

333.—Fauré-Fremiet, E. La famille des *Folliculinidae* (Infusoria Heterotricha). Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 1129-1175 15 figs.

334.—Faust, E. C. and Headlee, W. H. Intestinal parasite infections of the ambulatory white clinic population of New Orleans. Amer. J. trop. Med. Baltimore 16 1936 pp. 25-38.

Fedele, M. vide Pazzini, A.

335.—Fennell, R. A. Feeding rate of *Amoeba proteus* on bacteria-free *Chilomonas paramecium*. J. Alabama Acad. Sci. 5 1934 pp. 27-28.

336.—Fernandez Martinez, F. and Suarez Peregrin, E. Comentarior a una estadística de parasitismo intestinal. VIII. Reun. Soc. Argentina Patol. Region, Norte Buenos Aires 2 1936 pp. 817-824.

Fialkovskaya, L. P. vide Tchaporuskaya-Bajenova, N. A.

337.—Fialkovsky, A. P. and Tveritina, O. A. [Epidemiology of canine leishmaniasis in Tashkent (Observations of 1934-1935).] [In Russian.] Uzbekistan Parasitol. Symposium Tashkent 1 1936 pp. 349-361.

338.—Finley, H. E. A method for inducing conjugation within *Vorticella* cultures. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 323-326.

Fisikov, V. V. vide Tsynger, J. H.

Flandrin, J. vide Ehrmann, F.

339.—Florida, G. B. Sul rinvenimento di Orbitoidi non rimaneggiate nel flysch lombardo. Bol. Soc. geol. ital. 54 2 1936 pp. 253-262 1 pl. 2 figs.

Flye Sainte Marie, P. E. vide Deschiens, R.

Fonbrune, P. de vide Comandon, J.

Forkner, C. E. vide Teng, C. T.

340.—Fott, B. Phytoplankton produktion des Ohrid-Sees. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 229-237 3 figs. [Dinoflagellates.]

341.—Fowell, R. R. The fibrillar structures of protozoa, with special reference to schizogregarines of the genus *Selenidium*. J.R. micr. Soc. London (3) 56 1936 pp. 12-28 6 figs.

342.—Fowell, R. R. Observations on the sporozoa inhabiting the gut of the polychaete worm *Polydora flava* Claparède. Parasitology Cambridge 28 1936 pp. 414-430 22 figs.

343.—Foy, H. and Kondi, A. Researches on Blackwater fever in Greece. IV.—Experimental investigations into the existence of haemolytic strains of malaria and/or other specific parasites in blackwater fever. Ann. Trop. Med. Parasit. L'pool. 30 1936 pp. 423-433.

344.—Føyn, B. Ueber die Kernverhältnisse der Foraminifere *Myxotheca arenilega* Schaudinn. Arch. Protistenk. Jena 87 1936 pp. 272-295 19 figs.

345.—Føyn, B. Der Lebenszyklus von *Discorbina vilardeboana* d'Orbigny. Bergens Mus. Aarb. 1936 2 pp. 1-22 2 pls. 5 figs.

346.—Franke, A. Die Foraminiferen des deutschen Lias. Abh. preuss. geol. LdAnst. 169 1936 pp. 1-138 12 pls.

347. — Frankenberg, G. v. Urtierstudien ohne Mikroskop. Aquar. Berlin 10 1936 pp. 45-48 12 figs. [Ciliata.]

Freitas, G. de vide Cunha, A. M. da.

348.—Frenguelli, J. "*Silicotextulina deflandrei*," nueva especie de foraminifero siliceo, viviente en El Puerto de San Blas. Notas Mus. La Plata (Zool.) 1 1935 pp. 111-119 1 fig.

349. — Frisch, J. H. *Paramecium multimicronucleata* vs. *Paramecium multimicronucleatum*. Science N.Y. N.S. 84 1936 pp. 290-291.

350.—Frizzell, D. L. and Wheeler, H. E. Neotypes in zoological nomenclature. [Abstract.] Proc. Geol. Soc. Amer. (1935) 1936 pp. 409-410. [Foraminifera.]

Frizzell, D. L. *vide* Schencke, H. G.

351.—Froilano de Mello, I. New trypanosomids of some Indian birds. Proc. Indian Acad. Sci. (B) 2 1935 pp. 500-502.

352.—Froilano de Mello, I. and Afonso, E. Blood parasites of *Coracias b. benghalensis* with special remarks on its two types of *Leucocytozoon*. Proc. Indian Acad. Sci. (B) 2 1935 pp. 67-73 2 pls. 2 text-figs.

353.—Froilano de Mello, I. and Dias, E. *Plasmodium narayani* n. sp. parasite of the fish otter *Lutra lutra*. Proc. Indian Acad. Sci. (B) 3 1936 pp. 212-213 1 pl.

354.—Froilano de Mello, I. and Vales, C. *Haemogregarina thyrsoideae* n. sp. parasite of the Indian eel *Thyrsoideia macrurus* Blecker. Proc. Indian Acad. Sci. (B) 4 1936 pp. 403-404 1 pl.

355.—Froilano de Mello, I. and Valles, C. On a trypanosome found in the blood of the Indian fresh water fish *Clarias batrachus* Linn. Proc. Indian Acad. Sci. (B) 3 1936 pp. 120-124 1 fig.

356.—Frye, W. W. and Meleney, H. E. The effect of various suspending media on the pathogenic and phagocytic activity of *Endamoeba histolytica*. Amer. J. Hyg. 24 1936 pp. 414-422.

357.—Frye, W. W. and Meleney, H. E. The viability of *Endamoeba histolytica* cysts after passage through the cockroach. J. Parasit. Urbana 22 1936 pp. 221-222.

358.—Frye, W. W. and Meleney, H. E. Intestinal protozoa in human autopsies. J. Parasit. Urbana 22 1936 pp. 300-301.

Frye, W. W. *vide* Meleney, H. E.

359.—Gabaldon, A. Carbarsone: its action on the intestinal trichomonads in vivo. Amer. J. trop. Med. Baltimore 16 1936 pp. 621-639.

360.—Galliard, H. Premier cas de coccidiose humaine à *Isospora belli*

Wenyon 1923 signalé au Tonkin. Bull. Soc. Path. Exot. Paris 29 1936 pp. 118-120.

362.—Ganapathi, P. N. A new species of myxosporidian from the heart of a marine fish, *Otolithus ruber*. Curr. Sci. Bangalore 5 1936 p. 204.

Ganguly, S. K. *vide* Chopra, R. N.

363.—Garrett, Jnr., J. B. Occurrence of *Nonionella cockfieldensis* at Caliborne, Alabama. J. Paleont. Menasha, Wis. 10 1936 pp. 785-786.

364.—Gaschen, H. Contribution à l'étude de l'infection naturelle des anophèles au Tonkin. Bull. Soc. Path. Exot. Paris 29 1936 pp. 1093-1095. [*Plasmodium*.]

365.—Gauduchean, A. A propos de la phagocytose amibienne (2^e note). Bull. Soc. Path. Exot. Paris 29 1936 pp. 1069-1074 4 figs.

366.—Gause, G. F. Vérifications expérimentales de la théorie mathématique de la lutte pour la vie. (Actualités Scient. et Industr. 277: Exposés de Biométrie et de Statist. Biol. ix.) Paris 1935 63 pp. [*Non vidi.*] [*Paramecium*.]

367.—Gause, G. A. Stereoisomeric nature of oxidation and fermentation. Nature London 138 1936 pp. 245-246. [Ciliata, Flagellata.]

368.—Gause, G. F. The principles of biocoenology. Quart. Rev. Biol. Baltimore 11 1936 pp. 320-336 10 figs. [Protozoa.]

369.—Gause, G. F. On certain basic problems of biocoenology. [Russian with English summary.] Zool. J. Moscow 15 1936 pp. 363-381. [Ciliates and flagellates.]

370.—Gause, G. F., Smaragdova, N. P. and Witt, A. A. Further studies of interaction between predators and prey. J. Animal Ecol. 5 1936 pp. 1-18 6 figs. [*Paramecium*, *Didinium*.]

371.—Gaw, H. Z. Physiology of the contractile vacuole in ciliates. (1) The effect of osmotic pressure. Arch. Protistenk. Jena 87 1936 pp. 185-200 5 figs.

372.—Gaw, H. Z. Physiology of the contractile vacuole in ciliates. (3) The effect of temperature. Arch. Protistenk. Jena 87 1936 pp. 201-212 6 figs.

373.—Gaw, H. Z. Physiology of the contractile vacuole in ciliates. (4) The effect of heavy water. Arch. Protistenk. Jena 87 1936 pp. 213–224 6 figs.

Gaw, H. Z. *vide* Tang, P. S.

374.—Gay, F. P. *et al.* Agents of disease and host resistance, including the principles of immunology, bacteriology, mycology, protozoology, parasitology and virus diseases. (Baillière, Tindall & Cox) London 1936 xiii + 1582 pp. 6 pls. 212 figs.

375.—Geiman, Q. M. and Ratcliffe, H. L. Morphology and life-cycle of an amoeba producing amoebiasis in reptiles. Parasitology Cambridge 28 1936 pp. 208–228 2 pls. 1 text-fig.

376.—Gelei, J. von. V. Beiträge zur Ciliatenfauna der Umgebung von Szeged. Zwei Gymnostomata-Arten: *Amphileptus carchesii* Stein und *Bryophyllum hyalinum* sp. n. Acta Biol. Szeged. 4 1936 pp. 1–11 7 figs.

377.—Gelei, J. v. Ein geschraubter oder kochlioider Körperbau in der Ciliatenwelt. [German summary.] Allat. Közlem. Budapest 33 1936 pp. 1–35 21 figs.

378.—Gelei, J. v. Eine Pulsationsblase, die nie entleert wird. Beobachtungen an *Amoeba macrovesiculata* n. sp. Arch. Protistenk. Jena 88 1936 pp. 85–89 20 figs.

379.—Gelei, J. v. Die Bildung des *Porus excretorius* und sein Verhältnis zum Neuronemensystem bei *Paramacium*. Biol. Zbl. Leipzig 56 1936 pp. 27–34 6 figs.

380.—Gelei, J. v. Beiträge zur Ciliatenfauna der Umgebung von Szeged. [German summary.] Math. term. Ert. Budapest 54 1936 pp. 923–951 14 figs.

381.—Gelei, J. v. Das Excretionsorgan der Protozoen, morphologisch, entwicklungsgeschichtlich und physiologisch betrachtet. [German summary.] Mat. Term. Közlem. Budapest 37 1935 pp. 3–127 23 figs.

382.—Gelei, J. v. Ascorbinsäure (C-Vitamin) zur Darstellung des Nephrial apparatus bei Ziliaten. Z. wiss. Mikr. Leipzig 53 1936 pp. 260–272 4 figs.

383.—Georgévitch, J. Über Diplo- und Haplophase im Entwicklungs-

kreise des Myxosporids *Zschokkella rovigensis* Nemecek. Arch. Protistenk. Jena 87 1936 pp. 151–154 13 figs.

384.—Georgévitch, J. Ein neuer Hyperparasit, *Leishmania esocis* nov. spec. Arch. Protistenk. Jena 88 1936 pp. 90–92 1 fig.

385.—Gersch, M. Untersuchungen über vitale Kern und Plasmafärbungen bei *Paramacium*. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 268–274.

386.—Geyn, W. E. A. Van de and Vierk, I. M. Van der. A monograph on the Orbitoididae, occurring in the tertiary of America. Leidsche Geol. Mededeel. Leiden 7 2 1935 pp. 221–272 9 pls.

387.—Giovannola, A. Les *Leucocytozoon*: leur développement schizogonique. Ann. Parasitol. Paris 14 1936 pp. 369–374 2 pls.

388.—Giovannola, A. *Plasmodium immaculatum* (Grassi and Feletti, 1892) Schaudinn, 1902, the correct name for the parasite causing malignant tertian malaria. Proc. Helminth. Soc. Washington 2 1935 pp. 90–91.

Glyn-Hughes, F. *vide* Yorke, W.

389.—Gönnert, R. *Sporodinium pseudocalani* n.g. n.sp. ein Parasit aus Copepodeneiern. Z. Parasitenk. Berlin 9 1936 pp. 140–143 7 figs.

390.—Gönnert, R. and Westphal, A. Zur Technik der Stuhluntersuchung auf Protozoen. Arch. Schiffs. Tropenhyg. Leipzig 40 1936 pp. 5–16.

Gönnert, R. *vide* Westphal, A.

391.—Gorbunowa, M. [Changes in the parasitic fauna of pike and roach according to their age.] [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 5–30 2 figs.

Gorman, A. E. *vide* Bundesen, H. N.

392.—Gousseff, W. F. A new coccidium from crayfish. J. Roy. micr. Soc. London (3) 56 1936 pp. 326–327.

393.—Gousseff, W. F., Rastegajeff, E. F. and Soussko, S. F. Die Zecken als Überträger der Babesiellen und Francaïellen der Rinder. Arch. Tierheilk. Berlin 71 1936 pp. 138–144.

Gousseff, W. F. *vide* Yakimoff, W. L.

Gousseff, V. F. *vide* Yakimoff, V. L.

- 394.—Goyanes, J. Aspects morphologiques de *Bartonella canis*. Ann. Parasit. Paris **14** 1936 pp. 423-428 1 fig.
- 395.—Gran, H. H., Hentschel, E. and Russell, F. S. Handliste zur Sicherung der Bestimmungen nordischen Planktons. Rapp. Cons. Explor. Mer. Copenh. **100** Pt. 3 1936 pp. 15-20.
- 396.—Gregorio, A. de. Fossili triassici delle cave di Billiemi. Ann. Géol. Paléont. Palermo **54** 1930 pp. 1-40 7 pls. [Foraminifera.]
- 397.—Gripenburg-Schee, W. Klutert-höhle, Bismarck-und Rentropshöhle bei Milspe und ihre Tierwelt. Abh. Westfäl. Provinzial. Mus. Munsteri. W. **6** 1935 pp. 1-46 4 figs.
- Grimard, L. *vide* Nattan-Larrier, L.
- Grimsdale, T. F. *vide* Barker, R. W.
- 398.—Groat, W. A. A general purpose polychrome blood stain. J. Lab. Clin. Med. St. Louis **21** 1936 pp. 978-982. [Haemocytozoa.]
- 399.—Grodzensky, D. Das elektrokinetische Potential von *Trypanosomen*. Protoplasma, Leipzig **26** 1936 pp. 622-624.
- 400.—Groot, A. A. de. Einige Beobachtungen an *Dinamoeba mirabilis* Leidy. Arch. Protistenk. Jena **87** 1936 pp. 427-436 3 figs.
- 401.—Gubler, J. Les fusulinidés du Permien de l'Indochine, leur structure et leur classification. Mem. Soc. géol. Fr. Paléont. **26** 1935 pp. 1-173 24 pls.
- 402.—Guimarães, J. R. A. Contribuição ao conhecimento das espécies do genero *Henneguya* Thélohan, 1892, parasitas de peixes brasileiros. Rev. Industr. Anim. S. Paulo **3** 1936 pp. 132-139 1 pl.
- Gulbransen, R. *vide* Browning, C. H.
- 403.—Guseva, K. Organismes planktoniques nouveaux et rares dans le rayon de construction d'une digue sur la Moskva-réka (riv. Moscou) à la station hydraulique de Rublevo. [French summary.] Bull. Soc. Nat. Moscou. Sect. Biol. N.S. **45** 1936 pp. 220-222. [Flagellates.]
- 404.—Hada, Y. Studies on the Foraminifera of brackish waters. I. Hijirippu and Mochirippu lakes. [English résumé.] Zool. Mag. Tokyo **48** 1936 pp. 847-860 12 figs.
- Hadley, P. B. *vide* Shinn, L. E.
- 405.—Hadley, W. H. Recent foraminifera from near Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill **52** 1936 pp. 35-37 1 fig.
- 406.—Hakansson, E. G. *Dientamoeba fragilis*, a cause of illness. Report of case. Amer. J. trop. Med. Baltimore **16** 1936 pp. 175-185 1 pl.
- 407.—Hakansson, E. G. Observations on chromatoid bodies in the cysts of *Entamoeba histolytica*. U.S. Naval Med. Bull. **34** 1936 14 pp. (sep. pag.).
- 408.—Hall, N. Blood films of ox from Northern Nigeria showing numerous spores of sarcocysts. Trans. Soc. Trop. Med. Hyg. Lond. **30** 1936 p. 3.
- 409.—Hall, R. P., Johnson, D. F. and Loefer, J. A method for counting protozoa in the measurement of growth under experimental conditions. Trans. Amer. micr. Soc. Menasha **54** 1935 pp. 298-300. [Flagellates, Ciliates.]
- 410.—Hall, R. P. and Loefer, J. B. On the supposed utilisation of inorganic nitrogen by the colourless cryptomonad flagellate, *Chilomonas paramecium*. Protoplasma. Leipzig **26** 1936 pp. 321-330.
- Hall, R. P. *vide* Loefer, J. B.
- 411.—Halsey, H. R. The life-cycle of *Amoeba proteus* (Pallas, Leidy) and of *Amoeba dubia* (Schaeffer). J. exp. Zool. Philadelphia **74** 1936 pp. 167-203 8 figs.
- Hanzawa, S. *vide* Cushman, J. A.
- 412.—Hara, Y. [On *Cepedea dimidiata orientalis*.] [Japanese with English summary.] Botany & Zool. Tokyo **4** 1936 pp. 537-544 10 figs.
- 413.—Harding, J. P. The nutritive and other conditions that determine the rate of growth and of multiplication of *Glaucoma pyriformis*, with special reference to the independence of size and rate of reproduction. Abs. Diss. Univ. Cambridge 1935-36 1936 pp. 34-35.

414.—Hardy, A. C. The Arctic plankton collected by the *Nautilus* Expedition 1931. Part I. General Account. J. Linn. Soc. London 39 1936 pp. 391-403. [Tintinnids.]

Hardy, A. V. *vide* Bundesen, H. N.

415.—Hart, T. J. On the phytoplankton of the South-West Atlantic and the Bellingshausen Sea 1929-31. Discovery Rpts. 8 1934 pp. 1-268 84 figs. [Dinoflagellates.]

416.—Hartley, J. J. On the occurrence of *Saccamminopsis fusuliniformis* in Northern Ireland. Irish Nat. Journ. Belfast 6 1936 pp. 95-97.

Hasskó, A. *vide* Scheff, G.

Hawk, B. *vide* Mast, S. O.

417.—Hayasaka, I. A twinned or double fossil shell of *Rotalia*. J. Geol. Soc. Japan 43 508 1936 pp. 60-62 3 figs.

418.—Headlee, W. H. and Cable, R. M. Studies on intestinal parasite infections of students of Berea College, Kentucky. J. Parasit. Urbana 22 1936 pp. 530-531.

Headlee, W. H. *vide* Faust, E. C.

419.—Hegner, R. Viability of parasitic protozoa after the death of the host. Amer. J. Hyg. 24 1936 pp. 309-317.

420.—Hegner, R. and Eskridge, L. Effects of increasing the viscosity of culture media on the multiplication of *Trichomonas hominis*. J. Parasit. Urbana 22 1936 pp. 224-225.

421.—Hegner, R. and Eskridge, L. A colony of *Trichomonas*-free rats. J. Parasit. Urbana 22 1936 pp. 408-409.

422.—Hegner, R. and Eskridge, L. Effects of allantoin on trichomonad flagellates *in vitro* and *in vivo*. J. Parasit. Urbana 22 1936 pp. 410-411.

423.—Henbest, L. G. Radiolaria in the Arkansas novaculite, Caballos novaculite and Bigfork chert. J. Paleont. Menasha Wis. 10 1936 pp. 76-78.

Henrard, C. *vide* Brutsaert, P.

Henry, E. *vide* Rodhain, J.

424.—Henson, F. R. S. Les grands Foraminifères de l'Oligocène de Palestine. C.R. Acad. Sci. Paris 202 1936 pp. 861-863.

Hentschel, E. *vide* Gran, H. H.

425.—Herman, C. M. Ectoparasites and bird diseases. Bird Banding 7 1936 pp. 163-166. [Blood parasites.]

426.—Herms, W. B. and Kadner, C. G. The louse-fly, *Lynchia fusca*, parasite of the owl, *Bubo virginianus pacificus*, a new vector of malaria of the California Valley quail. J. Parasit. Urbana 22 1936 p. 541.

427.—Heron-Allen, E. The genus *Keramosphaera*, Brady. J. R. micr. Soc. London (3) 56 1936 pp. 113-119 1 pl.

428.—Herrick, C. A. Organ specificity of the parasite *Eimeria tenella*. J. Parasit. Urbana 22 1936 pp. 226-227.

429.—Herrick, C. A. and Cross, S. X. The development of natural and artificial resistance of young rats to the pathogenic effects of the parasite *Trypanosoma lewisi*. J. Parasit. Urbana 22 1936 pp. 126-129.

430.—Herrick, C. A. Olt, G. L. and Holmes, C. E. Age as a factor in the development of resistance of the chicken to the effects of the protozoan parasite, *Eimeria tenella*. J. Parasit. Urbana 22 1936 pp. 264-272.

431.—Herrick, J. A. Two new species of *Myxobolus* from fishes of Lake Erie. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 194-198 1 pl.

432.—Hetherington, A. The precise control of growth in a pure culture of a ciliate, *Glaucoma pyriformis*. Biol. Bull. Woods Hole 70 1936 pp. 426-440 1 fig.

433.—Hingst, H. E. Recent observations on the origin of Schüffner's granules. Amer. J. Trop. Med. Baltimore 16 1936 pp. 679-684. [*Plasmodium*.]

434.—Hoare, C. A. Morphological and taxonomic studies on mammalian trypanosomes. I. The method of reproduction in its bearing upon classification, with special reference to the *lewisi* group. Parasitology Cambridge 28 1936 pp. 98-109 1 fig.

435.—Hoare, C. A. Morphological and taxonomic studies on mammalian trypanosomes. II. *Trypanosoma simiae* and acute porcine trypanosomiasis in tropical Africa. Trans. Soc. trop. Med. Hyg. London **29** 1936 pp. 619-645 3 figs.

436.—Hoare, C. A. *Trypanosoma simiae*, the cause of acute porcine trypanosomiasis in Africa. Trans. Soc. Trop. Med. Hyg. Lond. **30** 1936 pp. 3-4.

437.—Hoare, C. A. Note on *Trypanosoma simiae* from an outbreak amongst pigs in the Gold Coast. Trans. Soc. trop. Med. Hyg. Lond. **30** 1936 pp. 315-316 1 fig.

Hoare, C. A. *vide* Broom, J. C.

438.—Hörlein, H. The chemotherapy of infectious diseases caused by protozoa and bacteria. Proc. Roy. Soc. Med. London **29** 1936 pp. 313-324.

439.—Hofker, J. and Rijsinge, C. van. Voorne's Duin. De Levende Nat. Amsterdam **36** 1932 pp. 337-382 26 figs. [Testacea.]

440.—Hogue, M. J. Four races of *Retortamonas (Embadomonas) intestinalis*. Amer. J. Hyg. **23** 1936 pp. 80-84 9 figs.

441.—Hok, T. S. Ueber mikrosphäre Lepidocyklinen von Ngampel (Rembang, Mitteljava). [Abstract.] Geol. Zbl. Leipzig, **8** 6 1936 p. 305 No. 1093.

442.—Hok, T. S. Beitrag zur Kenntnis der Lepidocyklinen. Proc. K. Akad. Wet. Amsterdam **39** 1936 pp. 990-999.

443.—Hollande, A. Sur la cytologie d'un flagellé du genre *Bodo*. C.R. Soc. Biol. Paris **123** 1936 pp. 651-653 1 fig.

Holmes, C. E. *vide* Herrick, C. A.

Hoof, M. T. van *vide* Rodhain, J.

444.—Hoogenraad, H. R. Zusammenstellung der fossilen Süßwasser-rhizopoden aus postglazialen Sapropelium- und Torfablagerungen Europas. Arch. Protistenk. Jena **87** 1936 pp. 402-416.

445.—Hoogenraad, H. R. Was ist *Pamphagus mutabilis* Bailey? Arch. Protistenk. Jena **87** 1936 pp. 417-426 4 figs.

446.—Hoogenraad, H. R. Rhizopoden in duin mossen. Natura Breda **35** 1936 pp. 164-165.

447.—Hopkins, D. L. The relation between locomotion and temperature in the marine amoeba, *Flabellula mira* Schaeffer, with special reference to adaptation to temperature. [Abstract.] Anat. Rec. Philadelphia **67** Suppl. 1, 1936 p. 75.

Hornberger, J. *vide* Plummer, F. B.

448.—Hornby, H. E. Notes on progress of research drawn up at 1933 conference. Conference on Co-ordination of Tsetse and Trypanosomiasis res. E. Africa, Nairobi 1936 pp. 26-28. [Trypanosomes.]

449.—Horváth, J. v. Beiträge zur Physiologie von *Kahlia simplex*. Arch. Protistenk. Jena **86** 1936 pp. 482-499 11 figs.

450.—Hovasse, R. *Rhizophidium beauchampi* sp. n. Chytridinée parasite de la Volvocinée *Eudorina (Pleodorina) illinoensis* (Kofoid). Ann. Protistologie Paris **5** 1936 pp. 73-81 4 figs.

451.—Hovasse, R. Constituants cytoplasmiques et, en particulier, appareil de Golgi chez quelques volvocinées. C.R. Soc. Biol. Paris **123** 1936 pp. 253-256 3 figs.

Howat, C. H. *vide* Lamborn, W. A.

452.—Howchin, W. Notes on the geological sections obtained by several borings situated on the plain between Adelaide and Gulf St. Vincent. Trans. roy. Soc. S. Aust. **59** 1935 pp. 68-102 1 fig. [Foraminifera.]

453.—Howe, H. V. The foraminiferal genus *Palmula* Isaac Lea 1833. J. Paleont. Menasha Wis. **10** 1936 pp. 415-416 2 figs.

454.—Hsiung, T. S. Notes on the known species of *Triadinium* with the description of a new species. Bull. Fan Memorial Inst. Biol. (Zool.) Peiping **6** 1935 pp. 21-32 5 figs.

455.—Hsiung, T. S. On some new ciliates from the mule, with the description of a new genus. Bull. Fan Memorial Inst. Biology Peiping **6** (3) 1935 p. 81 1 pl.

456.—Hsiung, T. S. A survey of the ciliates of Chinese equines. Bull. Fan Memorial Inst. Biol. (Zool.) Peiping **6** 1936 pp. 289-304 3 pls.

457.—Hunninen, A. V. and Wichterman, R. Hyperparasitism: a species of *Hexamita* (Protozoa, Flagellata) found in the reproductive systems of *Deropristis inflata* (Trematoda) from marine eels. J. Parasit. Urbana 22 1936 p. 540.

458.—Husain, A. A preliminary study of the soil protozoa of Lahore. Proc. Indian Sci. Congr. Calcutta 22 1935 p. 325.

459.—Hutner, S. H. The nutritional requirements of two species of *Euglena*. Arch. Protistenk. Jena 88 1936 pp. 93–106.

460.—Huzimoto, H. Stratigraphical and paleontological studies of the Titibu system of the Kwanto-mountain land. Part 2. Paleontology. [Foraminifera.] [Abstract.] Geol. Zbl. Leipzig 8 1936 p. 211 No. 780.

461.—Huzimoto, H. Stratigraphical and palaeontological studies of the Titibu system of the Kwanto-mountain land. Part 2. Palaeontology. Sci. Rep. Tokyo Bun. Daig. (C) 1 1936 pp. 29–125 27 pls. [Foraminifera.]

462.—Hyman, L. H. Observations on protozoa: I. The impermanence of the contractile vacuole in *Amoeba vespertilio*. II. Structure and mode of food ingestion of *Peranema*. Quart. J. micr. Sci. London N.S. 79 1936 pp. 43–56 7 figs.

463.—Ibara, Y. The effect of temperature on the encystment of *Blepharisma undulans*. [English summary.] Zool. Mag. Tokyo 48 1936 pp. 346–353 1 fig.

464.—Iida, T. T. Osmotic pressure of *Noctiluca scintillans*. J. Fac. Sci. Univ. Tokyo Zool. 3 1934 pp. 495–497.

Ioff, I. vide Sassuchin, D.

465.—Ivanić, M. Ein neuer Beitrag zur Kenntnis der multiplen Teilung bei *Arcella vulgaris* Ehrbg. Arch. Protistenk. Jena 86 1936 pp. 471–481 1 fig.

466.—Ivanić, M. Zur Kenntnis der Vermehrungsruhestadien bei *Chilodon uncinatus* Ehrbg. Arch. Protistenk. Jena 87 1936 pp. 159–178 1 pl.

467.—Ivanić, M. Die Kernteilung bei *Opalina ranarum* Stein und *Opalina obtrigona* Stein. Arch. Protistenk. Jena 87 1936 pp. 172–184 1 pl.

468.—Ivanić, M. Zur Kenntnis der Entwicklungsgeschichte bei *Mastigina hylae* Frenzel. Arch. Protistenk. Jena 87 1936 pp. 225–241 1 fig. 1 pl.

469.—Ivanić, M. Zur Kenntnis der Vermehrungs- und Wiedervermehrungsruhestadien erster, zweiter und dritter Ordnung bei einem Heliozoon (*Vampyrellidium vagans* Zopf). Arch. Protistenk. Jena 87 1936 pp. 248–267 1 pl.

470.—Ivanić, M. Ueber die mit Encystierung verbundene, in Form einer fortgesetzten Zweiteilung vorkommende multiple Teilung bei einer Süßwasseramöbe (*Vahlkampfiabütschlii* spec. nov.). Arch. Protistenk. Jena 87 1936 pp. 393–401 1 pl.

471.—Ivanić, M. Structure du noyau au repos et sa division au début de la division multiple (schizogonie) chez le *Trypanosoma rotatorium*. La Cellule 44 1936 pp. 351–366 1 pl.

472.—Ivanić, M. Ueber die mittels cytostomähnlicher Gebilde vorkommende Gefangennahme und Einverbleibung der Nahrung und deren Zerkleinerung bei einer Süßwasseramöbe (*Amoeba entzii* spec. nov.). La Cellule 44 1936 pp. 369–386 1 pl. 1 fig.

473.—Ivanić, M. Sur l'ingestion des aliments et la division nucléaire chez le *Trypanosoma equiperdum* Doflein. La Cellule 45 1936 p. 149 1 pl.

474.—Ivanić, M. Recherches sur l'ingestion des aliments au moyen de cytostome chez quelques amibes d'eau douce (*Amoeba vespertilio* Pénard et *Hartmannella maasi* Ivanić). La Cellule 45 1936 p. 177 2 pls.

475.—Ivanić, M. Ein neuer Beweis für den ursprünglich promitotischen Charakter der Kernteilung beim Tertianaparasiten (*Plasmodium vivax* Grassi et Feletti). Zbl. Bakt. Jena. I. Abt. (Orig.) 136 1936 pp. 109.

476.—Ivanić, M. Ein neuer Beitrag zur Kenntnis der Kernteilung beim Tertianaparasiten (*Plasmodium vivax* Grassi et Feletti). Zbl. Bakt. Jena. I. Abt. (Orig.) 136 1936 pp. 418–420 2 figs.

477.—Ivanić, M. Zur Kenntnis der Entwicklungsgeschichte von *Entamoeba histolytica* Schaudinn. Zbl. Bakt. Jena I. Abt. (Orig.) 137 1936 pp. 65–91 2 pls.

478.—Ivanić, M. Beiträge zur Kenntnis der Entwicklungsgeschichte einer im menschlichen Enddarme lebenden *Endolimax*-Amöbe (*Endolimax gildermeisteri* spec. nov.) Zbl. Bakt. Jena I. Abt. (Orig.) 137 1936 pp. 377–398 1 pl. 10 figs.

479.—Ivanić, M. Ueber einen Proto-plasmakörperparasiten von *Entamoeba histolytica* Schaudinn (*Entamoebophaga hominis* gen. nov. spec. nov.). Zbl. Bakt. Jena I. Abt. (Orig.) 138 1936 pp. 48–56 1 pl.

480.—Ivanić, M. Ueber die zwei abweichenden Ruhestadien von *Actinophrys sol* Ehrbg. und deren Bedeutung. Zool. Anz. Leipzig 113 1936 pp. 29–33 2 figs.

481.—Ivanić, M. Ueber die bei den Palmellastadien von *Englena viridis* Ehrbg. vorkommende "Häutung" und deren Bedeutung. Zool. Anz. Leipzig 113 1936 pp. 62–64 4 figs.

482.—Ivanić, M. Enzystierungs-gang und Bau der fertiggebildeten Ruhezyste bei *Carchesium polypinum* Ehrbg. Zool. Anz. Leipzig 113 1936 pp. 234–237 4 figs.

483.—Ivanić, M. Ein abweichendes parthenogenetisches Ausschlüpfungs-stadium von *Chilodon uncinatus* Ehrbg. und seine Bedeutung. Zool. Anz. Leipzig 113 1936 pp. 303–305 1 fig.

484.—Ivanić, M. Die Nahrungsauf-nahme mittels Reusenapparats bei *Chilodon*-Arten. (*Chilodon cucullus* Ehrbg. und *Chilodon uncinatus* Ehrbg.) Zool. Anz. Leipzig 114 1936 pp. 26–28 3 figs.

485.—Ivanić, M. Zur Kenntnis der Nahrungsaufnahme mittels Lobopodien bei *Vampyrellidium vagans* Zopf. Zool. Anz. Leipzig 114 1936 pp. 279–282 2 figs.

486.—Ivanova-Gobzem, P. S. [On the coccidia of domestic and wild animals in Northern Kazakhstan.] [In Russian.] [Parasites of Livestock and their Control. (Publ. by U.S.S.R. Acad. of Sci. Series of Kazakhstan) 1935.] pp. 243–264. [*Non vidi.*]

Iwanoff-Gobzem, P. S. *vide* Yakimoff, W. L.

487.—Jackson, B. Culture methods and preparation of permanent proto-zoan slides. Proc. Louisiana Acad. Sci. 2 1935 pp. 65–67.

Jackson, C. *vide* Du Toit, P. J.

488.—Jahn, T. L. Effect of aeration and lack of CO₂ on growth of bacteria-free cultures of protozoa. Proc. Soc. exp. Biol. 33 1936 pp. 494–498.

489.—James, S. P., Nicol, W. D. and Shute, P. G. Clinical and parasitological observations on induced malaria. Proc. Roy. Soc. Med. London 29 1936 pp. 879–894.

Janssens, P. *vide* Bessemans, A.

Jarvis, P. W. *vide* Cushman, J. A.

490.—Jennings, P. H. A micro-fauna from the Monmouth and basal Rancocas groups of New Jersey. Bull. Amer. Paleont. Ithaca 23 78 1936 pp. 1–59 6 pls.

491.—Jirovec, O. *Haplosporidium černosvitovi* n. sp., eine neue Haplosporidienart aus *Opistocysta (Pristina) flagellum* Leidy. Arch. Protistenk. Jena 86 1936 pp. 500–508 1 pl.

492.—Jirovec, O. Zur Kenntnis von in Oligochaeten parasitierenden Mikrosporidien aus der Familie *Mrázekidae*. Arch. Protistenk. Jena 87 1936 pp. 314–344 8 figs 4 pls.

493.—Jirovec, O. *Nosema černosvitovi* n. sp., eine neue Microsporidie aus dem Oligochaeten *Opistocysta flagellum*. Mém. Soc. Zool. Tchécoslovaque Prague 3 1936 pp. 1–3 5 figs.

494.—Jirovec, O. I. Studien über Microsporidien. Mém. Soc. Zool. Tchécoslovaque Prague 4 1936 pp. 1–75 6 pls. 1 fig.

495.—Jirovec, O. and Wenig, K. Die Oberflächenspannung des Ratten-serums bei Trypanosomen und Bartonelleninfektion. Mém. Soc. Zool. Tchécoslovaque Prague 3 1936 4 pp. (sep. pag.).

496.—Jörg, M. E. Addenda et corrigenda al trabajo: Neuvoos protozoos parásitos de la R. Argentina (Jörg, 1930). VIII. Reun. Soc. Argentina Patol. Region. Norte, Buenos Aires 2 1936 pp. 1030–1035 9 figs.

497.—Jörg, M. E. Hallazgo de dos *Trypanosomas* spec., hemoparásitos de batracios leptodactílicos. VIII. Reun. Soc. Argentina Patol. Region Norte, Buenos Aires 2 1936 pp. 1036–1041 4 figs.

498.—Jörg, M. E. De la coccidiosis de los conejos de laboratorio. Contribución para su terapéutica. (Ensayo terapéutico de las sales de la oxifenilquinolina.) Rara localización de parásitos. VIII. Reun. Soc. Argentina Patol. Region Norte Buenos Aires 2 1936 pp. 1042-1051 2 figs.

499.—Johnson, C. M. A natural infection of *Trypanosoma hippicum* Darling in the vampire bat *Desmodus rotundus murinus* Wagner. Amer. J. trop. Med. Baltimore 16 1936 pp. 59-62.

500.—Johnson, C. M. Further studies on the transmission of *Trypanosoma hippicum* Darling by the vampire bat *Desmodus rotundus murinus* Wagner. Amer. J. trop. Med. Baltimore 16 1936 pp. 163-173.

501.—Johnson, C. M. and De Rivas, G. T. Six new cases of Chagas' disease in Panama with review of previous cases. Amer. J. trop. Med. Baltimore 16 1936 pp. 47-57.

502.—Johnson, D. F. Growth of *Glaucoma ficaria* Kahl in cultures with single species of other micro-organisms. Arch. Protistenk. Jena 86 1936 pp. 359-378 1 fig.

Johnson, D. F. *vide* Hall, R. P.

503.—Jolly, A. M. D. Aspects atypiques du *Plasmodium falciparum* chez les enfants indigènes en bas âge à Brazzaville (A.E.F.). Fréquence de l'évolution schizogonique et gamétogonique complète dans le sang périphérique. Riv. Malariol. Rome (I) 15 1936 pp. 229-239 1 pl.

504.—Jolly, A. and Sicault, —. Nouveaux cas d'évolution complète du *Plasmodium praecox* dans le sang circulant. Bull. Soc. Path. Exot. Paris 29 1936 pp. 389-390.

505.—Jones, E. P. Comparative measurements of living and fixed protozoa. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 516-518.

506.—Jung, W. Thekamoeben eines Eggegebirgsmoores und zweier Moore im Hohen Venn. Ann. Protistologie Paris 5 1936 pp. 83-123 18 figs.

507.—Jung Sun, C., Yao, Y. T., Chu, H. J. and Wu, C. C. Natural infection of *Phlebotomus chinensis* with flagellates morphologically indis-

tinguishable from those of *Leishmania donovani*. Chin. Med. J. 50 1936 pp. 911-916 5 figs.

Kadner, C. G. *vide* Herms, W. B.

508.—Kamada, T. Contractile vacuole of *Paramecium*. J. Fac. Sci. Univ. Tokyo (Zool.) 4 1935 pp. 49-62 4 figs.

509.—Kamada, T. Diameter of contractile vacuole in *Paramecium*. Zool. Mag. Tokyo 48 1936 pp. 287-288

510.—Karaman, S. Die Fauna der unterirdischen Gewässer Jugoslaviens. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 46-73 5 figs. [Rhizopoda, Ciliata.]

511.—Kasansky, I. I. Über Filtrierbarkeit der Trypanosomen. [Russian with German summary.] Rev. Microbiol. Epidém. Parasitol. Suratov 15 1936 pp. 67-72.

512.—Kauntze, W. H. Report on progress made up to end of 1934 on programme of research drawn up by the 1933 conference. Conference on Co-ordination Tsetse and Trypanosomiasis Res. E. Africa Nairobi 1936 pp. 29-34. [Trypanosomes.]

513.—Kawakami, H. Thermal inhibition of trichocyst discharge in *Paramecium*. [Summary.] Zool. Mag. Tokyo 48 1937 pp. 1015-1016.

514.—Kehar, N. D. Some physico-chemical factors and their relationship to protein fractions, blood cells and parasitic counts, in the blood sera of monkeys infected with *Plasmodium knowlesi*. Rec. Malaria Surv. India 6 1936 pp. 499-509.

515.—Keijzer, C. J. On variability in East Indian Foraminifera. Temminckia Leiden 1 1936 pp. 75-151 3 pls.

516.—Keller, B. M. Mikrofauna der oberen Kreide des Dnjepr-Donetz-Beckens und einiger angrenzenden Gebiete. [Russian with German summary.] Bull. Soc. Nat. Moscou Sect. Géol. 43 1935 pp. 522-558 3 pls. [Foraminifera.]

517.—Kelser, R. A. A complement-fixation test for Chagas' disease employing an artificial culture antigen. Amer. J. Trop. Med. Baltimore 16 1936 pp. 405-415.

Kerschner, —. *vide* Yakimoff, W. L.

518.—Kessel, J. F., Blakely, L. and Cavell, K. Amebiasis and bacillary dysentery in the Los Angeles County hospital 1929-1935. *Amer. J. trop. Med. Baltimore* **16** 1936 pp. 417-429.

Kessler, W. R. *vide* Dawson, J. A.

Keveorkoff, N. P. *vide* Khodukin, N. J.

518A.—Khodukin, N. J., Sofieff, M. S. and Keveorkoff, N. P. Sur l'identification des différentes souches de leishmanies. (Problème de l'agent pathogène des leishmanioses.) *Ann. Inst. Pasteur Paris* **57** 1936 pp. 487-515.

Kidder, G. W. *vide* Summers, F. M.

519.—Kiesselbach, A. Einige morphologische und biologische Beobachtungen an *Epiclintes ambiguus* (Ciliata hypotricha). *Note Inst. Biol. mar. Rovigno* **18** 1935 pp. 1-9 5 figs.

520.—King, A. J., Mascall, W. N. and Price, I. N. O. Trichomonas vaginitis, its incidence and coexistence with gonococcal infections. *Lancet, London* **231** 1936 (ii) pp. 18-20.

King, R. E. *vide* Dunbar, C. O.

521.—King, R. L. and Taylor, A. B. *Malpighamoeba locustae* n. sp. (Amoeboidea), a protozoan parasitic in the Malpighian tubes of grasshoppers. *Trans. Amer. micr. Soc. Menasha* **55** 1936 pp. 6-10 1 pl.

522.—Kinosita, H. Electric polarisation of hydrogen ions in *Paramecium*. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 83-85.

523.—Kinosita, H. Effect of external pH on the electric polarisation in *Paramecium*. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 85-86.

524.—Kinosita, H. Electric excitation and electric polarisation in *Paramecium*. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 86-88.

525.—Kinosita, H. The time-intensity relation in the cathodal galvanic effect of *Paramecium*. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 155-157 4 figs.

526.—Kinosita, H. Supernormal phase in electric response of *Paramecium*. *Zool. Mag. Tokyo* **48** 1936 pp. 290-291.

527.—Kinosita, H. Effect of change in orientation on the electric excitation in *Paramecium*. *Zool. Mag. Tokyo* **48** 1936 pp. 291-292 1 fig.

528.—Kinosita, H. Addition of subliminal stimuli in *Paramecium*. *Zool. Mag. Tokyo* **48** 1936 pp. 293-294 1 fig.

529.—Kinosita, H. The magnitude of response and the strength of stimulation intensity of *Spirostomum*. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 1009-1010 1 fig.

530.—Kinosita, H. Repeated response of *Spirostomum* to a single continuous electric current. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 1010-1011.

531.—Kinosita, H. Effect of change in orientation on the time-intensity relation of electrical stimulation in *Spirostomum*. [Summary.] *Zool. Mag. Tokyo* **48** 1936 pp. 1011-1012.

Kireewa, G. *vide* Rauser-Černoussowa, D.

532.—Kirby, H. Two polymastigote flagellates of the genera *Pseudodevescovina* and *Caduceia*. *Quart. J. micr. Sci. London N.S.* **79** 1936 pp. 309-335 5 pls.

533.—Kitchen, S. F. and Bradley, G. H. *Anopheles walkeri* Theobald as a vector of *Plasmodium falciparum* (Welch). *Amer. J. trop. Med. Baltimore* **16** 1936 pp. 579-581.

Kitchen, S. F. *vide* Boyd, M. F.

534.—Kitching, J. A. The physiology of contractile vacuoles. II. The control of body volume in marine Peritricha. *J. exp. Biol. Cambridge* **13** 1936 pp. 11-27 8 figs.

535.—Kitching, J. A. Effects of hypertonic media on the contractile vacuoles of protozoa. *Nature London* **138** 1936 p. 287.

536.—Klein, B. M. Wirkung von Schlangengiften auf Leben und Silberliniensystem von Infusorien. *Arch. Protistenk. Jena* **87** 1936 pp. 399-413 11 pls.

537.—Klein, B. M. Beziehungen zwischen Maschenweite und Bildungsvorgängen im Silberliniensystem der Ciliaten. *Arch. Protistenk. Jena* **88** 1936 pp. 1-22 1 pl. 2 figs.

538.—Klein, B. M. and Missriegler, A. Strahlenenergetische Einflüsse auf das neuroformative System. Biol. Zbl. Leipzig **56** 1936 pp. 174–188 6 figs. [Ciliata.]

539.—Kleine, F. K. Remarks on sleeping sickness. J. S. Afric. Vet. Med. Assoc. **7** 1936 pp. 204–210.

Kleinpell, R. M. *vide* Woodring, W. P.

540.—Kligler, I. J. and Olitzki, L. The antigenic composition of *Trypanosoma evansi*. Ann. Trop. Med. Parasit. L'pool. **30** 1936 pp. 287–291.

541.—Klug, G. Neue oder wenig bekannte Arten der Gattung *Mastigamoeba*, *Mastigella*, *Cercobodo*, *Tetramitus* und *Trigonomonas*. Arch. Protistenk. Jena **87** 1936 pp. 97–116 12 figs.

542.—Klug, G. *Salpingorhiza* gen. nov., eine neue Craspedomonadaceengattung. Arch. Protistenk. Jena **87** 1936 pp. 117–122 2 figs.

543.—Klug, G. Ein Beitrag zur Kenntnis von *Bicoeca lacustris* J. Clark (Studien über farblose Flagellaten). Arch. Protistenk. Jena **88** 1936 pp. 107–115 3 figs.

544.—Knowles, R. and Das Gupta, B. M. Some observations on the intestinal protozoa of macaques. Ind. J. Med. Res. **24** 1936 pp. 547–556 1 pl.

545.—Kofoid, C. R. and Whitaker, B. G. Natural infection of American human trypanosomiasis in two species of cone-nosed bugs, *Triatoma protracta* Uhler and *Triatoma uhleri* Neiva in Western United States. J. Parasit. Urbana **22** 1936 pp. 259–263.

Kofoid, C. A. *vide* Whedon, W. F.

Kondi, A. *vide* Foy, H.

546.—Kotulla, U. Die Moorfauna des Glatzer Schneeberges. I. Eine neue *Nebela*-Art von den Seefeldern. Pasc. Beitr. Biol. Glatzer Schneeberges Hft. **2** Breslau 1936 pp. 172–174 4 figs.

547.—Koutek, J. Sur la découverte des calcaires à Nubéculaires en Tchecoslovaquie. C.R. Séances Soc. géol. Fr. **8-9** 1936 pp. 151–153.

548.—Kouznetsov, S. P. La fauna nummulitique de l'arondissement de Nachitchevane (Anticaucasie). [French

summary.] Trav. Soc. Nat. (Sect. Géol.) Leningrad **64** 1935 pp. 30–46.

Krann, M. H. *vide* Swellengrebel, N. H.

549.—Krestovnikoff, V. N. and Theodorowitch, G. J. Une nouvelle espèce de foraminifères du genre *Archaediscus* du carbonifère de l'Oural meridional. [French summary.] Bull. Soc. Nat. Moscou Sect. Géol. N.S. **44** 1936 pp. 86–90.

550.—Krijgsman, B. J. Vergleichend physiologische Untersuchungen über den Stoffwechsel von *Trypanosoma evansi* im Zusammenhang mit der Anpassung an das Wirtstier. Z. Vergleich. Physiol. Berlin **23** 1936 pp. 663–7 11 2 figs.

551.—Krüger, F. Die Trichocysten der Ciliaten im Dunkelfeldbild. Zoologische, Stuttgart **34** 1936 pp. 1–82, 6 pls. 65 figs.

Kruidenier, F. *vide* Woodhead, A. E.

552.—Kudo, R. R. Studies on *Nyctotherus ovalis* Leidy, with special reference to its nuclear structure. Arch. Protistenk. Jena **87** 1936 pp. 10–42 3 pls.

553.—Kufferath, H. À propos des méthodes de recherche des microfossiles. C.R. 2^{me} Congr. Sci. Bruxelles **1** 1935 pp. 749–752.

554.—Kuhn, O. Foraminiferen aus dem deutschen Ornaten. Cbl. Min. Geol. Paläont. Stuttgart **10** 1936 pp. 445–453 17 figs.

555.—Kuhn, O. Revision der Opalinuston-(Dogger Alpha)-Fauna in Franken, mit Ausschluss der Cephalopoden. Paläont. Z. Berlin **17** 1935 pp. 109–158 3 pls. [Foraminifera.]

556.—Kubs, M. L., Pfeiffer, C. C. and Tatum, A. L. A study of the curative action of arsenophenylglycine in *T. lewisi* infections in the rat. Amer. J. Hyg. **23** 1936 pp. 10–24.

557.—Kunz, H. Eine neue Suctorie, *Cucumophrya leptomesochrae* n.g. n. sp. von Helgoland. Zool. Anz. Leipzig **114** 1936 pp. 173–174 3 figs.

558.—Kuppusamy, A. R. Leucocytozoa and microfilariæ of fowls and *Haemoproteus columbae* of pigeons in Province Wellesley. Indian Vet. J. **13** 1936 pp. 25–35 8 pls.

559.—Kuznecov, S. S. [Description of some *Nummulites* from Transcaucasia and Northern Caucasus.] [In Russian.] Trav. Soc. Nat. (Sect. Géol.) Leningrad **63** 1934 pp. 240–257 1 pl.

560.—Lackey, J. B. Occurrence and distribution of the marine protozoan species in the Woods Hole area. Biol. Bull. Woods Hole **70** 1936 pp. 264–278.

561.—Lackey, J. B. Some freshwater protozoa with blue chromatophores. Biol. Bull. Woods Hole **71** 1936 pp. 492–497 1 pl.

562.—Ladd, H. S. Globigerina beds as depth indicators in the tertiary sediments of Fiji. Science N.Y. N.S. **83** 1936 pp. 301–302.

563.—Lafitte, R. Le damien et le nummulitique dans l'Aurès occidental. C.R. Acad. Sci. Paris **201** 1935 pp. 1497–1499.

Lagodsky, H. *vide* Launoy, L.

564.—Lamborn, W. A. Report on progress made on programme of research drawn up by the 1933 conference. Conference on co-ordination Tsetse and Trypanosomiasis Res. E. Africa Nairobi 1936 pp. 63–77. [Trypanosomes.]

565.—Lamborn, W. A. and Howat, C. H. A possible reservoir host of *Trypanosoma rhodesiense*. Brit. Med. J. 1936 (i) pp. 1153–1155.

566.—Lameere, A. Évolution des protozoaires. C.R. 2^{me} Congr. Sci. Bruxelles **2** 1935 pp. 1079–1083.

567.—Lapparent, A. F. de. La transgression nummulitique dans les Alpes de Provence. C.R. Acad. Sci. Paris **200** 1935 pp. 157–159.

568.—Launoy, L. and Lagodsky, H. Les mononucléaires à corps de Kurloff, dans l'infection expérimentale du cobaye par *Trypanosoma annamense*. C.R. Soc. Biol. Paris **122** 1936 pp. 539–541.

569.—Launoy, L. and Lagodsky, H. Modification du taux du fer sanguin, dans l'infection expérimentale à *Trypanosoma annamense*, chez le lapin. C.R. Soc. Biol. Paris **122** 1936 pp. 633–636.

570.—Launoy, L. and Lagodsky, H. Les protides et l'urée dans le sérum sanguin de lapins expérimentalement

infectés par *Trypanosoma annamense*. C.R. Soc. Biol. Paris **122** 1936 pp. 1055–1058.

571.—Launoy, L., Prieur, M. and Ancelot, A. Suite à l'étude d'une souche de *Trypanosoma annamense* rendue résistante à la tryparsamide. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 759–769.

572.—Laurent, P. Le campagnol des champs (*Microtus arvalis* Pallas) existe-t-il en Abyssinie ? ou, quelques considérations sur un point de nomenclature. Bull. Soc. Hist. nat. Alger. **27** 1936 pp. 384–386. [Haemogregarine.]

573.—Lavie, G. Recherches sur les coccidies intestinales des tritons. Ann. Parasitol. Paris **14** 1935 pp. 151–163 4 figs.

574.—Lavie, G. *Protoopalina duboscqui* n. sp. opaline parasite d'un poisson marin. Ann. Parasitol. Paris **14** 1936 pp. 272–277 2 figs.

575.—Lavie, G. Sur quelques flagellés intestinaux de poissons marins. Ann. Parasitol. Paris **14** 1936 pp. 278–289 2 figs.

576.—Lavie, G. Sur un *Trichomonadid* libre des eaux stagnantes. Ann. Parasitol. Paris **14** 1936 pp. 359–368 3 figs.

577.—Lavie, G. Deux *Trichomonas* nouveaux parasites intestinaux d'oiseaux. Bull. Stat. Biol. Arcachon. Bordeaux **33** 1936 pp. 109–114 1 fig.

578.—Lavie, G. Sur la structure des flagellés du genre *Hexamita* Duj. C.R. Soc. Biol. Paris **121** 1936 pp. 1173–1180 1 fig.

579.—Lavie, G. Sur l'existence dans certains genres de Diplomastigins d'individus droits et gauches. C.R. Soc. Biol. Paris **122** 1936 pp. 1274–1276 1 fig.

Lavie, H. *vide* Brumpt, E.

580.—Le Calvez, J. Modifications du test des foraminifères pélagiques en rapport avec la reproduction : *Orbulina universa* d'Orb. et *Tretomphalus bulloides* d'Orb. Ann. Protistologie Paris **5** 1936 pp. 125–133 8 figs.

581.—Le Calvez, J. Sur quelques foraminifères de Villefranche et de Banyuls. Arch. Zool. exp. gén. Paris. Notes et Revue **77** 1935 pp. 79–98 11 figs.

582.—Le Calvez, J. Flagellisporos du radiolaire *Coelodendrum ramosissimum* (Haeckel). Arch. Zool. exp. gén. Paris Notes et Revue 77 1935 pp. 99–102 2 figs.

583.—Le Calvez, J. Sur le genre *Iridia*. Arch. Zool. exp. gén. Paris 78 1936 pp. 115–131 1 pl. 5 figs.

584.—Le Calvez, J. Les gamètes de quelques Foraminifères. C.R. Acad. Sci. Paris 201 1935 pp. 1505–1507 3 figs.

585.—Lecompte, M. Contribution à la connaissance des "récifs" du Frasnien de l'Ardenne. Mém. Inst. géol. Univ. Louvain 10 1936 pp. 90–112 6 pls. [Foraminifera.]

Lederer, E. *vide* Lwoff, A.

Leger, M. *vide* Mesnil, F.

586.—Legg, J. The occurrence of bovine babesiosis in Northern Australia. Pamph. Council sci. industr. Res. Australia 56 1935 pp. 1–48 4 pls.

Leitman, M. Z. *vide* Tchapurskaya-Bajenova, N. A.

587.—Lépine, P. and Bilfinger, F. Recherches de la leishmaniose viscérale chez les chiens de fourrière d'Athènes. Bull. Soc. Path. Exot. Paris 29 1936 pp. 131–135.

588.—Lepsi, I. Un nouvel infusoire de la Mer Noire: *Urostyla naumanni* n. sp. Bull. Mus. nat. Kichineff. 6 1935 pp. 16–17 1 fig.

Lester, H. M. O. *vide* Yorke, W.

589.—Lestoquard, F. and Donatien, A. Étude des *Leishmania* du derme cutané. Bull. Soc. Path. Exot. Paris 29 1936 pp. 422–430 1 fig.

590.—Lestoquard, F., Donatien, A. and Salord, C. Effet de la splénectomie dans l'anaplasmose du mouton. Bull. Soc. Path. Exot. Paris 29 1936 pp. 264–266.

Lestoquard, F. *vide* Sergent, Ed.

591.—Leupold, W. Note sur quelques échantillons du nummulitique de la région Zunuz-Harzand. Bull. Soc. Neuchâtel. Sci. nat. 59 1934 pp. 136–139.

592.—Licharew, B. Materials to the study of the upper carboniferous of Ferghana. (Foraminifera). [Russian

with English summary.] Trans. Central geol. prospect. Ser. U.S.S.R. 31 1935 pp. 3–47.

593.—Liebmann, H. Auftreten, Verhalten und Bedeutung der Protozoen bei der Selbstreinigung stehenden Abwassers. Z. Hyg. Berlin 118 1936 pp. 29–63 16 figs.

594.—Liebmann, H. Die Ciliatenfauna der Emscherbrunnen. Z. Hyg. Berlin 118 1936 pp. 554–573 6 figs.

Ling, C. Y. *vide* Chu, T. C.

595.—Lipparini, T. Nummuliti dell'Oligocene scandinave (Reggio Emilia). Atti Acc. Torino 71 1936 pp. 236–240 1 pl.

Lin, B. C. *vide* Chu, T. C.

Lizaur, J. *vide* Marin, A.

596.—Loefer, J. B. Isolation and growth characteristics of the "Zoochlorella" of *Paramecium bursaria*. Amer. Nat. 70 1936 pp. 184–187.

597.—Loefer, J. B. Effect of certain "peptine" media and carbohydrates on the growth of *Paramecium bursaria*. Arch. Protistenk. Jena 87 1936 pp. 141–149.

598.—Loefer, J. B. Bacteria-free culture of *Paramecium bursaria* and concentration of the medium as a factor in growth. J. exp. Zool. Philadelphia 72 1936 pp. 387–407 5 figs.

599.—Loefer, J. B. A simple method for maintaining pure-line mass culture of *Paramecium caudatum* on a single species of yeast. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 255–256.

600.—Loefer, J. B. and Hall, R. P. Effect of ethyl alcohol on the growth of eight protozoan species in bacteria-free cultures. Arch. Protistenk. Jena 87 1936 pp. 123–129.

Loefer, J. B. *vide* Hall, R. P.

601.—Longwell, C. R. and Dunbar, C. O. Problems of Pennsylvanian-Permian boundary in Southern Nevada. Bull. Amer. Assoc. Petrol. Geol. Oklahoma 20 1936 pp. 1198–1207 6 figs. [Foraminifera.]

602.—Lopez-Neyra, C. R. Flagelados intestinales humanos en España. [In Spanish.] Rev. Acad. cienc. Zaragoza 19 1936 pp. 41–58 1 pl.

- 603.—**Lorando, N. and Sotiriades, D.** Immunity in malaria: Therapeutic results obtained from subcutaneous injection of immunized blood. *J. trop. Med. London* **39** 1936 pp. 197-204 8 figs.
- 604.—**Lourie, E. M. and O'Connor, R. J.** Trypanolysis *in vitro* by mouse immune serum. *Ann. Trop. Med. Parasit. L'pool.* **30** 1936 pp. 365-388.
- 605.—**Lourie, E. M. and O'Connor, R. J.** The dissociation of antibody from sensitized trypanosomes. *Ann. Trop. Med. Parasit. L'pool.* **30** 1936 pp. 541-544.
- 606.—**Lowndes, A. G.** Flagella movement. *Nature London* **138** 1936 pp. 210-121. [Peranema, Euglena.]
- 607.—**Luce, R. H. and Pohl, W. A.** Nature of crystals found in *Amoeba*. *Science N.Y. N.S.* **82** 1935 pp. 595-596.
- 608.—**Lukács, D.** Beiträge zur Kenntnis von *Spathidium hyalinum* Dujardin (Protozoa, Ciliata). *Arb. Ung. Biol. Forsch. Inst.* **8** 1936 pp. 89-100 7 figs.
- 609.—**Lundbye, J. T.** Bestemmelsen af Kloakforvieningen i Havvand. *Forh. skand. naturf. Møte.* **19** 1936 pp. 464-465. [Ciliata.]
- 610.—**Luntz, A.** Unsterblichkeit von Protozoenindividuen, erhalten durch periodische Reizungen. *Arch. Protistenk. Jena* **88** 1936 pp. 23-26 1 fig.
- 611.—**Luntz, A.** Ueber die Regulation der Reizbeantwortung bei koloniebildenden grünen Einzelligen. (*Synura petersenii* und *Eudorina elegans*). [German summary.] *J. Biol. Moscou* **4** 1935 pp. 735-749.
- 612.—**Luntz, A.** "Unsterblichkeit" von Protozoen-individuen, erhalten durch periodische Reizungen. [German summary.] *J. biol. Moscou* **4** 1936 pp. 1083-1086.
- 613.—**Luyet, B.** Mesure directe de la dose létale de courant électrique chez les Paramécies. *C.R. Acad. Sci. Paris* **202** 1936 pp. 511-512.
- 614.—**Lwoff, A.** L'oxytrophie et les organismes oxytrophes. *C.R. Soc. Biol. Paris* **119** 16 1935 pp. 87-90. [Flagellata.]
- 615.—**Lwoff, A.** La nutrition azotée et carbonée de *Polytomella agilis* (Polyblepharidée incolore). *C.R. Soc. Biol. Paris* **119** 1935 pp. 974-976.
- 616.—**Lwoff, A.** La fonction de la protohémine pour les protozoaires et les bactéries parahémotrophes. *C.R. Soc. Biol. Paris* **122** 1936 pp. 1041-1042.
- 617.—**Lwoff, A. and Dusi, H.** La nutrition de l'Euglénien *Astasia chattoni*. *C.R. Acad. Sci. Paris* **202** 1936 pp. 248-250.
- 618.—**Lwoff, A. and Dusi, H.** La suppression expérimentale des chloroplastes chez *Euglena mesnili*. *C.R. Soc. Biol. Paris* **119** 1935 pp. 1092-1095.
- 619.—**Lwoff, A. and Dusi, H.** La nutrition azotée et carbonée de *Chlorogonium euchlorum* à l'obscurité; l'acide acétique envisagé comme produit de l'assimilation chlorophyllienne. *C.R. Soc. Biol. Paris* **119** 1935 pp. 1260-1263.
- 620.—**Lwoff, A. and Lederer, E.** Remarques sur "l'extrait de terre" envisagé comme facteur de croissance pour les Flagellés. *C.R. Soc. Biol. Paris* **119** 1935pp. 971-973.
- 621.—**Lwoff, A. and Provasoli, L.** La nutrition de *Polytoma caudatum* var. *astigmata* (Chlamydomonadine incolore) et la synthèse de l'amidon par les leucophytes. *C.R. Soc. Biol. Paris* **119** 1935 pp. 90-93.
- Lwoff, A. vide Chatton, E.**
- 622.—**Lwoff, M.** Le pouvoir de synthèse des trypanosomides des Muscides. *C.R. Soc. Biol. Paris* **121** 1936 pp. 419-421.
- McCartney, W. vide Browning, C. H.**
- McCoy, G. W. vide Bundesen, N. H.**
- 623.—**McCullough, A. W.** Notes on the behaviour of a small amoeba of the genus *Naegleria*. *Trans. Kans. Acad. Sci.* **38** 1935 pp. 337-340 1 pl.
- 624.—**MacDougall, M. S.** Étude cytologique des trois espèces du genre *Chilodonella* Strand. Morphologie, conjugaison, réorganisation. *Bull. biol. France-Belg.* **70** 1936 pp. 308-331 6 pls. 2 figs.
- 625.—**MacFadyen, W. A.** D'Orbigny's lias foraminifera. *J.R. micr. Soc. London* (3) **56** 1936 pp. 147-153 1 pl. 1 fig.

626.—McGlamery, W. Species of *Elphidium* and *Amphistegina* from Choctaw Bluff, Alabama River, Alabama. *J. Alabama Acad. Sci.* **8** 1936 p. 47.

627.—Machado, O. Considerações sobre as isosporoses humanas [Portuguese with English summary.] *Bol. Inst. Vital Brazil* **18** 1936 pp. 3-24 5 figs.

628.—McIntosh, A. New host records of parasites. *Proc. Helminth. Soc. Washington* **2** 1935 p. 80. [*Haptophrya*.]

629.—MacKinlay, R. B. Observations on *Nebela collaris* Leidy (*pro parte*), a testate amoeba of moorland waters. *J. Roy. micr. Soc. London* (3) **56** 1936 pp. 307-325 16 figs.

630.—Maclean, G. Notes on trypanosomiasis. *Quart. Bull. Health Organiz. L. of N. Geneva* **5** 1936 pp. 179-181.

631.—MacLennan, R. F. Dedifferentiation and redifferentiation in *Ichthyophthirius*. II. The origin and function of cytoplasmic granules. *Arch. Protistenk. Jena* **86** 1936 pp. 404-426 55 figs.

McMasters, J. H. *vide* Cushman, J. A.

632.—Makarov, P. Experimentelle Untersuchungen an Protozoen mit Bezug auf das Narkose-Problem. *Protoplasma Leipzig* **24** 1935 pp. 593-606 5 figs.

Malamos, B. *vide* Mayer, M.

633.—Malkani, P. G. *Haemoproteus rileyi* (sp. nov.) causing a fatal disease in Indian peacock. *Indian J. Vet. Sci.* **6** 1936 pp. 155-157 1 pl.

Mandekos, A. *vide* Barber, M. A.

634.—Manwell, R. D. The status of *Plasmodium capistrani*. *Amer. J. trop. Med. Baltimore* **16** 1936 pp. 685-688.

635.—Manwell, R. D. The problem of species, with special reference to the malaria parasites. *Ann. Trop. Med. Parasit. L'pool.* **30** 1936 pp. 435-439.

636.—Manwell, R. D. *Plasmodium polare* in the vertebrate host. *J. Parasit. Urbana* **22** 1936 p. 412.

637.—Marie, P. Sur la microfaune crétacée du sud-est du Bassin de Paris. *C.R. Acad. Sci. Paris* **203** 1936 pp. 97-100 1 fig. [Foraminifera.]

638.—Marie, P. Sur la microfaune du Crétacé moyen et supérieur à faciès bathyal du Nord Marocain. *C.R. Acad. Sci. Paris* **202** 1936 pp. 145-148 1 fig. [Foraminifera.]

639.—Marie, P. De l'utilisation des foraminifères en stratigraphie. *C.R. Acad. Sci. Paris* **203** 1936 pp. 1536-1538.

640.—Marie, P. Sur la présence du genre *Rosalina* dans la craie du Bassin de Paris. *C.R. Séances Soc. géol. Fr.* **8-9** 1936 pp. 135-137.

641.—Marin, A., Pastora, J. L. and Lizaure, J. de. Premières recherches de pétrole sur la côte atlantique du territoire du protectorat espagnol au Maroc. *Bull. Soc. géol. Fr.* **5** 1935 pp. 649-673 2 pls. 19 figs. [Foraminifera.]

642.—Marschall, F. Hämoglobinurie und Nierenveränderungen bei Bartonellenanämie entmilzter Ratten und bei Afflenmalaria in ihrer Beziehung zum menschlichen Schwarzwasserfieber. *Arch. Schiffs. Tropenhyg. Leipzig* **40** 1936 pp. 151-160 4 figs.

643.—Martin, L. T. Foraminifera from Monterey Bay. [Abstract.] *Proc. Geol. Soc. Amer.* (1935) **1936** p. 416.

644.—Martin, W. E. A sporozoan parasite of larval trematodes. *J. Parasit. Urbana* **22** 1936 p. 536.

Martinez, F. *vide* Mazza, S.

Mascall, W. N. *vide* King, A. J.

645.—Mast, S. O. and Hawk, B. Response to light in *Peranema trichophorum*. (1) Relation between dark-adaptation and sensitivity to light. *Biol. Bull. Woods Hole* **70** 1936 pp. 408-412 1 fig.

646.—Mast, S. O. and Pace, D. M. Why have some investigators been unable to grow *Chilomonas paramecium* in inorganic or simple organic solutions? *Science N.Y.* **83** 1936 pp. 18-19.

Matikaschwili, I. L. *vide* Yakimoff, W. L.

Matschoulsky, S. N. *vide* Yakimoff, W. L.

Matschulsky, S. N. *vide* Rastegaiëff, E. F.

Matschulsky, S. N. *vide* Yakimoff, W. L.

Matvejev, A. A. *vide* Sassuchin, D. N.

647.—Mawson, D. and Chapman, F. The occurrence of a lower-miocene formation on Bougainville Island. Trans. roy. Soc. S. Austr. **59** 1935 pp. 241-242. [Foraminifera.]

648.—Mayer, M. and Malamos, B. Zur Differentialdiagnose von *Leishmania donovani* und *tropica* durch Plattenkulturen. Zbl. Bakt. Jena I. Abt. (Orig.) **136** 1936 pp. 412-418 6 figs.

Mayer, M. *vide* Nocht, B.

649.—Mazza, S. Transmisión del *Schizotrypanum cruzi* al carpincho (*Hydrochoerus notialis hydrochoeris* Hollister). VIII. Reun. Soc. Argentina Patol. Región. Norte Buenos Aires **2** 1936 pp. 1003-1006 2 figs.

650.—Mazza, S. Efectos de la transmisión experimental de *Trypanosoma equinum* (Voges) en armadillos y zorros. VIII. Reun. Soc. Argentina Patol. Región. Norte Buenos Aires **2** 1936 pp. 1007-1009 1 fig.

651.—Mazza, S. Observaciones sobre la transmisión en serie de *Schizotrypanum cruzi* en armadillo. VIII. Reun. Soc. Argentina Patol. Región. Norte Buenos Aires **2** 1936 pp. 1010-1012.

652.—Mazza, S. Sobre particularidades de *Schizotrypanum cruzi* en la circulación de un portador humano. VIII. Reun. Soc. Argentina Patol. Región. Norte Buenos Aires **2** 1936 pp. 1022-1025 2 figs.

653.—Mazza, S. Transmisión experimental de *S. cruzi* a diferentes animales silvestres. VIII. Reun. Soc. Argentina Patol. Región. Norte Buenos Aires **2** 1936 pp. 1026-1029.

654.—Mazza, S., Martinez, F. and Arias, J. C. Observación durante un año de un portador adulto de *Schizotrypanum cruzi*. VIII. Reun. Soc. Argentina Patol. Región. Norte Buenos Aires **2** 1936 pp. 691-700 6 figs.

Mechanikova, V. *vide* Schourenkova, A.

655.—Meleney, H. E. and Frye, W. W. The pathogenicity of *Endamoeba histolytica*. Trans. Soc. trop. Med. Hyg. London **29** 1936 pp. 369-378.

Meleney, H. E. *vide* Frye, W. W.

Mellanby, K. *vide* Duke, H. L.

656.—Mesnil, F., Leger, M. and Pérard, C. Essais divers d'infection des poules par des trypanosomes pathogènes de mammifères. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 679-682.

657.—Messikommer, E. Algen aus dem Obertoggenburg. Jb. St. Gallis. naturw. Ges. **87** 1935 pp. 95-130 2 pls. [Flagellates.]

658.—Messikommer, E. Die Algenwelt der inneren Plessuralpen. Vjschr. naturf. Ges. Zürich **80** 304 (Beiblatt.) 1935 pp. 1-59 5 pls. 2 figs. [Flagellata.]

659.—Metelnikov, S. L'évolution de la mort dans le règne animal. Rev. Gén. Sci. Paris **31** Jan. 1936 (sep. pag.). [Ciliates.]

660.—Mettam, R. W. M. and Carmichael, J. Turning sickness, a protozoan encephalitis of cattle in Uganda. Its relationship with East Coast Fever. Parasitology Cambridge **28** 1936 pp. 254-283 1 pl.

661.—Meyer, J. R. Anatomico-pathological study of enterohepatitis or "blackhead" in turkeys [Portuguese with English summary.] Arch. Inst. Biol. São Paulo. **6** 1935 pp. 85-94 6 pls.

662.—Mihaéloff, S. Contribution à l'étude de protozoaires. Bull. Inst. égypt. **18** 1936 pp. 45-57.

663.—Milicer, W. Recherches expérimentales sur le système neuromoteur de *Paramacium caudatum*. [Polish with French summary.] Acta Biol. Experiment. Warsaw **9** (10) 1935 pp. 174-194 12 figs.

Miller, F. W. *vide* Andrews, J.

664.—Miller, J. R. Contrast stain for the rapid identification of *Trichomonas vaginalis*. J. Amer. Med. Assoc. Chicago **106** 1936 p. 616.

665.—Minning, W. Zur Entstehung der Kokzidienknoten in der Leber von Kaninchen. Z. Parasitenk. Berlin **9** 1936 pp. 61-72 8 figs.

666.—Minning, W. Zur Frage der auf dem Wege über die Plazenta und durch den Saugakt erworbenen Immunität gegen *Trypanosoma lewisi*. Zbl. Bakt. Jena I. Abt. (Orig.) **135** 1936 pp. 469-472.

Missriegler, A. *vide* Klein, B. M.

Mitra, A. N. *vide* Ray, H. N.

Mizkewitsch, W. J. *vide* Yakimoff, W. L.

667.—Mochkovski, C. [=Moschkovski.] Les relations entre l'hôte et le parasite dans le paludisme. Considérations générales sur l'immunité et la virulence. (Premier mémoire.) Bull. Soc. Path. Exot. Paris **29** 1936 pp. 274-279.

668.—Mochkovski, C. La nature de la latence et de l'incubation à longue échéance dans le paludisme. La période de latence et l'incubation à longue échéance dans la tierce bénigne. (Deuxième mémoire.) Bull. Soc. Path. Exot. Paris **29** 1936 pp. 411-422.

669. — Mochkovski, C. Quelques observations sur la coloration vitale des *Leishmania*. C.R. Soc. Biol. Paris **121** 1936 pp. 1607-1608.

670.—Mochkovski, C. Suite des études sur les indices du paludisme. [Russian with French summary.] Med. Parasitol. & Parasit. Dis. Moscow **5** 1936 pp. 203-210 1 fig.

671.—Mochkovski, C. Études sur la chimiothérapie quantitative. Premier mémoire: Les "courbes chimiothérapeutiques" des produits antipaludiques acridine-atébrine et lupinyl-acridine. [In Russian, with French summary.] Med. Parasitol. & Parasit. Dis. Moscow **5** 1936 pp. 712-724, 725-734.

672.—Moldavskaya-Kritchenskaya, V., Einhorn, E. and Sukhova, L. Sur les réactions des tissus dans le paludisme expérimental des chardonnerets. [Russian with French summary.] Med. Parasitol. & Parasit. Dis. Moscow **5** 1936 pp. 619-624 5 figs.

673.—Monod, J. Le taux de croissance en fonction de la concentration de l'aliment dans une population de *Glaucoma piriformis* en culture pure. C.R. Acad. Sci. Paris **201** 1935 pp. 1513-1515.

674.—Monod, J. and Tessier, G. La concentration de l'aliment, facteur quantitatif de l'accroissement des populations d'Infusoires. C.R. Acad. Sci. Paris **202** 1936 pp. 162-164 1 fig.

675.—Morcos, Z. *Entamoeba histolytica* in dogs. Vet. J. London **92** 1936 pp. 38-39.

676.—Morea, L. Régénération chez *Spirostomum ambiguum*. C.R. Soc. Biol. Paris **119** 1935 pp. 235-237.

677.—Morehouse, N. F. and Becker, E. R. A note on an undetermined parasite of the albino rat. J. Parasit. Urbana **22** 1936 pp. 106-107 1 fig.

Morehouse, N. F. *vide* Becker, E. R.

678.—Morellet, L. and J. Faune des sables à *Nummulites variolarius* de Léviguen (Oise). Bull. Mus. Hist. nat. Paris (2) **8** 1936 pp. 292-310.

679.—Moret, L. Sur l'âge des complexes détritiques qui terminent la série nummulitique subalpine. C.R. Seances Soc. géol. Fr. **1-2** 1936 pp. 22-23.

680.—Mori, N. On the action of electricity on organisms. I. On the action of electric current upon *Paramecium*, especially on the cause of death by electric shock. [Abstract.] Okayama Igk. Z. **46** 1934 pp. 1498-1513. [Abstract in Japan J. Zool. **6** 1936 p. (73).]

681.—Moschkovski, S. [= Mochkovski.] Über einen eigentümlichen Fund in den von *Plasmodium vivax* befallenen Erythrozyten. [Russian with German summary.] Rev. Microbiol., Epidém. Parasitol. Saratov **15** 1936 pp. 57-59 2 pls.

682.—Mosna, E. L'azione della chinina e dell'atebrin sul *Plasmodium knowlesi*. [Italian with English summary.] Riv. Malariol. Rome (I) **15** 1936 pp. 99-105 1 pl.

683.—Müller, R. Die osmoregulatorische Bedeutung der kontraktilen Vakuolen von *Amoeba proteus*, *Zoothamnium hickes* und *Fröntonia marina*. Arch. Protistenk. Jena **87** 1936 pp. 345-382 11 figs.

Muench, H. *vide* Boyd, M. F.

Mulrennan, J. A. *vide* Boyd, M. F.

Muniz, J. *vide* Cunha, A. M. da.

Muniz, J. *vide* Regendanz, P.

Murgatroyd, F. *vide* Yorke, W.

684.—Murgeanu, M. G. Sur l'importance des marnes à Rosalines dans la zone recouvrements de Comarnic. C.R. Séances Inst. Géol. Roumanie 19 (1930-1) 1933, pp. 82-88 1 pl.

685.—Myers, E. H. The life-cycle of *Spirillina vivipara* Ehrenberg with notes on morphogenesis, systematics and distribution of the Foraminifera. J.R. micr. Soc. London (3) 56 1936 pp. 120-146 3 pls.

686.—Naito, T. and Oka, S. Untersuchungen über die Festigkeit von Trypanosomen gegen Arsenpräparate. Zbl. Bakt. Jena. I. Abt. (Orig.) 137 1936 pp. 401-418.

Narbutt, K. I. *vide* Isynger, Y. A.

687.—Nastjukowa, O. A. On the chemical stimulation of the division rate in *Paramaecium caudatum*. [Russian with English summary.] Zool. J. Moscow 15 1936 pp. 394-408.

688.—Nattan-Larrier L. and Dufour, J. Localisation des *Leishmanias* dans les épithéliums des canaux biliaires normaux et cancéreux. C.R. Soc. Biol. Paris 121 1936 pp. 13-17 2 figs.

689.—Nattan-Larrier, L. and Dufour, J. Les variations morphologiques de *Trypanosoma rabinowitchi* dans les cultures sur milieu solide. C.R. Soc. Biol. Paris 122 pp. 1936 pp. 514-517.

690.—Nattan-Larrier, L. and Noyer, B. Le tropisme de *Leishmania tropica* chez la souris. Bull. Soc. Path. Exot. Paris 29 1936 pp. 769-777.

691.—Nattan-Larrier, L. and Noyer, B. Les infections de la souris par *Leishmania tropica*. C.R. Soc. Biol. Paris 122 1936 pp. 902-904.

692.—Nattan-Larrier, L. and Grimaud, L. Existe-t-il des formes métacycliques dans les cultures de *Leishmania donovani*. C.R. Soc. Biol. Paris 122 1936 pp. 993-996.

693.—Naville, A. La précession sexuelle et l'hétérogamie chez les Sporozoaires. Rev. Fac. Sci. Univ. Istanbul N.S. 1 (1) 1935 pp. 1-36 22 figs.

694.—Naville, A. A propos du *Globidium (Gastrocystis) cameli* (Henry et Masson). Rev. Fac. Sci. Univ. Istanbul N.S. (3) 1936 1 pp. 1-9 9 figs.

Nawtzewitsch, N. *vide* Dogiel, V.

695.—Nichols, D. A. Post-pleistocene fossils of the uplifted beaches of the eastern Arctic regions of Canada. Canad. Field Nat. 50 1936 pp. 127-129. [Foraminifera.]

Nicol, W. D. *vide* James, S. P.

696.—Nicolau, S. and Pérard, C. Étude histo-physio-pathologique de l'oeil et du système nerveux dans la leishmaniose généralisée du chien. Ann. Inst. Pasteur, Paris 57 1936 pp. 463-486 17 figs.

697.—Nicolle, C. Dernières lignes personnelles. I. Mode de transmission des *Leishmania*. Arch. Inst. Pasteur. Tunis 25 1936 pp. 249-250.

698.—Nicolle, P. Variations du taux réticulocytaire au cours de l'incubation dans l'infection expérimentale du lapin par *Trypanosoma equiperdum*. C.R. Soc. Biol. Paris 122 1936 pp. 1312-1315.

699.—Nie, D. and Cheng, P. S. *Tintinnoina* about the Hainan Island. Abstr. Pap. Sci. Conf. Nanking 1935 pp. 45-46.

Nie, D. *vide* Wang, C. C.

700.—Nielsen, E. S. The production of phytoplankton at the Faroe Isles, Iceland, East Greenland and in the waters around. Medd. Komm. Havundersog. Kjøb. (Plankton) 3 Nr. 1 pp. 1-86 2 figs. [Flagellates, Ciliates.]

701.—Nieschulz, O. and Bos, A. Ueber die Benennung und Morphologie der Taubentrichomonaden. Zbl. Bakt. Jena I. Abt. (Orig.) 135 1936 pp. 473-475 1 fig.

702.—Nigrelli, R. F. The morphology, cytology and life-history of *Oodinium ocellatum* Brown, a dinoflagellate parasite on marine fishes. Zoologica N.Y. 21 (3) 1936 p. 129 9 pls. 5 figs.

703.—Nitschke, P. N. *Trichomonas vaginalis* infestation in the male. J. Amer. Med. Assoc. Chicago 107 1936 pp. 12-14

Nobrega, P. *vide* Reis, J.

704.—Nocht, B. and Mayer, M. Die Malaria. Eine Einführung in ihre Klinik, Parasitologie und Bekämpfung. 2nd ed. Berlin (J. Springer). 1936 vi. + 172 pp. 2 pls. 24 text-figs.

Nodenot, L. *vide* Boisseau, R.

705.—Nouvel, H. Notes sur la faune marine de la région de Roscoff. Trav. Sta. biol. Roscoff Paris **13** 1935 pp. 211–218. [Ciliates.]

706.—Nowikowa, K. [The parasitic fauna of smelts under natural and culture conditions: the influence of acclimatization of smelts upon their parasitic fauna]. [In Russian.] Annals Leningrad State University No. 7 (Biol. Ser.) Fasc. 3: Problems of ecological parasitology 1936 pp. 156–162.

Noyer, B. *vide* Nattan-Larrier, L.

O'Connor, R. J. *vide* Lourie, E. M.

707.—Oesterlin, M. Zur Chemotherapie der Infektionskrankheiten. Z. Hyg. Berlin **118** 1936 pp. 263–306 1 fig. [Trypanosomes.]

708.—Oesterlin, M. Zur Chemotherapie der Piroplasmosen. Zbl. Bakt. Jena I. Abt. (Orig.) **137** 1936 pp. 419–423 3 figs.

Oka, S. *vide* Naito, T.

709.—Olifan, W. I. Variabilität von *Paramaecium caudatum* bei langdauernder Einwirkung differenter Temperaturen. Arch. Protistenk. Jena **86** 1936 pp. 427–453.

710.—Olifan, W. Variabilität von *Paramaecium caudatum* bei dauernder Einwirkung verschiedener Temperaturen. [German summary.] J. biol. Moscow **4** 6 1936 pp. 1097–1116.

Olitzki, L. *vide* Kligler, I. J.

711.—Olivier, E. Suite à la faune de l'Allier. Les thécamoebiens du Bourbonnais. Rev. sci. Bourbonnais **1936** pp. 3–15.

712.—Ostroumoff, A. A. Sur une nouvelle espèce des heliozoaires du plancton marin (*Acanthocystis wiasemskii*). Trav. Stat. sci. nat. Karadagh. **1** 1917 pp. 62–65 1 fig.

Ott, G. L. *vide* Herrick, C. A.

713.—Oye, P. van. Rhizopoden uit het mos van Meijndel. I. Inleiding, methode en materiaal. Levende Nat. Amsterdam **40** 1936 pp. 215–221.

714.—Oye, P. van. Rhizopoden uit het mos van Meijndel. Levende Nat. Amsterdam **40** 1936 pp. 240–246.

715.—Ozersky, N. N. [On coccidiosis of rabbits.] [In Russian.] Works

of Saratov Veterin. Res. Inst. **3** 1936 pp. 168–176.

716.—Ozersky, N. N., Shepelev, K. M., and Sassuchin, D. N. [Contributions to the study of equine nuttalliosis.] [In Russian.] Works of Saratov Veterin. Res. Inst. **3** 1936 pp. 125–147 11 figs.

Pace, D. M. *vide* Mast, S. O.

717.—Packard, C. E. Form and size variation in a *Spathidium* believed to be *Spathidium spathula*. Amer. Nat. **70** 1936 pp. 261–263.

718.—Packard, C. E. The macro-nucleus of the Stentors. Amer. Nat. **70** 1936 pp. 501–502.

719.—Palmer, D. K. New genera and species of Cuban oligocene foraminifera. Mem. Soc. Albana Hist. nat. **10** 1936 pp. 123–128 1 pl. 3 figs.

720.—Palmer, D. K. Some large fossil Foraminifera from Cuba. Mem. Soc. Cubana Hist. nat. **9** 1936 pp. 237–264 5 pls. 19 figs.

721.—Palmer, D. K. and Bermúdez, P. J. An oligocene foraminiferal fauna from Cuba. Mem. Soc. Cubana Hist. nat. **10** 1936 pp. 227–271 8 pls.; pp. 273–316 1 pl. 1 fig.

722.—Pannier, R. Essai de culture de *Trypanosoma lewisi* dans le latex d'*Euphorbia characias* et *Euphorbia esula*. C.R. Soc. Biol. Paris **123** 1936 pp. 29–30.

723.—Pannier, R. Flagellose d'une euphorbe des environs de Banyuls-sur-Mer. C.R. Soc. Biol. Paris **122** 1936 pp. 374–377 1 fig.

724.—Papadakis, A. Avian malaria parasites and their incidence in Greek birds. [In Greek, with English summary.] Praktika, Athens **10** 1935 pp. 432–436.

725.—Papantonakis, E. Die Leishmaniosen in der Provinz Messinia (Peloponnes, Griechenland). Arch. Schiffs. Tropenhyg. Leipzig **40** 1936 pp. 141–146 3 figs.

726.—Părduez, B. Ueber die biologische Bedeutung des schraubigen Körperbaues der Ciliaten. [German summary.] Acta. Biol. Szeged. **4** 1 1936 pp. 12–38.

727. — Párducz, B. Beiträge zur phylogenetischen Ableitung der Hymenostomen Infusorien. [German summary.] Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 120-141 8 figs.

Parker, F. L. *vide* Cushman, J. A.

Parr, W. J. *vide* Chapman, F.

Parrot, L. *vide* Sergent, Ed.

728. — Pashitnowa, Z. A. Materialien zur Erforschung der Mikrofauna der Reisfelder und die Biologie der Anopheles-larve auf den Reisfeldern. II. Die Mikrofauna der Reisfelder der Samarkander Oase. [Russian with German summary.] Acta Univ. Asiae Med. Tashkent. (Ser. Zool.) 18 1935 pp. 3-64 2 pls.

Pastora, J. L. *vide* Marin, A.

729. — Patten, R. Notes on a new protozoon, *Piridium sociabile* n. gen. n. sp. from the foot of *Buccinum undatum*. Parasitology Cambridge 28 1936 pp. 502-516 15 figs.

730. — Patten, R. and Beams, H. W. Observations on the effect of the ultracentrifuge on some free living flagellates. Quart. J. micr. Sci. London N.S. 78 1936 pp. 615-635 3 pls. 1 fig.

Pavlinova, Y. *vide* Taliaferro, W. H.

731. — Pazzini, A. and Fedele, M. Giovanni Battista Grassi (27 Marzo 1854-4 Maggio 1925). Riv. Biol. Firenze 19 1935 45 pp. (sep. pag.) 7 figs.

732. — Pearse, A. S. Estuarine animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill 52 1936 pp. 174-222 2 pls. [Foraminifera.]

Pedlow, J. T. *vide* Reiner, L.

Peel, —. *vide* Schwetz, J.

733. — Pellissier, M. Sur certains constituants cytoplasmiques de l'infusoire cilié *Trichodinopsis paradoxa* Clap. et Lach. Arch. Zool. exp. gén. Paris. (Notes et Revue.) 78 1936 pp. 32-36 1 fig. (Protistologica LVII.)

734. — Pellissier, M. Sur la musculature de "*Trichodinopsis paradoxa*," infusoire parasite. Rev. Sci. Nat. Auvergne, Clermont-Ferrand 1 1935 pp. 22-24 1 pl.

Pennypacker, M. I. *vide* Stabler, R. M.

Pérard, C. *vide* Mesnil, F.

Pérard, C. *vide* Nicolau, S.

735. — Perruche, L. Sur quelques microfossiles du jurassique. Bull. Soc. franç. Micr. Paris 5 1935 pp. 23-25 1 pl. [Foraminifera.]

736. — Peshkovskaja, L. S. The changes of the nuclear apparatus of *Climacostomum virens* during conjugation. [English summary.] Biol. J. Moscou, 5 1936 pp. 207-220 20 figs.

737. — Pessôa, S. B. Nova especie de *Zelleriella* parasita do *Bufo marinus*. Ann. Paulist. Med. & Cirurg. S. Paulo 28 1934 3 pp. (sep. pag.) 4 figs.

738. — Petrov, V. P. [On the primary lesion in Kala-Azar.] [In Russian.] Uzbekistan Parasitol. Symposium Tashkent 1 1936 pp. 222-226.

Pfeiffer, C. C. *vide* Kuhs, M. L.

739. — Piender, J. Les gisements de cénonanien à Alvéolines en Basse Provence. Bull. Soc. géol. Fr. 5 iv. 1936 pp. 461.

740. — Piender, J. Sur un foraminifère nouveau du Bathonien des montagnes d'Escreins (H.-Alpes): *Kilianina blancheti* nov. gen. nov. sp. Trav. Lab. Géol. Univ. Grenoble 18 1936 pp. 121-130 2 pls.

741. — Phelps, A. Growth of protozoa in pure culture. II. Effect upon the growth curve of different concentration of nutrient materials. J. exp. Zool. Philadelphia 72 1936 pp. 479-496 5 figs.

Phifer, L. D. *vide* Thompson, T. G.

742. — Picard, L. and Solomonica, P. On the geology of the Gaza-Beersheba district (Foraminifera). Bull. Geol. Dept. Hebrew Univ. Jerusalem 1, 2. 1936 pp. 10-44 4 pls. 3 figs.

Picard, L. *vide* Avnimelech, M.

743. — Picken, L. E. R. A note on the mechanism of salt and water balance in the heterotrichous ciliate, *Spirostomum ambiguum*. J. exp. Biol. London 13 1936 pp. 387-392 1 fig.

744. — Plummer, F. B. and Hornberger, Jr. J. Geology of Palo Pinto County, Texas. Univ. Texas Bull. 3534 1935 pp. 19-238 28 figs. [Foraminifera.]

745.—Plummer, H. J. Structure of *Ceratobulimina*. Amer. Midl. Nat. Notre Dame 17 1936 pp. 460-463 10 figs.

746.—Plummer, H. J. Microscopical evidence of the Navarro-Taylor Contact in subsurface sections in Central Texas. Univ. Texas Bull. 3501 1935 pp. 281-292 1 pl. [Foraminifera.]

Pohl, A. W. *vide* Luce, R. H.

747.—Poindexter, H. A. Some observations on the nature of the thermoprecipitin reaction in *Trypanosoma equiperdum* infection. Amer. J. trop. Med. Baltimore 16 1936 pp. 485-492.

748.—Poisson, R. Observations sur une chloromonadine rapportée au genre *Coelomonas* Stein 1878: *Coelomonas grandis* (Ehrbg.) 1838. Arch. Zool. exp. gén. Paris. Notes et Revue 77 1935 pp. 36-42 13 figs. [Protistologica LIII.]

749.—Poslavski, E. [Amoebiasis and lambliasis (giardiasis) in Essentouki (Caucasus).] [In Russian.] Med. Parasitol. & Parasit. Dis. Moscow 5 1936 pp. 99-107.

750.—Powell, W. N. *Trichomonas vaginalis* Donné, 1836: its morphologic characteristics, mitosis and specific identity. Amer. J. Hyg. 24 1936 pp. 145-169 1 pl. 3 figs.

751.—Powers, P. B. A. Ciliates infesting Acapulco sea urchins. J. Parasit. Urbana 22 1936 p. 541.

752.—Poyarkoff, E. La methode de l'infection dosée dans l'étude de la biologie de la pébrine.—Ann. Inst. Pasteur. Paris 56 1936 pp. 584-596.

753.—Precht, H. Epizoen der Kieler Bucht. Nova Acta Leopoldina Halle N.F. 3 (15) 1935 pp. 405-474 44 figs.

754.—Precht, H. *Opercularia frondicola* spec. n. ein Epizoon eines Landcopepoden. Zool. Anz. Leipzig 115 1936 pp. 217-218 1 fig.

Prieur, M. *vide* Launoy, L.

755.—Prenant, M. Leçons de Zoologie. Protozoaires flagellés. Protozoaires infusoires ciliés. (Actualités Scient. et Industr. Paris) 1935. [Non vidi.]

Price, I. N. O. *vide* King, A. J.

756.—Principi, P. Alcune osservazioni sui terreni terziari del Bacino di Sulmona. Biol. Soc. geol. ital. 55 1936 pp. 44-55 4 figs. [Nummulites.]

757.—Pringsheim, E. G. Zur Kenntnis saprotroper Algen und Flagellaten. I. Ueber Anhäufungskulturen polysaproter Flagellaten. Arch. Protistenk. Jena 87 1936 pp. 43-96 11 figs.

758.—Protescu, O. Prezența genului *Calpionella alpina* Lorenz în Klipa de calcar berriasiian dui M-tele Piatra Arsă (Sinaia) jud. Prahova. Bul. Soc. Nat. Romania Bucuresti 3 1933 pp. 13-14.

759.—Provasoli, L. La culture pure mixte du cilié hypotriche, *Kahlia acrobates*. C.R. Soc. Biol. Paris 119 1935 pp. 93-96.

Provasoli, L. *vide* Lwoff, A.

760.—Raabe, H. Études de microorganismes parasites des poissons de mer. I. *Nosema ovoideum* Thél. dans le foie des Rougets. Bull. Inst. océanogr. Monaco 696 1936 pp. 1-12 7 figs.

761.—Raabe, L. Weitere Untersuchungen an einigen Arten des Genus *Conchophthirus* Stein. Mem. Acad. Polon. Cracovie 6 1934 pp. 221-235 1 pl. 4 text-figs.

762.—Rachmanow, H. Die Bestimmung des spezifischen Gewichts der Zysten von *Lamblia intestinalis* (*Giardia intestinalis*). Arch. Schiffs. Tropenhyg. Leipzig 40 1936 pp. 395-396.

763.—Raffaele, G. Potere infettante del sangue durante l'incubazione della malaria aviaria. [Italian with English summary.] Riv. Malariol. Rome (I) 15 1936 pp. 77-87.

764.—Raffaele, G. Il doppio ciclo schizogonico di *Plasmodium elongatum*. [Italian with English summary.] Riv. Malariol. Rome (I) 15 1936 pp. 309-317 1 pl.

765.—Raffaele, G. Presumibili forme iniziali di evoluzione di *Plasmodium relictum*. [Italian with English summary.] Riv. Malariol. Rome (I) 15 1936 pp. 318-324 2 pls.

Raggatt, H. G. *vide* Condit, D. D.

766.—Rankov, M. Die Verteilung des *Plasmodium vivax* und *Plasmodium immaculatum* bei verschiedenen Altersgruppen. Arch. Schiffs. Tropenhyg. Leipzig 40 1936 pp. 277-289.

767.—Rastegaiëff, E. *Ornithodoros lahorensis* Neumann, 1908, vecteur des hémoparasites du mouton: *Anaplasma ovis* et *Theileria recondita*. Bull. Soc. Path. Exot. Paris 29 1936 pp. 732–733.

768.—Rastegaiëff, E. F. and Matschulsky, S. N. Zur Frage der endoglobulären Parasiten der Schafe und Ziegen und ihrer Ueberträger. (Vorläufige Mitteilung.) 3. Ueber die Ueberträger der Blutparasiten der Schafe (*Anaplasma ovis* und *Theileria recondita*). Berlin. Tierärztl. Wschr. 52 1936 p. 585.

769.—Rastegaiëff, E. F., Matschulsky, S. N. and Timofeeff, P. S. Zur Frage der endoglobulären Parasiten der Schafe und Ziegen und ihrer Ueberträger. (Vorläufige Mitteilung.) 2. Die Anaplasmose der Ziegen im Gebiete Leningrad. Berlin Tierärztl. Wschr. 52 1936 p. 585.

770.—Rastegaiëff, E. F. and Timofeeff, P. S. Zur Frage der endoglobulären Parasiten der Schafe und Ziegen und ihrer Ueberträger. (Vorläufige Mitteilung.) 1. Babesiellöse der Schafe im Gebiete Leningrad. Berlin Tierärztl. Wschr. 52 1936 pp. 584–585.

Rastegaiëff, E. F. vide Yakimoff, W. L.

Rastegaiëff, E. F. vide Gousseff, W. F.

Ratcliffe, H. L. vide Geiman, Q. M.

771.—Rausser-Černousova, D. M. Zur Frage von der stratigraphischen Bedeutung der ober-paläozoischen Foraminiferen. [German summary.] Bull. Acad. Sci. U.R.S.S. Géol. 1936 1 pp. 61–86 2 figs.

772.—Rausser-Černousova, D. Bemerkungen über die Gattung *Wedekindellinia* Dunbar et Henbest und ihre stratigraphische Bedeutung. C.R. Acad. Sci. Leningrad 4 1935 pp. 117–120.

773.—Rausser-Černousova, D. On the *Fusulinidae* and the stratigraphic subdivision of the oil-bearing limestones in the Sterlitamak district. C.R. Acad. Sci. Moscou N.S. 1936 pp. 299–302.

774.—Rausser-Černousova, D. and Kirewa, G. Ueber Polymorphismus und Variabilität bei *Fusulina minima*

Schellwien. Paläont. Z. Berlin 17 1935 pp. 244–257 8 figs.

Rawlings, I. D. vide Bundesen, H. N.

775.—Ray, H. N. On a new species of *Eimeria* (Sporozoa-coccidia) from the intestine of toad, *Bufo melanostictus*. [Abstract.] Proc. Indian Sci. Congr. Calcutta 22 1935 p. 315.

776.—Ray, H. N. and Chakravorti, M. On the species of *Stenophora*—a septate gregarine, from the Indian millipede, *Cumalopsis* sp. [Abstract.] Proc. Indian Sci. Congr. Calcutta 22 1935 p. 315.

777.—Ray, H. N. and Das Gupta, M. On a species of *Eimeria* (Sporozoa-coccidia) from the gall-bladder of a lizard *Hemidactylus coctaei*. [Abstract.] Proc. Indian Sci. Congr. Calcutta 22 1935 p. 315.

778.—Ray, H. N. and Mitra, A. N. On the morphology of *Chilomitus caviae*, a flagellate from the cecum of guinea-pig. [Abstract.] Proc. Indian Sci. Congress Calcutta 22 1935 p. 315.

779.—Ray, J. C. Leishmania vaccines. [Abstract.] Proc. Indian Sci. Congr. Calcutta 22 1935 p. 416.

Rector, L. E. vide Tsuchiya, H.

780.—Rees, C. W. Exposure of three endoglobular bovine parasites to different degrees of temperature. J. Parasit. Urbana 22 1936 pp. 538–539.

Rees, C. W. vide Andrews, J.

781.—Regendanz, P. Ueber den Entwicklungsgang von *Babesia bigemina* in der Zecke *Boophilus microplus*. Zbl. Bakt. Jena I. Abt. (Orig.) 137 1936 pp. 423–428.

782.—Regendanz, P. and Muniz, J. O *Rhipicephalus sanguineus* como transmissor da prioplasmose canina no Brasil. [In Portuguese.] Mem. Inst. Osw. Cruz. Rio de J. 31 1936 pp. 81–84.

783.—Reichel, M. Étude sur les Alvéolines. Abh. schweiz. paläont. Ges. 57 1936 No. 4 pp. 1–93 9 pls. 16 figs.

784.—Reichel, M. Bemerkungen über einige von O. Renz im Zentralen Apenin gesammelten Foraminiferen. Ecl. geol. Helv. 29 1936 pp. 136–142 1 fig.

Reichel, M. vide Buxtorf, A.

785.—Reiner, L., Smythe, C. V. and Pedlow, J. T. On the glucose metabolism of trypanosomes (*Trypanosoma equiperdum* and *Trypanosoma lewisi*). J. Biol. Chem. Baltimore **113** 1936 pp. 75–88.

Reis, A. S. *vide* Reis, J.

786.—Reis, J., Nobrega, P. and Reis, A. S. Doenças das aves. (Tratado de ornithopathologia.) São Paulo (Instituto Biológico) 1936 pp. vi. + 469 4 pls. 359 text-figs.

787.—Renn, C. E. The wasting disease of *Zostera marina*. I. A phytochemical investigation of the diseased plant. Biol. Bull. Woods Hole **70** 1936 pp. 148–158 2 figs. [*Labyrinthula*.]

788.—Renn, C. E. Persistence of the eel-grass disease and parasite on the American Atlantic coast. Nature London **138** 1936 pp. 507–508. [*Labyrinthula*.]

789.—Renz, O. Die Verbreitung Kretazischer Foraminiferen in der Westgriechischen Olonos-Pindoszone. Prak. Akad. Athens **3** 1938 pp. 419–423.

790.—Renz, O. Ueber ein Maestrichtien-Cénomanien-Vorkommen bei Alfermée am Bicersee. Verh. schweiz. naturf. Ges. **117** 1936 pp. 290–291. [Foraminifera.]

791.—Renz, O. Ueber *Globotruncana* im Cenoman des Schweizerjura. Verh. Schweiz. naturf. Ges. **117** 1936 pp. 291–292.

792.—Renkauf, E. Die Hornalge *Ceratium cornutum*. Mikrokosmos. Stuttgart **29** 1936 pp. 105–108 6 figs.

793.—Reynolds, B. D. *Colpoda steini* a facultative parasite of the land slug *Agriolimax agrestis*. J. Parasit. Urbana **23** 1936 pp. 48–53.

Rice, J. B. *vide* Barber, M. A.

794.—Rieder, J. Biologische und ökologische Untersuchungen an Süßwasser-Suktorien. Arch. Naturgesch. Leipzig (N.F.) **5** 1936 pp. 137–214 6 figs.

795.—Rieder, J. Beitrag zur Kenntnis der Süßwasser-Suktorien und Revision der Schweizer Suktorien-Fauna. Rev. suisse Zool. Genève **43** 1936 pp. 359–395 15 figs.

796.—Riedmüller, L. Beitrag zum Kulturellen Verhalten von *Trichomonas foetus*. Zbl. Bakt. Jena I. Abt. (Orig.) **137** 1936 pp. 428–433.

Rijsinge, C. van *vide* Hofker, J.

797.—Robaux, A. Sur l'existence de l'Éocène supérieur et de l'Oligocène dans la série du Flysch du Sud de la province de Cadix. C.R. Acad. Sci. Paris **200** 1935 pp. 685–687. [Foraminifera.]

798.—Robaux, A. Extension des formations du crétacé supérieur, de l'éocène et de l'oligocène de la série du Flysch dans le sud de la province de Cadix. C.R. Acad. Sci. Paris **200** 1935 pp. 955–957. [Foraminifera.]

799.—Robaux, A. Répartition du Flysch dans le subbétique selon la transversale de Londa (Andalousie). C.R. Acad. Sci. Paris **202** 1936 pp. 962–964. [Foraminifera.]

800.—Robaux, A. Sur la présence du Crétacé supérieur sur le paléozoïque du Bétique de Malaga (Andalousie). C.R. Acad. Sci. Paris **202** 1936 pp. 1291–1293. [Foraminifera.]

801.—Robaux, A. Le Flysch nummulitique sur la transversale de Malaga (Andalousie). C.R. Acad. Sci. Paris **202** 1936 pp. 1600–1602. [Foraminifera.]

802.—Robin, L. A. Cycle évolutif d'un Hepatozoon de *Gecko verticillatus*. Ann. Inst. Pasteur Paris, **56** 1936 pp. 376–394 4 figs.

803.—Robin, L. A. Évolution d'une hémogrégarine de saurien chez des moustiques. C.R. Acad. Sci. Paris **202** 1936 pp. 512–515.

804.—Robson, G. C. Invertebrates (other than Insects). Phylum Protozoa. Regan. Natural History pp. 22–24 3 figs London 1936.

805.—Rodecurt, M. *Trichomonas vaginalis* als bakteriologisch-hygienisches Problem. Zbl. Bakt. Jena I. Abt. (Orig.) **138** 1936 pp. 56–57.

806.—Rodhain, J. Piroplasmes d'okapi et d'éléphants dans l'Ouelle. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 877–881 1 fig.

807.—Rodhain, J. Note sur l'existence en Belgique de trois représentants de trypanosomes de petits mammifères. C.R. Congr. Sci. Bruxelles **1930** pp. 1215–1217.

808.—Rodhain, J. La réceptivité des singes Africains au *Plasmodium knowlesi*. C.R. Soc. Biol. Paris **123** 1936 pp. 1003-1006.

809.—Rodhain, J. and Berghe, L. van den. Contribution à l'étude des plasmodiums des singes Africains. Ann. Soc. Belge Méd. Trop. **16** 1936 pp. 521-531 2 pls.

810.—Rodhain, J. and Henry, E. Localisation cutanée du *Trypanosoma maroccanum* chez le cobaye. C.R. Soc. Biol. Paris **121** 1936 pp. 1388-1390 2 figs.

811.—Rodhain, J. and Hoof, M. T. van. Les chéloniens porteurs d' *Entamoeba invadens*. C.R. Soc. Biol. Paris **121** 1936 pp. 156-158.

812.—Rodhain, J. and Hoof, M. T. van. Sur le pouvoir hématophage de *Entamoeba invadens*. C.R. Soc. Biol. Paris **123** 1936 pp. 138-141.

813.—Roeckl, K. W. Untersuchung der Gregarinen. Mikrokosmos Stuttgart **30** 1936 pp. 6-9 11 figs.

814.—Rohrbach, F. *Paranoplophrya vivipari* n. gen., n. sp., ein neuer Ciliat aus dem Darm von *Viviparus unicolor* Olivier. Senckenbergiana Frankfurt. **18** 1936 pp. 134-143 6 figs.

815.—Rosenberg, L. E. On the viability of *Tritrichomonas augusta*. Trans. Amer. micr. Soc. Menasha **55** 1936 pp. 313-314.

Ross, A. O. F. *vide* Yorke, W.

816.—Rottier, P.-B. Recherches sur les courbes de croissance de *Polytoma uwelli*. L'influence de l'oxygénation. C.R. Soc. Biol. Paris **122** 1936 pp. 65-68 1 fig.

817.—Rottier, P.-B. Recherches sur la croissance de *Polytoma uwelli*. L'influence de la concentration des substances nutritives. C.R. Soc. Biol. Paris **122** 1936 pp. 776-780 1 fig.

818.—Roubaud, E. Au sujet des modes divers de l'évolution trypanosomienne chez les glossines. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 820-821.

819.—Roubaud, E. and Colas-Belcour, J. Essai de transmission de *Tryp. gambiense* par *G. palpalis* à l'Institut Pasteur de Paris. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 500-504 1 fig.

Roudabush, R. L. *vide* Coatney, G. R.

Roy, A. C. *vide* Chopra, R. N.

Roy, D. N. *vide* Strickland, C.

820.—Rozeboom, L. E. *Triatoma dimidiata* Latr. found naturally infected with *Trypanosoma cruzi* Chagas in Panama. Amer. J. trop. Med. Baltimore **16** 1936 pp. 481-484.

Rudd, E. A. *vide* Condit, D. D.

821.—Ruedemann, R. and Wilson, T. Y. Eastern New York Ordovician Cherts. Bull. Geol. Soc. Amer. Washington D.C. **47** 10 1936 pp. 1566-1582 3 pls. [Radiolaria.]

822.—Ruge, H. Zur Frage der James'schen Sporozoitentheorie. Z. Hyg. Berlin **118** 1936 pp. 724-737.

Russell, F. S. *vide* Gran, H. H.

823.—Russell, H. Observations on immunity in relapsing fever and trypanosomiasis. Trans. Soc. trop. Med. Hyg. Lond. **30** 1936 pp. 179-190.

824.—Russo, A. Mitosi ed amitosi, divisioni sessuali o di categoria in un ciliato, *Cryptochilum echini* Mps. Biol. Zbl. Leipzig **56** 1936 pp. 226-230 2 figs.

825.—Rutten, L. Roches et fossiles de l'île Pisang et de la Nouvelle-Guinée. Bull. Mus. Hist. nat. Belg. **12** 1936 pp. 1-14 4 pls. [Foraminifera.]

826.—Rutten, M. G. Geology of the northern part of the province of Santa Clara, Cuba. [Abstract.] Geol. Zbl. Leipzig **8** 4 1936 p. 215 No. 795. [Foraminifera.]

827.—Rutten, M. G. Zur Einführung geographischer Rassenkreise bei fossilen Foraminiferen. (Antwort an Hans E. Thalmann.) Paläont. Z. Berlin **17** 1935 pp. 257-262.

828.—Rutten, M. G. On an inter-septal canal-system in the foraminiferal species *Discocyclus papyracea* (Bouée). Proc. K. Akad. Wet. Amsterdam **39** 1936 pp. 413-418 1 pl. 7 figs.

Salord, C. *vide* Lestoquard, F.

829.—Sargent, D. L. An improvement in staining technic for protozoa. Stain Technol. Geneva (U.S.A.) **11** 1936 pp. 49-52.

830.—Sarkar, S. L. The action of quinine on *Paramaecium caudatum*. Arch. Protistenk. Jena **87** 1936 pp. 268-271.

Sarkissian, M. *vide* Ter-Matevossian, C.

831.—Sarkissiane A. B. La mouche-
ture de Schöffner et le ponetage de
Maurer dans les erythrocytes dans les
cas de leur coloriage par le Nilblau-
sulfate-azur-éozine. *Folia Haematol.*
Leipzig **54** 1936 pp. 145-149 2 figs.
[Malaria parasites.]

832.—Sassuchin, D. Blutparasitäre
Krankheiten der Nager und einiger
anderer Säugetiere. [Russian with
German summary.] *Rev. Microbiol.*
Epidém. Parasitol. Saratov **15** 1936 pp.
45-56 1 pl. 3 figs.

833.—Sassuchin, D. M. [Piroplas-
moses of wild mammals in South-
Eastern Russia. No. IV.] [In Russian.]
Works of Saratov Veterin. Res. Inst.
3 1936 pp. 155-164 2 figs.

834.—Sassuchin, D. Zur Morphologie
und dynamik der Entwicklung von
Nuttallia ninense. *Zool. Anz. Leipzig*
113 1936 pp. 219-226 3 figs.

835.—Sassuchin, D. N. and Matve-
jev, A. A. [Trypanosomiasis of cattle
in South-Eastern R.S.F.S.R.] [In
Russian.] *Works of Saratov Veterin.*
Res. Inst. **3** 1936 pp. 165-167.

836.—Sassuchin, D., Ioff, I. and
Tiflow, W. Materials for the study on
the parasites and enemies of fleas.
[Russian with English summary.] *Rev.*
Microbiol., Epidém., Parasitol. Saratov
15 1936 pp. 27-44 15 figs.

Sassuchin, D. N. *vide* Ozersky, N. N.

837.—Saurin, E. Études géologiques
sur l'Indochine du Sud-est. *Bull.*
Serv. géol. Indo-Chine **22** 1 1935 pp.
93-97. [Foraminifera.]

838.—Schaeffer, A. A. *Chaos chaos*
Lin., the rare giant amoeba first seen
by Roesel in 1775. [Abstract.] *Anat.*
Rec. Philadelphia **67** Suppl. 1 1936
pp. 75-76.

839.—Scheff, G. and Hasskø, Å.
Einfluss einiger Chemotherapeutika auf
den Stoffwechsel der Trypanosomen,
mit Rücksicht auf das Interferenz-
phänomen. *Zbl. Bakt. Jena I. Abt.*
(Orig.) **136** 1936 pp. 420-424.

840.—Schenck, H. G. and Frizzell,
D. L. Subgeneric nomenclature in
foraminifera. *Amer. J. Sci. New Haven*
(5) **31** 1936 pp. 464-466.

841.—Schiller, J. and Stefan, F.
Zur Ökologie zweier stenothermer
Kaltwasser-Dinoflagellaten, *Gymnodin-*

ium tenuissimum und *Peridinium acicu-
liferum*. *Oester. bot. Zs.* **84** 1935 pp.
102-108, 1 fig.

842.—Schilling, C. Au sujet des
modes divers de l'évolution trypano-
somienne chez les glossines. *Bull. Soc.*
Path. Exot. Paris **29** 1936 pp. 817-820.

843.—Schilling, C. Immunisation
contre les maladies à trypanosomes.
Bull. Soc. Path. Exot. Paris **29** 1936
pp. 886-888.

844.—Schilling, C. Immunisierung
gegen Trypanosomenkrankheiten.
Deutsch. Med. Wschr. **62** 1936 pp.
1715-1716

845.—Schilling, C. Immunization
against trypanosomiasis. 3rd communi-
cation. *J. trop. Med. London* **39** 1936
pp. 221-222.

846.—Schindewolf, O. H. Paläontolo-
gie, Entwicklungslehre und Genetik.
1936 pp. 1-108, 34 figs. [Foramini-
fera.]

Schmassmann, W. *vide* Suchlandt, O.

847.—Schmidt, M. Fossilien der
Spanischen Trias. Weitere Pseudo-
fossilien und Problematica. *Abh. heidel-
berg. Akad. Wiss.* **22** 1936 pp. 18-32.
[Foraminifera.]

848.—Schourenkova, A. and Mech-
anikova, V. La répartition des espèces
de l'hématozoaire du paludisme dans
certains foyers endémiques du Tadjik-
istan. [Russian with French sum-
mary.] *Med. Parasitol. & Parasit. Dis.*
Moscow **5** 1936 pp. 379-393.

Schoute, E. *vide* Swellengrebel, N. H.

849.—Schouten, G. B. *Nyctol[h]erus*
barberoi n. sp., *Zelleriella menendezii* n.
sp., protozoarios parasitos de batracios
(*Leptodactylus caliginosus* Günther).
Rev. Soc. cient. Paraguay **3** 1934 pp.
143-145 1 fig.

850.—Schouten, G. B. *Haemogre-
garina migonei* n. sp. hematozoario de
un ofidio, *Cyclagras gigas* D.B. *Rev.*
Soc. cient. Paraguay **3** 1934 pp. 145-
147 1 fig.

851.—Schouten, G. B. *Cunhaia*
curvata (Hassellmann) ciliado de *Cavia*
aperea (Exl.). *Rev. Soc. cient. Para-
guay* **3** 1936 191 1 fig.

852.—Schulz, E. Die Reaktionen
des Ciliaten *Trachelocerca* auf mechan-
ische Reize. *Zool. Anz. Leipzig* **116**
1936 pp. 300-336.

853.—Schwartz, V. Versuche über Regeneration und Kerndimorphismus der Ciliaten. Nach. Ges. Wiss. Göttingen. VI. N.F. 1 1934 pp. 143–155 14 figs.

854.—Schwetz, J. Les trypanosomiasés animales du Congo Belge et tout spécialement de la Province Orientale (Étiologie, morphologie et thérapeutique). C.R. Congr. Sci. Bruxelles 1930 pp. 1203–1213.

855.—Schwetz, J. Observations et recherches sur le paludisme dans le Congo belge. Note sur les groupes d'âge qui sont le plus gravement frappés, par le paludisme dans les régions hyperendémiques de l'Afrique centrale. Riv. Malariol. Rome (I) 15 1936 pp. 60–75, 146–152.

856.—Schwetz, J., Baumann, H. Peel, — and Belhommet, —. À l'étude épidémiologique de la malaria dans la forêt et dans la savane du Congo Oriental. Mem. Inst. Colon. Belge. (8°) 3 (2) 1934 pp. 1–45.

Sebestyén, O. *vide* Entz, G.

857.—Seeler, T. Ueber eine quantitative Untersuchung des Planktons der deutschen Ströme unter besondere Berücksichtigung der Einwirkung von Abwässern und der Vorgänge der biologischen Selbstreinigung. II. Der Rhein. Arch. Hydrobiol. Stuttgart 30 1936 pp. 85–114 16 figs.

858.—Selmanova, F. [The effect of acariche upon *Plasmodium vivax*.] [In Russian.] Med. Parasitol. & Parasit. Dis. Moscow 5 1936 pp. 614–616 9 figs.

859.—Semans, F. M. Protozoan parasites of the Orthoptera, with special reference to those of Ohio. I. Introduction and methods. Ohio J. Sci. 36 pp. 315–320.

860.—Sergent, Ed. Immunité ou prémunition dans les maladies à hémocytozoaires (paludismes, piroplasmoses). Arch. Inst. Pasteur Alger 14 1936 pp. 413–417.

861.—Sergent, Ed., Donatien, A., Parrot, L. and Lestoquard, F. Cycle évolutif de *Theileria dispar* du boeuf chez la tique *Hyalomma mauritanicum*. Arch. Inst. Pasteur. Alger. 14 1936 pp. 259–294 1 pl. 10 text-figs.

862.—Sergent, Ed., Donatien, A. Parrot, L. and Lestoquard, F. Étude

morphologique du cycle évolutif de *Theileria dispar* chez le boeuf et chez la tique. Ann. Inst. Pasteur Paris 57 1936 pp. 30–55 1 pl. 6 figs.

863.—Sergent, Ed., Donatien, A., Parrot, L. and Lestoquard, F. Cycle évolutif du sporozoaire *Theileria dispar*, agent de la theilériose bovine des pays méditerranéens chez le boeuf et chez une tique. C.R. Acad. Sci. Paris 202 1936 pp. 809–811.

Setna, S. B. *vide* Bhatia, B. L.

864.—Seyd, E. L. Studies on the regulation of *Spirostomum ambiguum* Ehrbg. Arch. Protistenk. Jena 86 1936 pp. 454–470 36 figs.

865.—Shattuck, G. C. The distribution of American leishmaniasis in relation to that of *Phlebotomus*. Amer. J. trop. Med. Baltimore 16 1936 pp. 187–205.

866.—Shelanski, H. A. Studies on *T. vaginalis* in vitro. J. Lab. Clin. Med. St. Louis 21 1936.

Shelanski, H. A. *vide* Stabler, R. M.

Shepelev, K. M. *vide* Ozersky, N. N.

867.—Shinn, L. E. and Hadley, P. B. Note on the spontaneous contamination of a bacterial culture by an organism resembling *Hartmannella castellanii*. J. Inf. Dis. Chicago 53 1936 pp. 23–27 1 pl.

868.—Shortt, H. E. Life-history and morphology of *Babesia canis* in the dog tick *Rhipicephalus sanguineus*. Parts I. and II. Ind. J. Med. Res. 23 1936 pp. 885–920 9 pls. 2 figs.

Shute, P. G. *vide* James, S. P.

Sicault, —. *vide* Jolly, A.

Silberstein, J. K. *vide* Dawson, J. A.

869.—Silvestri, A. Sulla validità de genere *Fusulina* Fischer. Bol. Soc. geol. ital. 54 1936 pp. 203–219 1 pl. 3 figs.

870.—Silvestri, A. Su di alcune foraminiferi terziarii della Sirtica. [Abstract.] Geol. Zbl. Leipzig 8 1936, p. 258, No. 940.

871.—Simitch, T. Les parasites intestinaux en Serbie du Sud. Bull. Mens. Off. Internat. Hyg. Publ. Paris 28 1936 pp. 861–886.

- 872.—Simmons, J. S. *Anopheles* (*Anopheles*) *punctimacula* naturally infected with malaria plasmodia. Amer. J. trop. Med. Baltimore 16 1936 pp. 105-108.
- 873.—Simmons, J. S. *Anopheles* experimentally infected with malaria plasmodia. Science N.Y. N.S. 83 1936 pp. 268-269.
- 874.—Simmons, J. S. *Anopheles* (*Anopheles*) *neomaculipalpus*, Curry, experimentally infected with malaria plasmodia. Science N.Y. N.S. 84 1936 pp. 202-203.
- 875.—Singer, E. Die Wirkung der Chemotherapeutica auf die Trypanosomenzelle. Z. Hyg. Berlin 117 1936 pp. 752-756.
- 876.—Sitter, L. M. de. Nota betreffende de foraminiferen fauna van het neogeen van Koetai. Jaarb. Mijnw. Ned.-Oost. Ind. 59 1932 pp. 122-125.
- Skinner, J. W. *vide* Dunbar, C. O.
- 877.—Slatineanu A., Balmus, G. and Balmus, P. Sur l'action pathogène du *Trypanosoma lewisi*. Bull. Soc. Path. Exot. Paris 29 1936 pp. 888-894.
- Smaragdova, N. P. *vide* Gause, G. F.
- 878.—Smith, G. F. M. A gonad parasite of the starfish. Science N.Y. N.S. 84 1936 p. 157.
- 879.—Smyly, H. J. and Chang, K. Two cases of coccidiosis in man. Chin. Med. J. 50 1936 pp. 1195-1202 1 fig.
- Smythe, C. V. *vide* Reiner, L.
- Sofieff, M. S. *vide* Khodukin, N. J.
- 880.—Sokoloff, D. El organoide de percepciones luminosas de los *Euglenoidina*. An. Inst. Biol. Mexico 6 1935 pp. 189-192 4 figs.
- 881.—Sokoloff, D. Analisis hidrobiológico del manantial de la "Mora" de Actopan, Hgo. An. Inst. Biol. Mexico 7 1936 pp. 287-303 21 figs. [Rhizopoda, Flagellata, Ciliata.]
- Sokoloff, I. I. *vide* Yakimoff, W. L.
- Solomonica, P. *vide* Picard, L.
- Sommerville, E. T. W. *de vide* Dios, R. L.
- 882.—Sonneborn, T. M. The effect of variations in length of the interendemic interval on the lengths of subsequent intervals in *Paramecium aurelia*. [Abstract.] Anat. Rec. Philadelphia 67 Suppl. 1 1936 p. 74.
- 883.—Sonneborn, T. M. The relation between time since the last endomixis and the tendency for endomixis to recur in *Paramecium aurelia*. [Abstract.] Anat. Rec. Philadelphia 67 Suppl. 1 1936 p. 75.
- 884.—Sonneborn, T. M. Factors determining conjugation in *Paramecium aurelia*. I. The cyclical factor, the recency of nuclear reorganization. Genetics Menasha 21 1936 pp. 503-514.
- 885.—Sonneborn, T. M. and Cohen, B. M. Factors determining conjugation in *Paramecium aurelia*. II. Genetic diversities between stocks or races. Genetics Menasha 21 1936 pp. 515-518.
- 886.—Sotiriadès, D. Passive immunity in experimental and natural immunity. J. trop. Med. London 39 1936 pp. 257-260.
- Sotiriadès, D. *vide* Lorando, N.
- 887.—Souché, G. Sur le noyau du *Diplocystis schneideri* Kunstl. C.R. Acad. Sci. Paris 202 1936 pp. 1099-1100.
- 888.—Soulié, P. Sur une nouvelle trypanosomose équine en Syrie. Considérations épidémiologiques. Essai d'identification. Bull. Soc. Path. Exot. Paris 29 1936 pp. 777-785 2 figs.
- Soussko, S. F. *vide* Gousseff, W. F.
- Spartansky, O. A. *vide* Yakimoff, W. L.
- 889.—Stabler, R. M. and Chen, T.-T. Observations on an *Endamoeba* parasitizing opalinid ciliates. Biol. Bull. Woods Hole 70 1936 pp. 56-71 4 pls. 1 text-fig.
- 890.—Stabler, R. M. and Penny-packer, M. I. A race of *Trichomonas augusta* in the liver abscesses in a frog. J. Parasit. Urbana 22 1936 p. 541.
- 891.—Stabler, R. M. and Shelanski, H. A. *Trichomonas columbae* as a cause of death in the hawk. J. Parasit. Urbana 22 1936 pp. 539-540.
- Stabler, R. M. *vide* Chen, T.-T.
- Stefan, F. *vide* Schiller, J.
- 892.—Stewart, J. L. Porcine trypanosomiasis in the Gold Coast. Trans. Soc. trop. Med. Hyg. Lond. 30 1936 pp. 313-314.

893.—Stiles, C. W. Opinions rendered by the International Commission on Zoological Nomenclature. [Opinion 127.] Science N.Y. **84** 1936 pp. 459-460.

894.—Stone, W. S. A method of staining protozoa in bulk. J. Lab. Clin. Med. St. Louis **21** 1936 pp. 839-842 1 fig.

895.—Stratman-Thomas, W. K. and Baker, F. C. *Anopheles barberi* Coquillett as a vector of *Plasmodium vivax* Grassi and Feletti. Amer. J. Hyg. **24** 1936 pp. 182-183.

Stratman-Thomas, W. K. *vide* Boyd, M. F.

896.—Strickland, C. and Roy, D. N. Abstract of a paper on experimental malarial infection of *A. subpictus* Grassi (*A. rossii* "type" Giles). Ind. Med. Gaz. **71** 1936 p. 327.

897.—Strumia, M. M. A rapid universal blood stain. May-Gruenwald-Giemsa in one solution. J. Lab. Clin. Med. St. Louis **21** 1936 pp. 930-934. [Haemocytozoa.]

898.—Stshedrin, S. Zur Kenntnis der Foraminiferenfauna der arktischen Meere der USSR. [German summary.] Trans. arctic Inst. Leningrad **33** 1936 pp. 51-64.

899.—Stschedrina, Z. *Alveolophragmium orbiculatum* nov. gen. nov. sp. Eine sandschalige Foraminifer aus dem Japanischen, Ochotskischen und Karischen Meer. Zool. Anz. Leipzig **114** 1936 pp. 312-319 3 figs.

900.—Stump, A. B. Observations on the feeding of *Diffugia*, *Pontigulasia* and *Lesquereusia*. Biol. Bull. Woods Hole **69** 1935 pp. 136-145 1 pl.

901.—Stump, A. B. The influence of test materials on reproduction in *Pontigulasia vas* (Leidy) Schouteden. Biol. Bull. Woods Hole **70** 1936 pp. 142-147 1 fig.

902.—Suchlandt, O. and Schmassmann, W. Limnologische Beobachtungen an acht Hochgebirgsseen der Landschaft Davos. Rev. Hydrol. Aarau **7** 1935 pp. 1-201 25 figs. [Rhizopods, Flagellates.]

Sukhova, L. *vide* Moldavskaya-Kritchevskaya, V.

903.—Šulc, J. Études sur quelques genres et espèces de Pénéroplidés. Ann. Protistologie Paris **5** 1936 pp. 157-170 2 pls.

Suarez Peregrin, E. *vide* Fernandez Martinez, F.

904.—Summers, F. M. and Kidder, G. W. Taxonomic and cytological studies on the ciliates associated with the amphipod family Orchestiidae from the Woods Hole district. II. The coelozoic astomatous parasites. Arch. Protistenk. Jena **86** 1936 pp. 379-403 2 pls.

905.—Swellengrebel, N. H., Buck, A. de, Schoute, E. and Kraan, M. H. Investigations on the transmission of malaria in some villages north of Amsterdam. Quart. Bull. Health Organiz. L. of N. Geneva **5** 1936 pp. 295-352 3 figs.

906.—Syngajewskaja, E. The individual growth of protozoa: *Blepharisma lateritia* and *Actinophrys* sp. [English summary.] Trav. Inst. Zool. Biol. Kiev. **8** 1935 pp. 151-157.

907.—Szabados, M. *Euglena* Untersuchungen. [German summary.] Acta Biol. Szeged. **4** 1936 pp. 49-95 2 pls.

908.—Szalai, T. Der Einfluss der Gebirgsbildung auf die Evolution des Lebens. Palaeont. Z. Berlin **13** 1936 pp. 113-122 1 fig. [Foraminifera.]

909.—Taliaferro, W. H. and Cannon, P. R. The cellular reactions during primary infections and superinfections of *Plasmodium brasilianum* in Panamanian monkeys. J. Inf. Dis. Chicago **59** 1936 pp. 72-125 13 pls.

910.—Taliaferro, W. H. and Pavlinova, Y. The course of infection of *Trypanosoma duttoni* in normal and in splenectomized and blocked mice. J. Parasit. Urbana **22** 1936 pp. 29-41 5 figs.

911.—Tang, P. S. and Gaw, H. L. Delayed death and change in resistance to the action of ultra violet radiation in *Paramecium bursaria*. Proc. Chinese Physiol. Soc. Tsingtao **9** 1936 pp. 27-28.

912.—Tappenbeck, D. Ueber tierische Foraminiferengesteine von Sipora (Mentawai-Inseln). Proc. K. Akad. Wet. Amsterdam **39** 1936 pp. 661-670 1 pl.

Tatum, A. L. *vide* Kuhs, M. L.

913.—Tauson, A. O. Lake Dikoye and its biology (Ciliates and Flagellates). [English summary.] *Scient. Mem. M. Gorky. St. Univ. Perm.* 1 1935 pp. 3-55 3 pls.

Taylor, A. B. *vide* King, R. L.

914.—Tchakhotine, S. Les protozoaires, objets d'expériences en cyto-logie expérimentale. (Recherches faites avec la micropuncture ultraviolette.) *Ann. Protistologie Paris* 5 1936 pp. 1-55 3 pls. 48 figs.

915.—Tchakhotine, S. La résistance de la paramécie et d'autres infusoires aux manipulations multiples dans la micro-expérimentation. *Bull. Soc. franç. micr. Paris* 5 1936 pp. 61-64 2 figs.

916.—Tchakhotine, S. Effets d'irradiation localisée du noyau des Infusoires par micropuncture ultraviolette. *C.R. Acad. Sci. Paris* 292 1936 pp. 778-781.

917.—Tchakhotine, S. Irradiation localisée du myonème du pédoncule des Vorticelles par micropuncture ultraviolette. *C.R. Acad. Sci. Paris* 292 1936 pp. 1114-1116.

918.—Tchakhotine, S. Recherches physiologiques sur les protozoaires, faites au moyen de la micropuncture ultraviolette. *C.R. Acad. Sci. Paris* 290 1935 pp. 2217-2219.

919.—Tchakhotine, S. La fonction du stigma chez le flagellé *Euglena*, étudiée au moyen de la micropuncture ultraviolette. *C.R. Soc. Biol. Paris* 121 1936 pp. 1162-1165.

920.—Tchapurskaya-Bajenova, N. A., Leitman, M. Z. and Fialkovskaya, L. P. [The epidemiology of balantidiasis, morphological and biological comparison of *Balantidium coli* and *Balantidium suis*.] [In Russian.] *Uzbekistan Parasitol. Symposium Tashkent* 1 1936 pp. 227-242.

921.—Teng, C. T. Negative effect on blood of normal rabbits of inoculation of killed *Leishmania donovani*. *Proc. Soc. exp. Biol.* 34 1936 pp. 661-665.

922.—Teng, C. T. and Forkner, C. E. The presence of infective *Leishmania donovani* in the urine and prostatic fluid of patients with Kala-Azar. *Chinese Med. J. (Suppl. No. 1)* 1936 pp. 394-401.

923.—Ter-Matevossian, C., Sarkisian, M. and Zaturian, A. [Pathogenicity to kittens of various strains of *Entamoeba histolytica* occurring in Armenia.] [In Russian.] *Med. Parasitol. & Parasit. Dis. Moscow* 5 1936 pp. 108-118.

Tessier, G. *vide* Monod, J.

924.—Tetry, A. Contribution à la connaissance de la faune de l'étang de Lindre. *Bull. Soc. Hist. nat. Metz.* (3) 34 1935 pp. 249-265. [Rhizopoda, Ciliata.]

925.—Thalman, H. E. Bibliography and index to new genera, species and varieties of Foraminifera for the year 1934. *J. Paleont. Menasha, Wis.* 10 4 1936 pp. 294-322.

926.—Thalman, H. E. Synecological studies in Foraminifera. [Abstract.] *Proc. Geol. Soc. Amer.* (1935) 1936, p. 364.

927.—Thalman, H. E. Mitteilungen über Foraminiferen II. *Verh. schweiz. naturf. Ges.* 116, 1935, pp. 340-391.

928.—Theiler, H. and Farber, S. M. *Trichomonas muris*, parasitic in the oxyurid nematodes, *Aspicularis tetra- ptera* and *Syphacia obvelata*, from white mice. *Parasitology, Cambridge* 28 1936 pp. 149-160.

Theodorovitch, G. J. *vide* Krestovnikoff, V. N.

929.—Thompson, M. L. The genotype of *Fusulina* S.S. *Amer. J. Sci. New Haven* (5) 32 1936 pp. 287-291.

930.—Thompson, M. L. Fusulinids from the Black Hills and adjacent areas in Wyoming. *J. Paleont. Menasha, Wis.* 10 1936 pp. 95-113 4 pls.

931.—Thompson, M. L. The fusulinid genus *Verbeekina*. *J. Paleont. Menasha, Wis.* 10 1936 pp. 193-201.

932.—Thompson, M. L. Lower per- mian fusulinids from Sumatra. *J. Paleont. Menasha, Wis.* 10 1936 pp. 587-592 1 pl.

933.—Thompson, M. L. Pennsylvanian fusulinids from Ohio. *J. Paleont. Menasha, Wis.* 10 1936 pp. 673-683 2 pls.

934.—Thompson, T. G. and Phifer, L. D. The plankton and the properties of the surface waters of the Puget Sound region. *Univ. Washington Pub. Oceanogr. Seattle* 1 1936 pp. 111-134 5 figs. [Dinoflagellates and Tintinnids.]

935.—Thomson, J. G. (1) Large macrophages simulating *Entamoeba histolytica* in the lymph follicles of the human appendix. (2) Phagocytosis of the schizonts of *Plasmodium falciparum* by polymorphonuclear cells. Trans. Soc. trop. Med. Hyg. Lond. **29** 1936 pp. 360-361.

936.—Thomson, J. G. The occurrence of *Glugea anomala* (Moniez, 1887, 1893) in the stickleback *Gasterosteus aculeatus* in ponds and streams in England. Trans. Soc. trop. Med. Hyg. Lond. **30** 1936 pp. 7-8.

937.—Thorp, E. M. Calcareous shallow-water marine deposits of Florida and the Bahamas. Pap. Tortugas Lab. Carn. Instn. **29** 1936 pp. 37-119 3 pls. 10 figs. [Foraminifera.]

Tiflow, W. *vide* Sassuchin, D.

Timofeeff, P. S. *vide* Rastegaiëff, E. F.

Todorsky, F. A. *vide* Yakimoff, W. L.

938.—Toporkov, T. M. Sur la présence des hématozoaires du paludisme dans les organes pendant la période latente. Med. Parasitol. & Parasit. Dis. Moscow **5** 1936 pp. 405-411 2 figs.

939.—Travis, B. V. Studies on some trichomonad flagellates from birds with descriptions of five new species and two new varieties. Iowa St. Coll. J. Sci. **10** 1936 pp. 115-128 2 pls.

940.—Trofimowitsch, W. P. Die Wirkung von Zyankali und Methylenblau auf die Lebenstätigkeit des Infusoriens *Paramaecium caudatum* [German Summary.] Biol. J. Moscow **5** 3 1936 pp. 403-414.

941.—Trowell, H. C. Loose stools with particular reference to amoebiasis. Part III. E. Afric. Med. J. **12** 1936 pp. 299-310.

942.—Tsuchiya, H. The effects of dyes on *Endameba histolytica* in vitro. J. Lab. Clin. Med. St. Louis **21** 1936 pp. 1028-1035.

943.—Tsuchiya, H. Experimental amebiasis in rats with cysts of human carriers. J. Parasit. Urbana **22** 1936 p. 540.

944.—Tsuchiya, H. and Rector, L. E. Studies on intestinal parasites among

wild rats caught in Saint Louis. Amer. J. trop. Med. Baltimore **16** 1936 pp. 705-714.

945.—Tsynger, J. A., Fisikov, V. V. and Tsynger, Y. A. On the average size of Infusoria (*Stentor*, *Paramaecium*). J. Biol. exp. Moscow **7** 1931 pp. 325-339.

946.—Tsynger, Y. A. and Narbutt, K. I. On the variability of Infusoria (*Stylonychia pustulata* Ehrbg.). J. Biol. Exper. Moscow **7** 1931 pp. 517-24.

Tsynger, Y. A. *vide* Tsynger, J. A.

Tveritina, O. A. *vide* Fialkovsky, A. P.

947.—Tyzzer, E. E. A study of immunity produced by infection with attenuated culture-strains of *Histomonas meleagridis*. J. Comp. Path. London **49** 1936 pp. 285-303.

948.—Uéno, M. Zooplankton of Lake Taraika and its neighbouring waters, Southern Sakhalin. Trans. Sapporo nat. Hist. Soc. **14** 1936 pp. 174-177 1 pl. [Testacea.]

949.—Umbgrove, J. H. F. *Heterospira*, a new foraminiferal genus from the tertiary of Borneo. Leidsche Geol. Meded. Leiden **8** 1936 pp. 155-157 1 pl.

950.—Utermöhl, H. Über die bei den Palmellastadien von *Euglena viridis* Ehrbg. vorkommende "Hautung" und deren Bedeutung. Zool. Anz. Leipzig **114** 1936 pp. 109-111.

Vales C. *vide* Froilano de Mello, I.

951.—Valette, G. Étude de la fixation de la quinine sur les paramécies au moyen de l'examen microscopique de la fluorescence. C.R. Acad. Sci. Paris **201** 1935 pp. 681-683.

952.—Valkanov, A. Notizen über die Brackwässer Bulgariens I. Flagellata, Infusoria. [German Summary.] Ann. Univ. Sofia **31** 3 1935 pp. 249-296 8 pls. 11 figs.

953.—Valkanov, A. Versuch einer Revision der Rhizopodengattung *Cochliopodium* Hertw. and Less. SitzBer. Ges. naturf. Fr. Berl. **1936** pp. 92-101 6 figs.

Valles, C., *vide* Froilano de Mello, I.

- 954.—Varga, L. Études sur la faune des protozoaires de quelques sols du Sahara et des hauts plateaux algériens. Ann. Inst. Pasteur Paris **56** 1936 pp. 101-123.
- 955.—Vaughan, T. W. *Helicolepina nortoni*, a new species of foraminifera from a deep well in St. Landry parish, Louisiana. J. Paleont. Menasha Wis. **10** 1936 pp. 248-252 2 pls.
- 956.—Vaughan, T. W. New species of orbitoidal foraminifera of the genus *Discocyclina* from the lower eocene of Alabama. J. Paleont. Menasha Wis. **10** 1936 pp. 249-259 3 pls.
- 957.—Vaughan, T. W. Stolon-systems of communication between the equatorial chambers of orbitoidal foraminifera. Science N.Y. N.S. **83** 1936 p. 485.
- 958.—Vaughan, T. W. and Cole, W. S. New tertiary foraminifera of the genera *Operculina* and *Operculinoides* from North America and the West Indies. Proc. U.S. Nat. Mus. **83** 1936 pp. 487-496 4 pls.
- Villeneuve, F., vide Chatton, E.
- 959.—Vincent, M. Un nouveau type de coccidie des péripates. C.R. Soc. Biol. Paris **122** 1936 pp. 260-262 1 fig.
- 960.—Vincienne, H. Le crétacé supérieur de Cuiseaux. C.R. Séances Soc. géol. Fr. **7** 1936 pp. 122-124. [Foraminifera.]
- 961.—Vlerk, I. M. van der. Foraminiferenbepalingen uit gesteentemonsters van Zuid Rembang. Jaarb. Mijnw. Ned.-Oost.-Ind. **59** 1932 pp. 102-109.
- Vlerk, I. M. van der vide Geyn, W. A. E. Van de.
- 962.—Volz, P. Die mikroskopische Lebewelt natürlicher Faulschlammgewässer. Mikrokosmos. Stuttgart **29** 1936 pp. 176-178 5 figs. [Ciliates.]
- Vroman, J. vide Boomgaart, L.
- 963.—Wailles, G. H. Plankton of the Bermuda Oceanographic Expeditions. II. Notes on Protozoa. Zoologica, New York **21** 1936 pp. 81-84 2 pls.
- 964.—Wang, C. C. and Nie, D. Report on the rare and new species of freshwater infusoria, part II. Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.
- 965.—Wang, C. C. and Nie, D. *Volvox africanus* west of Nanking. Abstr. Pap. Sci. Conf. Nanning 1935 pp. 44-45.
- 966.—Wang, C. C. and Nie, D. *Volvox africanus* west of Nanking. Chinese J. Zool. **1** 1935 pp. 87-100 9 figs.
- 967.—Warwick, T. The parasites of the muskrat (*Ondatra zibethica* L.) in the British Isles. Parasitology Cam. bridge **28** 1936 pp. 395-402.
- Wenig, K., vide Jirovec, O.
- 968.—Wenrich, D. H. Studies on *Dientamoeba fragilis* (Protozoa). I. Observations with special reference to nuclear structure. J. Parasit. Urbana **22** 1936 pp. 76-83 1 pl.
- 969.—Wenrich, D. H. Variations in *Dientamoeba fragilis* and a suggestion as to its pathogenicity. J. Parasit. Urbana **22** 1936 p. 538.
- 970.—Wenyon, C. M. Blood films of ox and horse contaminated with spores of sarcocystis and globidium. Trans. Soc. Trop. Med. Hyg. Lond. **30** 1936 p. 3.
- 971.—Westphal, A. Zur Morphologie, Biologie und Infektionsfähigkeit der viergeisseligen Trichomonasarten des Menschen. Zbl. Bakt. Jena I Abt. (Orig.) **137** 1936 pp. 363-376 9 figs.
- 972.—Westphal, A. and Gönner, R. Über die Häufigkeit von *Entamoeba histolytica*-Infektionen in Ländern mit tropischem und gemäßigtem Klima. Arch. Schiffs. Tropenhyg. Leipzig **40** 1936 pp. 425-439.
- Westphal, A. vide Gönner, R.
- 973.—Wetzel, W. Zur Stratigraphie, Sedimentpetrographie und Paläontologie des Alttertiärs von Fehmarn und der Umgegend Kiels. Cbl. Min. Geol. Paläont. Stuttgart B **12** 1936 pp. 513-529 4 figs. [Foraminifera, Radiolaria, Peridinia.]
- 974.—Wetzel, O. Die mikropalaeontologie des Heiligenhafener Kieseltones (Ober-Eozän). Jber. Niedersächs. geol. Ver. Hannover **27** (1936) 1935 pp. 41-81 3 pls. 4 figs. [Radiolaria, Silicoflagellata.]

975.—Whedon, W. F. and Kofoed, C. A. Dinoflagellata of the San Francisco region I. On the skeletal morphology of two new species, *Gonyaulax catenella* and *G. acatenella*. Univ. Calif. Pub. Zool. **41** 1936 pp. 25–34 16 figs.

976.—Wheeler, H. E. Stratigraphy and fauna of the McCloud limestone. [Abstract.] Proc. Geol. Soc. Amer. (1935) 1936 p. 409. [Foraminifera.]

Wheeler, H. E. *vide* Frizzell, D. L.

Whitaker, B. G. *vide* Kofoed, C. A.

White, E. M. *vide* Cushman, J. A.

White, H. F. *vide* Andrews, J.

977.—White, M. P. Some fusulinid problems. J. Paleont. Menasha, Wis. **10** 1936 pp. 123–133 3 pls.

978.—Wichterman, R. Division and conjugation in *Nyctotherus cordiformis* (Ehr.) Stein (Protozoa, Ciliata) with special reference to the nuclear phenomena. J. Parasit. Urbana **22** 1936 p. 540.

Wichterman, R. *vide* Hunninen, A. V.

979.—Wiesner, H. Sur la découverte de diatomées et autres microfossiles peu connus dans le crétacé supérieur de la Bohême. Ann. Protistologie, Paris **5** 1936 pp. 151–155. [Dinoflagellates.]

980.—Wilkansky, B. Life in the Dead Sea. Nature London **133** 1936 p. 467. [Phytoplankton.]

981.—Williams, E. G. Notes on the plankton of some lochs in the island of Mull. North Western Nat. Arbroath **11** 1936 pp. 23–29. [Flagellates and Ciliates.]

982.—Wills, L. The occurrence of bodies of doubtful nature in the red blood corpuscles of splenectomized monkeys. Trans. Soc. Trop. Med. Hyg. London **29** 1936 p. 362.

Wilson, T. Y. *vide* Ruedemann, R.

983.—Winogradowa, T. *Sphaerita*, ein Parasit der Wiederkäuerinfusorien. Z. Parasitenk. Berlin **8** 1936 pp. 356–358 6 figs.

984.—Winogradowa, T. Zur Frage der Conjugation der Infusorien aus dem Wiederkäuermagen. Z. Parasitenk. Berlin **8** 1936 p. 359–364.

Witt, A. A. *vide* Gause, G. F.

985.—Woino-Jassenetski, M. Aenderungen der Malariaparasiten im Blut

der Leiche. [Russian, with German Summary.] Med. Parasitol. & Parasit. Dis. Moscow **5** 1936 pp. 94–98.

986.—Wolfson, F. Synchronicity, periodicity, and the length of the asexual cycle of *Plasmodium rouxi* in the canary. Amer. J. Hyg. **23** 1936 pp. 340–348.

987.—Wolfson, F. *Plasmodium oti* n. sp., a plasmodium from the eastern screech owl (*Otus asio naevius*), infective to canaries. Amer. J. Hyg. **24** 1936 pp. 94–101 1 pl. 2 figs.

988.—Wolfson, F. Periodic phenomena of the asexual cycle of *Plasmodium circumflexum* in canaries. Amer. J. Hyg. **24** 1936 pp. 207–216.

989.—Wolfson, F. A twenty-four hour asexual cycle in a new strain of *Plasmodium praecox* (*relictum*). J. Parasit. Urbana **22** 1936 p. 539.

990.—Wolfson, F. Bird malaria transmitted by the intravenous injection of sporozoites. J. Parasit. Urbana **22** 1936 pp. 291–292.

991.—Wood, F. D. *Trypanosoma neotomae*, sp. nov., in the dusky-footed wood rat and the wood rat flea. Univ. Calif. Pub. Zool. **41** 1936 pp. 133–144 1 pl.

Wood, F. D. *vide* Wood, S. F.

992.—Wood, S. F. and Wood, F. D. Occurrence of haematozoa in some California cold-blooded animals. J. Parasit. Urbana **22** 1936 pp. 518–520 1 fig.

993.—Woodhead, A. E. and Kruidenier, F. The probable method of infection of the four-toed salamander with the protozoan, *Haptophrya michiganensis*. J. Parasit. Urbana **22** 1936 pp. 107–108.

994.—Woodring, W. P., Bramlette, M. N. and Kleinpell, R. M. Miocene stratigraphy and paleontology of Palos Verdes Hills, California. Bull. Amer. Ass. Petrol. Geol. Chicago Ill. **20** 1936 pp. 125–149. [Foraminifera, Radiolaria.]

995.—Woolcock, V. *Chloromyxum pristiophori*, a new species of Myxosporidia parasitic in the gall-bladder of *Pristiophorus cirratus* (saw-shark). Parasitology Cambridge **28** 1936 pp. 72–78 2 pls.

Wu, C. C. *vide* Jung Sun, C

- 996.—Yakimoff, V. L. [= W. L.] Coccidios dos animais domesticos do Brasil. [Portuguese with English summary.] Arch. Inst. Biol. São Paulo 7 1936 pp. 167–187.
- 997.—Yakimoff, W. L. A propos d'*Eimeria thianethi* Gwélessiany, 1935. Ann. Parasitol. Paris 14 1936 pp. 295–297.
- 998.—Yakimoff, W. L. Le rapport du *Piroplasma bigeminum* et *Francaïella colchica* au Caucase. Ann. Soc. Belge Méd. Trop. 16 1936 pp. 159–160.
- 999.—Yakimoff, W. L. Zur Frage der Nierenkokzidiose der Gänse in U.S.S.R. Tierärztl. Rundschau No. 12 1936 pp. 227–228. [*Non vidi.*]
- 1000.—Yakimoff, W. L. Zur Frage der Sarkozysten der Rentiere. Z. Infektionskr. Haust. Berlin 50 1936 pp. 217–223 4 figs.
- 1001.—Yakimoff, W. L. *Eimeria mirabilis* n. sp., Kokzidie der Aeskulap-schlange (*Ophisaurus apodus*). Zbl. Bakt. Jena I Abt. (Orig.) 137 1936 pp. 95–96 1 fig.
- 1002.—Yakimoff, W. L., Baskakoff, W. P., Gousseff, W. F., Matschulsky, S. N., Mizkewitsch, W. J., Rastegaiëff, E. F. and Kerschner, —. Zur Schweinekokzidiose in Russland (USSR). Berlin. Tierärztl. Wschr. 52 1936 pp. 358–362.
- 1003.—Yakimoff, V. L. [= W. L.] and Gousseff, V. F. [= Gousseff, W. F.] *Isopora rocha-limai* n. sp., parasita da pêga (*Pica pica* L.). [Portuguese with English summary.] Arch. Inst. Biol. São Paulo 7 1936 pp. 189–190 1 pl.
- 1004.—Yakimoff, W. L. and Gousseff, W. F. Nouvelles coccidies chez les gerboises (*Alactaga jaculus*). Ann. Parasit. Paris 14 1936 pp. 447–448 2 figs.
- 1005.—Yakimoff, W. L. and Gousseff, W. F. A propos des coccidies des oiseaux sauvages. Ann. Parasit. Paris 14 1936 pp. 449–456 1 fig.
- 1006.—Yakimoff, W. L. and Gousseff, W. F. *Eimeria syngnathi* n. sp., a new coccidium from the great pipe fish (*Syngnathus nigrolineatus*). J. Roy. Micr. Soc. London (Ser. III) 56 1936 p. 376 1 fig.
- 1007.—Yakimoff, W. L. and Gousseff, W. F. Zur Frage der Modifikation der Virulenz der *Theileria annulata*. Zschr. Infektionskr. Haust. Berlin 50 1936 pp. 65–70.
- 1008.—Yakimoff, W. L. and Gousseff, W. F. Die Coccidien der Schwarzen Ratten. Z. Parasitenkunde Berlin 8 4 1936 pp. 504–508 8 figs.
- 1009.—Yakimoff, W. L. and Gousseff, W. F. Kokzidiose des Iltis. Zbl. Bakt. Jena I Abt. (Orig.) 136 1936 pp. 125–126 1 fig.
- 1010.—Yakimoff, W. L. and Gousseff, W. F. Eine neue Kokzidie des Frosches. Zbl. Bakt. Jena I Abt. (Orig.) 138 1936 pp. 43–44 1 fig.
- 1011.—Yakimoff, W. L. and Gousseff, W. F. Neue Kokzidien des Igels. Zbl. Bakt. Jena I Abt. (Orig.) 138 1936 pp. 45–47 7 figs.
- 1012.—Yakimoff, W. L., Iwanoff-Gobzem, P. S. and Matschoulsky, S. N. Zur Frage der Infektion der Tiere mit heterogenen Kokzidien. IV. und V. Mitteilung. Zbl. Bakt. Jena I Abt. (Orig.) 137 1936 pp. 299–302.
- 1013.—Yakimoff, W. L. and Matikaschewili, I. L. Coccidiosis of the grey and stone partridge. Parasitology Cambridge 28 1936 pp. 146–147.
- 1014.—Yakimoff, W. L. and Matschoulsky, S. N. Die Coccidiose der Hunde in Leningrad. Arch. Tierheilk. Berlin 70 1936 pp. 169–173 1 fig.
- 1015.—Yakimoff, W. L. and Matschoulsky, S. N. Coccidiosis in the Kangaroo. J. Parasit. Urbana 22 1936 pp. 514–515 1 fig.
- 1016.—Yakimoff, W. L. and Matschoul[s]ky, S. N. Eine Kokzidie der Dohle. Münch. tierärztl. Wschr. 87 1936 p. 603 1 fig.
- 1017.—Yakimoff, W. L., Matschoulsky, S. N. and Spartansky, O. A. Neue Kokzidie der Hasen. Wien. Tierärztl. Monatschr. 23 1936 pp. 490–491 1 fig.
- 1018.—Yakimoff, W. L. and Matschulsky, S. N. On the coccidia of birds of prey. J. Roy. Micr. Soc. London (Ser. III) 56 1936 pp. 372–375 1 pl.
- 1019.—Yakimoff, W. L. and Mizkewitsch, W. J. Sur la question de la répartition géographique des piroplasmes des bovidés en Russie. Ann. Soc. Belge Méd. Trop. 16 1936 pp. 161–162.

1020.—Yakimoff, W. L., Sokoloff, I. I. and Matschoulsky, S. N. Ueber die Kokzidien des Rentieres. Berlin. Tierärztl. Wschr. 52 1936 pp. 535-538 6 figs.

1021.—Yakimoff, W. L. and Todorsky, F. A. Zur Frage über die Piroplasmose und Nuttalliose der Pferde. München. Tierärztl. Wschr. No. 41 1936 pp. 483-484. [*Non vidi.*]

1022.—Yakimoff, W. K. and Todorsky, F. A. Babesiellöse der Rinder im Gebiet Gorki (früher Nischni-Novgorod). Tierärztl. Rundschau No. 50 1936 p. 937. [*Non vidi.*]

1023.—Yancey, P. H. The effect of high centrifugal force in the movement of *Paramecium*. J. Alabama Acad. Sci. 4 1933 p. 23.

1024.—Yancey, P. H. Some studies on protozoa with ultraviolet light. J. Alabama Acad. Sci. 7 1935 p. 24.

1025.—Yancey, P. H. The effect of experimental cell disorganization on the heredity of *Paramecium*. J. Alabama Acad. Sci. 5 1934 p. 26.

Yao, Y. T. *vide* Jung Sun, C.

1026.—Yorke, W., Murgatroyd, F., Glyn-Hughes, F., Lester, H. M. O. and Ross, A. O. F. A new arsenical for the treatment of syphilis and trypanosomiasis. Brit. Med. J. London 1936 (i) pp. 1042-1048.

Zaturian, A. *vide* Ter-Matevossian, C.

1027.—Zaturjan, A. Über nicht pathogene *histolytica*-ähnliche Amöben. [Russian, with German summary.] Rev. Microbiol., Epidém., Parasitol. Saratov 15 1936 pp. 60-66 12 figs.

Zee, G. F. *vide* Chu, T. C.

1028.—Zelmanova, F. Morphologie comparée des modifications des hématies parasitées par les plasmodiums du paludisme et les facteurs déterminant la possibilité de décélérer ces modifications dans les préparations colorées. [Russian, with French summary.] Med. Parasitol. & Parasit. Dis. Moscow 5 1936 pp. 401-404 2 figs.

1029.—Zertchaninov, L. [Intestinal protozoa in northern Urals.] [In Russian.] Med. Parasitol. & Parasit. Dis. Moscow 5 1936 pp. 119-122.

1030.—Zmeev, G. Hémoparasites des vertébrés sauvages du Tadjikistan.

[Russian, with French summary.] Trav. fil. Acad. Sci. U.R.S.S. Tadjikistan (Moscow-Leningrad) 6 1936 pp. 249-266 6 figs.

1031.—Zschucke, J. Vergleichende Untersuchungen über experimentelle Trypanosomiasis nach Impfung ins Blut oder in den Liquor cerebrospinalis. Z. Hyg. Berlin 118 1936 pp. 615-622.

1032.—Zolog, M. and Comsia, O. Nouvelles recherches sur l'action des substances arsénobenzoniques dans les trypanosomiasis expérimentales. C.R. Soc. Biol. Paris 122 1936 pp. 1132-1134.

II.—SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Treatises, Text-books.—Textbook, BRUMPT, 117; Phylum Protozoa (Natural History of), ROBSON, 804; Trichocysts of Protozoa, CHADEFAUD, 155; Medical Protozoology, GAY, ETC., 374; Protozoal infections of birds, REIS, ETC., 786; Soil microfauna, CUTLER & CRUMP, 243; Monograph on the genus *Nebela* (Testacea), DEFLENDRE, 264; Testacea from Bourbonnais (France), OLIVIER, 711; Treatise on the *Alveolinidae*, REICHEL, 783; Tertiary faunas, Foraminifera, DAVIES, 258; Paleontology in relation to Evolution and Genetics (Foraminifera), SCHINDEWOLF, 846; *Fusulinidae* of Indochina, GUBLER, 401; Colourless, non-parasitic Flagellates, KLUG, 541; Lectures on flagellates and ciliates, PRENANT, 755; Malaria, NOCHT & MAYER, 704; Ciliophora of India, BHATIA, 51; Relationships of the Tintinnids with *Calpionella*, jurassic fossils, DEFLENDRE, 265; Trichocysts of Ciliates, KRÜGER, 551.

Addresses, Reviews.—Chemotherapy in last 30 years, BROWNING, 105; Incidence of malaria and amoebiasis in U.S.A., CRAIG, 217; Saprozoic Flagellates, PRINGSHEIM, 757; Review of van de Geyn's and van der Vlerk's monograph of *Orbitoididae*, SCHENK & FRIZZELL, 840.

History.—History of the classification of the Foraminifera, CHAPMAN & PAN, 169; D'Orbigny's lias foraminifera, MACFADYEN, 625; Genus *Keramospaera* Brady, HERON-ALLEN, 427; Records of acute porcine trypanosomiasis in Africa, HOARE, 435; Biography of Grassi, PAZZINI & FEDELE, 731; W. S. Perrin as a protozoologist, DOBELL, 284; Sir A. Theiler and his work, DU TOIT & JACKSON, 317.

Bibliography.—Rare protozoological books, BELTRAN, 44; Bibliography and index to new genera, etc., of Foraminifera for 1934, THALMANN, 925; Grassi's works, PAZZINI & FEDELE, 731; List of works by Sir A. Theiler, DU TOIT & JACKSON, 317.

Classification, Nomenclature.—Summary of northern planktonic organisms, GRAN, HENTSCHEL & RUSSELL, 395; Revision of the genus *Cochliopodium*, VALKANOV, 953; Relationship of the genus *Nebela*, DEFLANDRE, 264; Classification of the Foraminifera, CHAPMAN & PAER, 169; Nomenclature of Foraminifera from oilfields, CHAPMAN, 165; Position of eocene genus *Discocyclina*, RUTTEN, 828; Classification of the *Folliculinidae*, FAURÉ-FREMIET, 333; Nomenclature of *Fusulina*, FRIZZELL & WHEELER, 350; Genotype of *Fusulina* S.S., THOMPSON, 929; Genus *Lepocyclis* Perty—key to species, CONRAD, 205; Position of tertiary *Lepidocyclinidae*, HOK, 442; *Lepidocyclina* Gümbel 1868 (type *Nummulites mantelli*) to stand as a genus together with *Cyclosiphon* Ehrbg., STILES, 993; Substitution of *Lepidocyclina* Gümbel for *Cyclosiphon* Ehrbg. 1956, CHAPMAN, 166; Orbitoid subgenera, SCHENK & FRIZZELL, 840; Relationships of the *Peneroplidae*, SÜLC, 903; Nomenclature of *Verbeekina*, THOMPSON, 931; Validity of the name *Haemogregarina aravalis*, LAURENT, 572; Correct name for *Plasmodium* of malignant tertian malaria, GIOVANNOLA, 388; Systematic position of *Globidium*, NAVILLE, 694; New name for *Trichomonas* of pigeon, NIESCHULZ & BOS, 701; Relationships of the *Hymenostomata* (Holotricha), PÁRDUCZ, 727; *Paramecium multimicronucleatum*? correct form for *P. multimicronucleata*, FRISCH, 349; Revision of freshwater Suctorina, REIDER, 795.

ECONOMICS.

General.—Phytoplankton and fish problems, NIELSEN, 700; Role of planktonic forms in the economy of the sea, LACKEY, 530; Rôle of protozoa in self-purification of water, LIEBMANN, 593; Dinoflagellates as food for the mussel, BULEY, 125; Borings for water in South Australia (Foraminifera), HOWCHIN, 452.

Petroleum sources.—Tertiary faunas Foraminifera, DAVIES, 258; Foraminifera from oil fields California, CUSHMAN & McMASTERS, 238; Foraminifera, from Georges Bank Canyon, CUSHMAN, 226; Foraminifera from Palo Pinto County, Texas, PLUMMER & HORNBERGER, 744; Foraminifera from mesozoic beds in Texas, PLUMMER, 746; Stratigraphical uses of Foraminifera, MARIE, 639; Foraminifera from Moroccan oilfields, MARIN, PASTORA & LIZAU, 641; Foraminifera from oilfields of Western Australia, CONDIT, RAGGATT & RUDD, 202; Foraminifera from Dutch East Indies, VLERK, 961; Foraminifera from oilfields of California, WOODRING, BRAMLETTE & KLEINFELL, 994; Foraminifera from Dutch East Indies (Koetai), SITTER, 876; Nomenclature of Foraminifera from oilfields, CHAPMAN, 165; Foraminifera from oil shales, Java, BOOMGAART & VROMAN, 75; Foraminifera from oilfields of Mexico, BARKER, 34; Foraminifera from oilfields of N. Germany, EICHENBERG, 322; 323; Foraminifera from oilfields of Nevada, LONGWELL & DUNBAR, 601; *Fusulinidae* from oilfields in Ural mountains, RAUSER-CERNOUSOVA, 773.

Soil protozoa.—General, CUTLER & CRUMP, 243; Amoebae from fungi, COMANDON & FONBRUNE, 199; Soil biology in Malaya, CORBET, 203; Protozoal fauna of Sahara, VARGA, 954; Amoeba from volcanic soil, BRUNETTI, 120; Soil protozoa from Central Asia BRODSKY & BELAYEVA, 98; Soil protozoa of Central Asia, BRODSKY, 97; Soil protozoa from Lahore, HUSAIN, 458; Switzerland, BERZ, 46.

Protozoa in relation to disease.—(see also under Parasitism).

General.—Text-book, BRUMPT, 117; Incidence of intestinal protozoa in New Orleans population, FAUST & HEADLEE,

334; Incidence of intestinal parasites in Argentine, FERNANDEZ MARTINEZ & SUAREZ PEREGRIN, 336; Intestinal protozoa in human cadavers, FRYE & MELENEY, 358; Blood-parasites of hoofed animals in Persia, DELPÝ, 270; Parasites affecting ruffed grouse in Canada, CLARKE, 192; Incidence of intestinal protozoa in Shanghai, CHU, ETC., 189; Incidence of intestinal protozoa in population of Northern Urals, ZERTCHANINOV, 1029; Intestinal parasites of rats in U.S.A., TSUCHIYA & RECTOR, 944; Incidence of intestinal parasites in Serbia, SIMITCH, 871; Eel-grass parasitized by *Labyrinthula*, RENN, 787, 788; Protozoal infections of birds, REIS, ETC., 786; Incidence of intestinal protozoa in Mexican children, CABALLERO, 135; Incidence of intestinal protozoa in population of Athens, U.S.A., BYRD, 133; Intestinal parasites in U.S.A. students, BYRD, 134; Incidence of parasites in Baltimore rats, ANDREWS & WHITE, 15; Incidence of intestinal protozoa among Kentucky students, HEADLEE & CABLE, 418.

Amoebiasis.—Incidence of amoebiasis in natives, Nairobi, TROWELL, 941; Epidemic outbreak in Chicago 1933, BUNDESEN, ETC., 127; Incidence in U.S.A., CRAIG, 217; Occurrence in S. California, KESSEL, ETC., 518; Incidence in N. Caucasus, POSLAVSKI, 749; Amoeboid organism causing bovine haematuria, DATTA, 256; Entamoebic infections of man in Serbia and methods of diagnosis, SIMITCH, 871; Viability of *E. histolytica* after passage through cockroach, FRYE & MELENEY, 357; Loss of virulence in *E. histolytica* cultures, DESCHIENS, 275; Influence of intestinal flora upon pathogenicity of *E. histolytica*, DESCHIENS, 278; Diagnosis of *E. histolytica* infection, DE YOUNG, 280; Development of *E. histolytica* in sewage water, DESCHIENS & FLYE SAINTE MARIE, 279; Pathogenicity of *E. histolytica*, MELENEY & FRYE, 655; *E. histolytica* in Egyptian dogs, MORCOS, 675; Virulence and immunity in *E. histolytica* infections, CRAIG, 218; Incidence of *E. histolytica* in tropical and temperate climates, WESTPHAL & GÖNNERT, 972; Pathogenicity of various Armenian strains of *E. histolytica*, TER-MATEVOSSIAN, ETC., 923; Macrophages in human appendix mistaken for *E. histolytica*, THOMSON, 935; Diagnosis

of *E. histolytica* infections, CHANG, ETC., 163; Cutaneous localization of *E. histolytica*, CARINI, 146; *E. histolytica* in rats, AWAKJAN, 24; Susceptibility of rats to *E. histolytica*, ATCHLEY, 22; Infection of man with simian strains of *E. coli*, DOBELL, 285; New human *Endolimax*, IVANIĆ, 478; Pathogenic action of *Dientamoeba*, HAKANSSON, 406; Incidence of *Dientamoeba* in Holland, BRUG, 113; Pathogenicity of *Dientamoeba*, WENRICH, 969; *Dientamoeba* infection in Calcutta, DAS GUPTA, 215; Amoeba pathogenic to grasshoppers, KING & TAYLOR, 521.

Leishmaniasis.—*Leishmania* vaccines, RAY, 779; Distribution of American leishmaniasis, SHATTUCK, 865; Methods of identification of strains of leishmania, KHODUKIN, ETC., 518A; Differentiation of leishmania cultures, MAYER & MALAMOS, 648; Transmission of leishmania, NICOLLE, 697; Incidence in Greece, PAPANTONAKIS, 725; Canine leishmaniasis in Tashkent, FIALKOVSKY & TVERITINA, 337; Sandflies naturally infected with leishmania in China, JUNG SUN, ETC., 507; Visceral infections in man in Brazil, CUNHA & CHAGAS, 222; Primary lesion in Kala-Azar, PETROV, 738; Histopathology of canine visceral leishmaniasis, NICOLAU & PÉREARD, 696; Incidence and diagnosis of visceral leishmaniasis in Athens dogs, LÉPINE & BILFINGER, 587; *Leishmania* in dermal affections, LESTOQUARD & DONATIEN, 589; Effect of physical agents upon *L. donovani*, CHUNG, 190; *L. donovani* in urine and prostate, TENG & FORKNER, 922; Visceral human leishmaniasis in Brazil, CHAGAS, 157; Histotropism in *L. tropica*, NATTAN-LARRIER & NOYER, 690; Relapses of Oriental Sore, DOSTROVSKY, 294.

Trypanosomiasis.—*Trypanosomiasis* in Tanganyika, HORNBY, 448; Cultivation of pathogenic trypanosomes, BRUTSAERT & HENRIARD, 121; Trypanosomiasis of livestock in Belgian Congo, SCHWETZ, 854; Conference on trypanosomiasis in E. Africa, 203; Failure to infect fowls with mammalian trypanosomes, MESNIL, ETC., 656; Trypanosomiasis of domestic animals in Africa, DU TOIT, 316; Development of Trypanosomes in tsetse, ROUBAUD, 818, SCHILLING, 842; Pathogenicity of *T. lewisi*, SLATINEANU, ETC., 877; Pathogenicity of *T. theileri*, SASSUCHIN &

MATVEJEV, 835; Experimental infection of man with *T. cruzi*, CHAGAS, 156; Vectors of Chagas' Disease in Western U.S.A., KOFOID & WHITAKER, 545; Complement-fixation test for Chagas' disease, KELSER, 517; Course of Chagas' disease, MAZZA, ETC., 654; *Triatoma*-vector of Chagas' disease in Panama, ROZEBOOM, 820; Chagas' disease in Panama, JOHNSON & DE RIVAS, 591; Infection rate of *Triatoma* and the distribution of Chagas' disease in the Argentine, DIOS, ETC., 283; Symptoms of Chagas' disease, DIAS, 281; Immunization against pathogenic trypanosomes, BEVAN, 49; Immunization against African trypanosomes, SCHILLING, 843, 844, 845; Immunity, RUSSELL, 823; Cutaneous localization of *T. evansi* (= *maroccanum*), RODHAIN & HENRY, 810; Surra in Syria, SOULIÉ, 888; Effect of *T. evansi* (= *annamense*) infection upon composition of serum in rabbits, LAUNOY & LAGODSKY, 570; Transmission of *T. hippicum* by vampire bat, JOHNSON, 530; Treatment of *T. congolense* infections, DANKS & DAUBNEY, 248; *T. simiae* as the cause of epizootics among pigs in Africa, HOARE, 435; Porcine trypanosomiasis in the Gold Coast, with first record of *T. simiae* in West Africa, STEWART, 892; *T. vivax* infections in Mauritius, ADAMS, 4; Nerve lesions in *T. gambiense* infection, BOGAERT, 65; Critical review of human trypanosomiasis problems, BEVAN, 48; Pathology of *T. rhodesiense* infection in brain, CALWELL, 140; Influence of direct passages on virulence of polymorphic trypanosomes, CORSON, 209; Experimental cyclical transmission of *T. rhodesiense* from man to man via sheep, CORSON, 211; Antelope-reservoir of *T. gambiense*, CORSON, 213; Infectivity of *T. rhodesiense* to *Glossina*, CORSON, 214; Review on sleeping sickness, KLEINE, 539; Human reservoir of *T. rhodesiense*, LAMBORN & HOWART, 565; DAVEY, 257; Prophylaxis and reservoirs in sleeping sickness, MACLEAN, 630; Biology of polymorphic trypanosomes in Africa, DUKE, 311; Rôle of game animals as reservoir of human trypanosomes, DUKE, 309; Prophylactic action of "Bayer 205" against human trypanosomes, DUKE, 308; Antelope-reservoir of *T. gambiense*, DUKE, 310; Drug prophylaxis of sleeping sickness, DUKE, 306.

Animal Flagellosis.—Infection of ewes with *Trichomonas foetus*, ANDREWS & REES, 14; Transmission of *Trichomonas foetus* in cattle, ANDREWS & MILLER, 13; Pigeon-trichomonad infections, CAUTHEN, 143; *Trichomonas* in vaginal discharge, ASSINDER, 20; Epidemiology of *Trichomonas vaginalis* infection, RODECURT, 805; Incidence, organ-specificity, differential diagnosis and bionomics of human trichomonads, WESTPHAL, 971; Incidence of *Trichomonas vaginitis* in London, KING, ETC., 520; *Trichomonas vaginalis* in males, NITSCHKE, 703; Pathogenicity of *Histomonas* and immunization against "blackhead," TYZZER, 947; "Blackhead" in turkeys, MEYER, 661; "Blackhead" in poultry due to a trichomonad, ALLEN, 10; Incidence of *Giardia* infections in N. Caucasus, POSLAVSKI, 749.

Coccidiosis.—Influence of diet in coccidiosis, ARKHIPOV, 17; Effect of diet on infection in rat, BECKER & MOREHOUSE, 39; Effect of vitamins on coccidian infection, BECKER & MOREHOUSE, 40, 41; Coccidia of domestic and wild animals in Asiatic USSR, IVANOVA-GOZDEM, 486; Age-factor in the susceptibility of chickens to infection with *E. tenella*, HERRICK, ETC., 430; Pigeon-coccidiosis (*E. pfeifferi*), BONDOIS, 71; Renal coccidiosis of geese in Russia, YAKIMOFF, 999; Rabbit-coccidiosis, OZERSKY, 715; Treatment of rabbit coccidiosis, JÖRG, 498; *Tyzzeria* gen. n., pathogenic to ducks, ALLEN, 9; Lesions in sheep-coccidiosis, ANTEQUEDA, 16; Canine coccidiosis in Leningrad, YAKIMOFF & MATSCHOUJSKY, 1014; Coccidia from reindeer, YAKIMOFF, ETC., 1020; Eimeriosis of domestic animals in Brazil, YAKIMOFF, 996; Pig-coccidiosis in Russia, YAKIMOFF, ETC., 1002; Review of human coccidiosis (*Isospora*) with description of case from Brazil, MACHADO, 627; *Isospora belli* in Tonkin, GALLIARD, 381; Human *Isospora* infections in China, SMYLY & CHANG, 879; Cases of *I. belli* infection in Morocco, CORCUFF, 207.

Malaria.—Text-book on malaria, NOCHT & MAYER, 704; Distribution and epidemiology in Cyprus, BARBER, 30; Seasonal incidence in Greece, BARBER, ETC., 31; Distribution of

strain of *P. vivax* in U.S.A., BOYD, ETC., 82; Age-distribution of B.T. and M.T. parasites in Yugoslavia, RANKOV, 766; Endemic malaria in Belgian Congo, SCHWETZ, ETC., 856; Age-incidence and specific distribution of malaria in Tadzhikistan, SCHOURENKOVA & MECHANIKOVA, 848; Incidence in U.S.A., CRAIG, 217; Estimation of malarial indices, MOCHKOVSKI, 670; Incidence and epidemiology in Subcarpathian Russia, Tshechoslovakia, DRBOHLAV, 298; Technique of induced malaria, BOYD, ETC., 89; Seasonal variation in B.T. course, BOYD, ETC., 83; Quartan malaria in treatment of neuro-syphilis, BOYD & STRATMAN-THOMAS, 85; Induced malarial infection in Holland, BUCK, 123; Localization of parasites during latent period of infection, TOPORKOV, 938; Changes undergone by the parasites in corpses, WOJNO-JASSENETSKI, 985; Development of sporozoites in reticulo-endothelial system and its bearing on treatment and relapses, RUGE, 822; Course of induced malaria, JAMES, ETC., 489; Experiments on aetiology of black-water fever, FOY & KONDI, 343; Relation of mosquito density to transmission of malaria, BARBER, ETC., 33; Transmission in Holland, SWELLENGREBEL, ETC., 905; New anopheline vector of B.T. in U.S.A., STRATMAN-THOMAS & BAKER, 895; New Anopheles vector in Central America, SIMMONS, 874; Vectors, age-incidence and treatment of malaria in Belgian Congo, SCHWETZ, 855; New Anopheles vector in Central America, SIMMONS, 873; Latency and prolonged incubation period in B.T., MOCHKOVSKI, 668; Development of *P. falciparum* in peripheral blood, JOLLY & SICAUT, 504; A typical development of M.T. parasite in Africans, JOLLY, 503; Nature of immunity, ASHFORD, 19; Immunity to various stages of *P. vivax*, BOYD & KITCHEN, 80; Immunity to *P. vivax*, BOYD & KITCHEN, 81; Acquired immunity to M.T., BOYD, ETC., 86; Immunity to B.T., BOYD, ETC., 88; Passive immunity, SOTIRIADES, 886; Phagocytosis in monkey malaria, TALIAFERRO & CANNON, 909; Immunization, LORANDO & SOTIRIADES, 603; Immunity, MOCHKOVSKI, 667; *Haemoproteus* pathogenic to peacock, MALKANI, 633; Treatment of neuro-syphilis with *P. knowlesi*, CHOPRA & DAS GUPTA, 186.

Piroplasmosis.—Comparison of Palestinian and Algerian bovine *Theileria*, ADLER & ELLENBOGEN, 6; Infection in sheep of Leningrad district, RASTEGAIÉFF & TIMOFFEEFF, 770; Vectors of ovine theileriosis in Russia, RASTEGAIÉFF & MATSCHULSKY, 768; Piroplasms of wild mammals in S.E. Russia, SASSUCHIN, 833; Equine piroplasmosis, YAKIMOFF & TODORSKY, 1021; Cattle babesiosis in Russia, YAKIMOFF & TODORSKY, 1022; Distribution of bovine piroplasms in Russia, YAKIMOFF & MIZKEWITSCH, 1019; Changes in virulence of *Th. annulata*, YAKIMOFF & GOUSSEFF, 1007; Cattle piroplasmosis in the Caucasus, YAKIMOFF, 998; Discussion on East Coast Fever, 204; Bovine babesiosis in N. Australia, LEGG, 586; Equine nuttalliosis in South-Eastern Russia, OZERSKY, ETC., 716; "Turning Sickness" in Uganda, METTAM & CARMICHAEL, 660; Treatment of piroplasmoses, OESTERLIN, 708; Life-cycle and transmission of *B. canis*, SHORTT, 868; Complete life cycle of *T. dispar* in bovine and in tick, SERGENT, 862; Transmission of ovine *Theileria* by *Ornithodoros*, RASTEGAIÉFF, 767; Transmission of *Babesia bigemina*, REGENDANZ, 781; Transmission of canine piroplasmosis by *Rhipicephalus*, REGENDANZ & MUNIZ, 782; Ticks transmitting bovine piroplasms, GOUSSEFF, ETC., 393.

Other Sporozoa.—Infection in goats of Leningrad district, RASTEGAIÉFF, ETC., 769; *Leucocytozoon* infection in Indian fowls, KUPPUSAMY, 558; Artificial infection with *Nosema bombycis* and immunity in silkworm disease, POYARKOFF, 752; *Sarcocystis* spores in blood film of ox, HALL, 408; *Sarcocystis*-like infection in brain of sheep, BROWNLEE, 108; *Sarcocystis* and *Globidium* in blood films of ox and horse, WENYON, 970; *Sarcosporidiosis* in reindeer, YAKIMOFF, 1000; Toxoplasmosis in guinea-pigs in Africa, BOISSEAU & NODENOT, 69; Transmission of ovine anaplasma by tick, RASTEGAIÉFF, 767; Effect of splenectomy in ovine anaplasmosis, LESTOQUARD, ETC., 590.

Ciliates.—Epidemiology of balantidiasis, TCHAPURSKAYA-BAJENOVA, ETC., 920; Human *Balantidium* in rats, AWAKJAN, 25.

Chemotherapy and Prophylaxis.—General review, BROWNING, 105

Methods of quantitative estimation of chemotherapeutic agencies, MOCHKOVSKI, 671; Treatment of protozoal infections, HÖRLEIN, 438; Significance of electric charge of trypanosomes, BROOM, ETC., 100; Mechanism of drug action upon trypanosomes, SINGER, 875; Mechanism of therapeutic action upon trypanosomes, SCHEFF & HASSKÓ, 839; Chemotherapeutic action in trypanosomiasis, OESTERLIN, 707; Arsenic resistance in trypanosomes, DUBOIS, 303; DUKE, 307; Drug-resistance in *Trypanosoma annamense*, LAUNOY, ETC., 571; Arsenic-fastness in trypanosomes, NAITO & OKA, 686; Atoxyl-resistance in trypanosomes, DUBOIS, 302; Prophylactic "Bayer 205" in sleeping sickness, DUKE, 306; Treatment of *Trypanosoma congolense* infections, DANKS & DAUBNEY, 248; Treatment of *Trypanosoma brucei* infection leading to immunity, BROWNING & GULBRANSEN, 106; Trypanocidal action of styryl selenazole compounds, BROWNING, ETC., 107; Action of arsenobenzols in trypanosomiasis, ZOLOG & COMSIA, 1032; New trypanocidal arsenical, YORKE, ETC., 1026; Treatment of rat-trypanosomiasis, KUHS, ETC., 556; Prophylaxis of human trypanosomiasis, MACLEAN, 630; Prophylactic action of "Bayer 205" in trypanosomiasis, DUKE, 308; Action of carbarsone on trichomonads, GABALDON, 359; Treatment of malaria (general), BASTIANELLI, 36; *In vitro* action of atebirin on *Plasmodium relictum*, BUROVA, 128; Effect of atebirin upon *Plasmodium vivax*, SELMAONVA, 858; Action of atebirin in monkey malaria, CHOPRA, ETC., 187; Relation of concentration of atebirin to number of malarial parasites, CHOPRA, ETC., 188; Action of quinine and atebirin upon *Plasmodium knowlesi*, MOSNA, 682; Parasitotropic effect of acridine upon B.T. malarial parasite, DEMINA, 273; Treatment of piroplasmoses, OESTERLIN, 708.

MISCELLANEOUS.

Laboratory methods and technique.—Making prints of fossil foraminifera, BAKX, 28; Methods of examining oil shales for Foraminifera, BARKER, 34; Dissection and preparation of mosquitoes for malaria parasites, BARBER & RICE, 32; Experimental suspension of vitality in Rhizopods and ciliates, BECQUEREL, 42; Nuclear division in

Peridinia, BIECHELER, 55; Technique of ultraviolet irradiation of *Amoeba*, BLACK, 62, 63; Technique of micro-cataphoresis, BROWN & BROOM, 103; Centrifuging *Paramecium*, BROWN, 104; Logarithmic method of calculating growth in cultures, BRUG, 112; Eosin-method for examination of faeces, BRUG, 114; Technique of induced malaria, BOYD, ETC., 89; Technique for collecting fossil foraminifera, BUBNOFF, 122; Dissection of salivary ducts of tsetse-flies, BURTT, 130; Nuclear staining in *Amoeba*, CHALKLEY, 161; Staining cilia of *Glaucoma*, CHATTON & BRACHON, 174; Staining ciliary system, CHATTON & BRACHON, 175; Silver nitrate method for Ciliates, CHATTON & LWOFF, 179; Staining ciliary system, CHATTON & LWOFF, 180; Cinematographic record and amoeboid movement, COMANDON & FONBRUNE, 199; Cinematography of *Amoeba*, COMANDON & FONBRUNE, 200; Study of a bog pond, COWLES & BRAMBEL, 216; Staining fossil Foraminifera, DEFLANDRE, 266; Diagnosis of *Entamoeba histolytica* infection, DE YOUNG, 280; Heat stimulation of *Paramecium*, DOUDOROFF, 295; Staining methods for *Peridinium*, ENTZ & SEBESTYÉN, 328; Fixation and staining *Discorbina*, FØYN, 345; Ciliata in aquaria, FRANKENBERG, 347; Counting Ciliates and Flagellates, HALL, JOHNSON & LOEFER, 409; Effect of nicotine on Ciliates and Flagellates, GAUSE, 367; Vitamin C method for excretory system of Ciliates, GELEI, 382; Staining *Paramecium*, GERSCH, 385; Method of investigation of stools for parasites, GÖNNERT & WESTPHAL, 390; New staining method for blood parasites, GROAT, 398; Technique for controlling size and division rate in *Glaucoma*, HARDING, 413; Pure culture of *Glaucoma*, HETHERINGTON, 432; Staining *Volvocinae*, HOVASSE, 451; Fixing and staining Ciliates and Flagellates, JACKSON, 487; Effect of fixation on size of protozoa, JONES, 505; Attempts to filter trypanosomes, KASANSKY, 511; Complement-fixation test for Chagas' disease, KELSER, 517; Electric polarisation of *Paramecium*, KINOSITA, 522; Effect of hypertonic solutions on contractile vacuoles, KITCHING, 534; Effect of snake's venom on Ciliates, KLEIN, 536; Demonstration of trichocysts in Ciliates, KRÜGER, 551; Technique of examining fossil forms,

KUFFERATH, 553; Collection of marine planktonic forms, LACKEY, 560; "Peptone" media and *Paramecium*, LOEFLER, 597; Mass culture of *Paramecium*, LOEFLER, 599; Photomicrographs of flagella movement, LOWNDES, 606; Technique of analysis of crystalline inclusions in *Amoeba*, LUCE & POHL, 607; Electrical stimulus of *Paramecium* LUYET, 613; Fixing and staining *Chilodonella*, MACDOUGALL, 624; Embedding and staining Testacea, MACKINLAY, 629; Narcosis of Ciliates and Flagellates, MAKAROV, 632; Stratigraphical uses of Foraminifera, MARIE, 639; Stain for *Trichomonas vaginalis*, MILLER, 664; Vital staining of *Leishmania*, MOCHKOVSKI, 669; Collecting Rhizopoda from bogs, OYE, 713; Staining *Stentor*, PACKARD, 718; Centrifuging Flagellates, PATTEN & BEAMS, 730; Staining Phytomonadida, POISSON, 748; Estimation of specific gravity of *Giardia* cysts, RACHMANOW, 762; Collection and examination of freshwater Suctoria, RIEDER, 794; Method for staining intestinal protozoa, SARGENT, 829; Action of quinine on *Paramecium*, SARKAR, 830; Method for showing "stippling" in *Plasmodium* infections, SARKISSIANE, 831; Quantitative estimation of freshwater plankton, SEELER, 857; Methods of preparing parasitic protozoa from Orthoptera, SEMANS, 859; Technique of size regulation in *Spirostomum*, SEYD, 864; Conjugation of *Paramecium*, SONNEBORN, 884; Conjugation of *Paramecium*, SONNEBORN & COHEN, 885; Staining protozoa in bulk, STONE, 894; New staining method for blood parasites, STRUMIA, 897; Collection of *Pontigulasia* (Testacea), STUMP, 901; Ultra-violet irradiation of Rhizopods and Ciliates, TCHAKHOTINE, 914; Manipulation of *Paramecium* in micro-technique, TCHAKHOTINE, 915; Ultra-violet stimulation of Ciliata, TCHAKHOTINE, 916; Ultraviolet irradiation of Rhizopods and Ciliates, TCHAKHOTINE, 918; Ultraviolet light and eye spot of *Euglena*, TCHAKHOTINE, 919; Staining *Paramecium caudatum*, TROFIMOVITSCH, 940; Staining *Euglena viridis*, UTERMÖHL, 950; Treating *Paramecium* with quinine for study of fluorescence, VALETTE, 951; Centrifuging *Paramecium*, YANCEY, 1023; Ultraviolet irradiation of *Paramecium* and *Amoeba*, YANCEY, 1024; Centrifuging *Paramecium*, YANCEY, 1025; Methods of

staining malarial blood for demonstration of changes in red cells, ZELMANOVA, 1028.

Cultivation.—*Pentatrichomonas* from poultry, ALLEN, 10; *Trichomonas foetus* (free from bacteria), ANDREWS, 12; Various media and constituents for leishmania, BERREBI, 45; Soil protozoa, BERZ, 46; Milk-blood medium for leishmania, BIANCHI, 53; Physical factors in cultures of *Entamoeba histolytica*, BIRCH-HIRSCHFELD, 59; Free living trichomonad, BISHOP, 61; Pure cultures of *Volvocaceae*, BOLD, 70; Culturing *Vorticella*, *Blepharisma* and *Spirostomum*, 96; *Dientamoeba*, BRUG, 113; Pathogenic African trypanosomes, BRUTSAERT & HENRARD, 121; Cultural requirements of lizard-trichomonad, CAILLEAU, 136; Medium for *Trichomonas* of pigeon, CAILLEAU, 137; Effect of sterols upon growth of *Trichomonas columbae*, CAILLEAU, 138; Two races of *Glaucoma*, CHATTON & BRACHON, 174; Two forms of *Paramecium* in a 3-year old culture, CHATTON & BRACHON, 176; *Entamoeba histolytica*, CRAIG, 219; New medium for *Entamoeba histolytica*, CRAIG, 220; Bovine trichomonads, DAS GUPTA, 249; Pure-line strains of trichomonads, DAS GUPTA, 252; Culture of *Amoeba dubia*, DAWSON, KESSLER & SILBERSTEIN, 260; Culture of *Uroleptus mobilis*, DELAMATER, 268; Development of *Entamoeba histolytica* in sewage water, DESCHIENS & FLYE SAINTE MARIE, 279; *Entamoeba coli* of human and simian origin, DOBELL, 285; Action of serum upon cultures of *Entamoeba histolytica*, DOPFER & DESCHIENS, 293; *Leishmania tropica*, DUBOIS, 304; *Colpidium* and *Haematococcus*, ELLIOTT, 327; Culturing *Vorticella*, FINLEY, 338; Culturing Flagellates and Ciliates, HALL, JOHNSON & LOEFLER, 409; Pure strain of *Chilomonas paramecium*, HALL & LOEFLER, 410; *Amoeba proteus* and *Amoeba dubia*, HALSEY, 411; Effect of viscosity of medium upon growth of trichomonads, HEGNER & ESKRIDGE, 420; Pure culture of *Glaucoma*, HETHERINGTON, 432; *Embadomonas*, HOGUE, 440; Soil protozoa, HUSAIN, 458; *Euglena*, HUTNER, 459; Culture methods for Ciliates and Flagellates, JACKSON, 487; Bacteria-free cultures of *Glaucoma* and *Chilomonas*, JAHN, 488; *Glaucoma ficaria*, JOHNSON, 502; Two races of *Epi-*

clinetes, KIESSELBACH, 519; "Pep-tone" media and *Paramecium*, LOEFER, 597; *Paramecium bursaria*, LOEFER, 598; Mass culture of *Paramecium*, LOEFER, 599; Bacteria-free cultures of Flagellates and Ciliates, LOEFER & HALL, 600; *Polytomella*, LWOFF, 615; Effect of protohaemin upon development of *Strigomonas* (Trypanosomidae), LWOFF, 616; Culture of *Euglena*, LWOFF & DUSI, 617; *Euglena*, LWOFF & DUSI, 618; Effect of soil extract on Flagellates, LWOFF & LEDERER, 620; Cultivation of *Peranema*, MAST & HAWK, 645; *Chilomonas paramecium*, MAST & PACE, 646; Cultural characteristics of *Leishmania donovani* and *L. tropica*, MAYER & MALAMOS, 648; *Amoeba*, *Zoothamnium* and *Frontonia*, MÜLLER, 683; Culture of *Spathidium*, PACKARD, 717; Culture of rat-trypanosome in latex of *Euphorbia*, PANNIER, 722; *Glaucoma pyriformis*, PHELPS, 741; *Spirostomum ambiguum*, PICKEN, 743; Saprozoic Flagellates, PRINGSHEIM, 757; Ciliata, *Kahlia acrobates*, PROVASOLI, 759; *Trichomonas foetus*, RIEDMÜLLER, 796; *Polytoma*, ROTTIER, 816; ROTTIER, 817; *Stentor* and *Paramecium*, SCHWARTZ, 853; *Trichomonas vaginalis*, SHELANSKI, 866; Collection of Testacea, STUMP, 900; Cultivation of *Pontigulasia* (Testacea) without shells, STUMP, 901; *Euglena*, SZABADOS, 907; Culture of *Paramecium* in light and dark, TANG & GAW, 911; *Histomonas meleagridis*, TYZZER, 947; Human trichomonads, WESTPHAL, 971.

STRUCTURE.

Morphology: General Anatomy.—*Mycetozoa: Entamoebophaga* gen. n., IVANIĆ, 479.

Rhizopoda.—Organic matter conserved in fossil Foraminifera, BONTE, 73; *Entamoeba* parasitic in opalinid ciliate, BRUMPT & LAVIER, 119; *Entamoebae* in opalinid ciliates, STABLER & CHEN, 889; CHEN & STABLER, 185; *Entamoeba* from marmot, CROUCH, 221; Abnormal cyst of *Entamoeba coli*, DAS GUPTA, 250; Genus *Nebela*, DEFLANDRE, 264; Nuclear structure in Foraminifera, FØYN, 344; *Dientamoeba*, HAKANSSON, 406; New *Endolimax* sp. from man, IVANIĆ, 478; Dimorphism in Heliozoa, IVANIĆ, 435; Variability in Foraminifera,

KEIJZER, 515; New *Malpighamoeba* from grasshoppers, KING & TAYLOR, 521; Caucasian *Nummulites*, KUZNECOV, 559; Modifications in the test of Foraminifera, LE CALVEZ, 580; Structure of *Naegleria*, McCULLOUGH, 623; Structure of *Nebela collaris* MacKINLAY, 629; Structure of eocene *Ceratobulimina* PLUMMER, 745; Canal-system of *Discocyclina* [Foraminifera], RUTTEN, 828; *Chaos chaos*, SCHAEFFER, 838; *Trypanosoma neotomae* sp. n., WOOD, 991; New or aberrant histolytica-like *Entamoeba*, ZATURJAN, 1027.

Mastigophora.—Relationships of *Diplosalis* (Dinoflagellata), ABÉ, 3; *Pentatrichomonas* in poultry, ALLEN, 10; *Bodo* from yeast-culture, BAIER, 27; New avian trypanosome, CARPANO, 148, 149; New *Coccidinium*, CHATTON & BICHELER, 171; *Gregarella* gen. n., CHATTON & BRACHON, 173; *Lepocinclis*, CONRAD, 205; *Chilomastix* from marmot, CROUCH, 221; *Leishmania* in visceral infections of man in Brazil, CUNHA & CHAGAS, 222; Bovine trichomonads, DAS GUPTA, 249; Differentiation of *Trichomonas* and *Eutrichomastix*, DAS GUPTA, 252; *Trichomonas* from snake, DAS GUPTA, 253; *Eutrichomastix* from snakes, DAS GUPTA, 254; New trypanosomes from Indian birds, FROILANO DE MELLO, 351; New trypanosome from fish, FROILANO DE MELLO & VALLES, 355; Hyperparasitic *Leishmania* [?], GEORGÉVITCH, 384; *Sporodinium* gen. n. (Dinoflagellate), GÖNNERT, 389; *Trypanosoma simiae*, HOARE, 435; 436; 437; Races of human *Embadomonas*, HOGUE, 440; *Trypanosomes* of Argentinian amphibia, JÖRG, 497; *Pseudodevescovina* and *Caduceia*, KIRBY, 532; New intestinal flagellates of marine fishes, LAVIER, 575; Free-living trichomonad, LAVIER, 576; New avian trichomonads, LAVIER, 577; Structure of *Hexamita* spp., LAVIER, 578; Dextro- and laevo-forms in Diplomonadidae, LAVIER, 579; *Leishmania* from dermal lesions, LESTOQUARD & DONATIEN, 589; General structure of human intestinal flagellates, LOPEZ-NEYRA, 602; *Histomonas*, MEYER, 661; Culture-forms of *Trypanosoma rabinowitschi*, NATAN-LARRIER & DUFOUR, 689; Pigeon-trichomonad, NIESCHULZ & BOS, 701; *Oodinium ocellatum*, NIGRELLI, 702; Leptomonad from plant, PANNIER, 723; *Coelomonas grandis* (Phytomonadida), POISSON, 748;

Trichomonas vaginalis, POWELL, 750; *Chilomitus caviae*, RAY & MITRA, 778; *Trypanosoma duttoni*, TALIAFERRO & PAVLINOVA, 910; Function of the eyespot in *Euglena*, TCHAKHOTINE, 919; Trichomonads of birds, TRAVIS, 939; Differentiation of human trichomonads, WESTPHAL, 971.

Sporozoa.—*Tyzzeria* gen. n. (Coccidia), ALLEN, 9; Degenerated *Plasmodium* sporozoites, BARBER, 29; “*Piroplasma taylori*,” BHATIA, 50; *Eimeria* of pigeon, BONDOIS, 71; *Sarcocystis*-like cysts in brain of sheep, BROWNLEE, 108; *Plasmodium* of domestic fowl, BRUMPT, 115; New *Isospora* from lizard, CARINI, 145; New *Hyalosporina* (gregarine), CHAKRAVARTY, 160; New *Siedleckia*, CHATTON & VILLENEUVE, 181; Schizonts of *Plasmodium vivax*, CORRADETTI, 208; Coccidium and gregarines from *Polydora* (polychaete), FOWELL, 342; *Haemoproteus* and *Leucocytozoon* from Indian bird (*Coracias*), FROILANO DE MELLO & AFONSO, 352; *Plasmodium* from otter, FROILANO DE MELLO & VALLES, 353; New haemogregarine from eel, FROILANO DE MELLO & VALES, 354; New *Henneguya*, GANAPATHI, 362; *Entamoeba* of reptiles, GEIMAN & RATCLIFFE, 375; *Leucocytozoon* spp., GIOVANNOLA, 387; New *Myxobolus* from fish, GORBUNOVA, 391; *Mantonella* n. sp. (Coccidia), GOUSSEFF, 392; *Henneguya* spp. from Brazilian fishes, GUIMARÃES, 402; New *Myxobolus* from fish, HERRICK, 431; New *Haplosporidium*, JIROVEC, 491; New spp. of Mrazekidae (Microsporidia), JIROVEC, 492; New Microsporidia, JIROVEC, 494; *Leucocytozoon* of fowls, KUPPUSAMY, 558; *Eimeria* spp. from newts, LAVIER, 573; New *Haemoproteus* from peacock, MALKANI, 633; Comparison of *Plasmodium capistrani* and *P. praecox*, MANWELL, 634; *Piridium* gen. n. (Gregarine?), PATTEN, 729; *Nosema oviodeum*, RAABE, 760; New *Eimeria* from Indian toad, RAY, 775; *Stenophora* (Gregarine), RAY & CHAKRAVORTI, 776; *Hepatozoon* of Gecko, ROBIN, 802; New reptilian *Hepatozoon*, ROBIN, 803; *Nuttalia loxodontis* sp. n., RODHAIN, 806; *Plasmodium gonderi* sp. n., RODHAIN & BERGHE, 809; *Nuttalia* of hedgehog, SASSUCHIN, 834; New ophidian haemogregarine, SCHOUTEN, 850; Stages of *Theileria dispar* in tick, SERGENT, ETC., 861; *Theileria dispar*, SERGENT, ETC.,

862; *Theileria dispar* in bovine and in tick, SERGENT, ETC., 863; *Babesia canis* in tick, SHORTT, 868; Nuclear structure in *Diplocystis*, SOUCHÉ, 887; Murine trichomonad in nematodes, THEILER & FARBER, 928; *Glugea anomala*, THOMSON, 936; *Mantonella* gen. n. (Coccidia), VINCENT, 959; Changes undergone by malarial parasites in human corpses, WOINO-JASSENETSKI, 985; New *Plasmodium* from owl, WOLFSON, 987; New *Chloromyxum* (Myxosporidia), WOOLCOCK, 995; *Eimeria thianethi*, YAKIMOFF, 997; Sarcosporidia from reindeer, YAKIMOFF, 1000; New *Eimeria* of lizard, YAKIMOFF, 1001; New *Isospora* from magpie, YAKIMOFF & GOUSSEFF, 1003; Two new *Eimeria* from jerboa, YAKIMOFF & GOUSSEFF, 1004; New *Eimeria* sp. from birds, YAKIMOFF & GOUSSEFF, 1005; New *Eimeria* from fish, YAKIMOFF & GOUSSEFF, 1006; New *Eimeria* spp. from rats, YAKIMOFF & GOUSSEFF, 1008; *Eimeria* of polecat, YAKIMOFF & GOUSSEFF, 1009; New *Isospora* from frog, YAKIMOFF & GOUSSEFF, 1010; New coccidia (*Isospora* and *Eimeria*) from hedgehog, YAKIMOFF & GOUSSEFF, 1011; *Eimeria* of partidges, YAKIMOFF & MATIKASCHWIL, 1013; Canine coccidia, YAKIMOFF & MATSCHOULSKY, 1014; New *Eimeria* (Coccidia) from kangaroo, YAKIMOFF & MATSCHOULSKY, 1015; *Isospora* from jackdaw, YAKIMOFF & MATSCHOULSKY, 1016; New *Eimeria* from hare, YAKIMOFF, ETC., 1017; *Caryospora* from birds of prey, YAKIMOFF & MATSCHOULSKY, 1018; New *Eimeria* (Coccidia) from reindeer, YAKIMOFF, ETC., 1020; New reptilian haemogregarine, ZMEEV, 1030.

Ciliophora.—New *Thecacinet*, ALLGÉN, 11; General structure of *Lagenophrys*, AWERINZEW, 26; General, BHATIA, 51; *Zelleriella* sp., BRUMPT & LAVIER, 119; Revision of *Balanitidium depressum*, CHAKRAVARTY, 158; Revision of *Nyctotherus kempi*, CHAKRAVARTY, 159; New *Epistylis*, CHATTON, 170; *Conidophrys* (Suctorio), CHATTON & LWOFF, 178; *Cyathodinium chagasi* sp. n., CUNHA & FREITAS, 223; *Cyathodinioides* (= *Cyathodinium*) *pyriformis*, CUNHA & FREITAS, 224; *Cepedea dimidiata*, HARA, 412; *Triadinium*, HSIUNG, 454; New intestinal ciliates from the mule, HSIUNG, 455; Corrigenda to description of *Nyctotherus*, *Ichthyophthirius* and *Cepedea*, JÖRG,

496; Size of living and fixed ciliates, JONES, 505; *Nyctotherus ovalis*, KUDO, 552; New *Protoopalina*, LAVIER, 574; New *Lionotus* and *Cyclidium*, LIEBMAN, 593; *Spathidium hyalinum*, LUKÁCS, 608; Structure of *Chilodonella*, MACDOUGALL, 624; Structure of *Spathidium*, PACKARD, 717; Spiral structure of Ciliates, PÁRDUCZ, 726; New *Zelleriella*, PESSÔA, 737; Various ciliophora attached to marine animals, PRECHT, 753; *Conchophthirus* and *Myxophyllum* gen. n., RAABE, 761; *Paranoplophrya* gen. n., ROHRBACH, 814; New *Zelleriella* and *Nyctotherus* from amphibian, SCHOUTEN, 849; *Cumhaia*, SCHOUTEN, 851; New *Anoplophrya*, SUMMERS & KIDDER, 904; Human and porcine *Balantidium*, TCHAPURSKAYA-BAJENOVA, ETC., 920.

Formae incertae sedis.—"Bosman-cysts" in human faeces, BRUG, 110; Canine *Bartonella*, GOYANES, 394; Sporozoon in trematode cercariae, MARTIN, 644; Undetermined intracellular parasite of rat, MOREHOUSE & BECKER, 677; Red-cell inclusions in monkeys, WILLS, 982.

Minute Structure: Special Anatomy.—General.—*Conidophrys* (Suctoria), CHATTON & LWOFF, 178.

Ectoplasm, membranes, etc.—Buccal cilia in *Fabrea salina*, BRACHON, 91; Trichocysts and their structure, CHADEFAUD, 155; Arrangement of ciliary elements during division of *Ancistrumid* ciliates, CHATTON & LWOFF, 177; Pseudopodia of Testacea, DEFLANDRE, 263; Flagella of *Bodo*, HOLLANDE, 443; Gullet of *Peranema*, HYMAN, 462; Trichocysts of Ciliates, KRÜGER, 551.

Organellae of locomotion.—Cilia in *Fabrea salina*, BRACHON, 91; The "cinetome" of *Opalina*, CHATTON & BRACHON, 172; Staining cilia of *Glaucoma*, CHATTON & BRACHON, 174; Ciliary system of *Glaucoma*, etc., CHATTON & BRACHON, 175; Ciliary structure of silver nitrate method, CHATTON & LWOFF, 179; Ciliary system of Infusoria, CHATTON & LWOFF, 180; Pseudopodia of Testacea, DEFLANDRE, 263; Spiralciliary arrangement, GELEI, 377; Flagella of *Bodo*, HOLLANDE, 443; Flagella of *Peranema*, HYMAN, 462; Trichocysts of Ciliates, KRÜGER, 551; Flagella movement in

Peranema and *Euglena*, LOWNDES, 606; Cilia of *Spathidium*, LUKÁCS, 608; "Silver line system" in *Conchophthirus*, RAABE, 761.

Nucleus and cytoplasm.—Nuclear reaction in *Balantidium*, CHAKRAVARTY, 158; *Amoeba proteus*, CHALKLEY, 161; Cytoplasmic division in *Amoeba*, CHALKLEY, 162; Mitosis in *Amoeba dubia*, DAWSON, KESSLER & SILBERSTEIN, 260; *Myxotheca* (Foraminifera), FØYN, 344; Staining in *Paramecium*, GERSCH, 385; Golgi apparatus in *Volvocinae*, HOVASSE, 451; Nuclear structure in *Trypanosoma rotatorium*, IVANIĆ, 471; Resting stages in *Actinophrys*, IVANIĆ, 480; Resting stages in *Euglena*, IVANIĆ, 481; Resting stages in *Carchesium*, IVANIĆ, 482; Nuclear structure in *Nyctotherus*, KUDO, 552; Peculiar nuclear inclusion in *Plasmodium vivax*, MOSCHKOWSKI, 681; Macronucleus of *Stentor*, PACKARD, 718; Conjugation in *Cryptochilum*, RUSSO, 824; Regeneration in *Stentor* and *Paramecium*, SCHWARTZ, 853; Effect of ultra-violet irradiation on Rhizopods and Ciliates, TCHAKHOTINE, 914; Nuclear structure of *Dientamoeba*, WENRICH, 968.

Nuclear division.—*Lagenophrys*, AWERINZEW, 26; Binary fission in *Plasmodium vivax* "ring" forms, BEACH, 38; Nuclear division in *Peridinia*, BIECHELER, 55; Division in *Chattonella*, BIECHELER, 57; Conjugation in *Trichodina*, BROUARDEL, 102; *Dientamoeba*, BRUG, 111; Extrusion of "polar bodies" in *Plasmodium*, CASINI, 150; Mitosis and interkinesis in *Amoeba*, CHALKLEY, 161; Cytoplasmic division in *Amoeba*, CHALKLEY, 162; Binary fission in *Plasmodium falciparum*, CHAULITCH, 164; Mitosis in *Opalinid* ciliates, CHEN, 184; Centriole in mitosis of hypermastigote flagellates, CLEVELAND, 194; *Cyathodinium chagasi* sp. n., (Ciliata), CUNHA & FREITAS, 223; *Cyathodinioides* (= *Cyathodinium*) *pyriformis* (Ciliata), CUNHA & FREITAS, 224; Sporozoites of *Plasmodium*, DE MEILLON, 272; Autogamy in *Paramecium*, DILLER, 282; Cell division in *Gonyostomum semen*, DROUET & COHEN, 300; In *Peridinium*, ENTZ & SEBESTYEN, 328; *Myxotheca* (Foraminifera), FØYN, 344; Spiral body-form in Ciliates, GELEI, 377; *Zschokkella* (Microsporidia), GEORGÉVITCH, 383;

Dinamoeba mirabilis, GROOT, 400; Division in *Kahlia*, HORVÁTH, 449; *Opalina*, IVANIĆ, 467; *Vampyrellidium*, IVANIĆ, 469; Multiple division in *Vahlkampfia*, IVANIĆ, 470; *Trypanosoma rotatorium*, IVANIĆ, 471; Promitosis in *Plasmodium*, IVANIĆ, 475; Mitosis in *Plasmodium*, IVANIĆ, 476; *Entamoeba histolytica*, IVANIĆ, 477; New *Endolimax* sp., IVANIĆ, 478; Resting stages in *Actinophrys*, IVANIĆ, 480; Resting stages in *Euglena*, IVANIĆ, 481; Resting stages in *Carchesium*, IVANIĆ, 482; Parthenogenesis in *Chilodon*, IVANIĆ, 483; *Pseudoodevescovina* and *Caduceia*, KIRBY, 532; Mitosis in *Spirillina vivipara*, MYERS, 685; Sporozoa general, NAVILLE, 693; *Oodinium ocellatum*, NIGRELLI, 702; Macronucleus of *Stentor*, PACKARD, 718; Nuclear changes during conjugation in *Chimacostomum*, PESHKOVSKAJA, 736; *Trichomonas vaginalis*, POWELL, 750; Conjugation in *Cryptochilum*, RUSSO, 824; Regeneration in *Stentor* and *Paramecium*, SCHWARTZ, 853; Conjugation of *Paramecium*, SONNEBORN, 884; *Anoplophrya*, SUMMERS & KIDDER, 904; *Nyctotherus*, WICHTERMAN, 978.

Various internal structures.—Food vacuoles in *Paramecium*, BRAGG, 94; Cytoplasmic inclusions in *Balantidium*, CHAKRAVARTY, 158; Zooxanthellae in *Orbitolites*, DOYLE, 297; Anatomy of *Gonyostomum semen* (Flagellata), DROUET & COHEN, 300; Cellular inclusions in *Peridinium*, ENTZ & SEBESTYÉN, 328; Fibrils in *Selenidium* (Gregarinida), FOWELL, 341; Formation of contractile vacuole and excretory pore in *Paramecium*, GELEI, 379; Excretory mechanism in protozoa, GELEI, 381; Excretory system in Ciliates, GELEI, 382; "Chromatoid bodies" in *Entamoeba histolytica*, HAKANSSON, 407; Blepharoplast of *Bodo*, HOLLANDE, 443; Golgi apparatus in *Volvocinae*, HOVASSE, 451; Contractile vacuole in *Amoeba vespertilio*, HYMAN, 462; Temporary cytostome in amoebae, IVANIĆ, 472, 474; "Zoochlorella" of *Paramecium*, LOEFER, 596; Crystalline inclusions in *Amoeba*, LUCE & POHL, 607; Cytoplasmic granules in *Ichthyophthirius*, MACLENNAN, 631; Mitochondria in *Trichodinopsis*, PELLISSIER, 733; Myonemes in *Trichodinopsis* (Ciliata), PELLISSIER, 734; Eye-spot in *Euglena*, SOKOLOFF, 880.

Cysts, Spores.—Cyst structure in *Peridinium*, ENTZ & SEBESTYÉN, 328; Cysts of human *Embadomonas*, HOGUE, 440; Cyst structure in *Kahlia*, HORVÁTH, 449; Cyst-formation in *Arcella*, IVANIĆ, 465; Spores in *Mrazekidae* (Microsporidia), JIROVEC, 492; Microsporidian spores, JIROVEC, 494.

REPRODUCTION AND LIFE-CYCLE.

Mycetozoa.—*Entamoebophaga* gen. n., IVANIĆ, 479.

Rhizopoda.—*Entamoeba* parasitic in opalinid ciliate, BRUMPT & LAVIER, 119; Genus *Nebela*, DEFLANDRE, 264; Life-cycle of *Discorbina vilardeboana*, FAYN, 345; Life history of *Dinamoeba mirabilis*, GROOT, 400; Life-cycle of *Amoeba proteus* and *Amoeba dubia*, HALSEY, 411; Multiple division in *Arcella*, IVANIĆ, 465; Development of *Mastigina hylae*, IVANIĆ, 468; Multiple division in *Vahlkampfia*, IVANIĆ, 470; Development of *Entamoeba histolytica*, IVANIĆ, 477; Development of new *Endolimax* sp. from man, IVANIĆ, 478; Modifications of the test in Foraminifera, LE CALVEZ, 580; Flagellispores of Radiolaria, LE CALVEZ, 582; Sporulation in *Iridia* (Foraminifera), LE CALVEZ, 583; Conjugation in Foraminifera, LE CALVEZ, 584; Life-history of *Nebela collaris*, MACKINLAY, 629; Life-cycle of *Spirillina vivipara*, MYERS, 685.

Mastigophora.—Division in *Chattonella*, BIECHELER, 57; Development of new *Coccidinium*, CHATTON & BIECHELER, 171; Development of *Gregarina* gen. n., CHATTON & BRACHON, 173; Conjugation in *Polytoma*, DOGIEL, 288; Development of rat-trypanosomes in the blood, DYMOV, 318; Development of *Trypanosoma cruzi* in the blood, DYMOV, 319; Schizogony in *Leishmania*, ESTRADA, 329; Development of *Sporodinium* gen. n. (Dinoflagellate), GÖNNERT, 389; Comparison of stages of development in trypanosomes of lewisi-group, HOARE, 434; Absence of filterable stages in trypanosomes, KASANSKY, 511; Reproduction in *Bicoeca*, KLUG, 543; Binary fission of *Trypanosoma cruzi* in blood, MAZZA, 652; Development of "metacyclic" forms in cultures of *Leishmania donovani*, NATTAN-LARRIER & GRIMARD,

692; Life-cycle of *Oodinium ocellatum*, NIGRELLI, 702; Life-cycle of *Ceratomyx cornutum*, RENKAUF, 792; Development of trypanosomes in tsetse, ROUBAUD, 818; SCHILLING, 842; *Trypanosoma duttoni*, TALIAFERRO & PAVLINOVA, 910.

Sporozoa.—*Tyzzeria* gen. n. (Coccidia), ALLEN, 9; Binary fission in *Plasmodium vivax* "ring" forms, BEACH, 38; *Eimeria* of pigeon, BONDOS, 71; Early development of gametocytes of *Plasmodium vivax*, BOYD, ETC., 90; Development of *Plasmodium* of domestic fowl, BRUMPT, 115; New *Isospora* from lizard, CARINI, 145; Development of new *Hyalosporina*, CHAKRAVARTY, 160; Binary fission in *Plasmodium falciparum*, CHAULITZ, 164; New *Siedleckia*, CHATTON & VILLENEUVE, 181; Life cycle of *Eleutheroschizon* and absence of schizogony in this form and in *Siedleckia*, CHATTON & VILLENEUVE, 182; Types of schizogony in *Plasmodium vivax*, CORRADETTI, 208; Development of *Entamoeba* of reptiles, GEIMAN & RATCLIFFE, 375; Development of *Zschokkella* (Microsporidia), GEORGÉVITCH, 383; Schizogony in *Leucocytozoon*, GIOVANNOLA, 387; Development of new *Haplosporidium*, JIROVEC, 491; Development of Mrazekidae (Microsporidia), JIROVEC, 492; Development of Microsporidia, JIROVEC, 494; Schizogony and gametogony of *Plasmodium falciparum* in peripheral blood, JOLLY, 503; Development of *Plasmodium falciparum* in peripheral blood, JOLLY & SICAUT, 504; *Eimeria* spp. from newts, LAVIER, 573; Latency and prolonged incubation period in malarial infection, MOCHKOVSKI, 668; Development of *Globidium*, NAVILLE, 694; *Piridium* gen. n. (Gregarine?), PATTEN, 729; Development of *Nosema bombycis* after artificial infection, POYARKOFF, 752; *Nosema ovoideum*, RAABE, 760; Double schizogonic cycle in avian *Plasmodium*, RAFFAELE, 764; Initial stages of development of avian *Plasmodium*, RAFFAELE, 765; Development of *Babesia bigemina* in tick, REGENDANZ, 781; Development of *Hepatozoon* of gecko, ROBIN, 802; Development of new reptilian *Hepatozoon*, ROBIN, 803; *Plasmodium gonderi* sp. n., RODHAIN & BERGHE, 809; Development of gregarines, ROECKL, 813; Development of sporozoites of human *Plasmodium* in

reticulo-endothelial system, RUGE, 822; *Nuttalia* of hedgehog, SASSUCHIN, 834; Development of *Theileria dispar* in tick, SERGENT, ETC., 861; Development of *Theileria dispar* in bovine and in tick, SERGENT, ETC., 862; 863; Development of *Babesia canis* in tick, SHORTT, 868; Localization of malarial parasites during latent period of infection, TOPORKOV, 938; Development of *Plasmodium* in canary, WOLFSON, 986; New *Plasmodium* of owl, WOLFSON, 987; Asexual cycle in avian *Plasmodium*, WOLFSON, 988; Asexual development in avian *Plasmodium*, WOLFSON, 989; Development of new *Chloromyxum* (Myxosporidia) from shark, WOOLCOCK, 995.

Ciliophora. — Reproduction in *Lagenophrys*, AWERINZEW, 26; *Conidophrys* (Suctorina), CHATTON & LWOFF, 178; Rate of reproduction of *Paramacium* in culture, DOLGOPOLSKA, 290; Effect of light on reproduction of *Paramacium*, DOLGOPOLSKA, 291; Reproduction in *Folliculinidae*, FAURÉ-FREMIET, 333; Life-history of *Kahlia*, HORVÁTH, 449; Conjugation in *Chilodonella*, MACDOUGALL, 624; Chemical stimulation of division rate in *Paramacium*, NASTJUKOWA, 687; Freshwater Suctorina, RIEDER, 794; Sexual and asexual reproduction in *Volvox*, WANG & NIE, 965; *Volvox africanus*, WANG & NIE, 966; Division in *Nyctotherus*, WICHTERMAN, 978.

PHYSIOLOGY.

Movement, contractility. — A predatory peridininian, BIECHLER, 56; Feeding habits of peridininians, BIECHLER, 58; Ciliary movement in *Fabrea salina*, BRACHON, 91; Trichocysts and their structure, CHADEFAUD, 155; Ciliary system of *Glaucoma*, CHATTON & BRACHON, 174; 175; Ciliary system of Infusoria, CHATTON & LWOFF, 180; Feeding mechanism in *Amoeba*, COMANDON & FONBRUNE, 200; Vertical migration of *Gonyostomum semen*, COWLES & BRAMBEL, 216; Pseudopodia of Testacea, DEFLANDRE, 263; Movements of *Selenidium* (Gregarinida), FOWELL, 341; Effect of osmotic pressure on *Paramacium*, GAW, 371; Effect of temperature on contractile vacuole of *Paramacium*, GAW, 372; Effect of heavy water on

Paramecium, GAW 373; Spiral body-form in Ciliates, GELEI, 377; Permanent contractile vesicle in *Amoeba*, GELEI, 378; Formation of contractile vacuole and excretory pore in *Paramecium*, GELEI, 379; Excretory mechanism in protozoa, GELEI, 381; Flagella of *Bodo*, HOLLANDE, 443; Effect of temperature on *Flabellula mira* (marine amoeba), HOPKINS, 447; Contractile vacuole in *Amoeba vespertilio*, HYMAN, 462; Food ingestion in *Paranema*, HYMAN, 462; Buoyancy of *Noctiluca*, IIDA, 464; Nutrition in *Chilodon*, IVANIĆ, 484; Nutrition in *Vampyrellidium*, IVANIĆ, 485; Contractile vacuole in *Paramecium*, KAMADA, 508; KAMADA, 509; Temperature and trichocyst discharge in *Paramecium*, KAWAKAMI, 513; Contractility of *Epiclinetes*, KIESSELBACH, 519; Electrical stimulation of *Paramecium*, KINOSITA, 525; 526; Electrical stimulation of *Spirostomum*, KINOSITA, 529; 530; 531; Contractile vacuoles of Ciliates, KITCHING, 534; Contractile vacuoles of *Paramecium* and *Amoeba*, KITCHING, 535; Flagella movement in *Paranema* and *Euglena*, LOWNDES, 606; Ciliary movement in *Spathidium*, LUKÁCS, 608; Response to light in colonial Flagellates, LUNTZ, 611; Assimilation in Flagellates, LWOFF, 614; Synthesis in *Polytoma*, LWOFF & PROVASOLI, 621; Flagellate stage of the amoeba *Nae-gleria*, McCULLOUGH, 623; Narcosis of Ciliates and Flagellates, MAKAROV, 632; Artificial "protoplasm," MIHAÉLOFF, 662; Ciliary movement in *Paramecium*, MILICER, 663; Contractile vacuole of *Amoeba*, Zoothamnium and *Frontonia*, MÜLLER, 683; Effect of temperature on *Paramecium*, OLIFAN, 710; Spiral structure of Ciliates, PÁRDUCZ, 726; Effect of hypertonic solutions on *Spirostomum*, PICKEN, 743; Stimulation of *Trachelocerca*, SCHULZ, 852; Response to light in *Euglena*, SOKOLOFF, 880; Growth rate of *Blepharisma* and *Actinophrys*, SYNGAJEWSKAYA, 906; Ultraviolet irradiation of Rhizopods and Ciliates, TOHAKHOTINE, 914; Effect of ultraviolet stimulation of *Vorticella*, TOHAKHOTINE, 917; Ultra-violet irradiation of rhizopods and ciliates, TOHAKHOTINE, 918; Effect of centrifugal force on *Paramecium*, YANCEY, 1023.

Nutrition, Metabolism. — Glycogen in trichomonads and entamoebae,

ALEXEIEFF, 8; *Bodo* in yeast-culture, BAIER, 27; Effect of diet on coccidian infection in the rat, BECKER & MOREHOUSE, 39; Cultural requirements of leishmania, BERREBI, 45; A predatory peridinian, BIECHELER, 56; Feeding habits of peridinians, BIECHELER, 58; Effect of ultraviolet light on *Amoeba*, BLACK, 62, 63; Circulation of food vacuoles in *Paramecium*, BRAGG, 94; Sugar fermentation in culture of *Trichomonas*, CAILLEAU, 136; Cultural requirements of *Trichomonas* of pigeon, CAILLEAU, 137; Effect of sterols upon growth of *Trichomonas columbae*, CAILLEAU, 138; Ingestion and digestion of bacilli by amoeba, COMANDON & FONBRUNE, 198; Feeding mechanism of amoebae from fungi, COMANDON & FONBRUNE, 199; Feeding mechanism in *Amoeba*, COMANDON & FONBRUNE, 200; Ingestion of erythrocytes by *Entamoeba coli*, DOBELL, 285; Effect of heat on *Paramecium*, DOUDOROFF, 295; Testacea as food for Fungi, DRECHSLER, 299; Utilization of glucides by *Leishmania*, DUBOIS, 304; Feeding rate of *Amoeba*, FENNELL, 335; Phagocytosis in amoebae, GAUDUCHEAU, 365; Interaction between *Paramecium* and *Didinium*, GAUSE, SMARAGDOVA & WITT, 370; Effect of osmotic pressure on *Paramecium*, GAW, 371; Supposed utilisation of nitrogen by *Chilomonas*, HALL & LOEFER, 410; "Chromatoid bodies" in *Entamoeba histolytica*, HAKANSSON, 407; Food and division rate of *Glaucoma*, HARDING, 413; Nutrition in *Kahlia*, HORVÁTH, 449; Food requirements of *Euglena*, HUTNER, 459; Food ingestion in *Paranema*, HYMAN, 462; Ingestion of food in amoebae, IVANIĆ, 472, 474; Method of ingestion of food in *Trypanosoma equiperdum*, IVANIĆ, 473; Nutrition in *Chilodon*, IVANIĆ, 484; *Vampyrellidium vagans*, IVANIĆ, 485; Metabolism of *Trypanosoma evansi*, KRIJGSMAN, 550; Assimilation in Flagellates, LWOFF, 614; *Polytomella*, LWOFF, 615; Utilisation of protohaemin by *Strigomonas* (Trypanosomidae), LWOFF, 616; Effect of culture solutions on *Euglena*, LWOFF & DUSI, 617; Suppression of chloroplasts in *Euglena*, LWOFF & DUSI, 618; Effect of darkness on *Chlorogonium*, LWOFF & DUSI, 619; Synthesis in *Polytoma*, LWOFF & PROVASOLI, 621; Synthetic action of trypanosomidae, LWOFF, M., 622; Food ingestion in *Nebela collaris*, MACKINLAY, 629;

Function of cytoplasmic granules in *Ichthyophthyrus*, MACLENNAN, 631; Food ingestion in *Vampyrella*, MIHAÉLOFF, 662; Effect of concentrated solutions on Ciliata, MONOD & TESSIER, 674; Osmotic balance in *Spirostomum*, PICKEN, 743; Saprozoic Flagellates, PRINGSHEIM, 757; Glucose metabolism of trypanosomes, REINER, ETC., 785; Cultural requirements of *Trichomonas foetus*, RIEDMÜLLER, 796; Haematophagy in *Entamoeba invadens*, RODEHAIN & HOOF, 812; Amoeba in bacterial cultures, SHINN & HADLEY, 867; Feeding mechanism in Testacea, STUMP, 900.

Excretion.—Effect of temperature on contractile vacuoles of *Paramecium*, GAW, 372; Effect of heavy water on contractile vacuoles of *Paramecium*, GAW, 373; Pathogenicity of *Entamoeba* of reptiles, GEIMAN & RATCLIFFE, 375; Permanent contractile vesicle in *Amoeba*, GELEI, 378; Formation of excretory pore in *Paramecium*, GELEI, 379; Excretory mechanism in protozoa, GELEI, 381; Vitamin C method for excretory system in Ciliates, GELEI, 382; Contractile vacuole in *Amoeba vespertilio*, HYMAN, 462; Contractile vacuole in *Paramecium*, KAMADA, 508; 509; Contractile vacuole of *Amoeba*, *Zoothamnium* and *Frontonia*, MÜLLER, 683.

Properties of nucleus and protoplasm—Extension of cell membrane in *Amoeba* irradiated with ultraviolet light, BLACK, 62, 63; Movements of food vacuoles in *Paramecium*, BRAGG, 94; Electric charge of *Trypanosoma* and *Leishmania*, BROOM, ETC., 100; Centrifuging *Paramecium*, BROWN, 104; Pseudopodia of Testacea, DEFLANDRE, 263; Effect of osmotic pressure on *Paramecium*, GAW, 371; Effect of temperature on *Paramecium*, GAW, 372; Effect of heavy water on *Paramecium*, GAW, 373; Permanent contractile vesicle in *Amoeba*, GELEI, 378; Electric charge of trypanosomes, GRODZENSKY, 399; Electrical stimulation of *Paramecium*, KINOSITA, 526; Chemical constitution of trypanosomes, KLIGLER & OLITZKI, 540; Artificial "protoplasm," MIHAÉLOFF, 662; Vital staining of *Leishmania*, MOCHKOVSKI, 669; Osmosis and contractile vacuole of *Amoeba*, *Zoothamnium* and *Frontonia*, MÜLLER, 683; Effect of centrifuging

Flagellates, PATTEN & BEAMS, 730; Action of quinine on *Paramecium*, SARKAR, 830; Feeding mechanism in Testacea, STUMP, 900; Effect of ultraviolet light on nuclei of Ciliata, TCHAKHOTINE, 916; Ultraviolet irradiation of *Paramecium* and *Amoeba*, YANCEY, 1024.

Nervous System.—Temperature and trichocyst discharge in *Paramecium*, KAWAKAMI, 513; Electric polarisation in *Paramecium*, KINOSITA, 522; 523; 524; Electrical stimulation of *Paramecium*, KINOSITA, 525; Electrical stimulation of *Spirostomum*, KINOSITA, 529; 530; 531; Effect of snake's venom on Ciliates, KLEIN, 536; Effect of division on neuro-motor system of *Euplotes*, KLEIN, 537; Irradiation effects on ciliates, KLEIN & MISSRIEGLER, 538; Light sensitivity in *Peranema*, MAST & HAWK, 645; Effect of electric current on *Paramecium*, MORI, 680; Response to light in *Euglena*, SOKOLOFF, 880; Function of the eye-spot in *Euglena*, TCHAKHOTINE, 919.

Growth, Multiplication.—Reproduction in *Lagenophrys*, AWERINZEW, 26; Nuclear division in *Peridinia*, BIECHELER, 55; Division in *Chattonella*, BIECHELER, 57; Encystment in *Fabrea salina*, BRACHON, 92; Conjugation in *Trichodina*, BROUARDEL, 102; Nuclear division in *Amoeba*, CHALKLEY, 161; Cytoplasmic division in *Amoeba*, CHALKLEY, 162; Two forms of *Paramecium* in a 3-year old culture, CHATTON & BRACHON, 176; *Entamoeba histolytica* in cultures, CRAIG, 219; Mitosis in *Amoeba dubia*, DAWSON, KESSLER & SILBERSTEIN, 260; Heavy water and the fission rate of *Uroleptus*, DELAMATER, 268; Autogamy in *Paramecium*, DILLER, 282; Conjugation in *Polytoma*, DOGIEL, 288; Effect of heat on *Paramecium*, DOUDOROFF, 295; Cell division in *Gonyostomum semen*, DROUET & COHEN, 300; Dimorphism in permian fusulines, DUNBAR, SKINNER & KING, 314; Effect of pantothenic acid on growth rate of *Colpidium* and *Haemato-coccus*, ELLIOTT, 327; Conjugation in *Vorticella*, FINLEY, 338; Growth in Foraminifera, FØYEN, 344; Alternation of generations in *Discorbina*, FØYEN, 345; Division in *Dinamoeba*, GROOT, 400; *Amoeba proteus* and *Amoeba dubia*, HALSEY, 411; Food concentration and division rate of *Glaucoma*, HARDING,

413; Effect of viscosity of medium upon growth of *Trichomonas*, HEGNER & ESKRIDGE, 420; Growth of *Glaucoma* in pure culture, HETHERINGTON, 432; Division in *Kahlia*, HORVÁTH, 449; Effect of various foodstuffs on *Euglena*, HUTNER, 459; Effect of temperature on encystment of *Blepharisma*, IBARA, 463; Multiple division in *Arcella*, IVANIĆ, 465; Reproduction in *Chilodon*, IVANIĆ, 466; Reproduction in *Vampyrellidium*, IVANIĆ, 469; Multiple division in *Vahlkampfia*, IVANIĆ, 470; Parthenogenesis in *Chilodon*, IVANIĆ, 483; Effect of lack of CO₂ on *Glaucoma* and *Chilomonas*, JAHN, 488; Effect of other micro-organisms on *Glaucoma*, JOHNSON, 502; Effect of snake's venom on Ciliates, KLEIN, 536; Effect of division on organisation of *Euplotes*, KLEIN, 537; Irradiation of ciliates, KLEIN & MISSRIEGLER, 538; Reproduction in *Bicoeca*, KLUG, 543; Modifications of the test in Foraminifera, LE CALVEZ, 580; Flagellisporos of Radiolaria, LE CALVEZ, 582; Conjugation of gametes in Foraminifera, LE CALVEZ, 584; Effect of "peptone" media on growth of *Paramecium*, LOEFER, 597; *Paramecium bursaria*, LOEFER, 598; Effect of ethyl alcohol on Ciliates and Flagellates, LOEFER & HALL, 600; Effect of periodic stimulation on *Stylonychia*, LUNTZ, 610; Electrical stimulation of *Stylonychia*, LUNTZ, 612; Conjugation in *Chilodonella*, MACDOUGALL, 624; Effect of concentrated solutions on *Glaucoma*, MONOD, 673; Effect of concentrated solutions on Ciliata, MONOD & TESSIER, 674; Regeneration in *Spirostomum*, MOREA, 676; Asexual reproduction in *Spirillina vivipara*, MYERS, 685; Effect of temperature on *Paramecium*, OLIFAN, 709; Effect of temperature on rate of division in *Paramecium*, OLIFAN, 710; Growth of *Spathidium*, PACKARD, 717; Conjugation in *Climacostomum*, PESHKOVSKAYA, 736; *Glaucoma pyriformis*, PHELPS, 741; Life-cycle of *Ceratium cornutum*, RENKAUF, 792; Suctorina, RIEDER, 794; Effect of oxygen on growth of *Polytoma*, ROTTIER, 816; Effect of concentrated solutions on *Polytoma*, ROTTIER, 817; Recovery of *Spirostomum* after operation, SEYD, 864; Conjugation of *Paramecium*, SONNEBORN, 884; Conjugation in two races of *Paramecium*, SONNEBORN & COHEN, 885; Effect of test removal on multiplication of *Pontigulasia* (Testacea),

STUMP, 901; Growth rate of *Blepharisma* and *Actinophrys*, SYNGAJEWSKAYA, 906; Average size of *Stentor* and *Paramecium*, TSYNGER, FISIKOV and TSYNGER, 945; Variability in *Stylonychia*, TSYNGER and NARBUTT, 946; Asexual development of *Volvox*, WANG & NIE, 965; Asexual reproduction and parthenogonidia in *Volvox*, WANG & NIE, 966; Effect of centrifuging *Paramecium*, YANCEY, 1025.

Regeneration.—Effect of division on organisation of *Euplotes*, KLEIN, 537; Nuclear changes in *Stentor* and *Paramecium*, SCHWARTZ, 853; Recovery of *Spirostomum* after operation, SEYD, 864; Endomixis in *Paramecium*, SONNEBORN, 882; 883.

Degeneration.—*Plasmodium* sporozoites, BARBER, 29; Testacea as food for fungi, DRECHSLER, 299; *Spirostomum*, MOREA, 676.

Vitality.—Resistance to low temperatures of Rhizopods and Ciliates, BECQUEREL, 42; Resistance of soil protozoa to climate, BERZ, 46; Encystment in *Fabrea salina*, BRACHON, 92; Viability of *Plasmodium* oocysts, BUCK, 123; Two forms of *Paramecium* in a 3-year old culture, CHATTON & BRACHON, 176; Effect of heavy water on *Uroleptus*, DELAMATER, 268; *Entamoeba histolytica* in sewage water, DESCHIENS & FLYE SAINTE MARIE, 279; Cysts of *Entamoeba coli*, DOBELL, 285; Viability of *Entamoeba histolytica* cysts after passage through cockroach, FRYE & MELENEY, 357; Intestinal protozoa in human cadavers, FRYE & MELENEY, 358; *Dientamoeba* in faeces, HAKANSSON, 406; *Amoeba proteus* and *Amoeba dubia*, HALSEY, 411; Starvation of *Glaucoma*, HARDING, 413; Viability of parasites after death of host, HEGNER, 419; Effect of snake's venom on Ciliates, KLEIN, 536; Effect of periodic stimulation of *Stylonychia*, LUNTZ, 610; "Immortality" in *Stylonychia*, LUNTZ, 612; Lethal electrical current for *Paramecium*, LUYET, 613; Immortality in protozoa, METALNIKOV, 659; Regeneration in *Spirostomum*, MOREA, 676; Effect of electric current on *Paramecium*, MORI, 680; Effect of temperature on rate of division in *Paramecium*, OLIFAN, 710; Viability of frog trichomonad, ROSENBERG, 815;

Recovery of *Spirostomum* after operation, SEYD, 864; Endomixis in *Paramecium*, SONNEBORN, 882; 883; Resistance of *Paramecium* to ultraviolet irradiation, TANG & GAW, 911; Effect of potassium cyanide and methylene blue on *Paramecium*, TROFIMOWITSCH, 940; Average size of *Stentor* and *Paramecium*, TSYNGER, FISIKOV & TSYNGER, 945; Viability of *Dientamoeba* in vitro, WENRICH, 968; Ultraviolet irradiation of *Paramecium* and *Amoeba*, YANCEY, 1024.

Sexuality, Conjugation. — Reproduction in *Lagenophrys*, AWERINZEW, 26; Conjugation in *Trichodina*, BROUARDEL, 102; Extrusion of "polar bodies" in gametocytes of *Plasmodium*, CASINI, 150; Nuclear division in *Amoeba*, CHALKLEY, 161; *Coccidinium* (Mastigophora), CHATTON & BIECHLER, 171; *Siedleckia* (Sporozoa), CHATTON & VILLENEUVE, 181; Conjugation and endomixis in *Balanidium*, CUNHA & MUNIZ, 225; Autogamy in *Paramecium*, DILLER, 282; *Polytoma uvella*, DOGIEL, 288; Conjugation in *Vorticella*, FINLEY, 338; Sexual reproduction in Foraminifera, FØYN, 344; Alternation of generations in *Discorbina*, FØYN, 345; Effect of conjugation on organisation of *Euplotes*, KLEIN, 537; Flagellipores of Radiolaria, LE CALVEZ, 582; Sporulation in *Iridia* (Foraminifera), LE CALVEZ, 583; Conjugation in *Kahlia*, HORVÁTH, 449; Reproduction in *Chilodon*, IVANIĆ, 466; Reproduction in *Vampyrellidium*, IVANIĆ, 469; Effect of conjugation in ciliates, METALNIKOV, 659; *Spirillina vivipara*, MYERS, 685; Sexual phenomena in Sporozoa, NAVILLE, 693; Conjugation in *Climacostomum*, PESHKOVSKAYA, 736; Conjugation in *Cryptochilum*, RUSSO, 824; Conjugation in *Paramecium*, SONNEBORN, 884; Conjugation in two races of *Paramecium*, SONNEBORN & COHEN, 885; Conjugation in *Anoplophrya*, SUMMERS & KIDDER, 904; Sexual colonies of *Volvox*, WANG & NIE, 965; Male and female colonies in *Volvox*, WANG & NIE, 966; Conjugation of Ophryoscolecidae, WINOGRADOWA, 984.

Cyst-formation. — *Fabrea salina*, BRACHON, 92; *Entamoeba histolytica* cultures, CRAIG, 219; Cyst-formation in *Peridinium*, ENTZ & SEBESTYÉN, 328; *Dinamoeba mirabilis*, GROOT, 400; *Kahlia simplex*, HORVÁTH, 449;

Effect of temperature on encystment of *Blepharisma*, IBARA, 463; Buoyancy of *Noctiluca*, IIDA, 464; Cyst-formation in *Arcella*, IVANIĆ, 465; Resting stages in *Chilodon*, IVANIĆ, 466; Resting stages in *Vampyrellidium*, IVANIĆ, 469; *Vahlkampfia*, IVANIĆ, 470; Resting stages in *Actinophrys*, IVANIĆ, 480; Resting stages in *Euglena*, IVANIĆ, 481; Resting stages in *Carchesium*, IVANIĆ, 482; Cyst-formation in *Naegleria*, McCULLOUGH, 623; Specific gravity of *Giardia* cysts, RACHMANOW, 762; Encystment in Suctorina, RIEDER, 794; *Euglena viridis*, UTERMÖHL, 950;

Environments Effects, Response to Stimuli. — Effect of low temperatures on Rhizopods and Ciliates, BECQUEREL, 42; Effect of climate on soil protozoa, BERZ, 46; Effect of short waves upon development of arsenic-resistant trypanosomes, BESSEMAN & JANSSENS, 47; Physical factors in cultures of *Entamoeba histolytica*, BIRCH-HIRSCHFELD, 59; Negative reaction of *Amoeba* to ultraviolet light, BLACK, 62, 63; Effect of light on cultures of Volvocaceae, BOLD, 70; Variation in size and shape of *Paramecium*, BRAGG, 93; Circulation of food vacuoles in *Paramecium*, BRAGG, 94; Behaviour of *Paramecium* on glucose solutions, CHEJFEC, 183; Effect of physical agents upon *Leishmania*, CHUNG, 190; Action of soporifics and alkaloids upon *Spirostomum*, CZERNIEWSKI, 246; Effect of heavy water on *Uroleptus*, DELAMATER, 268; Effect of heat on *Paramecium*, DOUDOROFF, 295; Feeding rate of *Amoeba*, FENNELL, 335; Interaction between *Paramecium* and *Didinium*, GAUSE, SMARAGDOVA & WITT, 370; Effect of osmotic pressure on *Paramecium*, GAW, 371; Effect of temperature on *Paramecium*, GAW, 372; Effect of heavy water on *Paramecium*, GAW, 373; Electric charge of trypanosomes, GRODZINSKY, 399; Supposed utilisation of nitrogen by *Chilomonas*, HALL & LOEFER, 410; Effect of food concentration on division rate of *Glaucocoma*, HARDING, 413; Effect of temperature on *Flabellula mira* (marine amoeba), HOPKINS, 447; Effect of various food-stuffs on *Euglena*, HUTNER, 459; Effect of lack of CO₂ on growth of *Glaucocoma* and *Chilomonas*, JAHN, 488; Effect of other microorganisms on growth of *Glaucocoma*, 502; *Paramecium* in different solutions, KAMADA, 508;

Effect of temperature on trichocysts of *Paramecium*, KAWAKAMI, 513; Electric polarisation in *Paramecium*, KINOSITA, 522; 523; Electric polarisation of *Paramecium*, KINOSITA, 524; 525; 526; Effect of change in orientation on response of *Paramecium* to electrical stimulation, KINOSITA, 527; Effect of repeated electrical stimulation on *Paramecium*, KINOSITA, 528; Electrical stimulation of *Spirostomum*, KINOSITA, 529; 530; 531; Effect of hypertonic solutions on contractile vacuoles of Ciliates, KITCHING, 534; Irradiation of Ciliates, KLEIN & MISSRIEGLER, 538; Effect of "peptone" media on growth of *Paramecium*, LOEFER, 597; Effect of ethyl alcohol on growth of Flagellates and Ciliates, LOEFER & HALL, 600; Effect of periodic stimulation of *Stylonychia*, LUNTZ, 610; Response to stimuli in colonial Flagellates, LUNTZ, 611; Electrical stimulation of *Stylonychia*, LUNTZ, 612; Lethal electrical current for *Paramecium*, LUYET, 613; Effect of culture solutions on *Euglena*, LWOFF & DUSI, 617; Suppression of chloroplasts in *Euglena*, LWOFF & DUSI, 618; Effect of darkness on *Chlorogonium*, LWOFF & DUSI, 619; Effect of soil extract on culturing Flagellates, LWOFF & LEDERER, 620; Reaction *Naegleria* to light, McCULLOUGH, 623; Harcosis of Ciliates and Flagellates MAKAROV, 632; Light response in *Paramecium*, MAST & HAWK, 645; Successful culture of *Chilomonas*, MAST & PACE, 646; Effect of concentrated solutions on *Glaucoma*, MONOD, 673; Effect of concentrated solutions on Ciliata, MONOD & TESNIER, 674; Effect of electric current on *Paramecium*, MORI, 680; Osmosis in *Amoeba*, *Zoothamnium* and *Frontonia*, MÜLLER, 683; Effect of temperature on *Paramecium*, OLIFAN, 709; Variation of temperature and *Paramecium caudatum*, OLIFAN, 710; Centrifuging Flagellates, PATTEN & BEAMS, 730; Effect of hypertonic solutions on *Spirostomum*, PICKEN, 743; Effect of temperature upon piroplasms and anaplasms, REES, 780; Effect of variation of pH on Suctoria, RIEDER, 794; Effect of oxygen on growth of *Polytoma*, ROTTIER, 816; Effect of concentrated solutions on growth of *Polytoma*, ROTTIER, 817; Stimulation of *Trachelocerca*, SCHULZ, 852; Response to light in *Euglena*, SOKOLOFF, 880; Conjugation in *Paramecium*, SONNEBORN & COHEN, 885; Ultraviolet

irradiation of *Paramecium*, TANG & GAW, 911; Ultraviolet irradiation of Rhizopods and Ciliates, TCHAKHOTINE, 914; Effect of manipulation on *Paramecium*, TCHAKHOTINE, 915; Effect of ultraviolet light on Ciliata, TCHAKHOTINE, 916; Ultraviolet stimulation of *Vorticella*, TCHAKHOTINE, 917; Ultraviolet irradiation of rhizopods and ciliates, TCHAKHOTINE, 918; Function of the eye-spot in *Euglena*, TCHAKHOTINE, 919; Average size of *Stentor* and *Paramecium*, TSYNGER, FISIKOV & TSYNGER, 945; Variability in *Stylonychia*, TSYNGER & NARBUTT, 946; Effect of centrifugal force on movement of *Paramecium*, YANCEY, 1023; Effect of centrifuging *Paramecium*, YANCEY, 1025.

Effects of Reagents and Drugs.—

Action of organic acids upon *Entamoeba histolytica*, BIRCH-HIRSCHFELD, 60; Trypanocidal action of styryl selenazole compounds, BROWNING, ETC., 107; Action of antimalarial drugs upon avian haemosporidia, BRUMPT & BOVET, 118; *In vitro* action of atebirin on *Plasmodium relictum*, BURROVA, 128; Action of antimalarial drugs upon ciliates, CASINI, 151; Action of atebirin on *Plasmodium knowlesi*, CHOPRA, ETC., 187; Relation of concentration of atebirin to number of malarial parasites, CHOPRA, ETC., 188; Parasitotropic effect of acridine upon *Plasmodium vivax*, DEMINA, 273; Action of serum upon *Entamoeba histolytica*, DESCHIENS, 276; 277; Effect of paraminobenzoic acid upon trypanosomes, DUBOIS, 302; Arsenic resistance in trypanosomes, DUBOIS, 303; Arsenic resistance in trypanosomes, DUKE, 307; Pantothenic acid and *Colpidium* and *Haemotococcus*, ELLIOTT, 327; Action of media upon pathogenicity and phagocytosis in *Entamoeba histolytica*, FRYE & MELENEY, 356; Action of carbarsone on trichomonads, GABALDON, 359; Effect of nicotine on Ciliates and Flagellates, GAUSE, 367; Effect of heavy water on *Paramecium*, GAW, 373; Rearing of *Trichomonas*-free rats by treatment with carbarsone, HEGNER & ESKRIDGE, 421; Effect of allantoin upon trichomonads, HEGNER & ESKRIDGE, 422; Drug-fastness in trypanosomes, HORNBY, 448; Effect of various foodstuffs on *Euglena*, HUTNER, 459; Drug-resistance in trypanosomes, KAUNTZE, 512; Effect of hypertonic solutions on contractile

vacuoles, KITCHING, 535; Effect of snake's venom on ciliates, KLEIN, 536; Action of arsenophenylglycine upon *Trypanosoma lewisi*, KUHS, ETC., 556; Drug-resistance in *Trypanosoma annamense*, LAUNOY, ETC., 571; Effect on growth of *Paramecium bursaria*, LOEFFER, 598; Action of quinine and atabrin on *Plasmodium knowlesi*, MOSNA, 682; Arsenic-fastness in trypanosomes, NAITO & OKA, 686; Chemical stimulation of division rate in *Paramecium*, NASTJUKOWA, 687; Chemotherapeutic action in trypanosomiasis, OESTERLIN, 707; Chemotherapy of piroplasmoses, OESTERLIN, 708; Effect on growth of *Glaucoma pyriformis*, PHELPS, 741; Action of quinine on *Paramecium*, SARKAR, 830; Influence of drugs upon metabolism of trypanosomes, SCHEFF & HASSKÓ, 839; Action of atabrin upon *Plasmodium vivax*, SELMANOVA, 858; Mechanism of drug action upon trypanosomes, SINGER, 875; Effect of potassium cyanide and methylene blue on *Paramecium*, TROFIMOWITCH, 940; Action of dyes upon *Entamoeba histolytica*, TSUCHIYA, 942; Fluorescence in *Paramecium*, VALETTE, 951; Action of arsenobenzols upon trypanosomes, ZOLOG & COMSIA, 1032.

(Immunity—*vide* under Parasitism.)

ETHOLOGY.

Bionomics; Ecology—Parasites of native and acclimatized fish in a lake BOGATOWA, 66; Effect of size of reservoir upon parasitic fauna of fish, BYCHOWSKAJA, 132; Natural history of *Paramecium*, DEMBOWSKI, 271; Changes in the parasitic fauna of the eel in connection with its migrations, DOGIEL, 286; Parasites of cod-fish from "relict" lake, DOGIEL, 287; Origin of parasites in migratory birds, DOGIEL & NAWTSEWITSCH, 289; Biology of trypanosomes of the *brucei*-group, DUKE, 311; Quantitative bioecology, GAUSE, 368; Biocoenological experiments on ciliates and flagellates, GAUSE, 369; Changes in parasitic fauna of fish according to age, GORBUNOVA, 391; Role of protozoa in purification of water, LIEBMANN, 593; Ciliates in water-purification wells, LIEBMANN, 594; Changes in parasites of smelts under the influence of changed habitat, NOWIKOWA, 706.

Habitats.—**Plankton:** *Marine:* Peridinia from Japanese waters, ABÉ, 1, 2; Quantitative estimation of plankton, BAYER & BAJKOV, 37; Dinoflagellates from western Pacific, BÖHM, 68; Ciliates from Tortugas, Florida, BULLINGTON, 128; Tintinnids from coast of Portugal CANDEIAS, 142; Red "water-bloom" (*Mesodinium rubrum*) in British Columbia waters, CLEMENS, 193; Siliceous Foraminifera from coastal waters, Buenos Aires, FRENGUELLI, 348; Summary of northern planktonic organisms, GRAU, HENTSCHEL & RUSSELL, 395; Arctic Tintinnids, HARDY, 414; Dinoflagellates from South-west Atlantic and Bellingshausen Sea, HART, 415; Buoyancy of *Noctiluca*, IIDA, 464; Planktonic forms from Woods Hole, LACKEY, 560; Ciliates from Black Sea, LEPSI, 588; Tintinnids from Chinese waters, NIE & CHENG, 699; Phytoplankton of Greenland waters, NIELSEN, 700; Heliozoa from the Black Sea, OSTROUMOFF, 712; Dinoflagellates and Tintinnids from Puget Sound, THOMPSON & PHIFER, 834; Radiolaria, Flagellata, Ciliata from Bermuda, WAILES, 963; Dinoflagellata from San Francisco, WHADON & KOFROID, 975; Phytomonadida from the Dead Sea, WILKANSKY, 980.

Freshwater: Rhizopods, Flagellates and Ciliates from Lake Michigan, AHLSTROM, 7; *Volvox*, *Ceratium* from German lakes, BROHMER, 99; Rhizopods, Flagellates and Ciliates from Swiss lakes, BÜREN, 124; Rhizopoda, Ciliata, Flagellata from River Plate, CARBONELL, 144; *Gonyostomum semen* in a bog pond, COWLES & BRAMBEL, 216; Dinoflagellates from Czechoslovakian lakes, FOTT, 340; Ciliates from Hungary, GELEI, 376; Flagellates from Moscow River, GUSEVA, 403; Blue chromatophores in flagellates, LACKEY, 561; Winter occurrence of freshwater Dinoflagellates, Austria, SCHILLER & STEFAN, 841; Quantitative estimation, SEELE, 857; Rhizopoda, Flagellata, Ciliata, from two Mexican lakes, SOKOLOFF, 881; Rhizopods and Flagellates from Swiss lakes, SUCHLANDT & SCHMASSMANN, 902; *Euglena* from Hungary, SZABADOS, 907; Ciliates and Flagellates from Lake Dikoye, Russia, TAUSON, 913; Flagellates and Ciliates from island of Mull, WILLIAMS, 981.

Aquatic; General. — Ciliates of "Emscher"-wells, LIEBMANN, 594.

Marine: *Gymnodinium* and *Folliculina* from Port Erin, BRUCE, 109; Foraminifera from Australian waters, CHAPMAN & PARR, 168; *Foettingeria* from Actinians, DELPHY, 269; Foraminifera from the Weddell Sea, EARLAND, 320; *Folliculinidae* of the Breton coast, FAURÉ-FREMIET, 332; Foraminifera from coastal waters, N. Carolina, HADLEY, 405; Distribution of *Keramosphaera* BRADY, HERON-ALLEN, 427; Seasonal distribution of plankton at Woods Hole, LACKEY, 560; Foraminifera from Mediterranean, LE CALVEZ, 581; Ciliates from the Black Sea, LEPSI, 588; Foraminifera from Monterey Bay, MARTIN, 643; Foraminifera from Russian arctic waters, STSCHEDRIN, 898; A new foraminifer from Japanese waters, STSCHEDRINA, 899; Foraminifera from Florida and the Bahamas, THORPE, 937.

Brackish: New Chloromonadina, *Chattonella*, France, BIECHELER, 54; Foraminifera from Japanese lakes, HADA, 404; Testacea from Holland, HOKER & RIJSINGE, 439; Rhizopoda from sand-dune mosses, HOOGENRAAD, 446; Estuarine Foraminifera from N. Carolina, PEARSE, 732; Testacea from coastal lakes of Japan, UENO, 948; Flagellata, Ciliata from region of the Black Sea, VALKANOV, 952; Phytomonadida from the Dead Sea, WILKANSKY, 980.

Freshwater: Rhizopods, Flagellates and Ciliates from Swiss lakes, BÜREN, 124; *Gonyostomum semen* in a bog pond, COWLES & BRAMBEL, 216; *Euglena mesnili* sp. n., DEFLANDRE & DUSI, 267; Habitat of *Gonyostomum semen*, DROUET & COHEN, 300; Dinoflagellates from Czecho-Slovakian lakes, FORT, 340; Ciliata in aquaria, FRANKENBERG, 347; Ciliates from Hungary, GELEI, 380; Rhizopods, Ciliates and Flagellates from Westphalian lakes, GRIEPENBURG-SCHAE, 397; Testacea from bogs of Switzerland, JUNG, 506; Rhizopoda, Ciliata from subterranean waters of Jugoslavia, KARAMAN, 510; Colourless, non-parasitic Flagellates, KLUG, 541; Flagellata from woodland pools, Prague, KLUG, 542; Blue chromatophores in flagellates, LACKEY, 561; Free-living *Trichomonas*, LAVIER, 576;

Protozoa in standing waters, LIEBMANN, 593; Flagellates from Swiss lakes, MESSIKOMMER, 657; Flagellates from Alpine pools and lakes, MESSIKOMMER, 658; *Ceratium cornutum*, RENKAUF, 792; Suctoria, RIEDER, 794; Suctoria of Switzerland, RIEDER, 795; Winter occurrence of Dinoflagellates in small streams, Austria, SCHILLER & STEFAN, 841; Rhizopoda, Flagellata, Ciliata from two Mexican lakes, SOKOLOFF, 881; Rhizopods and Flagellates from Swiss lakes, SUCHLANDT & SCHMASSMANN, 902; Freshwater marshes of Lorraine - Rhizopods and Ciliates, TÉTRY, 924; Ciliata from Nanking, WANG & NIE, 964; *Volvox africanus* from a pond in Nanking, WANG & NIE, 965; Flagellates and Ciliates from island of Mull, WILLIAMS, 981.

Sewage: *Entamoeba histolytica* in sewage water, DESCHIENS & FLYE SAINTE MARIE, 279; Ciliata from waste water, HAVVAND, Norway, LUNDBYE, 609; Ciliates from factory waste water, VOLZ, 962.

Soil.—Microfauna, CUTLER & CRUMP, 243; Soil protozoa from Central Asia, BORDSKY & BELAYEVA, 98; BRODSKY, 97; Soil protozoa from Lahore, HUSAIN, 458; Protozoal fauna of Sahara, VARGA, 954; Testacea from mountainous moorland, Silesia, KOTULLA, 546; *Amoeba* from volcanic soil, BRUNETTI, 120; Structure of *Epiclinetes ambiguus*, KESSELBACH, 519; *Spathidium* from plant detritus, Hungary, LUKÁCS, 608.

Miscellaneous. — Rhizopoda from sand-dune mosses, HOOGENRAAD, 446; Testacea from bogs of Switzerland, JUNG, 506; Testacea from moorland waters, MACKINLAY, 628; Testacea from France (Bourbonnais), OLIVIER, 711; Rhizopoda from Dutch bogs, OYE, 713; Rhizopoda from bogs, OYE, 714; Microfauna of rice-fields, PASHITNOWA, 728; *Amoeba* contaminating bacterial culture, SHINN & HADLEY, 867.

Symbiosis.—Zooxanthellae in *Orbitolites*, DOYLE, 297; *Cucumophrya* [Suctoria] on harpacticoid Copepods, KUNZ, 557; "Zoochlorella" of *Paramecium*, LOEFER, 596; *Opercularia* (Ciliata) on land-copepods, PRECHT, 754.

Pseudoparasitism.—*Foettingeria* from Actinians, DELPHY, 269; Macrophages in human appendix mistaken for *Entamoeba histolytica*, THOMSON, 935;

Parasitism: General.—*Transmission, infectivity*: Ectoparasites of birds as vectors of blood-parasites, HERMAN, 425; Pathogenicity of *Entamoeba histolytica* in various media, FRYE & MELENEY, 356; Variation in virulence of *Entamoeba histolytica*, CRAIG, 218; Pathogenicity of *Entamoeba histolytica*, MELENEY & FRYE, 655; Loss of virulence in *Entamoeba histolytica* cultures, DESCHIENS, 275; Transmission of *Trichomonas foetus*, ANDREWS & MILLER, 13; Pathogenicity of pigeon-trichomonad to hawk, STABLER & SHELANSKI, 891; Pathogenicity of *Histomonas*, TYZZER, 947; Transmission of American leishmaniasis, SHATTUCK, 865; Transmission of *Leishmania*, NICOLLE, 697; Sandfly-vector of *Leishmania donovani* in China, JUNG SUN, ETC., 507; Virulence of trypanosomes to ruminants, HORNBY, 448; Transmission of *Trypanosoma hippicum* by vampire bat, JOHNSON, 500; Pathogenicity of *Trypanosoma lewisi* to rats, HERRICK & CROSS, 429; Transmissibility of *Trypanosoma congolense*, HORNBY, 448; Pathogenicity of *Trypanosoma simiae*, HOARE, 435; Natural infection of *Triatoma* with *Trypanosoma cruzi* in Panama, ROZEBOOM, 820; Natural infection of *Triatomas* with *T. cruzi* in Western U.S.A., KOFOID & WHITAKER, 545; Relative transmissibility of polymorphic trypanosomes by tsetse-flies, DUKE, 305; Infectivity of polymorphic African trypanosomes, DUKE, 311; Mechanical transmission of pathogenic trypanosomes, LAMBORN, 564; Transmissibility of polymorphic trypanosomes, KAUNTZE, 512; Influence of direct passages on virulence of polymorphic trypanosomes, CORSON, 200; Latent infections and mechanical transmission with pathogenic African trypanosomes, CORSON, 215; Transmission of trypanosome of wood-rat by flea, WOOD, 991; Pathogenicity and transmission of polymorphic trypanosomes to ruminants, CARMICHAEL, 147; Infectivity of *Trypanosoma rhodesiense* from crop of *Glossina*, DUKE & MELLANBY, 312; Transmission of *Trypanosoma rhodesiense*, CALWELL, 139; Infectivity of *Trypanosoma rhodesiense* to *Glossina*,

CORSON, 214; Development of *Trypanosoma gambiense* in tsetse in European laboratory, ROUBAUD & COLAS-BELCOUR, 819; Susceptibility of chickens of various ages to infection with *Eimeria tenella*, HERRICK, ETC., 430; Transmission of *Hepatozoon* from gecko, ROBIN, 802; Transmission of *Hepatozoon* of lizard by mosquitoes, ROBIN, 803; Susceptibility of *Anopheles walkeri* to *Plasmodium falciparum*, KITCHEN & BRADLEY, 533; *Plasmodium* in *Anopheles punctimacula*, SIMMONS, 872; New Anopheline vectors of malaria, SIMMONS, 873, 874; New anopheline vector of *Plasmodium vivax*, STRATMAN-THOMAS & BAKER, 895; Infectivity of avian *Plasmodium* during the incubation period, RAFFAELE, 763; Transmission of fowl-plasmodium by *Stegomyia*, BRUMPT, 116; Infectivity of fowl-plasmodium to other birds and its transmission, BRUMPT, 115; Susceptibility of anophelines to *Plasmodium vivax* and *P. falciparum*, BOYD & KITCHEN, 79; Infection of anophelines with *Plasmodium malariae*, BOYD & STRATMAN-THOMAS, 85; Susceptibility of anophelines to *Plasmodium falciparum*, BOYD, ETC., 84; Duration of infectivity of anophelines with *Plasmodium falciparum*, BOYD, ETC., 87; Infection rate with *Plasmodium* in Tonkin anophelines, GASCHEN, 364; Ticks transmitting bovine piroplasms, GOUSSEFF, ETC., 393; Transmission of *Babesia canis* by *Rhipicephalus*, REGENDANZ & MUNIZ, 782; Life-cycle of *Babesia canis* in tick, SHORTT, 868; Changes in virulence of *Theileria annulata*, YAKIMOFF & GOUSSEFF, 1007; Transmission of murine *Eperythrozoon* by lice, ELIOT, 326; Transmission of ovine *Anaplasma* and *Theileria* by tick, RASTÉGATÉFF, 767; Transmission of *Bartonella* from splenectomized mice, DURIEUX, 315; Facultative parasitism of *Colpoda steini* in mollusc, REYNOLDS, 793; Method of infection of salamander with *Haptophrya* (Ciliata), WOODHEAD & KRUIDENIER, 993.

Experimental infection: *Entamoeba histolytica* in rats, ATCHLEY, 22; Human entamoeba to rats, TSUCHIYA, 943; Simian strains of *Entamoeba coli* to man, DOBELL, 235; Cattle trichomonad (*T. foetus*) to sheep, ANDREWS & REES, 14; Free-living trichomonad to frog tadpoles, BISHOP, 61; Inoculation of cats with human trichomonads,

BONESTELL, 72; Human trichomonads to man, WESTPHAL, 971; *Leishmania tropica* to ground-squirrel, CAMINO-PETROS, 141; Course and localisation of infection in mice inoculated with *Leishmania tropica*, NATTAN-LARRIER & NOYER, 691; Attempts to infect fowls with mammalian trypanosomes, MESNIL, ETC., 656; Susceptibility of domestic animals to *Trypanosoma vivax*, ADAMS, 4; Inoculation of trypanosomes into blood stream and cerebrospinal fluid compared, ZSCHUCKE, 1031; Cyclical transmission of *Trypanosoma rhodesiense* from man to man via sheep, CORSON, 211; Susceptibility of hyrax and antelope to infection with *Trypanosoma rhodesiense*, CORSON, 212; Infection of baboon with *Trypanosoma gambiense*, BOURGUIGNON, ETC., 78; Cyclical transmission of *Trypanosoma gambiense* through monkeys, CORSON, 210; *Trypanosoma equinum* in S. American armadillos and foxes, MAZZA, 650; *Trypanosoma cruzi* in armadillo, MAZZA, 651; *Trypanosoma cruzi* in tapir, MAZZA, 649; *Trypanosoma cruzi* in wild mammals, MAZZA, 653; *Trypanosoma cruzi* to man, CHAGAS, 156; Cross-infections with coccidia, YAKIMOFF, ETC., 1012; Transmission of quail-plasmodium by *Lynchia*, HERMS & KADNER, 426; Susceptibility of various birds to fowl-plasmodium, BRUMPT, 116; Infection of mosquitoes, and man with malaria parasites, BUCK, 123; Susceptibility of African monkeys to *Plasmodium knowlesi*, RODHAIN, 808; *Plasmodium gonderi* to various monkeys, RODHAIN & BERGHE, 809; Experimental infection of anophelines with human malarial parasite, STRICKLAND & ROY, 896; *Plasmodium* of owl to canary, WOLFSON, 987; Transmission of avian malaria by injection of sporozoites, WOLFSON, 990; Inoculation of monkey malaria to man, CHOPRA & DAS GUPTA, 186; *Plasmodium polare* to canary, MANWELL, 636.

"Carriers": *Entamoeba histolytica* in rats, AWAKJAN, 24; Tortoises as reservoir of *Entamoeba*, RODHAIN & HOOFF, 811; Antelope-reservoir of *Trypanosoma gambiense*, CORSON, 213; Human reservoir of *Trypanosoma rhodesiense*, LAMBORN & HOWAT, 565; DAVEY, 257; Game as reservoir of human trypanosomes in Africa, DUKE, 311; Rôle of game animals as reservoir of human trypanosomes, DUKE, 309;

Antelope-reservoir of *Trypanosoma gambiense*, DUKE, 310; Human *Balantidium* in rats, AWAKJAN, 25.

Effect upon Host: Cutaneous localization of *Entamoeba histolytica*, CARINI, 146; Pathogenicity to kittens of Armenian strains of *Entamoeba histolytica*, TER-MATEVOSSIAN, ETC., 923; Modification of pathogenicity of dysentery amoeba for cats, DESCHIENS, 278; Amoeba pathogenic to grasshoppers, KING & TAYLOR, 521; Production of "Blackhead" in poultry by a trichomonad, ALLEN, 10; Trichomonads in pigeons and doves, CAUTHEN, 153; Liver abscesses in frog caused by *Trichomonas*, STABLER & PENNYPACKER, 890; Pathogenic action of *Histomonas*, TYZZER, 947; *Leishmania donovani* in urine and prostate, TENG & FORKNER, 922; Effect of killed *Leishmania donovani* upon blood of rabbit, TENG, 921; *Leishmania* in biliary canals, NATTAN-LARRIER & DUFOUR, 688; Histopathology of canine visceral leishmaniasis, NICOLAU & PÉRARD, 696; Histotropism in *Leishmania tropica*, NATTAN-LARRIER & NOYER, 690; Nerve lesions in trypanosome infections, BOGAERT, 65; Histopathology of *Trypanosoma rhodesiense* in brain, CALWELL, 140; Cutaneous localization of *Trypanosoma evansi* (= *marocanum*), RODHAIN & HENRY, 810; Pathogenicity of *Trypanosoma lewisi*, SLATINEANU, ETC., 877; Pathogenicity of *Trypanosoma theileri*, SASSUCHIN & MATVEJEV, 835; Effect of *Trypanosoma evansi* (= *annamense*) on iron-content in blood of rabbit, LAUNOY & LAGODSKY, 569; Effect of *Trypanosoma evansi* (= *annamense*) on blood-corpuscles of guinea-pig, LAUNOY & LAGODSKY, 568; Effect of *Trypanosoma evansi* (= *annamense*) upon composition of serum in rabbits, LAUNOY & LAGODSKY, 570; Effect of *Trypanosoma equiperdum* upon number of reticulocytes in rabbit, NICOLLE, 698; Effect of trypanosome and bartonella-infections upon surface tension of rat-serum, JIROVEC & WENIG, 495; Organ-specificity of *Eimeria tenella*, HERRICK, 428; Coccidium (*Tyzzeria* gen. n.), pathogenic to ducks, ALLEN, 9; Lesions produced by sheep-coccidia, ANTEQUEDA, 16; Rabbit coccidia in uterus, JÖRG, 498; Origin of "Schüffner's granules" in *Plasmodium* infections, HINGST, 433; Changes in red cells parasitized by malarial

parasites, ZELMANOVA, 1028; Blood changes in monkeys infected with *Plasmodium knowlesi*, KEHAR, 514; Tissue reactions in bird malaria, MOLDAVSKAYA-KRITCHEVSKAYA, ETC., 672; Haemoglobinuria in rat-bartonellosis and in monkey-malaria, MARSCHALL, 642; Effect of *Orchitophrya* (Ciliata) upon star-fish, BURROWS, SMITH, 878.

Immunity, Serology: Immunity and premunition in blood-parasites, SERGENT, 860; Immunity in *Entamoeba histolytica* infections, CRAIG, 218; Action of human sera upon cultures of *Entamoeba histolytica*, DOPTER & DESCHLENS, 293; Immunization of chickens against *Histomonas*, TYZZER, 947; Leishmania vaccines, RAY, 779; Serological tests for leishmania, KHODUKIN, ETC., 518A; Immunity in trypanosomiasis, RUSSELL, 823; Thermoprecipitin reaction in *Trypanosoma equiperdum* infection, POINDEXTER, 747; Absence of congenital transmission of immunity to *Trypanosoma lewisi*, MINNING, 666; Complement-fixation in CHAGAS' disease, KELSEY, 517; Dissociation of antibody from sensitized trypanosomes, LOURIE & O'CONNOR, 605; Trypanolysis by immune serum of mouse, LOURIE & O'CONNOR, 604; Antigenic composition of *Trypanosoma evansi*, KLIGLER & OLITZKI, 540; Immunization against pathogenic trypanosomes, SCHILLING, 843, 844, 845; Immunity to *Trypanosoma brucei* infection following treatment, BROWNING & GULBRANSEN, 106; Susceptibility of baboon to trypanosome infection, BOURGUIGNON, 78; Immunity in trypanosomiasis, BEVAN, 49; Immunity of rats to *Trypanosoma lewisi*, HERRICK & CROSS, 429; Formation of nodules in gall-ducts in rabbit-coccidiosis, MINNING, 665; Nature of immunity in malaria, ASHFORD, 19; Immunity in malaria, BASTIANELLI, 36; Immunity to *Plasmodium vivax*, BOYD, ETC., 88; Immunity to *Plasmodium falciparum*, BOYD, ETC., 86; Immunity to *Plasmodium vivax*, BOYD & KITCHEN, 81; Immunity to various stages of *Plasmodium vivax*, BOYD & KITCHEN, 80; Cross-immunity in simian malarial parasites, RODHAIN & BERGHE, 809; Immunity in malaria, SOTIRIADES, 886; Cellular reaction (phagocytosis) in monkey malaria, TALLAFERRO & CANNON, 909; Immunization against malaria, LORANDO &

SOTIRIADES, 603; Immunity in malaria MOCHKOVSKI, 667; Host-parasite relations in malarial infection, MOCHKOVSKI, 668; Effect of splenectomy in ovine anaplasmosis, LESTOQUARD, ETC., 590.

(Protozoa in relation to Disease—vide under Economics.)

Parasitism: Hosts. — General: Coccidia in wild animals of Switzerland, BORNAND, 76.

Haemococcidia and haemosporidia in various cold-blooded animals of California, WOOD & WOOD, 992.

Incidence of blood-parasites in vertebrates of Tadjikistan (Middle Asia): ZMEEV, 1030.

Various intestinal flagellates from marine fishes, LAVIER, 575.

Ciliophora ectoparasitic or attached to marine animals, Baltic, PRECHT, 753.

Man: Large intestine (Yugoslavia): *Endolimax gildemeisteri* sp. n. (Rhizop. Amoeb.) IVANIĆ, 478.

Intestinal protozoa in cadavers, FRYE & MELENEY, 358.

Human *Isospora* infections in China, SMYLY & CHANG, 879.

Other Mammalia: Blood-parasites of small mammals in S.E. Russia, SASSUCHIN, 832.

Piroplasms of wild mammals in S.E. Russia, SASSUCHIN, 833.

Alactaga jaculus, intestine (Central Asia): *Eimeria lavieri* sp. n., *E. joyeuxi* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1004.

?[*Cavia aperea*], intestine (Brazil): *Cyathodinium chagasi* sp. n. (Cil. Holotrich.), CUNHA & FREITAS, 223.

Cercocebus galeritus agilis, blood (Congo): *Plasmodium gonderi* sp. n. (Sporoz. Haemospor.), RODHAIN & BERGHE, 809.

Crocidura aranea, blood (Belgium): *Trypanosoma crocidurae* (Mastigoph. Protomonad.), RODHAIN, 807.

Desmodus rotundus murinus (vampire bat), blood (Panama): *Trypanosoma hippicum* (Mastigoph. Protomonad.), JOHNSON, 499.

Elephant, blood (Congo): *Nuttalia loxodontis* sp. n. (Sporoz. Haemospor.), RODHAIN, 806.

Eptesicus serotinus, blood (Belgium): *Trypanosoma vespertilionis* (Mastigoph. Protomonad.), RODHAIN, 807.

Equus spp., intestine (China): *Poly-morpha pellucida* sp. n. (Ciliata Holotrich.), HSIUNG, 456.

[*Erinaceus europaeus*], intestine (Russia): *Isospora erinacei* sp. n., *I. schmaltzi* sp. n., *Eimeria perardi* sp. n., *E. ostertagi* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1011.

Erinaceus rumanicus, blood (Russia): *Nuttalia ninense* (Sporoz. Haemospor.), SASSUCHIN, 834.

Lepus timidus, intestine (North Russia): *Eimeria septentrionalis* sp. n. (Sporoz. Coccid.), YAKIMOFF, ETC., 1017.

Lutra lutra, blood (India): *Plasmodium narayani* sp. n. (Sporoz. Haemospor.), FROILANO DE MELLO & VALLES, 353.

Macropus giganteus, intestine (Russia: Zool. Gardens): *Eimeria marsupialium* sp. n., *E. fausti* sp. n. (Sporoz. Coccid.), YAKIMOFF & MATSCHOUISKY, 1015.

Marmota monax, intestine (U.S.A.): *Entamoeba marmotae* sp. n. (Rhizop. Amoeb.), *Chilomastix instabilis* sp. n. (Mastigoph. Protomon.), CROUCH, 221.

Mule, intestine (China): *Triadinium magnum* sp. n. (Ciliata Oligotrich.), HSIUNG, 454; *Sulcoarcus pellucidulus* gen. n., sp. (Ciliata Holotrich.), *Spirodinium uncinucleatum*, *S. confusum* spp. n., *Ditozum gravinucleatum* sp. n. (C. Oligotrich.), HSIUNG, 455.

Mustela putorius, intestine (Russia): *Eimeria mephitidis* (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1009.

Neotoma fuscipes, blood (California): *Trypanosoma neotomae* sp. n. (Mastigoph. Protomonad.), WOOD, 991.

Nesokia indica, blood (Central Asia): *Trypanosoma bandicotti* (Mastigoph. Protomonad.), ZMEEV, 1030.

Ondatra zibethica (muskrat: England): intestinal parasites, WARWICK, 967.

Rangifer tarandus, intestine (North Russia): *Eimeria mayeri* sp. n., *E. tarandina* sp. n. *E. mühlensi* sp. n. (Sporoz. Coccid.), YAKIMOFF, ETC., 1020.

Rattus norvegicus and *R. rattus* (U.S.A.): incidence of intestinal protozoa, TSUCHIYA & RECTOR, 944.

Rattus norvegicus (U.S.A.): incidence of parasitic protozoa, ANDREWS & WHITE, 15.

Rattus rattus, intestine (Russia): *Eimeria ratti*, *E. nocti*, *E. hasei* spp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1008.

Silenus spp.: intestinal protozoa, KNOWLES & DAS GUPTA, 544.

Aves: Birds (Greece): incidence of malarial parasites, PAPADAKIS, 724.

Anas domestica, intestine (U.S.A.): *Tyzzeria perniciosa* gen. n., sp. n., (Sporoz. Coccid.), ALLEN, 9.

Bonasa umbellus (Canada): various parasites, CLARKE, 192.

Calidris leucophaea, caeca (France): *Trichomonas landei* sp. n. (Mastigoph. Protomonad.), LAVIER, 577.

Centropus s. parroti, blood (India): *Trypanosoma centropi* sp. n. (Mastigoph. Protomonad.), FROILANO DE MELLO, 351.

Chelidon urbica, blood (Russia): *Leucocytozoon* sp. (Sporoz. Haemospor.), DOGIEL & NAWTZEWITSCH, 289.

Coccyzus americanus americanus, intestine (U.S.A.): *Trichomonas* (T.) *coccyzi* sp. n., T. (*Tritrichomonas*) *beckeri* sp. n. (Mastigoph. Protomonad.), TRAVIS, 939.

Colaeus monedula collaris, intestine (Central Asia): *Isospora monedulae* sp. n. (Sporoz. Coccid.), YAKIMOFF & MATSCHOUISKY, 1016.

Colinus virginianus virginianus, caeca (U.S.A.): *Trichomonas* (T.) *floridanae* var. n. *colini*, T. (T.) *phasiani* (Mastigoph. Protomonad.), TRAVIS, 939.

Coracias benghalensis, blood (India): *Haemoproteus coraciae benghalensis* sp. n., *Leucocytozoon coraciae benghalensis* sp. n., L. sp. (Sporoz. Haemospor.), FROILANO DE MELLO & AFONSO, 352.

Cucullus micropternus, blood (India): *Trypanosoma cucullis* sp. n. (Mastigoph. Protomonad.), FROILANO DE MELLO, 351.

Erolia alpina, caeca and rectum (France): *Trichomonas sigalasi* sp. n. (Mastigoph. Protomonad.), LAVIER, 577.

Fulica americana americana, caeca (U.S.A.): *Trichomonas* (T.) *fulicae* sp. n. (Mastigoph. Protomonad.), TRAVIS, 939.

Ixobrychus m. minuta, blood (India): *Trypanosoma ixobrychi* sp. n. (Mastigoph. Protomonad.), FROILANO DE MELLO, 351.

Lobivanellus i. indicus, blood (India): *Trypanosoma lobivanelli* sp. n. (Mastigoph. Protomonad.), FROILANO DE MELLO, 351.

Lophortyx californica californica, caeca (U.S.A.): *Trichomonas* (T.) *hegneri* sp. n., T. (T.) *floridanae* (Mastigoph. Protomonad.), TRAVIS, 939.

Lyrurus (= *Tetrao*) *tetrrix*, intestine (Russia): *Eimeria nadsoni* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1005.

Neophron percnopterus, blood (Central Asia): *Hepatozoon adiei* (Sporoz. Coccid.), ZMEEV, 1030.

Otus asio naevius, blood (U.S.A.): *Plasmodium oti* sp. n. (Sporoz. Haemospor.), WOLFSON, 987.

Pavo cristatus, blood (India): *Haemoproteus rileyi* sp. n. (Sporoz. Haemospor.), MALKANI, 633.

Perdix perdix and *Caccabis chukar*, intestine (Leningrad Zool. Gardens): *Eimeria kofoidi* sp. n. (Sporoz. Coccid.), YAKIMOFF & MATIKASCHWILI, 1013.

Perdix perdix perdix, caeca (U.S.A.), *Trichomonas* (T.) *hegneri* sp. n., T. (T.) *floridanae* var. n. *perdicis*, T. (*Tritrichomonas*) *ortyxis* (Mastigoph. Protomonad.), TRAVIS, 939.

Pica pica, intestine (Russia): *Isosporarocha limai* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSIEFF, 1003.

Porzana carolina, caeca (U.S.A.): *Trichomonas* (*Tritrichomonas*) *porzanae* sp. n. (Mastigoph. Protomonad.), TRAVIS, 939.

Pyrhula europaea, blood (Egypt: from Germany): *Trypanosoma faridi* sp. n. (Mastigoph. Protomonad.), CARPANO, 148, 149.

Tetrao urogallus and *Dryobates major*, intestine (Russia): *Eimeria brumpti* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1005.

Tinnunculus tinnunculus, *Falco subbuteo*, *Milvus ater*, *Bubo bubo*, intestine

(Russia): *Caryospora henryi* (Sporoz. Coccid.), YAKIMOFF & MATSCHULSKY, 1018.

Turdoides sommervillei, blood (India): *Trypanosoma turdoidis* sp. n. (Mastigoph. Protomonad.), FROILANO DE MELLO, 351.

Turdus iliacus, blood (Italy): *Leucocytozoon* sp. (Sporoz. Haemospor.), GIOVANNOLA, 387.

Reptilia: *Coluber carelini*, blood (Central Asia): *Haemogregarina chartusica* sp. n. (Sporoz. Coccid.), ZMEEV, 1030.

Cyclagras gigas, blood (Paraguay): *Haemogregarina migonei* sp. n. (Sporoz. Coccid.), SCHOUTEN, 850.

Dymarchon corais, intestine (London: from N. America): *Trichomonas* sp. (Mastigoph. Protomonad.), DAS GUPTA, 253.

Eremias lineolata, blood (Central Asia): *Leptomonas* sp. (Mastigoph. Protomonad.); *Haemogregarina eremiae* sp. n. (Sporoz. Coccid.), ZMEEV, 1030.

Eremias grammica, blood (Central Asia): *Haemogregarina eremiae* sp. n. (Sporoz. Coccid.), ZMEEV, 1030.

Gecko verticillatus, blood (Indochina): *Hepatozoon mesnili* sp. n. (Sporoz. Coccid.), ROBIN, 803.

Hemidactylus coctaei, gall-bladder (India): *Eimeria* sp. (Sporoz. Coccid.), RAY & DAS GUPTA, 777.

Hemidactylus mabujae, intestine (Brazil): *Isospora hemidactyli* sp. n. (Sporoz. Coccid.), CARINI, 145.

Ophisaurus apodus, intestine (Turkistan): *Eimeria mirabilis* sp. n. (Sporoz. Coccid.), YAKIMOFF, 1001.

Psammophis sibilans, *Boaedon lineatus* and *Crotaphopeltis hotamboeia*, intestine (Uganda): *Eutrichomastix serpentis* (Mastigoph. Protomonad.), DAS GUPTA, 254.

Amphibia: *Anura* (U.S.A.): list of parasitic protozoa, BRANDT, 95.

Bufo marinus, intestine (Brazil): *Zelleriella antunesi* sp. n. (Cilioph. Opalin.), PESSÔA, 737.

Bufo melanostictus, intestine (India): *Eimeria* sp. n. (unnamed) (Sporoz. Coccid.), RAY, 775.

Bufo americanus and *Rana pipiens*, intestine (U.S.A.): *Haptophrya michiganensis* W. (Ciliata Holotrich.), MCINTOSH, 628.

Hyla raddiana, blood (Argentine): *Trypanosoma* sp. (Mastigoph. Protozonad.), JÖRG, 497.

Leptodactylus caliginosus, intestine (Paraguay): *Zelleriella menendezii* sp. n. (Ciliata Opalin.), *Nyctotherus barberoi* sp. n. (C. Heterotr.), SCHOUTEN, 849.

Leptodactylus gracilis, blood (Argentine): *Trypanosoma* sp. (Mastigoph. Protozonad.), JÖRG, 497.

Rana arvalis, intestine (Russia): *Isospora neos* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1010.

Rana, *Pelodytes*, *Bombinator*, intestine (France): *Spironucleus elegans* gen. n., sp. n. (Mastigoph. Diplomonad.), LAVIER, 578.

Salamandra maculosa, intestine (France): *Syndymita neglecta* gen. n., sp. n. (Mastigoph. Diplomonad.), LAVIER, 578.

Triton cristatus, *T. palmatus*, *T. vulgaris*, *T. alpestris*, intestine (France): *Eimeria canaliculata* sp. n., *E. tertia* sp. n. (Sporoz. Coccid.), LAVIER, 573.

Pisces: *Box boops*, intestine (Mediterranean Sea and B. of Biscay): *Hexamita bocis* sp. n. (Mastigoph. Diplomonad.), LAVIER, 575.

Box salpa, intestine (Mediterranean Sea): *Hexamita salpae* sp. n. (Mastigoph. Diplomonad.), LAVIER, 575.

Clarias batrachus, blood (India): *Trypanosoma clariae* var. n. *batrachi* (Mastigoph. Protozonad.), FROILANO DE MELLO & VALLES, 355.

Eupomotis gibbosus, peritoneal cavity (Lake Erie, U.S.A.): *Myxobolus osburni* sp. n. (Sporoz. Myxospor.), HERRICK, 431.

Gadus capelanus, intestine (Mediterranean Sea): *Protoopalina dubosqui* sp. n. (Cilioph. Opalin.), LAVIER, 574; *Hexamita capelani* sp. n. (Mastigoph. Diplomonad.), LAVIER, 575.

Micropterus dolomieu, peritoneal cavity and connective tissue (Lake Erie, U.S.A.): *Myxobolus osburni* sp. n., *M. kostiri* sp. n. (Sporoz. Myxospor.), HERRICK, 431.

Mugil chelo, intestine (Mediterranean Sea): *Hexamita mugilis* sp. n. (Mastigoph. Diplomonad.), LAVIER, 575.

Otolithus ruber, heart (India): *Henneguya* sp. n. (Sporoz. Myxosporid.), GANAPATHI, 362.

Phycis mediterraneus, intestine (Mediterranean Sea): *Hexamita phycidis* sp. n. (Mastigoph. Diplomonad.), *Chilomastix mediterraneus* sp. n. (M. Protozonad.), LAVIER, 575.

Pristiophorus cirratus, gall-bladder (Port Philip Bay, S. Australia): *Chloromyxum pristiophori* sp. n. (Sporoz. Myxospor.), WOOLCOCK, 995.

Rutilus rutilus, muscles (Russia): *Myxobolus pseudodispar* sp. n. (Sporoz. Myxospor.), GORBUNOVA, 391.

Syngnathus nigrolineatus, intestine (S. Russia): *Eimeria syngnathi* sp. n. (Sporoz. Coccid.), YAKIMOFF & GOUSSEFF, 1006.

Thymallus vulgaris, gills (Russia): *Myxobolus* sp. (Sporoz. Myxospor.), DUBININ, 301.

Thyrsoidea macrurus, blood (India): *Haemogregarina thyrsoideae* sp. n. (Sporoz. Coccid.), FROILANO DE MELLO & VALES, 354.

Insecta: Fleas, description of endoparasitic protozoa: SASSUCHIN, ETC., 836.

Melanophus differentialis, *M. mexicanus*, *M. femur-rubrum*, malpighian tubes (U.S.A.): *Malpighamoeba locustae* sp. n. (Rhizop. Amoeb.), KING & TAYLOR, 521.

Thermobia domestica (U.S.A.): gregarines, ADAMS, 5.

Myriapoda: *Polydesmus* sp. and *Strongylosoma contortipes*, intestine (India): *Hyalosporina rayi* sp. n. (Sporoz. Gregar.), CHAKRAVARTY, 160.

Protracheata: *Peripatopsis sedgwicki*, *P. moseleyi*, intestine (S. Africa): *Manonella peripati* gen. n., sp. n. (Sporoz. Coccid.), VINCENT, 959.

Crustacea: *Balanus* spp., moults (Mediterranean); *Epistylis horizontalis* sp. n. (Ciliata Peritrich.), CHATTON, 170.

Daphnia magna, fat-body (Czechoslovakia): *Octospora bayeri* sp. n. (Sporoz. Microspor.), JIROVEC, 494.

Orchestia agilis, body cavity (Woods Hole, Mass., U.S.A.): *Anoplophrya orchestii* sp. n. (Cil. Holotrich.), SUMMERS & KIDDER, 904.

Potamobius leptodactylus, intestine (Russia): *Mantonella potambii* sp. n. (Sporoz. Coccid.), GOUSSEFF, 392.

Pseudocalanus elongatus (Copepoda), eggs (North Sea): *Sporodinium pseudocalani* gen. n., sp. n. (Mastigoph. Dinoflag.), GÖNNERT, 389.

Sphaeroma serratum, secretory hairs (France): *Conidophrys guttipotor* sp. n. (Suctorina), CHATTON & LWOFF, 178.

Echinodermata: Sea-urchins (Pacific Ocean): Ciliates, POWERS, 751.

Mollusca: *Agriolimax agrestis*: facultative parasitism by *Colpoda steini* (Ciliata), REYNOLDS, 793.

Buccinum undatum, foot (Atlantic Ocean): *Piridium sociabile* gen. n., sp. n. (Sporoz. Gregarin.?), PATTEN, 729.

Eledone cirrosa, renal sac (Atlantic coast): *Chromidina coronata* (Ciliata Holotrich.), NOUVEL, 705.

Loripes lacteus: *Proboveria loripedis* subgen. n., s.p. n. (Ciliata Holotr.), CHATTON & LWOFF, 177.

Viviparus unicolor, intestine (Nile): *Paranoplophrya vivipari* gen. n., sp. n., (Ciliata Holotrich.), ROHRBACH, 814.

Annelida: Gregarines from Andaman polychaetes, BHATIA & SETNA, 52.

Ilyodrilus moldaviensis, body cavity (Bohemia): *Mrazekia ilyodrili* sp. n. (Sporoz. Microspor.), JIROVEC, 492, 494.

Limnodrilus hoffmeisteri, circulatory system (Turkestan): *Bacillidium haematobium* sp. n. (Sporoz. Microspor.), JIROVEC, 492, 494.

Limnodrilus clapedeanus, gonads (Bohemia): *Bacillidium limnodrili* sp. n. (Sporoz. Microspor.), JIROVEC, 492, 494.

Limnodrilus sp., leucocytes (Bohemia): *Mrazekia limnodrili* sp. n. (Sporoz. Microspor.), JIROVEC, 492, 494.

Lumbriculus variegatus, body cavity (Bohemia): *Mrazekia lumbricali* sp. n. (Sporoz. Microspor.), JIROVEC, 492, 494.

Opistocysta (Pristina) flagellum, intestine (Argentina): *Haplosporidium černosvitovi* sp. n. (Sporoz. Haplospor.), JIROVEC, 491; *Nosema černosvitovi* sp. n. (Sporoz. Microspor.), JIROVEC, 493.

Polychaete (indet.), intestine (Andaman Isl.): *Contorticorpa prashadi* gen. n., sp. n. (Sporoz. Gregar.), BHATIA & SETNA, 52.

Polydora flava, intestine (Atlantic Ocean): Eimeriid coccidium (indet.), *Selenidium axiferens* sp. n. (Sporoz. Gregarin.), FOWELL, 342.

Theostoma oerstedii, intestine (France): *Siedleckia caulleryi* sp. n. (Sporozoa Gregarin.), CHATTON & VILLENEUVE, 181.

Tubifex tubifex, blood vessels (Bohemia): *Nosema haematobium* sp. n. (Sporoz. Microspor.), JIROVEC, 494.

Nemathelminthes: *Aspicularis tetraptera* and *Syphacia obvelata*, intestine (parasitic in mice: U.S.A.): *Trichomonas muris* (Mastigoph. Protomonad.), THEILER & FARBER, 928.

Desmodora sp., ectoparasitized (Norway coast): *Thecacineta donsi* sp. n. (Suctorina), ALLGÉN, 11.

Platyhelminthes: Trematode cercariae from mollusc (*Succinea*) (U.S.A.): Sporozoon (indet.), MARTIN, 644.

Deropristis inflata (Trematode: from eels), genitalia: *Hexamita* sp. (Mastigoph. Diplomon.), HUNNINEN & WICHTERMAN, 457.

Protozoa: *Coolia monotis* (Dinoflagellata): *Coccidinium punctatum* sp. n. (Mastigoph. Dinoflag.), CHATTON & BIECHELER, 171.

Cryptoperidinium foliaceum (Dinoflagellata): *Coccidinium mesnili* sp. n. (Mastigoph. Dinoflag.), CHATTON & BIECHELER, 171.

Entamoeba histolytica, cytoplasm: *Entamoebaphaga hominis* gen. n., sp. n. (Mycetozoa), IVANIĆ, 479.

Entodinium and *Eudiplodinium* (Ciliata): *Sphaerita* (fungus), WINOGRADOWA, 983.

Eudorina (Pleodorina) illinoisensis (France): *Rhizophidium beauchampi* sp. n. (Chytridiaceae), HOVASSE, 450.

Fabrea salina (Ciliata Heterotr.): *Gregarella fabrearum* gen. n., sp. n. (Mastigoph.), CHATTON & BRACHON, 173.

Myxidium lieberkühni (Myxospor.) in urinary bladder of pike: *Leishmania esocis* sp. n. (Mastigoph. Protomon.), GEORGEVITSCH, 384.

Opalinidae (Ciliophora): *Entamoeba* (Rhizop.), STABLER & CHEN, 889; CHEN & STABLER, 185.

Plantae: *Zostera* (Atlantic Ocean), parasitized by *Labyrinthula*, RENN, 787, 788.

Euphorbia exigua, latex (S. France): *Herpetomonas* [= *Phytomonas*] sp. (Mastigoph. Protomonad.), PANNIER, 723.

GENETICS.

Genetic variations in *Paramecium*, BRAGG, 93; Paleontology in relation to Genetics (Foraminifera), SCHINDEWOLF, 846.

Heredity.—Effect of centrifuging *Paramecium*, YANCEY, 1025.

Variation, Mutation.—Morphological variations in *Paramecium*, BRAGG, 93; Variation within the genus *Nebela*, DEFLANDRE, 264; Variability in Foraminifera, KEIJZER, 515; Problem of species in malaria parasites, MANWELL, 635; Effect of temperature on *Paramecium*, OLIFAN, 709; Size variation in *Spathidium*, PACKARD, 717; Variability in *Fusulina minima*, RAUSER (CERNOUSSOWA & KIREEWA, 774; Variability in *Stylonichia*, TSYNGER & NARBUTT, 946; Variation in size of *Dientamoeba*, WENRICH, 969.

Phylogeny, Evolution.—Eocene foraminifera from Mexico, BARKER & GRIMSDALE, 35; Interdependence of planktonic organisms, BROHMER, 99; Evolution of Peritrichous ciliates, CHATTON, 170; Affinities of Coccidiniid flagellates, CHATTON & BIECHLER, 171; Affinities of *Gregarella* gen. n. (Mastigophora), CHATTON & BRACHON, 173; Affinities of *Siedleckia* (Sporozoa), CHATTON & VILLENEUVE, 181; Phylogeny of *Lepocinclis*, CONRAD, 205; Relationships of the Tintinnids with *Calpionella*, jurassic fossils, DEFLANDRE, 265; Evolution of parasitism in proto-

zoa, FANTHAM, 331; Phylogeny of the *Folliculinidae*, FAURÉ-FREMIET, 333; Struggle for existence in *Paramaecium*, GAUSE, 366; Relationships of post-glacial freshwater Rhizopoda, HOOGENRAAD, 444; Position of *Pamphagus mutabilis* [Testacea], HOOGENRAAD, 445; Evolution of protozoa, LAMEERE, 566; Relationships of the *Hymenostomata* (Holotricha), PÁRDUZ, 727; Phylogeny in fossil Foraminifera, RUTTEN, 827; Paleontology in relation to Evolution (Foraminifera), SCHINDEWOLF, 846; The genus *Fusulina*, SILVESTRI, 869; Evolution and geological influences (Foraminifera), SZALAI, 908; Revision of the genus *Cochliopodium*, VALKANOV, 953.

DISTRIBUTION.

(See also under Ethology.)

Geographical.—Marine:

Antarctic Ocean: Foraminifera from Weddell Sea, EARLAND, 320; Dinoflagellates from Bellingshausen and Weddell Seas, HART, 415.

Arctic Ocean: *Elphidiella* gen. n. CUSHMAN, 231; *Robertina*, CUSHMAN & PARKER, 241; Summary of northern planktonic forms, GRAN, HENTSCHEL & RUSSELL, 395; Arctic Tintinnids, HARDY, 414; Phytoplankton of Greenland waters, NIELSEN, 700; Foraminifera from Russian arctic waters, STSHEDRIN, 898.

Atlantic Ocean and adjacent seas: *Gymnodinium* and *Folliculina* from Port Erin, BRUCE, 109; Tintinnids from coast of Portugal, CANDEIAS, 142; *Elphidium*, CUSHMAN, 231; *Robertina*, CUSHMAN & PARKER, 241; *Folliculinidae* of the Breton coast, FAURÉ-FREMIET, 332; Summary of northern planktonic forms, GRAN, HENTSCHEL & RUSSELL, 395; Foraminifera from coastal waters, N. Carolina, HADLEY, 405; Dinoflagellates from South-west Atlantic, HART, 415; Foraminifera from Mediterranean, LE CALVEZ, 581; Ciliata from waste water, fiords, Norway, LUNDBYE, 609; Distribution of Foraminifera in Monterey Bay, MARTIN, 643; *Peneropliidae* from the Adriatic, ŠULC, 903; Foraminifera of the Bahamas and Florida, THORPE, 937; Radiolaria, Flagellata and Ciliata from Bermuda, WAILLES, 963.

Indian Ocean and adjacent seas: Tertiary Foraminifera from Java, BOOMGAART & VROMAN, 75; Tertiary Foraminifera from Dutch East Indies, CAUDRI, 152; East Indian Foraminifera, KEIJZER, 515; Foraminifera from oilfields, Texas, PLUMMER & HORNBERGER, 744; Tertiary Foraminifera from Mentawai Islands (Dutch E. Indies), TAPPENBECK, 912.

Pacific Ocean and adjacent seas: Peridinia from Japanese waters, ABÉ, 1; Peridinia from Japanese waters ABÉ, 2; Dinoflagellates from western Pacific, BÖHM, 68; Foraminifera in Australian waters, CHAPMAN & PARR, 168; Red "water-bloom" (*Mesodinium rubrum*) in British Columbian waters, CLEMENS, 193; *Elphidium*, CUSHMAN, 231; Foraminifera from Japanese brackish lakes, HADA, 404; Distribution of *Keramosphaera* Brady, HERON-ALLEN, 427; Tintinnids from Chinese waters, NIE & CHENG, 699; A new foraminifer from Japanese waters, STSCHEDRINA, 899; Dinoflagellates and Tintinnids from Puget Sound, THOMPSON & PHIFER, 934; Dinoflagellata from San Francisco, WHEDON & KOFOID, 975.

Non-Marine:

Europe: Cretaceous Foraminifera from Spain, ASTRE, 21; Freshwater plankton, Poland, BAYER & BAJKOV, 37; Foraminifera from the Apennines, BEHRMANN, 43; Soil protozoa, Aletsch, Switzerland, BERZ, 46; New Chloromonadina, *Chattonella*, brackish water, France, BIECHELER, 54; Cretaceous Foraminifera from France, BLANCHET, 64; Fossil Foraminifera from France, BONTE, 74; Radiolaria from Silurian of Czecho-Slovakia, BOUČEK, 77; Cretaceous Foraminifera from Sweden, BROTZEN, 101; Rhizopods, Flagellates and Ciliates from Swiss lakes, BÜREN, 124; Eocene Foraminifera from Italian Alps, BUXTORF & REICHEL, 131; Tertiary Foraminifera from Spain, CARBONELL, 143; Miocene Foraminifera from Spain, COLOM, 197; Cretaceous Foraminifera, CUSHMAN & PARKER, 239; Eocene Foraminifera from France, DAGUIN, 247; Oligocene Foraminifera from maritime Alps, DEB, 261; Oligocene Foraminifera from maritime Alps, DEB, 262; Carboniferous Foraminifera from the Urals, DONTKEVITCH, 296; Permian Foraminifera

in Russia, DUNBAR & SKINNER, 313; Foraminifera from oilfields of N. Germany, EICHENBERG, 322; Foraminifera from oilfields of N. Germany, EICHENBERG, 323; Jurassic Dinoflagellates from East Prussia, EISENACK, 324; Jurassic dinoflagellates from East Prussia, EISENACK, 325; Jurassic Foraminifera, Germany, FAHRION, 330; Cretaceous and tertiary *Orbitoides* from Lombardy, FLORIDIA, 339; Dinoflagellates from Czecho-Slovakian lakes, FOTT, 340; Foraminifera from Lias of Germany, FRANKE, 346; Freshwater Ciliates from Hungary, GELEI, 376; Freshwater Ciliates from Hungary, GELEI, 380; Triassic Foraminifera from Italy, GREGORIO, 396; Freshwater Rhizopods, Ciliates and Flagellates from Westphalian lakes, GRIEPENBURG-SCHÉE, 397; Flagellates from Moscow River, GUSEVA, 403; Carboniferous Foraminifera, N. Ireland, HARTLEY, 416; Brackish Testacea from Holland, HOFKER & RIJSINGE, 439; Postglacial freshwater Rhizopoda, HOOGENRAAD, 444; Rhizopoda, Ciliata from subterranean waters of Yugoslavia, KARAMAN, 510; Cretaceous Foraminifera from Russia, KELLER, 516; Flagellata from woodland pools, Prague, KLUG, 542; Eocene Foraminifera from Caucasasia, KOUZNETZOV, 548; Foraminifera from secondary beds of Germany, KUHN, 554; Foraminifera from Jurassic of Germany, KUHN, 555; Eocene Foraminifera from Provence, LAPARENT, 567; Devonian Foraminifera from the Ardennes, LECOMTE, 585; Foraminifera from carboniferous of Russia, LICHAREW, 592; Oligocene Foraminifera from the Apennines, LIPPARINI, 595; Cretaceous Foraminifera from Paris, MARIE, 637; Cretaceous Foraminifera from Paris beds, MARIE, 640; Flagellates from Swiss lakes, MESSIKOMMER, 657; Flagellates from Alpine pools and lakes, MESSIKOMMER, 658; Eocene Foraminifera, France, MORELLET, 678; *Nummulites* from the Alps, MORET, 679; *Rosalina* from tertiary of Roumania, MURGEANU, 684; Testacea from France (Bourbonnais), OLIVIER, 711; Heliozoa from the Black Sea, OSTROUMOFF, 712; Rhizopoda from Dutch bogs, OYE, 713, 714; Jurassic Foraminifera from France, PERRUCHE, 735; Cretaceous Foraminifera from Provence, PFENDER, 739; Foraminifera from Cretaceous of the Alps, PFENDER, 740; *Nummulites* from

tertiary of Sulmona, PRINCIPI, 756; Distribution of paleozoic Foraminifera in Russia, RAUSER-ČERNOUSOVA, 771; Tertiary Foraminifera from the Apennines, REICHEL, 784; Cretaceous Foraminifera in Greece, RENZ, 789; Cretaceous Foraminifera from Switzerland, RENZ, 790; Cretaceous Foraminifera from Swiss Jura, RENZ, 791; Freshwater Suctoria of Switzerland, RIEDER, 795; Tertiary Foraminifera in Spain and Portugal, ROBAUX, 797; Cretaceous and tertiary Foraminifera from Spain and Portugal, ROBAUX, 798; Cretaceous and eocene Foraminifera from Andalusia, ROBAUX, 799; Cretaceous Foraminifera from Andalusia, ROBAUX, 800; *Nummulites* from Andalusia, ROBAUX, 801; Winter occurrence of freshwater Dinoflagellates, Austria, SCHILLER & STEFAN, 841; Triassic Foraminifera from Spain, SCHMIDT, 847; Freshwater plankton from the Rhein, SEELER, 857; Rhizopods and Flagellates from Swiss lakes, SUCHLANDT & SCHMASSMANN, 902; Tertiary *Peneroplidae* from France, SULC, 903; Freshwater Euglena from Hungary, SZABADOS, 907; Ciliates and Flagellates from Lake Dikoye, Russia, TAUSON, 913; Freshwater marshes of Lorraine, Rhizopods and Ciliates, TÉTRY, 924; Flagellata, Ciliata from the region of the Black Sea, VALKANOV, 952; Cretaceous Foraminifera from France, VINCIENNE, 960; Tertiary Foraminifera, Radiolaria and Peridiniens, from N. Germany, WETZEL, 973; Radiolaria, Silicoflagellata from Eocene of N. Germany, WETZEL, 974; Cretaceous Dinoflagellates from Czecho-Slovakia, WIESNER, 979; Freshwater Flagellates and Ciliates from island of Mull, WILLIAMS, 981.

Asia: Cretaceous Foraminifera from Palestine, AVNIMELECH, DONCIEUX & PICARD, 23; Eocene *Nummulites* from Palestine, AVNIMELECH, DONCIEUX & PICARD, 23; Ciliate fauna of India, BHATIA, 51; Miocene Foraminifera from Trans-caucasia, BOGDANOVIĆ, 67; Tertiary Foraminifera from Syria, CIZANCOURT, 191; Soil biology in Malaya, CORBET, 206; Eocene Foraminifera from Assam, DAS-GUPTA, 255; Permian Foraminifera in China, DUNBAR & SKINNER, 313; Permian *Fusulinidae* of Indochina, GUBLER, 401; *Rotalia*, double fossil shell from Japan, HAYASAKA, 417; Oligocene Foraminifera

from Palestine, HENSON, 424; Permian Foraminifera from Japan, HUZIMOTO, 460; Carboniferous Foraminifera from Ural Mountains, KRESTOVNIKOFF & THEODOROVITCH, 549; Tertiary Foraminifera from Persia, LEUPOLD, 591; Tertiary foraminifera from Palestine, PICARD & SOLOMONICA, 742; Cretaceous ? Tintinnids from Palestine, PROTESCU, 758; Distribution of *Wedekindellina* in carboniferous of the Ural mountains, RAUSER-ČERNOUSOVA, 772; *Fusulinidae* from oilfields in Ural mountains, RAUSER-ČERNOUSOVA, 773; Eocene foraminifera from New Guinea, RUTTEN, 825; Permian Foraminifera from Indo-China, SAURIN, 837; *Sutra* (*Tryp. evansi*) in Syria, SOULIÉ, 888; Freshwater Ciliata from Nanking, WANG & NIE, 964; *Volvox africanus* first record from Nanking, WANG & NIE, 966;

Africa: Radiolaria and Silicoflagellates from phosphate deposits, Tunis, CAYEUX, 154; Cretaceous and tertiary Foraminifera from Dakar, COMBIER, 201; Eocene *Nummulites* of Egypt and the Mediterranean, CUVILLIER, 244; Eocene Foraminifera from Egypt, CUVILLIER, 245; Eocene Foraminifera from Arabia, DONCIEUX & CUVILLIER, 292; Eocene *Lepidocyclina*, EHRMANN & FLANDRIN, 321; Ante-miocene Foraminifera from Kantara, LAFITTE, 563; Cretaceous Foraminifera from Morocco, MARIE, 638; Foraminifera from oilfields of Morocco, MARIN, PASTORA & LIZAUR, 641; Tertiary foraminifera from N. Africa, SILVESTRI, 870.

N. America: Rhizopoda, Flagellata and Ciliata from Lake Michigan, AHLSTROM, 7; Tertiary foraminifera from Mexico, BARKER, 34; Eocene Foraminifera from Mexico, BARKER & GRIMSDALE, 35; Ciliates from Tortugas, Florida, BULLINGTON, 126; Cretaceous and tertiary Foraminifera from Georges Bank Canyons, CUSHMAN, 226; Cretaceous *Fronclularia*, CUSHMAN, 227; Cretaceous Foraminifera from U.S.A., CUSHMAN, 228; Tertiary Species of *Nonion* from U.S.A., CUSHMAN, 229; Cretaceous *Chilostomellidae*, CUSHMAN, 230; Cretaceous *Siphogenerinoides* from California, CUSHMAN & CAMPBELL, 235; Eocene Foraminifera from California, CUSHMAN & McMASTERS, 238; Cretaceous Foraminifera, CUSHMAN & PARKER, 239; Eocene Foraminifera, CUSHMAN & PARKER, 240; Tertiary

Robertina from U.S.A., CUSHMAN & PARKER, 241; Tertiary genus *Pyr-goella* from California, CUSHMAN & WHITE, 242; Tertiary Foraminifera from Alabama, GARRETT, 363; Tertiary *Orbitoididae*, GEYN & VLERK, 386; Foraminifera from coastal waters, N. Carolina, HADLEY, 405; Radiolaria from paleozoic, Arkansas, HENBEST, 423; Foraminifera from cretaceous, New Jersey, HOWE, 453; Cretaceous and eocene Foraminifera from New Jersey, JENNINGS, 490; Testacea from bogs of Switzerland, JUNG, 506; Secondary Foraminifera from Czechoslovakia, KOUTEK, 547; Freshwater flagellates with blue chromatophores, LACKEY, 561; Foraminifera from oilfields of Nevada, LONGWELL & DUNBAR, 601; Miocene Foraminifera, Alabama, MCGLAMERY, 626; Post-pleistocene Foraminifera from Canadian Arctic regions, NICHOLS, 695; Estuarine Foraminifera from N. Carolina, PEARSE, 732; Eocene *Ceratobulimina* from Texas, PLUMMER, 745; Secondary foraminifera from Texas, PLUMMER, 746; Paleozoic Radiolaria from New York beds, RUEDEMANN & WILSON, 821; Fifth record of *Chaoschaos* from New Jersey, SCHAEFFER, 838; Rhizopoda, Flagellata, Ciliata from two Mexican lakes, SOKOLOFF, 881; Tertiary Foraminifera from Mexico, THALMANN, 927; Paleozoic Foraminifera from Wyoming, THOMPSON, 930; Paleozoic foraminifera from Ohio, THOMPSON, 933; Dinoflagellates and Tintinnids from Puget Sound, THOMPSON & PHIFER, 934; Eocene foraminifera from Louisiana, VAUGHAN, 955; Eocene foraminifera from Alabama, VAUGHAN, 956; Tertiary Foraminifera from N. America, VAUGHAN & COLE, 958; Paleozoic Foraminifera from U.S.A., WHEELER, 976; Miocene Foraminifera and Radiolaria from California, WOODRING, BRAMLETTE & KLEINPELL, 994.

S. America: Freshwater plankton from River Plate, CARBONELL, 144; Siliceous Foraminifera from coastal waters, Buenos Aires, FRENGUELLI, 348.

Australia: Miocene and pliocene Foraminifera from Western Australia, CHAPMAN & CRESPIN, 167; Foraminifera from oilfields of Western Australia, CONDIT, RAGGATT, RUDD, 202; Ter-

tiary and quarternary Foraminifera from S. Australia, HOWCHIN, 452.

Pacific Islands: Pliocene Foraminifera from Japan, ASANO, 18; Tertiary Foraminifera from Ryukyu Islands, CUSHMAN & HANZAWA, 236; Miocene *Lepidocyclina* from Java, HOK, 441; Permian Foraminifera from Japan, HUZIMOTO, 461; *Globigerina* as a depth indicator in tertiary beds, Fiji, LADD, 562; Miocene Foraminifera from Solomon Islands, MAWSON & CHAPMAN, 647; Tertiary and quarternary foraminifera from Dutch East Indies, SITTE, 876; Permian Foraminifera from Sumatra, THOMPSON, 932; Tertiary Foraminifera from Borneo, UMBROGROVE, 949; Testacea from coastal lakes of Japan, UENO, 948; Tertiary Foraminifera from Dutch East Indies, (Rembang), VLERK, 961.

Atlantic Islands: Eocene foraminifera, CUSHMAN & BERMUDEZ, 232; Eocene Foraminifera from Cuba, CUSHMAN & BERMUDEZ, 233; Eocene Foraminifera from Cuba, CUSHMAN & BERMUDEZ, 234; Miocene Foraminifera from Jamaica, CUSHMAN & JARVIS, 237; Oligocene Foraminifera from Cuba, PALMER, 719; Fossil Foraminifera from Cuba, PALMER, 720; Oligocene Foraminifera from Cuba, PALMER & BERMUDEZ, 721; Eocene Foraminifera from Cuba, RUTTEN, 826; Tertiary Foraminifera from West Indies, VAUGHAN & COLE, 958.

General: Structure of cretaceous and miocene Orbitoid Foraminifera, VAUGHAN, 957.

Geological. — Primary: Radiolaria from Czechoslovakia, BOUCEK, 77; Foraminifera from oilfields of Western Australia, CONDIT, RAGGATT, RUDD, 202; Foraminifera from the Urals, DOUTKEVITCH, 296; Permian Foraminifera, distribution in N. Hemisphere, DUNBAR & SKINNER, 313; Dimorphism in permian fusulines, DUNBAR, SKINNER & KING, 314; *Fusulinidae* of Indochina, GUBLER, 401; *Saccamminopsis fusulinaformis* from Carboniferous, N. Ireland, HARTLEY, 416; Radiolaria from Arkansas, HENBEST, 423; Foraminifera from Japan, HUZIMOTO, 460; Permian Foraminifera from Japan, HUZIMOTO, 461; Carboniferous Foraminifera from Ural mountains, KRESTOVNIKOFF & THEODOROVITCH, 549; Foraminifera

from the Ardennes, LECOMPTE, 585; Foraminifera from carboniferous of Russia, LICHAREW, 592; Foraminifera from Permian of Nevada, LONGWELL & DUNBAR, 601; Distribution of paleozoic Foraminifera in Russia, RAUSER-ČERNOUSOVA, 771; Ordovician Radiolaria from New York beds, RUEDEMANN & WILSON, 821; Foraminifera from Permian of Indo-China, SAURIN, 837; Foraminifera from Wyoming, THOMPSON, 930; Permian Foraminifera from Sumatra, THOMPSON, 932; Foraminifera from Ohio, THOMPSON, 933; Foraminifera from U.S.A., WHEELER, 976.

Secondary: Cretaceous Foraminifera from Spain, ASTRE, 21; Cretaceous Foraminifera from Palestine, AVNIMELECH, DONCIEUX & PICARD, 23; Cretaceous Foraminifera from France, BLANCHET, 64; Cretaceous Foraminifera from Sweden, BROTZEN, 101; Cretaceous Foraminifera from Dakar, COMBIER, 201; Foraminifera from oilfields of Western Australia, CONDIT, RAGGATT, RUDD, 202; Foraminifera from cretaceous of Georges Bank Canyon, CUSHMAN, 226; *Fronidularia* from U.S.A., CUSHMAN, 227; Foraminifera from U.S.A., CUSHMAN, 228; *Chilostomellidae*, CUSHMAN, 230; *Siphogenerinoides* from California, CUSHMAN & CAMPBELL, 235; Foraminifera from Europe and America, CUSHMAN & PARKER, 239; Jurassic *Calpionella* and recent Tintinnids, DEFLANDRE, 265; Foraminifera from oilfields of N. Germany, EICHENBERG, 322; Foraminifera from oilfields of N. Germany, EICHENBERG, 323; Jurassic Dinoflagellates from East Prussia, EISENACK, 324; Jurassic dinoflagellates from East Prussia, EISENACK, 325; Foraminifera from Jurassic, Germany, FAHLION, 330; *Orbitoides* from Cretaceous of Lombardy, FLORIDIA, 339; Foraminifera from Lias of Germany, FRANKE, 346; Cretaceous foraminifera, New Jersey, HOWE, 453; Cretaceous Foraminifera from New Jersey, JENNINGS, 490; Cretaceous Foraminifera from Russia, KELLER, 516; Foraminifera from Czecho-Slovakia, KOUTEK, 547; Foraminifera, Germany, KUHN, 554; Foraminifera from Jurassic of Germany, KUHN, 555; d'Orbigny's Lias Foraminifera, MACFADYEN, 625; Cretaceous Foraminifera from Paris, MARIE, 637; Cretaceous Foraminifera from Morocco,

MARIE, 638; Cretaceous Foraminifera from Paris beds, MARIE, 640; Cretaceous Foraminifera from Morocco, MARIN, PASTORA & LIZAU, 641; Cretaceous Foraminifera from Cuba, PALMER, 720; Jurassic Foraminifera from France, PERRUCHE, 735; Cretaceous Foraminifera from Provence, PFENDER, 739; Foraminifera from the Alps, PFENDER, 740; Foraminifera from Texas, PLUMMER, 746; Cretaceous? Tintinnids from Palestine, PROTESCU, 758; Cretaceous *Alveolinidae*, REICHEL, 783; Cretaceous Foraminifera in Greece, RENZ, 789; Cretaceous Foraminifera from Switzerland, RENZ, 790; Cretaceous Foraminifera from Swiss Jura, RENZ, 791; Cretaceous Foraminifera from Spain and Portugal, ROBAUX, 798; Cretaceous Foraminifera from Andalusia, ROBAUX, 799; Cretaceous Foraminifera from Andalusia, ROBAUX, 800; Triassic Foraminifera from Spain, SCHMIDT, 847; Structure of Cretaceous orbitoid Foraminifera, VAUGHAN, 957; Cretaceous Foraminifera from France, VINCIENNE, 960; Cretaceous Dinoflagellates from Czecho-Slovakia, WIESNER, 979.

Tertiary: Pliocene Foraminifera from Japan, ASANO, 18; Eocene *Nummulites* from Palestine, AVNIMELECH, DONCIEUX & PICARD, 23; Foraminifera from Mexico, BARKER, 34; Eocene Foraminifera from Mexico, BARKER & GRIMSDALE, 35; Miocene Foraminifera from Transcaucasia, BOGDANOVIĆ, 67; Foraminifera from Java, BOOMGAART & VROMAN, 75; Eocene Foraminifera from Italian Alps, BUXTORF & REICHEL, 131; Foraminifera from Spain, CARBONELL, 143; Foraminifera from Dutch East Indies, CAUDRI, 152; Miocene and Pliocene Foraminifera from W. Australia, CHAPMAN & CRESPIN, 167; Foraminifera from Syria, CIZANCOURT, 191; Miocene Foraminifera from Spain, COLOM, 197; Tertiary Foraminifera from Dakar, COMBIER, 201; Foraminifera from oilfields of Western Australia, CONDIT, RAGGATT, RUDD, 202; Foraminifera from Georges Bank Canyon, CUSHMAN, 226; Species of *Nonion* from U.S.A., CUSHMAN, 229; *Elphidium*, CUSHMAN, 231; Foraminifera from Cuba, CUSHMAN & BERMUDEZ, 232; Foraminifera from Cuba, CUSHMAN & BERMUDEZ, 233; Foraminifera from Cuba, CUSHMAN & BERMUDEZ, 234;

Foraminifera from Ryukyu Islands, CUSHMAN & HANZAWA, 236; Foraminifera from Jamaica, CUSHMAN & JARVIS, 237; Eocene Foraminifera from California, CUSHMAN & McMASTERS, 238; Foraminifera from U.S.A., CUSHMAN & PARKER, 240; *Robertina* from U.S.A., CUSHMAN & PARKER, 241; *Pyrgoella*, gen. n. from California, CUSHMAN & WHITE, 242; Eocene Nummulites of Egypt and the Mediterranean, CUVILLIER, 244; Eocene Foraminifera from Egypt, CUVILLIER, 245; Eocene Foraminifera from France, DAGUIN, 247; Eocene Foraminifera from Assam, DAS-GUPTA, 255; Foraminifera from oilfields, DAVIES, 258; Oligocene Foraminifera from maritime Alps, DEB, 262; Oligocene Foraminifera from maritime Alps, DEB, 261; Eocene Foraminifera from Arabia, DONDICIEUX & CUVILLIER, 292; Eocene *Lepidocyclina* from N. Africa, EHREMAN & FLANDRIN, 321; *Orbitoides* from Eocene of Lombardy, FLORIDIA, 339; Foraminifera from Eocene and Pleistocene of Alabama, GARRETT, 363; *Orbitoididae* from America, GEYN & VLERK, 386; Triassic Foraminifera from Italy, GREGORIO, 396; Oligocene Foraminifera from Palestine, HENSON, 424; *Lepidocyclina* from Java, HOK, 441; Position of *Lepidocyclinidae*, HOK, 442; Tertiary borings (Foraminifera) in S. Australia, HOWCHIN, 452; Eocene Foraminifera from New Jersey, JENNINGS, 490; Eocene Foraminifera from Caucasasia, KOUZNETZOV, 548; *Globigerina* as a depth indicator in tertiary beds, Fiji, LADD, 562; Antemiocene Foraminifera from the Sahara, LAFITTE, 563; Eocene Foraminifera from Provence, LAPPARENT, 567; Foraminifera from Persia, LEUPOLD, 591; Oligocene Foraminifera from the Apennines, LIPPARINI, 595; Miocene Foraminifera, Alabama, MCGLAMERY, 626; Eocene Foraminifera from Morocco, MARIN, PASTORA & LIZAUR, 641; Miocene Foraminifera from Solomon Islands, MAWSON & CHAPMAN, 647; Eocene Foraminifera, France, MORELLET, 678; Eocene? *Nummulites* from the Alps, MORET, 679; *Rosalina* from Roumania, MURGEANU, 684; Oligocene Foraminifera from Cuba, PALMER, 719; Tertiary Foraminifera from Cuba, PALMER, 720; Oligocene Foraminifera from Cuba, PALMER & BERMÚDEZ, 721; Foraminifera from Palestine, PICARD & SOLOMONICA, 742; Eocene *Ceratobuli-*

mina, PLUMMER, 745; *Nummulites* from Sulmona, PRINCIPI, 756; Foraminifera from the Apennines, REICHEL, 784; Eocene and Oligocene Foraminifera in Spain and Portugal, ROBAUX, 797; Eocene and Oligocene Foraminifera from Spain and Portugal, ROBAUX, 798; Eocene Foraminifera from Andalusia, ROBAUX, 799; Foraminifera from New Guinea, RUTTEN, 825; Foraminifera from Cuba, RUTTEN, 826; Foraminifera from N. Africa, SILVESTRI, 870; Tertiary Foraminifera from Dutch East Indies, SITTER, 876; *Peneroplidae* from Tertiary of France, SULC, 903; Foraminifera from Dutch E. Indies, TAPPENBECK, 912; Tertiary Foraminifera from Mexico, THALMANN, 927; Foraminifera from Borneo, UMBGROVE, 949; Eocene Foraminifera from Louisiana, VAUGHAN, 955; Eocene foraminifera from Alabama, VAUGHAN, 956; Structure of Miocene orbitoid Foraminifera, VAUGHAN, 957; Tertiary Foraminifera from N. America and the West Indies, VAUGHAN & COLE, 958; Foraminifera from Dutch East Indies (Rembang), VLERK, 961; Foraminifera, Radiolaria and Peridinia from N. Germany, WETZEL, 973; Radiolaria, Silicoflagellata from Eocene of N. Germany, WETZEL, 974; Miocene Foraminifera and Radiolaria from California, WOODRING, BRAMLETTE & KLEINPELL, 994.

General: Making prints of fossil foraminifera, BAKX, 28; Foraminifera from the Apennines, BEHRMANN, 43; Organic matter conserved in fossil Foraminifera, BONTE, 73; Foraminifera from France, BONTE, 74; Radiolaria and Silicoflagellates, from phosphate deposits, Tunis, CAYEUX, 154; Foraminifera of the London Clay, DAVIS, 259; Staining fossil Foraminifera, DEFANDRE, 266; The genus *Nubecularia*, DERVILLE, 274; Parasites of cod-fish from "relict" lake, DOGIEL, 287; *Rotalia*, double fossil shell from Japan, HAYASAKA, 417; Postglacial freshwater Rhizopoda, Europe, HOOGENRAAD, 444; Foraminifera from from S. Australia, HOWCHIN, 452; Technique of examining fossil forms, KUFFERATH, 553; Stratigraphical uses of Foraminifera, MARIE, 639; Postpleistocene Foraminifera from Canadian Arctic regions, NICHOLS, 695; Distribution of *Wedekindellina*, RAUSER-CERNOUSSOVA, 772; *Fusulinidae* from oilfields in Ural mountains, RAUSER-

ČERNOUSOVA, 773; Variability in *Fusulina minima*, RAUSER-ČERNOUSOVA & KIREEWA, 774; Treatise on the *Alveolinidae*, REICHEL, 783; *Nummulites* from Andalusia, ROBAUX, 801; Phylogeny in fossil Foraminifera, RUTTEN, 827; Validity of the genus *Fusulina*, SILVESTRI, 869; Quarternary Foraminifera from Dutch East Indies, SITTER, 876; Influence of mountainous formations on evolution (Foraminifera), SZALAI, 908; Synecological studies in Foraminifera, THALMANN, 926; Genus *Verbeekina*, THOMPSON, 931; Dimorphism in fossil fusulinids, WHITE, 977.

possibly sp. n., from man, ZATURJAN 1027. — *Entamoeba invadens*, from reptiles: affinities, GERMAN & RATCLIFFE 375.

Malpighamoeba locustae sp. n., parasitic in American grasshoppers, *Melanocephalus* spp. KING & TAYLOR Trans. Amer. Micr. Soc. 55 p. 6 figs.

Mayorella volterrana, spinosa, spp. n. volcanic soil, BRUNETTI, Mem. Soc. tosc. Sci. nat. 45 p. 282 figs.

(b) Testacea.

Testacea from Bourbonnais (France), OLIVIER 711.

Testacea from mountainous moorland, Silesia, KOTULLA 546.

Revision of the genus *Cochliopodium*, VALKANOV 953.

Monograph on genus *Nebela*, DEFLANDRE 264.

Position of *Pamphagus mutabilis* Bailey, synonym *Pamphagus avidus* Leidy, HOOGENRAAD 445.

Amphiterma aegyptica sp. n. (no locality), MICHAÉLOFF Bull. Inst. égypt. 18 p. 45.

Cyclopyxis aplanata var. n. minima Bogs, Holland, OYE Levende Nat. Amsterdam 40 p. 215.

Nebela (*Quadrullella*) *quadrigera* sp. n. Among Mosses, N. America, DEFLANDRE Ann. Protistologie Paris 5 p. 201 figs.—*Nebela speciosa* sp. n. *galaeta* var. n. *orbicularis*, *tincta* var. n. *major*, *penardiana* nom. n. for *americana* (non Taranek) *wailesi* nom. n. for *lageniformis* var. *minor*, Among Mosses, cosmopolitan, DEFLANDRE Ann. Protistologie Paris 5 p. 201 figs.—*Nebela silesiaca* sp. n. Silesia, KOTULLA Pax. Beitr. Biol. Glatzer Schneeberges 2 p. 172 figs.

(c) Foraminifera.

Bibliography and index to new genera, etc., of Foraminifera for 1934, THALMANN 925.

Classification of the Foraminifera (new genera included up to end of 1934), CHAPMAN & PARR 169.

Foraminifera from Japanese brackish lakes, HADA 404.

†Foraminifera from tertiary oilfields, DAVIES 258.

III.—SYSTEMATIC INDEX.

Full references are given only in the case of new species. In other cases the numeral in " **LARGE BOLD CLARENDON** " refers to the list of titles where the full reference will be found. In the case where a reference is given in the Systematic Part, the volume number is printed in " **small bold Clarendon** ."

PROTOZOA, GENERAL.

Protozoal fauna of Sahara, lists of spp. found, VARGA, 954.

1.—MYCETOZOA.

Entamoebophaga gen. n. *hominis* sp. n., cytoplasmic parasite of *Entamoeba histolytica*, IVANIĆ Zbl. Bakt. (I), 138 48 figs.

2.—RHIZOPODA.

(a) Amoebida.

Amoeba macrovesiculata sp. n. Sphagnum infusion, GELEI, Arch. Protistenk. Jena 88 p. 85 figs.—*Amoeba entzii* sp. n., freshwater, Yugoslavia, IVANIĆ Cellule 44 p. 369 figs.

Endolimax gildemeisteri sp. n., from human large intestine, Yugoslavia, IVANIĆ Zbl. Bakt. (I) 137 p. 377 figs.

Entamoeba marmotae sp. n., from *Marmota monax*, U.S.A., CROUCH Iowa St. Coll. J. Sci. 11 p. 48.—*Entamoeba*,

Gametes of Foraminifera, LE CALVEZ, 584.

Nomenclature of Foraminifera from oilfields, CHAPMAN 165.

Nomenclature of Fusulina, FRIZZELL & WHEELER 350.

Orbitolites with zooxanthellae, DOYLE 297.

Position of eocene genus *Discocyclina*, RUTTEN 828.

Position of tertiary *Lepidocyclinidae*, HOK 442.

†Position of the genus *Nubecularia*, DERVILLE 274.

Sporulation in *Iridia*, LE CALVEZ 583.

Staining fossil Foraminifera, DEFLANDRE, 266.

Subgeneric nomenclature in *Orbitoididae*, SCHENCK & FRIZZELL, 840.

Technique for collecting fossil Foraminifera, BUBNOFF 122.

Use of Foraminifera in Stratigraphy, MARIE 639.

Validity of the genus *Fusulina*, SILVESTRI 869.

Variability in east indian Foraminifera, KEIJZER 515.

†*Allomorphina cubensis* sp. n. Oligocene Cuba, PALMER & BERMÚDEZ Mem. Soc. cubana Hist. nat. 10 p. 273 figs.—†*Allomorphina halli* nom. n. for *A. trigona* Plummer (non Reuss) Eocene New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.—†*Allomorphina minuta* sp. n. Cretaceous Texas, CUSHMAN Cushman Lab. Foraminif. 12 p. 71 figs.

†*Alveolina minuta* sp. n. Eocene, Apennines, REICHEL Ecl. geol. Helv. 29 p. 136 figs.—†*Alveolina primaeva* sp. n. *primaeva* subsp. n. *ludwigi* Eocene, France, REICHEL Abh. schweiz. paläont. Ges. 57 no. 4 p. 1 figs.

Alveolophragmium gen. n. *orbiculatum* sp. n. *orbiculatum* varr. n. *ochotonensis*, *caraensis* Japanese waters, STSCHEDRINA Zool. Anz. 114 p. 312 figs.

†*Amphimorphina californica* sp. n. Eocene California, CUSHMAN & McMASTERS J. Paleont. Menasha Wis. 10 p. 497 figs.—†*Amphimorphina erucaria* sp. n. Lias Germany, FRANKE

Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.—†*Amphimorphina tenuistriata*, *lirata*, *polita*, *crassa* spp. n. *tenuistriata* var. n. *seminuda* Eocene Cuba, CUSHMAN & BERMÚDEZ, Cushman Lab. Foraminif. 12 p. 1 figs.

†*Amphistegina lopeztrigoi*, *cubensis* spp. n. Eocene Cuba, PALMER Mem. Soc. cubana Hist. nat. 9 p. 237 figs.

†*Angulogenerina eximia* sp. n. Miocene, Jamaica, CUSHMAN & JARVIS Cushman Lab. Foraminif. 12 p. 3 figs.

†*Anomalina berthelini* sp. n. Cretaceous Russia, KELLER Bull. Soc. Nat. Moscou Sect. Géol. 43 p. 522 figs.—†*Anomalina crassisepta* var. n. *caribaea* Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 55 figs.—†*A. flinti* var. n. *adelinensis* Oligocene Cuba, PALMER & BERMÚDEZ Mem. Soc. cubana Hist. nat. 10 p. 273 figs.—†*A. henbesti* sp. n. Mesozoic Texas, PLUMMER Univ. Texas Bull. 3501 p. 281 figs.—†*A. pinguis* nom. n. for *A. grosserugosa* Plummer Cretaceous New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.

†*Archaediscus baschkiricus* sp. n. Carboniferous, Ural mountains, KRESTOVNIKOFF & THEODOROVITCH Bull. Soc. Nat. Moscou. Sect. Biol. 44 p. 86.

†*Arenobulima cuskleyae*, *malikinae*, *footei*, *haffi* sp. n. Cretaceous and Eocene New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.

†*Astacolus jarvisi* sp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

†*Asterigerina simiensis* sp. n. Eocene California, CUSHMAN & McMASTERS J. Paleont. Menasha Wis. 10 p. 497 figs.

†? *Asterorbis aguayoi*, *macei*, *cubensis*, *havanensis* spp. n. Cretaceous Cuba, PALMER Mem. Soc. cubana Hist. nat. 9 p. 237 figs.

Astrorhiza vermiculata sp. n. Mediterranean, LE CALVEZ Arch. Zool. exp. gén. 77 p. 79 figs.

†*Ataxophragmium compactum* sp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

Bathysiphon humilis sp. n. Mediterranean, LE CALVEZ Arch. Zool. exp. gén. 77 p. 79 figs.

†*Bifarina regularis* sp. n. Cretaceous Russia, KELLER Bull. Soc. Nat. Moscou. Sect. Géol. 43 p. 522 figs.

†*Bifarinella* gen. n. *ryukyuensis* sp. n. Pleistocene ? Ryukyu Islands, CUSHMAN & HANZAWA Cushman Lab. Foraminif. 12 p. 45 figs.

Bolivina beaufortana sp. n. coastal waters, N. Carolina, HADLEY J. Elisha Mitchell Sci. Soc. Chapel Hill 52 p. 35 figs.—†*B. hanzawai* sp. n. *subangularis ogasawensis* subsp. n. Pliocene Japan, ASANO Japan. J. Geol. Geogr. 13 p. 325 figs.—†*B. marielina*, *scabrata*, *palmerae*, spp. n. Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 27 figs.—†*B. matanzana* sp. n. Oligocene Cuba, PALMER & BERMÚDEZ Mem. Soc. cubana Hist. nat. 10 p. 273 figs.—†*B. rhumbleri* sp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.

†*Bolivinita crawfordensis* sp. n. Eocene New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.—†*B. eouvirgerini-formis* sp. n. Cretaceous Russia, KELLER Bull. Soc. Nat. Moscou. Sect. Géol. 43 p. 522 figs.

†*Bullatveolina* gen. n. (*Aveolina*) *bulloides* d'Orbigny Eocene Apennines, REICHEL Ecl. geol. Helv. 29 p. 136 fig.

Bulimina jarvesi, *microcostata*, *cacumenata*, *excavata*, *adamsi*, *stalacta*, *denticulata*, *lirata*, *instabilis* spp. n. *arkadelphiana* var. n. *midwayensis*, *guayabalen-sis* var. n. *ampla*, *rudita* nom. n. *ornata* (Cushman & Parker, non Egger) Eocene U.S.A., CUSHMAN & PARKER Cushman Lab. Foraminif. 12 p. 39 figs.—†*B. referata* sp. n., JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.—*B. ventricosa*, *pusilla*, *speciosa*, spp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

†*Buliminella fusiforma* sp. n. Cretaceous New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.—†*B. hofkeri* sp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.—†*B. vitrea*, *fabilis* spp. n. *carseyi* var. n. *plana* Cretaceous Texas, Mississippi, CUSHMAN & PARKER Cushman Lab. Foraminif. 12 p. 5 figs.

†*Camerina chawneri* sp. n. Oligocene Cuba, PALMER Mem. Soc. cubana Hist. nat. 9 p. 237 figs.—†? *Camerina dickersoni*, *cubensis* spp. n. Cretaceous Cuba, PALMER, Mem. Soc. cubana Hist. nat.

9 p. 237 figs.—†*C. kemmerlingi*, *discoidea* spp. n. *borneensis* nom. n. for *nuttalli* Vlerk, *taballarensis* nom. n. for *thalica* Vlerk Tertiary Dutch East Indies, CAUDRI Tertiary deposits of Soemba, 1934.

†*Cassidulina crispula*, *constellata*, *havanensis*, *labiata*, *arenasensis* spp. n. Eocene, Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 27 figs.

†*Chrysalogonium laeve*, *tenuicostatum*, *dickersoni* spp. n. Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 27 figs.—†*C. texanum* sp. n. Cretaceous U.S.A., CUSHMAN Cushman Lab. Foraminif. 12 p. 51 figs.

†*Cibicides matutina* sp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 fig.—†*C. neelyi*, *burlingtonensis*, *padella* spp. n. Cretaceous and Eocene New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.—†*C. ribbingi*, *excavata*, *thalmanni*, *sandidgei*, *eriksdalensis* spp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

Clavulina serventyi sp. n. Australian waters, CHAPMAN & PARR J. Roy. Soc. W. Aust. 21 p. 1 figs.—†*C. tokaiensis* sp. n. Pliocene Japan, ASANO Japan J. Geol. Geogr. 13 p. 325 figs.—†(*C.*) *histerella* subsp. n. *bradyana*, *tarukiensis* Pliocene Japan, ASANO Japan. J. Geol. Geogr. 13 p. 325 figs.

†*Conorbina* gen. n. *marginata*, *martini* spp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

†*Cribrogloborotalia* gen. n. *marielina* sp. n. Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 55 figs.

†*Cristellaria gutticostata* var. n. *cubana*, *peregrina* var. n. *matanzana* Oligocene Cuba, PALMER & BERMÚDEZ Mem. Soc. cubana Hist. nat. 10 p. 227 figs.—†*C. (Saracenaria) alata-angularis sublaevis*, *hannoverana* spp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.—†*C. (Astacolus) basidentata*, *stutzeri*, *denticulata-carinata*, *thuringica*, *adunca*, *scalpta*, *dubia*, spp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.—†*C. landinensis* sp. n. Landinien France BONTE, Ann. soc. géol. Nord. 59 p. 67,

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†*Spirophthalmium triebeli* sp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.

†*Spiroplectoides emmendorferi* sp. n. Eocene New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.

†*Stensiöjina* gen. n. (*Rotalia*) *exsculpta* Reuss. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

†*Stichocibicides* gen. n. *cubensis* sp. n. Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 27 figs.

†*Subalveolina* gen. n. *dordonica* sp. n. Cretaceous France, REICHEL Abh. schweiz. paläont. Ges. 57 no. 4 p. 1 figs.

†*Sumatrina japonica* sp. n. Permian Japan, HUZIMOTO Geol. Zbl. Leipzig 8 p. 211.—†*S. japonica* sp. n. Permian Japan, HUZIMOTO Sci. Rep. Tokyo Bun. Daig. 1 p. 29 figs.

†*Textularia aokii* sp. n. Pliocene Japan ASANO Japan J. Geol. Geogr. 13 p. 325 figs.—†*T. mexicana* var. n. *cubana* Oligocene Cuba, PALMER & BERMÚDEZ Mem. Soc. cubana Hist. nat. 10 p. 227 figs.

†*Thyrammina jurensis*, *subfava*, spp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.

†*Tolypammina jurensis* sp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.

†*Torreina* gen. n. *torrei* sp. n. Cretaceous Cuba, PALMER Mem. Soc. cubana Hist. nat. 9 p. 237 figs.

†*Triticites kagaharensis* sp. n. Permian, Japan, HUZIMOTO Geol. Zbl. Leipzig 8 p. 211.—†*T. kagaharensis* sp. n. Permian Japan, HUZIMOTO Sci. Rep. Tokyo Bun. Daig. 1 p. 29 figs.—†*T. ohioensis*, *skinneri* spp. n. Paleozoic Ohio, THOMPSON J. Paleont. Menasha Wis. 10 p. 673 figs.—†*T. submucronata*, *milleri* spp. n. Paleozoic Wyoming, THOMPSON J. Paleont. Menasha Wis. 10 p. 95 figs.

†*Trochammina borealis* sp. n. Cretaceous Russia, KELLER Bull. Soc. Nat. Moscou Sect. Géol. 43 p. 522 figs.—†*T. franki* sp. n. Cretaceous N. Germany, EICHENBERG Jber. Niedersachs. geol. Ver. 26 p. 150 figs.—*T. soldanii* sp. n. Weddell Sea, EARLAND Disc. Reps. Cambridge 13 p. 1 figs.

†*Trocholina paalzowi* sp. n. Jurassic Germany, KUHN Cbl. Min. Geol. Paläont. Stuttgart 10 p. 445 figs.

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†*Uvigerina cubana* sp. n. Oligocene Cuba, PALMER & BERMÚDEZ Mem. Soc. cubana Hist. nat. 10 p. 273 figs.—†*U. elongata* sp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.—†*U. havanensis* sp. n. Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 55 figs.

†*Vaginulina eriksdalensis* sp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.—†*V. franki* sp. n. Jurassic Germany, KUHN Cbl. Min. Geol. Paläont. Stuttgart 10 p. 445 figs.—†*V. kummi*, *aptiensis*, *minor* spp. n. Cretaceous N. Germany, EICHENBERG Jber. Niedersachs. geol. Ver. 27 p. 1 figs.—†*V. navarroana* sp. n. Creta-

ceous, Georges Bank, CUSHMAN Bull. Geol. Soc. America 47 p. 413 figs.—†*V. parva*, *curva*, *clivosa* spp. n. Lias Germany, FRANKE Abh. preuss. geol. Ld. Anst. 169 p. 1 figs.—†*V. pulchra*, *wageri* spp. n. Cretaceous N. Germany, EICHENBERG, Jber. Niedersachs. geol. Ver. 26 p. 150 figs.

†*Valvulina bullata* sp. n. Cretaceous Sweden, BROTZEN Sverig. geol. Undersökn. Arsb. c. 30 p. 1 figs.

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†*Vaughanina* gen. n. *cubensis* sp. n. Cretaceous Cuba, PALMER Mem. Soc. cubana Hist. nat. 9 p. 237 figs.

Verneuilina kurti sp. n. Cretaceous New Jersey, JENNINGS Bull. Amer. Paleont. 23 p. 1 figs.

†*Virgulina miniacea*, *cylindrica* spp. n. Eocene Cuba, CUSHMAN & BERMÚDEZ Cushman Lab. Foraminif. 12 p. 27 figs.

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†*Yabeina kaizensis* sp. n. Permian Japan, HUZIMOTO Geol. Zbl. Leipzig 8 p. 211.—†*Yabeina kaizensis* sp. n. Permian Japan, HUZIMOTO Sci. Rep. Tokyo Bun. Daig. 1 p. 29 figs.

(d) Heliozoa.

Acanthocystis wiasemskii sp. n. Black Sea, OSTROUMOFF Trav. Stat. Sci. nat. Karadagh 1 p. 62 figs.

(e) Radiolaria.

†*Acanthosphaera minuta*, *robusta*, *per-spinosa* spp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Amphisphaera holsatica* sp. n. Eocene N. Germany, WETZEL Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Cenosphaera antiqua* sp. n. Ordovician New York, RUEDEMANN & WILSON, Bull. Geol. Soc. Amer. 47 p. 1566 figs.

Choenicosphaera multispinosa, brevispina spp. n. Ordovician, New York, RUEDEMANN & WILSON, Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Dorydictyum minutum, magnum* spp. n. Ordovician New York, RUEDEMANN & WILSON, Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Doryplegma priscum, armatum, nux* spp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Druppula (Drupullissa) simplex* sp. n. Ordovician New York RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Halicalyptra similis, ambulans* spp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Haliomma antiquum, penrosei* spp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Heliosphaera venusta, haeckeli, rüsti, micropora* spp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Helotholus cornutus* sp. n. Eocene N. Germany, WETZEL, Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Lithocampe (?) spinosa* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Phormocyrtis striata* sp. n. Eocene N. Germany, WETZEL, Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Sethocapsa pytine* sp. n. Ordovician New York, RUEDEMANN & WILSON, Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Siphonosphaera (Merosiphonia) streptosiphonia* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Sphaeractis* gen. n. *triacantha* sp. n. Eocene N. Germany, WETZEL Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Sphaerozoum minutum* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Spongoprimum oligoporum* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Spongotrochus primaevus* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Staurosphaera sancta, crassispina* spp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Stichopilium uncinatum* sp. n. Eocene N. Germany, WETZEL Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Stylostaurus hindei* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Geol. Soc. Amer. 47 p. 1566 figs.

†*Theocyrtis ampla, veneris* spp. n. Eocene N. Germany, WETZEL Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Triplosphaera (?) maxima* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

†*Triplospyris galea* n. sp. Eocene N. Germany, WETZEL Jber. Niedersachs. geol. Ver. 27 p. 41 figs.

†*Xiphosphaera parva, brachyacantha macracantha* sp. n. Ordovician New York, RUEDEMANN & WILSON Bull. Soc. Geol. Amer. 47 p. 1566 figs.

3.—MASTIGOPHORA.

A. PHYTOMASTIGINA.

(a) Chrysomonadina.

Brachiomonas eugeniana sp. n. Freshwater Russia, GUSEVA Bull. Soc. Nat. Moscou Sect. Biol. 45 p. 220.

Cryptomonas curvara sp. n. Freshwater, Russia, GUSEVA Bull. Soc. Nat. Moscou Sect. Biol. 45 p. 220.

Kephyrion francevi sp. n. Freshwater Russia, GUSEVA Bull. Soc. Nat. Moscou Sect. Biol. 45 p. 220.

Salpingoeca longipes sp. n. Brackish water Black Sea, VALKANOV Ann. Univ. Sofia 31 p. 249 figs.

Salpingorhiza gen. n. *pascheriana* sp. n. Woodland pools Prague, KLUG Arch. Protistenk Jena 87 p. 117 figs.

(b) Cryptomonadina.

Chroomonas setoniensis sp. n. freshwater Alabama, LACKEY Biol. Bull. Woods Hole 71 p. 492 figs.

Cyanomonas coereulus sp. n. freshwater, Alabama, LACKEY Biol. Bull. Woods Hole 71 p. 492 figs.

Sphaerulla nili sp. n. (no locality), MIHAÉLOFF Bull. Inst. égypt. 18 p. 45.

(c) Dinoflagellata.

Dinoflagellates as food for the Mussel, BULEY 125.

Relationships of *Diplosalis*, ABÉ 3.

Coccidinium mesnili sp. n., parasitic on dinoflagellate, *Cryptoperidinium foliaceum*; *C. punctatum* sp. n., parasitic on dinoflagellate, *Coolia monotis*, CHATTON & BIECHELER C.R. Acad. Sci. 203 p. 573 figs.

†*Eodinia* gen. n. *pachythea* sp. n. Jurassic East Prussia, EISENACK Ann. Protistologie Paris 5 p. 59 figs — EISENACK Z. Geschiebelforsch. Berlin 12 p. 72 figs.

Gonyaulax catenella, *acatenella* spp. n. San Francisco, WHEDON & KOFOID Univ. Calif. Pub. Zool. 41 p. 25 figs.

Histioneis gregoryi sp. n. Western Pacific, BÖHM Bull. Bishop Mus. Honolulu 137 p. 3 figs.

†*Hystrichosphaera biformis* sp. n. Cretaceous Czecho-Slovakia, WIESNER Ann. Protistologie Paris 5 p. 151 figs.

Peridinium gargantua sp. n. Marine, France, BIECHELER C.R. Soc. Biol. Paris 121 p. 1054 figs. — *P. inflatiforme*, *matzenaueri* spp. n. Western Pacific, BÖHM Bull. Bishop Mus. Honolulu p. 3 figs. — *P. marukawai*, *ventralis*, *soltarium*, *truncus* spp. n. Japanese waters, ABÉ Sci. Rep. Tōhoku Univ. 11 p. 19 figs. — *P. rotundata*, *hemisphaericum*, *clavus*, *mutsuensis*, *monovelum*, *constricta* spp. n. Japanese waters, ABÉ Sci. Rep. Tōhoku Univ. 10 p. 639 figs.

Sporodinium gen. n. *pseudocalani* sp. n., from eggs of copepod, *Pseudocalanus elongatus*, GÖNNERT Z. Parasitenk. 9 p. 140 figs

(d) Euglenoidida.

Key to species of *Lepocinclis*, CONRAD 205.

Astasia longa, *linealis* spp. n. *inflata* var. n. minor saprozoic, PRINGSHEIM Arch. Protistenk. Jena 87 p. 43 figs.

Distigma pseudoproteus, *curvata* spp. n. Saprozoic, PRINGSHEIM Arch. Protistenk. Jena 87 p. 43 figs.

Euglena mesnili sp. n. Freshwater, DEFLANDRE & DUSI Arch. Zool. exp. gén. 77 p. 12 figs. — *E. proxima* var. n. *amphoraeformis*, *piriformis* Freshwater Hungary, SZABADOS Acta Biol. Szeged. 4 p. 49 figs.

Hyalaphacus ocellata sp. n. Saprozoic PRINGSHEIM Arch. Protistenk. Jena 87 p. 43 figs.

Lepocinclis physalis, *nayali*, *gracilima* spp. n. *nayali* var. n. *excavata*, *ovum* var. n. *discifera*, *salina* var. n. *papulosa*, *vallicauda* Freshwater, CONRAD Mem. Mus. Hist. nat. Belg. (2) 1 p. 1 figs.

Menoidinium longum sp. n. Saprozoic, PRINGSHEIM Arch. Protistenk. Jena 87 p. 43 figs.

(e) Phytomonadida.

Cyanomastix gen. n. *morgani* sp. n. freshwater Alabama, LACKEY Biol. Bull. Woods Hole 71 p. 492 figs.

Chloromonadina brackish water France, BIECHELER.

Chattonella gen. n. *subsalsa* sp. n. brackish water France, BIECHELER Arch. Zool. exp. gén. 78 p. 79 figs.

B. ZOOMASTIGINA.

(f) Protomonadida.

Caduceia nom. n. for *Devescovina* nova Grassi, KIRBY 532.

Chilomastix mediterraneus sp. n., from marine fish, *Phycis mediterraneus*, LAVIER Ann. Parasitol. 14 p. 278 figs.

Cercobodo racodytos sp. n. Freshwater, KLUG Arch. Protistenk. Jena 87 p. 97 figs.

Chilomastix instabilis sp. n., from *Marmota monax*, U.S.A., CROUCH Iowa St. Coll. J. Sci. 11 p. 48.

Eutrichomastix, generic independence of *Trichomonas* established by pure-line culture, DAS GUPTA, 252. — *E. keilini* nom. n. for "*Trichomonas*" *keilini* Bishop, 1935, LAVIER 576.

Leishmania [?] *esocis* sp. n., hyperparasitic in *Myxidium* (Myxosporidia) from pike, GEORGÉVITCH Arch. Protistenk. 88 p. 90 figs.

Mastigamoeba steinii, *scholaia*, *radiata*, spp. n. frshwater, KLUG Arch. Protistenk. Jena 87 p. 97 figs.

Mastigella caput-medusae sp. n. freshwater, KLUG Arch. Protistenk. Jena 87 p. 97 figs.

Pseudodevescovina uniflagellata, revision KIRBY 532.

Schizotrypanum merged in genus *Trypanosoma*, HOARE 434.

Trichomonas landei sp. n., *T. sigalasi* sp. n., from birds, *Calidris leucophaea* and *Erolia alpina* respectively, France, LAVIER Bull. Stat. Biol. Arcachon 33 p. 109 figs.—*T. (T.) fulcae* sp. n. from *Fulica americana*; *T. (T.) hegneri* sp. n., *T. (T.) floridanae* var. n. *perdicis* from *Perdix perdix*; *T. (T.) floridanae* var. n. *colini* from *Colinus virginianus*; *T. (T.) coccyzi* sp. n., *T. (Tritrichomonas) beckeri* sp. n. from *Coccyzus americanus*; *T. (T.) porzanae* sp. n. from *Porzana carolina*, U.S.A., TRAVIS Iowa State Coll. J. Sci. 10 p. 115 figs.—*T. hepatica* (Rivolta, 1878) correct name for *T. columbae* and *T. columbarum* which become synonyms, NIESCHULZ & BOS 701.—*T. vaginalis* Donné, 1836: specific independence upheld, POWELL 750.

Trypanosoma neotomae sp. n., from Californian rat, *Neotoma fuscipes*, WOOD Univ. Calif. Publ. Zool. 41 p. 133 figs.—*T. faridi* sp. n., from bullfinch, *Pyrhula europaea*, CARPANO Ann. Parasitol. 14 p. 290 figs. Bull. Minist. Agric. Egypt No. 165 5 pp. figs.—*T. turdoidis* sp. n., *T. centropi* sp. n., *T. ixobrychi* sp. n., *T. lobivanelli* sp. n., *T. cuculli* sp. n. from following Indian birds respectively: *Turdoides sommervillei*, *centropus s. parroti*, *Ixobrychus m. minuta*, *Lobivanellus i. indicus* and *Cucullus micropternus*, FROILANO DE MELLO Proc. Ind. Acad. Sci. (B) 2 1935 p. 500.—*T. simiae*, the cause of acute disease in pigs in Africa; revision of morphology, nomenclature and synonymy, HOARE 435.—*T.*, revision of classification of *lewisi*-group, HOARE 434.

(g) Hypermastigida.

[Vacant.]

(h) Diplomonadida.

Hexamita mugilis sp. n. from *Mugil chelo*; *H. capelani* sp. n. from *Gadus capelanus*; *H. phycidis* sp. n. from *Phycis mediterraneus*; *H. salpae* sp. n. from *Box salpa*; *H. bocis* sp. n. from *Box boopis*, marine fishes, LAVIER Ann. Parasitol. 14 p. 278 figs.

Spironucleus gen. n. *elegans* sp. n., from intestine of amphibia, LAVIER C.R. Soc. Biol. 121 p. 1177 figs.

Syndyomita gen. n. *neglecta* sp. n., from intestine of amphibia, LAVIER C.R. Soc. Biol. 121 p. 1177 figs.

(i) Polymonadida.

Tetramitus spinosus, *elephas*, spp. n. freshwater, KLUG Arch. Protistenk. Jena 87 p. 97 figs.

Trigonomonas diacra sp. n. freshwater, KLUG Arch. Protistenk. Jena 87 p. 97 figs.

FLAGELLATA INCERTAE SEDIS.

Apomastigina n. group to include *Gregarella* (q. v.), CHATTON & BRACHON 173.

Gregarella gen. n. *fabrearum* sp. n., parasitic on ciliate *Fabrea salina*, CHATTON & BRACHON C.R. Acad. Sci. 203 p. 525.

Gregarellidae fam. n. to include *Gregarella* (q. v.), CHATTON & BRACHON 173.

4.—SPOROZOA.

A. COCCIDIOMORPHA.

(a) Gregarinida.

Blastogregarina [subordo n.] to include Siedleckidae, CHATTON & VILLENEUVE 181.

Contortiocorpa gen. n. *prashadi* sp. n., from gut of polychaete (*indet.*), Andaman Isl., BHATIA & SETNA Proc. Indian Sci. Congr. 22 1935 p. 312.

Hologregarina [subordo n.] to include all gregarines except Siedleckidae (cf. Blastogregarina), CHATTON & VILLENEUVE 181.

Hyalosporina rayi sp. n., from gut of Indian millipedes, CHAKRAVARTY, Arch. Protistenk. 88 p. 116 figs.

Piridium gen. n. *sociabile* sp. n., from whelk, *Buccinum undatum*, PATTEN Parasitol. 28 p. 502 figs.

Selenidium axiferens sp. n., from gut of polychaete, *Polydora flava*, FOWELL Parasitol. 28 p. 414 figs.

Siedleckia calleryi sp. n., parasitic in polychaete, *Theostoma oerstedii*, CHATTON & VILLENEUVE C.R. Acad. Sci. 203 p. 508 fig.

(b) Coccidiida.

Caryospora henryi nom. n. for *Iso-spora henryi* Yakimoff & Matikasch-wili, 1932, with *C. tremula* (Allen, 1933) Hoare, 1934, as synonym, YAKIMOFF & MATSCHULSKY 1018.

Cryptosporidiinae, key to genera, ALLEN 9.

Eimeria mayeri, *E. tarandina*, *E. mühleni* spp. n., from reindeer, Rangifer tarandus, N. Russia, YAKIMOFF, SOKOLOFF & MATSCHOUISKY Berlin Tierärztl. Wschr. 52 p. 535 figs.—*E. kofoidi* sp. n., from partridge, Perdix perdix and Caccabis chukar, YAKIMOFF & MATIKASCHWILI Parasitol. 28 p. 146.—*E. marsupialium*, *E. fausti* spp. n., from kangaroo, Macropus giganteus, YAKIMOFF & MATSCHOUISKY J. Parasit. 22 p. 514 figs.—*E. perardi*, *E. ostertagi* spp. n., from European hedgehog, YAKIMOFF & GOUSSEFF Zbl. Bakt. (I) 138 p. 45 figs.—*E. canaliculata*, *E. tertia* spp. n., *E. spherica* (Schneider, 1887) (revived), from newts (*Triton* spp.), LAVIER Ann. Parasit. 14 p. 150 figs.—*E. mirabilis* sp. n., from lizard, Ophisaurus apodus (Turkestan), YAKIMOFF Zbl. Bakt. (I) 137 p. 95 fig.—*E. septentrionalis* sp. n., from hare, Lepus timidus, N. Russia, YAKIMOFF, etc. Wien. Tierärztl. Mschr. 23 p. 490 fig.—*E. ratti*, *E. noctii*, *E. hasei* spp. n., from rat, Rattus rattus; with list and diagnostic characters of other spp. from rats, YAKIMOFF & GOUSSEFF Z. Parasitenk. 8 p. 504 figs.—*E. syngnathi* sp. n., from fish, Syngnathus nigrolineatus, Russia, YAKIMOFF & GOUSSEFF J. R. Micr. Soc. 56 p. 376 fig.—*E. brumpti* sp. n. from Tetrao urogallus and Dryobates major; *E. nadsoni* sp. n. from Lyrurus tetriz, (Aves), with descriptive list of avian Eimeria spp., YAKIMOFF & GOUSSEFF Ann. Parasitol. 14 p. 449 figs.—*E. lavieri*, *E. joyeuxi* spp. n., from jerboa, Alactaga jaculus, Centr. Asia, YAKIMOFF & GOUSSEFF Ann. Parasitol. 14 p. 447 figs.—*E. sp. n.* [not named], from Bufo melanostictus, India, RAY Proc. Ind. Sci. Congr. 22 p. 315.—*E. thianethi* Gwélessiang, 1935, held to be invalid, being confused with *E. smithi* and *E. bukidnonensis*, YAKIMOFF 997.

Eimeriidae gen. indet. in nuclei of intestine cells of polychaete, Polydora flava, FOWELL 342.

Eleutheroschizon dubosqui Brasil, 1905, placed in the fam. Eimeriidae, CHATTON & VILLENEUVE 182.

Haemogregarina chartusica sp. n., from snake, Coluber carelini, H. eremiae sp. n., from lizards, Eremias, Centr. Asia, ZMEEV Trav. fil. Acad. Sci. U.R.S.S. Tadjikistan 6 p. 249 figs.—*H. thyrsoidae* sp. n., from Indian eel, Thyrsoida macrurus, FROILANO DE MELLO & VALES Proc. Ind. Acad. Sci. (B) 4 p. 403 figs.—*H. migonei* sp. from S. American snake, Cyclagras gigas, SCHOUTEN Rev. Soc. cient. Paraguay 3 1934 p. 145 fig.—*H.* (= Hepatozoon) arvalis (Martoglio, 1913) Lavier, 1921, described from Microtus (= Arvicola) arvalis in Abyssinia; in view of the non-existence of this mammal in Abyssinia the validity of the name of the parasite is questioned, LAURENT 572.

Hepatozoon mesnili sp. n. from lizard, Gecko verticillatus, Indochina, complete life-cycle and transmission described, ROBIN C.R. Acad. Sci. 202 p. 512; ROBIN 802.

Isospora rocha-limai sp. n., from magpie, Pica pica, Russia, YAKIMOFF & GOUSSEFF Arch. Inst. Biol. S. Paulo 7 p. 189 figs.—*Isospora neos* sp. n., from frog Rana arvalis, Russia, YAKIMOFF & GOUSSEFF Zbl. Bakt. (I) 138 p. 43 fig.—*I. erinacei*, *I. schmaltzi* spp. n., from European hedgehog, YAKIMOFF & GOUSSEFF Zbl. Bakt. (I) 138 p. 45 figs.—*I. monedulae* sp. n., from jackdaw, Colaeus monedula, Centr. Asia, YAKIMOFF & MATSCHOU[S]KY, Münch. Tierärztl. Wschr. 87 p. 603 fig.—*I. hemidactyli* sp. n., from lizard, Hemidactylus mabujae, Brazil, CARINI Ann. Parasitol. 14 p. 444 figs.—*I. henryi* (vide Caryospora).

Mantonella gen. n. peripati sp. n., from gut of Peripatopsis, VINCENT C.R. Soc. Biol. 122 p. 260 figs.—*M. potamobii* sp. n., from crayfish, Potamobius leptodactylus, Russia, GOUSSEFF J. R. Micr. Soc. 56 p. 326 figs.

Tyzzeria gen. n. pernicioosa sp. n., from intestine of duck, Anas domesticus, ALLEN Arch. Protistenk. 87 p. 262 figs.

(c) Haemosporidia.

Babesia major sp. n., race of canine piroplasm (= B. canis) transmitted by

Rhipicephalus, REICHENOW 1935 [Omitted from Z. R. vol. LXX (Prot.): 709.]—*Babesia canis*, life-cycle in *Rhipicephalus*, India, SHORTT 868.

Haemoproteus coraciae benghalensis sp. n. (var. n. ?), *Leucocytozoon coraciae benghalensis* [sp. n.], *L. sp.*, from Indian bird, *Coracias benghalensis*, FROILANO DE MELLO & AFONSO Proc. Ind. Acad. Sci. 2 1935 p. 67 figs.—*H. rileyi* sp. n. [mis-spelt *Hoemoproteus*], from Indian peacock, *Pavo cristatus*, MALKANI Ind. J. Vet. Sci. 6 p. 155 figs.—*H.*, lists of species and hosts, with bibliography, COATNEY 195.

Nuttalia loxodontis sp. n., from African elephant, RODHAIN Bull. Soc. Path. Exot. 29 p. 877 figs.

Pitoplasma taylori Sarwar, 1935, place as synonym of *Theileria hirci* Dschunk. & Urodsch., with which it is identified, BHATIA, 51.

Plasmodium oti sp. n., from American owl, *Otus asio*, WOLFSON Amer. J. Hyg. 24 p. 94 figs.—*P. narayani* sp. n., from otter, *Lutra lutra*, India, FROILANO DE MELLO & VALLES Proc. Ind. Acad. Sci. (B) p. 212 figs.—*P. gonderi* sp. n., nom. n. for *P. inui* var. *gonderi* Sinton & Mulligan, 1932–33, RODHAIN & BERGHE Ann. Belge Méd. Trop. 16 p. 521 figs.—*P. immaculatum* (Grassi & Feletti, 1892) recognized as correct name for parasite of malignant tertian malaria, *P. falciparum* and other names being synonyms, GIOVANNOLA 388. *P. capistrani*, regarded as identical to and synonym of *P. praecox*, MANWELL, 634.—*P.*, lists of species and hosts, with bibliography, COATNEY & RONDA-BUSH 196.

Theileria mutans in okapi, RODHAIN 806.—*T. dispar*, development in and transmission by tick, *Hyalomma mauritanicum*, SERGENT, ETC. 861, 862.

B. CNIDOSPORIDIA.

(d) Myxosporidia.

Chloromyxum pristiophori sp. n., from Australian saw-shark, *Pristiophora cirratus*, WOOLCOCK Parasitol. 28 p. 72 figs.

Henneguya sp. n. [un-named] from fish, *Otolithus ruber*, India, GANAPATHI Curr. Sci. 5 p. 204.

Myxobolus pseudodispar sp. n., from roach, *Rutilus rutilus*, GORBUNOVA Ann. Leningrad Univ. 7 (3) p. 5 figs.—*M. osburni* sp. n., *M. kostiri* sp. n., from fishes, *Micropterus dolomieu* and *Eupomotis gibbosus*, U.S.A., HERRICK Trans. Amer. Micr. Soc. 55 p. 194 figs.

(e) Microsporidia.

Microsporidia, list of spp. described since 1924, with hosts, site of infection, and bibliography, JIROVEC 494.

Bacillidium limnodrili sp. n., from *Limnodrilus claparedeanus*; *B. haematobium* sp. n., from *L. hoffmeisteri*, JIROVEC Mém. Soc. Zool. Tchecoslov. 4 p. 1 figs.; JIROVEC Arch. Protistenk. 87 p. 314 figs.

Mrazekia lumbriculi sp. n., from *Lumbriculus variegatus*; *M. ilyodrili* sp. n., from *Ilyodrilus moldaviensis*; *M. limnodrili* sp. n., from *Limnodrilus* sp., Bohemia, JIROVEC Mém. Soc. Zool. Tchecoslov. 4 p. 1 figs.; JIROVEC Arch. Protistenk. 87 p. 314 figs.

Mrazekidae, revision of the family, with description of spp. n. and host-list, JIROVEC 492.

Nosema černosvitovi sp. n., from oligochaete, *Opistocysta flagellum*, Argentine, JIROVEC Mém. Soc. Zool. Tchecoslovaque 3 p. 1 figs.—*N. haematobium* sp. n., from oligochaete, *Tubifex tubifex*, Bohemia, JIROVEC Mém. Soc. Zool. Tchecoslov. 4 p. 1 figs.

Octospora bayeri sp. n., from *Daphnia magna*, JIROVEC Mém. Soc. Zool. Tchecoslov. 4 p. 1 figs.

(f) Actinomyxidia.

[Vacant.]

(g) Sarcosporidia.

[Vacant.]

(h) Haplosporidia.

Haplosporidium černosvitovi sp. n., from gut of Argentine oligochaete, *Opistocysta flagellum*, JIROVEC Arch. Protistenk. 86 p. 500 figs.

5.—CILIOPHORA.

Ciliophora of India, monograph, with keys, host-parasite lists and geographical distribution, BHATIA 51.

A. OPALINATA.

Protoopalina dubosqui sp. n., parasitic in fish, *Gadus capellanus*, LAVIER Ann. Parasitol. 14 p. 272 figs.

Zelleriella antunesi sp. n., from toad, *Bufo marinus*, Brazil PESSÔA Ann. Paul. Med. Cirurg. 23 p. 1 figs.—*Z. menendezi* sp. n., from intestine of *Leptodactylus caliginosus*, Paraguay, SCHOUTEN Rev. Soc. cient. Paraguay 3 1934 p. 143 fig.

B. CILIATA.

(a) Holotrichida.

Relationships of the *Hymenostomata* PÁRDUCZ 727.

Anoplophrya orchestii sp. n., from body cavity of amphipod, *Orchestia agilis*, U.S.A., SUMMERS & KIDDER Arch. Protistenk. 36 p. 379 figs.

Bryophyllum hyalinum sp. n. fresh-water Hungary, GELEI Acta Biol. Szeged. 4 p. 1 figs.

Chilodonella chattoni sp. n. Sète France, MACDOUGALL Bull. biol. France Belg. 70 p. 308 figs.

Cyathodinioides gen. n. (nom. n. for *Cyathodinium pyriforme*), CUNHA & FREITAS C.R. Soc. Biol. 123 p. 711 fig.

Cyathodinium chagasi sp. n. [from intestine of *Cavia aperea*?], Brazil, CUNHA & FREITAS C.R. Soc. Biol. 123 p. 436 fig.

Cyclidium ecaudatum sp. n. from standing water Germany, LIEBMANN Z. Hyg. 118 p. 29 figs.

Glaucoma bacillivorax sp. n. Fresh-water Hungary, GELEI Math. term. Ért. Budapest 54 p. 923 figs.

Lionotus putrinus sp. n., from standing water Germany, LIEBMANN Z. Hyg. 118 p. 29 figs.

Loxodes punjabensis sp. n., from Punjab, BHATTIA Fauna of Brit. India: Ciliophora 1936 (p. 121 figs.)—*L. striatus* var. n. *nankingensis* Freshwater, Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Myxophyllum gen. n., nom. n. for *Conchophthirus steenstrupi* Stein. Raabe. Mém. Acad. Polon. Sci. (Cl. Sc. Math. & Nat., B) 6 1934 p. 221 figs.

Orthodonella nom. n. for *Orthodon* Guber, 1884 (pre-occupied in Pisces), BHATTIA 51.

Paranoplophrya gen. n. *vivipari* sp. n., from intestine of *Viviparus unicolor*, Nile, ROHRBACH Senckenbergiana 18 p. 134 figs.

Placus varnensis sp. n. brackish water Black Sea, VALKANOV Ann. Univ. Sofia 31 p. 249 figs.

Polymorpha pellucida sp. n., from intestine of equines, China, HSIUNG Bull. Fan. Mem. Inst. Biol. (Zool.) 6 p. 289 figs.

Proboveria subgen. n. *loripedis* sp. n., from mollusc, *Loripes lacteus*, CHATTON & LWOFF Arch. Zool. exp. gén. 73 p. 84.

Pseudoglaucoma digitata sp. n., from Punjab, BHATTIA Fauna of Brit. India: Ciliophora 1936 (p. 176 fig.).

Sulcoarcus gen. n. *pellucidulus* sp. n., from intestine of mule, China, HSIUNG Bull. Fan. Mem. Inst. Biol. 6 1935 p. 81 figs.

Trachelocera curvirostre sp. n. brackish water Black Sea, VALKANOV Ann. Univ. Sofia 31 p. 249 figs.

(b) Heterotrichida.

Folliculinopsis gen. n. *annulata lignicola* spp. n. marine, FAURÉ-FREMIET Mem. Mus. Hist. nat. Belg. 3 p. 1129 figs.—*Folliculinopsis annulata, lignicola* spp. n. Breton coast, FAURÉ-FREMIET Biol. Bull. Woods Hole 70 p. 353 figs.

Nyctotherus barberoi sp. n., from intestine of *Leptodactylus caliginosus*, Paraguay, SCHOUTEN Rev. Soc. cient. Paraguay 3 1934 p. 143 fig.

(c) Oligotrichida.

Relationships of Tintinnids with jurassic *Calpionella*, DEFLANDRE 265.

Dadayella hainanensis sp. n. Chinese waters, NIE & CHENG Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Ditozum gravinucleatum sp. n., from intestine of mule, China, HSIUNG Bull. Fan Mem. Inst. Biol. 6 p. 81 figs.

Favella shintsuensis, hainanensis spp. n. Chinese waters, NIE & CHENG Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Metacyclois sanyahensis sp. n. Chinese waters, NIE & CHENG Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Protorhabdonella ampulla, sanyahensis spp. n. Chinese waters, NIE & CHENG Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Spirodinium uncinucleatum. confusum spp. n., from intestine of mule, China, HSIUNG Bull. Fan. Memor. Inst. Biol. 6 p. 81 figs.

Trifascicularia parvum nom. n. for *Tetratoxum parvum* HSIUNG, 1930, HSIUNG Bull. Fan Mem. Inst. Biol. (Zool.) 6 p. 289 figs.

Tintinnas striatus, oblique spp. n. Chinese waters, NIE & CHENG Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Tintinnopsis hainanensis, oliveformis chinglanensis spp. n. Chinese waters, NIE & CHENG Abstr. Pap. Sci. Conf. Nanning 1935 p. 45.

Triadinium magnum sp. n., from mule, China, HSIUNG Bull. Fan Mem. Inst. Biol. (Zool.) 6 1935 p. 21 figs.

(d) Hypotrichida.

Pure culture of *Kahlia acrobates* PROVASOLI 759.

Chaenea mucicola sp. n. freshwater Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanking 1935 p. 45.

Keronopsis elongatus sp. n. freshwater Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanking 1935 p. 45.

Opisthotricha parahalophila sp. n. freshwater Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanking 1935 p. 45.

Pelatractus contractus sp. n. freshwater Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanking 1935 p. 45.

Peritromoides gen. n. *simplex* sp. n., from fresh water Punjab, BHATIA Fauna of Brit. India: Ciliophora 1936 (p. 363 fig.).

Strongylidium pseudocrassum sp. n. freshwater, Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanking 1935 p. 45.

Stylonichia pseudograndis sp. n. freshwater Nanking, WANG & NIE Abstr. Pap. Sci. Conf. Nanking 1935 p. 45.

Urostyla naumanni sp. n. Black Sea, LEPSI Bull. Mus. nat. Kichineff. 6 p. 16 fig.

(e) Peritrichida.

Carchesium duplicatum, grammari, jaerae, abrae spp. n., ectoparasitic on *Gammarus* (2), *Jaera* and *Abra* respectively, PRECHT Nova Acta Leopold N.F. (15) 1935 p. 405 figs.

Cothurnia nitocrae, peloscolicis, grammari, complanata, stylariodis, nereicola, halacaricola, triangula spp. n., on *Nitocra*, *Peloscolex*, *Gammarus*, *Stylarioides* (2), *Nereis*, *Copidognathus* (2), respectively, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Craspedomyoschiston gen. n. *sphaeromae* sp. n., ectoparasitic on *Sphaeroma rugicaudum*, Baltic, PRECHT Nova Acta Leopold. N. F. 3 (15) 1935 p. 405 figs.

Cyclochaeta astericola sp. n., ectoparasitic on *Asterias rubens*, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Epistylis horizontalis sp. n., from moults of *Balanus*, CHATTON Mém. Mus. Hist. Nat. Belg. (2) 3 p. 913 figs.—*E. gammari, nitocrae, jaerae, carcini*, spp. n., ectoparasitic on *Arenicola*, *Haliencyclops*, *Gammarus*, *Nitocra*, *Jaera* and *Carcinus* respectively, Baltic, PRECHT Nova Acta Leopold N.F. 3 (15) 1935 p. 405 figs.

Haplocaulus gen. n. *nicoleae* sp. n., ectoparasitic on *Nicolea zostericola*, Baltic, PRECHT Nova Acta Leopold N.F. 3 (15) 1935 p. 405 figs.

Intranstylum duplicatum, coniferum, bradymyon, congom spp. n., ectoparasitic on *Gammarus*, Baltic, PRECHT Nova Acta Leopold N.F. 3 (15) 1935 p. 405 figs.

Myoschiston gen. n. *duplicatum* sp. n., ectoparasitic on *Carcinus* and *Idothea*; *M. neomysidis, carcini, centropagidarum, cypridicola* spp. n., from *Neomysis*, *Carcinus*, *Centropages* and *Eurytemora*, *Cyprideis* respectively, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Opercularia frondicola sp. n. epizoic on land-copepods, PRECHT Zool. Anz. 115 p. 217 figs.

Rhabdostyla nereicola sp. n., from *Nereis dumerili*; Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Scyphidia indica sp. n., from Punjab, BHATIA Fauna of Brit. India: Ciliophora 1936 (p. 397 fig.).—*S. terebellides* sp. n., from *Terebellides stroemi*; s. *spinoicola* sp. n., from Spionid, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Trichodina terebellides sp. n., ectoparasite on *Terebellides stroemi*, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Vorticella jaerae, *minuta*, *fusca* spp. n., on *Jaera*, *Pallene*, *Enteromorpha* respectively, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Zoothamnium rigidum, *hiketes*, *intermedium*, *laomedaeae*, *abrae*, *vermicola* spp. n. ectoparasitic on *Gammarus* (2), *Laomedaea*, *Abra*, *Ophiothrix* respectively, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

C. SUCTORIA.

Revision of the Suctoria, RIEDER 795.

Acineta branchicola, *laomedaeae*, *harpacticicola*, *amphiasci* spp. n., on *Carcinus* and *Crangon*, *Laomedaea*, *Nitocra*, *Amphiascus* respectively, Baltic, PRECHT Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.—*Acineta labiata*, *maxima*, *brevicaulis* spp. n. freshwater,

Switzerland, RIEDER Rev. suisse Zool. Genève 43 p. 359 figs.

Conidophrys guttipotor sp. n., parasitic on crustacean, *Sphaeroma serratum*, CHATTON & LWOFF Bull. Biol. France-Belg. 70 p. 86 figs.

Craspedophrya gen. n. *erhardi* sp. n. freshwater, Switzerland, RIEDER Rev. suisse Zool. Genève 43 p. 359 figs.—*C. rotunda* nom. n. for *Trichophrya rotunda* Hentschel freshwater Switzerland, RIEDER Rev. Suisse Zool. Genève 43 p. 359 figs.

Cucumophrya gen. n. *leptomesochrae* sp. n. on *Leptomesochra confluens* (Copepoda), KUNZ Zool. Anz. 114 p. 173 figs.

Discophrya spatulata, *lata* spp. n. freshwater Switzerland, RIEDER Rev. Suisse Zool. Genève 43 p. 359 figs.

Lagenophrys rotunda sp. n., on Ostracoda, PRECHT, Nova Acta Leopold. N.F. 3 (15) 1935 p. 405 figs.

Paracincta crassipes sp. n. freshwater Switzerland, RIEDER Rev. Suisse Zool. Genève 43 p. 359 figs.

Thecacincta donsi sp. n., ectoparasitic on nematodes, *Desmodora*, Norway, ALLGÉN K. Norske vidensk. Selsk. 3 p. 51.

FORMAE INCERTAE SEDIS.

Undertermined intracellular parasite of rat, MOREHOUSE & BECKER, 677.

III. PORIFERA OR SPONGIDA

BY

M. BURTON, D.Sc.

CONTENTS.

| | PAGE |
|--|------|
| I. TITLES | 2 |
| II. SUBJECT INDEX :— | |
| General, Economics and Technique... .. | 4 |
| Structure | 4 |
| Physiology | 4 |
| Development and Growth | 4 |
| Ethology... .. | 4 |
| Distribution | 5 |
| III. SYSTEMATICS :— | |
| Calcarea | 5 |
| Freshwater | 5 |
| Hexactinellida | 5 |
| Tetrazonida | 7 |
| Euceratosa | 13 |
| Porifera Incertae Sedis | 13 |
| Cyathospongia | 13 |

I.—TITLES.

- 1.—Alander, H. Additions to the Swedish sponge-fauna. Ark. Zool. Stockholm 28 B 5 1935 pp. 1-6 1 fig.
- 2.—Arndt, W. Spongillidenvorkommen in Telezker Sea (Altai). Arch. Hydrobiol. Stuttgart 29 (4) 1936 pp. 687-690.
- 3.—Arndt, W. Zahlenmässiges zur Verteilung der spongiologischen Veröffentlichungen auf Sprachen und Länder sowie zur Entwicklung der Spongiologie. SitzBer. Ges. naturf. Fr. Berlin 1936 pp. 195-209.
- 4.—Arndt, W. Die Poriferen vom Standpunkt der Strahlungsbiologie. SitzBer. Ges. naturf. Fr. Berlin 1936 pp. 315-355.
- 5.—Arndt, W. Fortschritte unserer Kenntnis der tierischen Bewohnerschaft der Meereshöhlen. Mitt. Höhlen.-u. Karstf. Berlin 1936 pp. 137-141.
- 6.—Arndt, W. Die von Dr. A. Monard in Angola gesammelt Süswasserschwämme. Mit einem Überblick über die Spongillidenfauna Afrikas nach dem gegenwärtigen Stand unserer Kenntnisse. Arq. Mus. Bocage Lisboa 7 1936 pp. 7-35.
- 7.—Arndt, W. and Pax, F. Das Zusammenleben von Krustenanemonen und Schwämmen im Mittelmeer. Thalassia 2 (3) 1936 pp. 1-34 8 figs.
- 8.—Bartsch, P. Sponge conservation. Science N.Y. 83 (2164) 1936 p. 597.
- 9.—Bartenstein, H. Schwamm-Nadeln im Mittel-Devon der Eifel und Ober-Devon des Ost-Thüringischen Schiefergebirges. Senckenbergiana Frankfurt 17 (5-6) 1935 pp. 238-241 4 figs.
- 10.—Bedford, R. and Bedford, J. Further notes on Cyathospongia (Archaeocyathi) and other organisms. Mem. Kyancutta Mus. 3 1936 pp. 21-26 6 pls.
- 11.—Bedford, R. and Bedford, W. R. Further notes on Archaeocyathi (Cyathospongia) and other organisms. Mem. Kyancutta Mus. 2 1936 pp. 9-19 14 pls.
- 12.—Benson, W. N. and Keble, R. A. The Geology of the regions adjacent to Preservation and Chalky Inlets, Fiordland, New Zealand. Trans. Proc. Roy. Soc. N.Z. 65 (3) 1935. [Sponges pp. 290-292 2 figs.]
- 13.—Bolkhovitinova, M. A. On the Carboniferous sponges of the Moscow region. Bull. Moscow Mining Acad. 2 (1) 1923. [N.V.]
- 14.—Bouček, B. Die Plantonfauna der böhmischen Graptolithenschiefer. Cbl. Min. Geol. Paläont. Stuttgart 7 1936. [Sponges p. 293 fig. 1.]
- 15.—Breitfuss, L. Kalkschwämme vom Skagerrak und Kattegat, unter Berücksichtigung ihrer Weltverbreitung. Göteborgs VetenskSamh. Handl. (5) (B) 4 (15) 1936 pp. 1-16.
- 16.—Brøndsted, H. V. Entwicklungs-physiologische Studien über *Spongilla lacustris* (L.). Acta zool. Stockholm 17 1936 pp. 75-172 76 figs.
- 17.—Burton, M. Sponges [in] The Fishery Grounds near Alexandria. Notes Mem. Fisheries Res. Cairo 17 1936 pp. 1-28 16 figs.
- 18.—Burton, M. Notes on sponges from South Africa, with descriptions of new species. Ann. Mag. nat. Hist. 17 1936 pp. 141-147 4 figs.
- 19.—Burton, M. Sponge spicules [in] Oliver, W. R. B. The Tertiary flora of the Kaikorai Valley, Otago, New Zealand. Trans. Roy. Soc. N.Z. 66 1936 p. 304.
- 20.—Causey, D. and Eidson, H. *Trochospongilla horrida* in Arkansas. Science N.Y. 84 (2178) 1936 p. 291.
- 21.—Chapman, F. and Crespin, I. The palaeontology of the Plantagenet Beds of Western Australia. J. Roy. Soc. W. Aust. 20 1934. [Sponges pp. 109-118.]

Crespin, I. vide Chapman, F.

22.—Cuénot, L. Commensalisme des pontes de Céphalopodes avec des Éponges et des Cnidaïres. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 37-40.

23.—de Laubenfels, M. W. A discussion of the Sponge fauna of the Dry Tortugas in particular and the West Indies in general, with material for a revision of the families and orders of the Porifera. Pap. Tortugas Lab. Carn. Instn. 30 1936 pp. 1-225 22 pls.

24.—de Laubenfels, M. W. A comparison of the shallow-water sponges near the Pacific end of the Panama Canal with those at the Caribbean end. Proc. U.S. Nat. Mus. 83 2993 1936 pp. 441-466 6 figs.

25.—Duboscq, O. and Tuzet, O. Les amœbocytes et les cellules germinales des Éponges calcaires. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 209-226 10 figs.

Eidson, H. *vide* Causey, D.

26.—Eller, E. R. Upper Devonian sponges. Science N.Y. 84 (2167) 1936 p. 41.

27.—Forrest, J. E., Waterston, A. R. and Watson, E. V. The natural history of Barra, Outer Hebrides. Proc. phys. Soc. Edinb. 22 (5) 1936. [Sponges pp. 262-263.]

28.—Gerth, H. The occurrence of isolated calcular plates of *Dinocrinus* in the Permocarboneous of Australia and India and its stratigraphical significance. Proc. K. Akad. Wet. Amsterdam 39 1936 pp. 865-870 1 fig.

29.—Gregorio, A. de. Sul permiano di Sicilia. Ann. Géol. Paléont. Palermo 52 1930. [Sponges pp. 47-48 figs.]

Hornberger, J. *vide* Plummer, F. B.

30.—Howell, B. F. and Landes, R. W. New Monactinellid sponges from the Ordovician of Wisconsin. J. Paleont. Menasha Wis. 10 (1) 1936 pp. 53-59 21 figs.

31.—Inai, Y. *Discosiphonella*, a new ally of *Amblysiphonella*. Proc. Imp. Acad. Tokyo 12 (6) 1936 pp. 169-171 4 figs.

Keble, R. A. *vide* Benson, W. N.

32.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. 2 vols. Jena 1936. [Sponges pp. 138-157 figs.]

33.—Kumar, D. A. Spicules and classification of Tetraxonida. Proc. Indian Sci. Congr. Calcutta 22 1935 pp. 287-305.

34.—Lami, R. Quelques algues spongiocoles de la Rance. Bull. Lab. Maritime St. Servan 16 1936 pp. 7-15 4 figs.

Landes, R. W. *vide* Howell, B. F.

35.—Lecompte, M. Contribution à la connaissance des "Recifs" du Frasnien de l'Ardenne. Mém. Inst. géol. Louvain 10 1936. [Sponges pp. 93-97 figs. & pls.]

36.—Meewis, H. Contribution à l'étude histologique des éponges d'eau douce: *Spongilla lacustris* L.; *Ephydatia fluviatilis* L. Mem. Mus. Hist. nat. Belg. (21) 3 1936 pp. 519-537 19 figs.

37.—Moret, L. Spongiaires [in] Étude sur la faune du Bajocien Supérieur du Mont d'Or Lyonnais. Trav. Lab. Geol. Lyon 28 (9) 1936 pp. 131-134 figs.

38.—Neu, W. Istanbul-Baltaliman: Die Schwammfischerei in der neuen Türkei. SitzBer. Ges. naturf. Fr. Berlin 1936 pp. 88-91.

39.—Old, M. C. Additional North American fresh-water sponge records. Trans. Amer. micr. Soc. Menasha 55 (1) 1936 pp. 11-13.

40.—Old, M. C. Yucatan fresh-water sponges. Pub. Carnegie Instn. Washington 457 1936 p. 29 2 figs.

Pax, F. *vide* Arndt, W.

41.—Pecoil, R. Découverte de diatomées, d'héliozoaires et de spicules de Spongilles dans les Calcaires Chattiens de Chalendrat. Rev. Sci. nat. Auvergne Clermont Ferrand 1 (3) 1935 pp. 160-161.

42.—Pesson, P. Notes de faunistique armoricaine. Bull. Soc. sci. Bretagne 11 (1 & 2) 1934. [Sponges pp. 56-58.]

43.—Plummer, F. B. and Hornberger, J. Jr. Geology of Palo Pinto County, Texas. Univ. Texas Bull. 3534 1935 p. 19.

44.—Pourbaix, N. Sur le mécanisme d'accumulation des réserves dans les gemmules des Spongillidae. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 415-419 4 figs.

45.—Rezvoj, P. D. Porifera [in]. Faune de l'U.R.S.S. (3) 2 (2) 1936 124 pp. 15 pls. 19 figs.

46.—Sasaki, N. The fresh-water sponges obtained in Northeast Honshū, Japan. Saito Ho-on Kai Museum Research Bulletin 9 1936 pp. 1-30 4 pls. 8 figs.

47.—Schrammen, A. Die Kiesel-spongien des oberen Jura von Süd-deutschland. Palaeontographica Stuttgart 84A (4-6) 1936 pp. 149-197 10 pls.; 85A (1-4) 1936 pp. 1-114 27 pls.

48.—Schröder, K. Beiträge zur Kenntnis der Spiculabildung, der Larvenspiciulation und der Variationsbreite der Gerüstnadeln von Süßwasser-schwämmen. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 245-267 24 figs.

49.—Spriesterbach, J. Beitrag zur Kenntnis der Fauna des rheinischen Devon. Jahrb. preuss. geol. LdAnst. 55 (1) 1935. [Sponges pp. 447-483 2 pls. 2 figs.]

50.—Stolte, H. A. Die Herkunft des Zellmaterials bei regenerativen Vorgängen der wirbellosen Tiere. Biol. Rev. Cambridge 11 (1) 1936. [Sponges pp. 2-8 2 figs.]

51.—Tétry, A. Contribution à la connaissance de la faune de l'Étang de Lindre. Bull. Soc. Hist. nat. Metz (3) 34 1935. [Sponges p. 252.]

52.—Topsent, E. Éponges observées dans les parages de Monaco. Bull. Inst. océanogr. Monaco 686 1936 pp. 1-70 12 figs.

53.—Topsent, E. Étude sur les *Leucosolenia*. Bull. Inst. océanogr. Monaco 711 1936 pp. 1-47 20 figs.

Tuzet, O. *vide* Duboscq, O.

Waterston, A. R. *vide* Forrest, J. E.

Watson, E. V. *vide* Forrest, J. E.

54.—Wetzel, O. Die Mikropalae-ontologie des Heiligenhafener Kiesel-tones (Ober-Eozän). Jber. niedersächs. geol. Ver. Hannover 27 (1936) 1935. [Sponges pp. 44-45 figs.]

55.—Zahálka, B. Die spongilitischen Gesteine der böhmischen Kreide. [Czech.] Pub. Fac. Sci. Univ. Masaryk Brno 215 1935 pp. 1-22 11 figs.

56.—Zimmer, W. Über das Vorkommen der *Heteromeyenia baileyi* (Bwk.) in der sächsischen Oberlausitz. Isis Budissina Bautzen 13 1936 pp. 126-137 12 figs.

57.—Zorrilla, L. Algunos detalles acerca de los nucleos celulares estudiados por medio de la reaccion de feulgen y particularidades estructurales de las espículas de las esponjas del lago de Xochimilco. An. Inst. Biol. Mexico 6 (3-4) 1935 pp. 259-268 10 figs.

58.—Zvejška, F. Die Kreideinsel zwischen Letovice und Pamětica. Acta Soc. Sci. Nat. Moraviae 9 (2) 1934 pp. 1-21 2 figs. (German summary p. 22.)

II.—SUBJECT INDEX.

GENERAL, ECONOMICS AND TECHNIQUE.

Economics.—BARTSCH, 8; NEU, 38.

STRUCTURE.

Histology.—MEEWIS, 36.

Cytology.—ZORRILLA, 57.

PHYSIOLOGY.

ARNDT, 4; BRØNDSTED, 16; POUR-BAIX, 44.

DEVELOPMENT AND GROWTH.

Embryology.—DUBOSCQ & TUZET, 25; KORSCHOLT, 32.

Development of Spicules.—SCHRÖDER, 48.

ETHOLOGY.

Regeneration.—STOLTE, 50.

Commensalism.—ARNDT & PAX, 7; CUÉNOT, 22; LAMI, 34.

Ecology.—ARNDT, 5.

DISTRIBUTION.

FRESHWATER.

Europe.—FORREST, WATERSTON & WATSON, 27; PESSON, 42; REZVOJ, 45; TÉTRY, 51; ZIMMER, 53.

Africa.—ARNDT, 6.

Asia.—ARNDT, 2; REZVOJ, 45; SASAKI, 46.

America.—CAUSEY & EIDSON, 20; OLD, 39, 40; ZORRILLA, 57.

DISTRIBUTION.

MARINE.

N. Atlantic and Europe.—ALANDER, 1; BREITFUSS, 15; FORREST, WATSON & WATSON, 27.

Mediterranean.—BURTON, 17; TOPSENT, 52.

South Africa.—BURTON, 18.

West Indies.—DE LAUBENFELS, 23.

Panama.—DE LAUBENFELS, 24.

DISTRIBUTION.

FOSSIL.

Primary.—Cambrian, BEDFORD & BEDFORD, 10; BEDFORD & BEDFORD, 11; Ordovician, BENSON & KEBLE, 12; HOWELL & LANDES, 30; Silurian, BOUČEK, 14; Devonian, BARTENSTEIN, 9; ELLER, 26; LECOMTE, 35; SPRIESTERBACH, 49; Carboniferous, BOLKHOVITNOVA, 13; INAL, 31; PLUMMER & HORNBERGER, 43; Permian-carboniferous, GERTH, 28; Permian, GREGORIO, 29.

Secondary.—Jurassic, MORET, 37; SCHRAMMER, 47; Cretaceous, ZAHÁLKA, 55; ZVEJŠKA, 58.

Tertiary.—Eocene, WETZEL, 54; Oligocene, PECOIL, 41; Pliocene, BURTON, 19; Cainozoic, CHAPMAN & CRESPIAN, 21.

III.—SYSTEMATIC.

GENERAL.

Classification, DE LAUBENFELS 23; KUMAR 33.

CALCAREA.

†*Calceolispongia hindei* an Echinoderm, GERTH 28.

Hozawaia nom. n., for *Vosmaeria* Lendenfeld nec Fristedt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 194.

Leucosolenia European spp., TOPSENT 53.

†*Scribroporella* gen. n. *socialis* sp. n. Devonian Germany, SPRIESTERBACH Jahrb. preuss. geol. LdAnst. 55 1935 p. 477 pl. xli figs. 1-4, pl. xlii figs. 1-3 text-figs. 1-2.

“FRESHWATER.”

(SPONGILLIDAE.)

Of U.S.S.R., REZVOJ 45.

Baikalospongia intermedia morpho *profundalis* nov. U.S.S.R., REZVOJ Faune de l'U.R.S.S. 2 (2) p. 115 pl. xi fig. 44.

Spongilla sendai p. 10 pl. ii figs. 9-11, pl. iv figs. 27-28 text-figs. 3-4, *hozawai* p. 14 pl. ii fig. 12, pl. iv figs. 29-30, text-figs. 5-6 spp. n. Japan, SASAKI Saito Ho-on Kai Mus. Res. Bull. 9.

HEXACTINELLIDA.

†*Amphiblestrum* gen. n., *venosum* p. 182 pl. xvi fig. 12 pl. xviii figs. 7-8, *alternans* p. 182 pl. xxi figs. 1-2 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A.

†*Aulodorus* gen. n., *farreides* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 182 pl. xiv fig. 7, pl. xv fig. 15.

†*Auloplax richiei* sp. n. Jurassic France, MORET Trav. Lab. Geol. Lyon 23 p. 132 fig. 16.

†*Coscinocaulus* gen. n., *micropora* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 180 pl. xxii fig. 1.

†*Craticularia paradoxa turbinata* p. 180, *parallela fenestrata* p. 180 pl. xviii fig. 2 varr. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A.

†*Cryptochiderma* subg. n. of *Oypellia*, SCHRAMMEN Palaeontographica Stuttgart 84A p. 180.

†*Cypellia* (*Cryptochiderma*) *robusta* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 180 pl. xviii fig. 5; †*C.* (*Paracypellia*) *minor* p. 179 pl. xvii fig. 7 sp. n., *minor seriata* var. n. p. 179 Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**; †*C.* (*Phanerochiderma*) *infundibuliformis familiaris* var. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 179.

†*Dactylocalyx simpsoni* sp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. Aust. **20** 1934 p. 117 pl. xi fig. 23.

†*Desmoderma* gen. n., *evestigata* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 180.

†*Epaphroditus* gen. n., *nitidus* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 183 pl. xxiii fig. 1.

†*Erineum* gen. n., *minutum* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 181 pl. xvi fig. 8, pl. xxiii fig. 6.

†*Eutactus* gen. n., *reticulatus* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 181.

†*Feifelina* gen. n., *gigas* p. 182 pl. xv fig. 11, *favositides* p. 182 pl. xviii fig. 4 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographic Stuttgart **84A**.

†*Labyrinthus rimosus* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** pl. xix fig. 1.

†*Leptolacis* gen. n., *striata* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 183 pl. xvi fig. 11, pl. xviii fig. 11, pl. xxiii fig. 3.

†*Linosoma* gen. n., *calyx* p. 182 pl. xix fig. 23, *infundibuliformis* p. 182 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Lychniscaulus* gen. n., *vannus* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 180 pl. xv fig. 10, pl. xvii fig. 10.

†*Mystrium* gen. n., *porosum* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 183.

†*Pachyascus* gen. n., *formosus* p. 181 pl. xvi fig. 6, pl. xvii fig. 3, pl. xviii

figs. 1, 10, pl. xxii figs. 2-3, *punctatus* p. 181 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Pachyrhachis cupula* p. 179 pl. xxiii fig. 10, *cylindrata* p. 179, *labyrinthica* p. 179 pl. xv fig. 2 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Pachyteichisma avita* p. 179 pl. xv fig. 1 sp. n. *P. lamellosa turbinata* p. 179 var. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Paracreticularia* gen. n., *arborescens* p. 181 pl. xiv figs. 9-10, pl. xvi figs. 15, 17, *striato-punctata* p. 181, *tubifera* p. 181 pl. xiv fig. 8, pl. xvi fig. 3, *radiciformis* p. 181 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Paracypellia* subg. n., of *Cypellia*, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 179.

†*Phanerochiderma* subg. n., of *Cypellia* SCHRAMMEN Palaeontographica Stuttgart **84A** p. 179.

†*Polygonatum* gen. n. *sphaeroides* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 182.

†*Polyphemus* gen. n., *strombiformis* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 182.

†*Psephosyllogus* gen. n., *diligens* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 181 pl. xx figs. 3-5, pl. xxiii fig. 2.

†*Polypyge* gen. n., *pusilla* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 183.

†*Pycnocalyptra* gen. n., *calyx* p. 181 pl. xxi figs. 3-4, *minor* p. 181 pl. xxi fig. 5 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Pyritonema graptolithorum* sp. n. Siluria Bohemia, BOUČEK Cbl. Min. Geol. Paläont. Stuttgart **7** p. 293 fig. 1.

†*Rhabdium* gen. n., *angustatum* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 183.

†*Rhogostomium* gen. n., *corrugatum* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 182 pl. xv fig. 9, pl. xviii fig. 6, 9.

†*Rhombedonium* gen. n., *cypelliaeforme* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 182 pl. xvii fig. 5, pl. xxiii fig. 11.

†*Rhopaliscus* gen. n., *cingulatus* p. 181 pl. xiv fig. 11, pl. xx fig. 6, *macrostoma* p. 181, *parvulus* p. 181 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Sphenaulax progenies* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 181 pl. xvi fig. 10.

†*Sporadopyge* gen. n., *speciosa* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica **84A** p. 180 pl. xix fig. 2.

†*Sporadopyle romani* sp. n. Jurassic France, MORET Trav. Lab. Geol. Lyon **28** p. 131 fig. 15; †*S. consobrina* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 180.

†*Stauroderma microstoma* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 180.

†*Thyridium* gen. n., *lineatum* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 181 pl. xxii figs. 5-6.

†*Tremadictyon elegans* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 180 pl. xx figs. 1-2.

†*Tremaphorus* gen. n., *punctatus* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 183.

†*Trochobolus suevius* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 179 pl. xv fig. 4.

TETRAXONIDA.

(i) HOMOSCLEROPHORA.

Plakoosa gen. n. *eilsa* sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. **83** p. 463 fig. 45.

(ii) STREPTASTROSCLEROPHORA.

Halinastra gen. n., type = *Pachastrella exostotica* Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. **30** p. 179.

Monotria gen. n., type = *Coppatias solidissima* Wilson, DE LAUBENFELS

Pap. Tortugas Lab. Carn. Instn. **30** p. 179.

Pachataxa gen. n., type = *Pachastrella lithistina* Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. **30** p. 179.

Sphincterella nom. n., for *Sphinctrella* Schmidt nec Schmarda, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. **30** p. 180.

(iii) ASTROSCLEROPHORA.

†*Caminus parvistoma* p. 111 pl. vi fig. 3, *nitidus* p. 112 pl. vi fig. 4 spp. n. Cainozoic Australia, CHAPMAN & CRESPIJN J. Roy. Soc. W. Aust. **20** 1934.

Chondrillina gen. n., type = *Chondrilla phyllodes* Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. **30** p. 182.

Chondrosia chucalla nom. n., for *C. collectrix* Lendenfeld nec Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. **30** p. 184.

†*Cydonium ramuliferum* sp. n. Cainozoic Australia, CHAPMAN & CRESPIJN J. Roy. Soc. W. Aust. **20** 1934 p. 112 pl. vi fig. 5.

†*Ecionemia glauerti* sp. n. Cainozoic Australia, CHAPMAN & CRESPIJN J. Roy. Soc. W. Aust. **20** 1934 p. 111 pl. vi fig. 2.

(iv) LITHISTIDA.

†*Bothrolemma* gen. n., type = *B. osculifera* (Kolb), SCHRAMMEN Palaeontographica Stuttgart **84A** p. 186.

†*Chonellopsis* gen. n., *striata* p. 185 *folium* p. 185 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Cnemidiastrum pluristellatum orbiculata* var. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **85A** p. 85.

†*Coscinodiscus* gen. n., *suevicus* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A** p. 186.

†*Cyloracea matutina* p. 185 *pusilla* p. 185 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart **84A**.

†*Dicranoclonella* gen. n., *praecursor* p. 184, *schmidti* p. 184, *fallax* p. 184 spp. n., Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A.

†*Discodermia gigantea* p. 112 pl. vii fig. 6, *tabelliformis* p. 113 pl. vii figs. 7-8, *retepora* p. 113 pl. vii fig. 9, *tumulosa* p. 114 pl. viii fig. 10 spp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934.

†*Discosiphonella* gen. n., *manchuriensis* sp. n. Carboniferous Manchuria, INAI Proc. Imp. Acad. Tokyo 12 p. 169 figs. 1-4.

†*Epistomella aurita* p. 186 incompta p. 186 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A.

†*Leiocarenum papillosum* p. 184 planus p. 184 spp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A.

†*Leiodorella pustulosa* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 186.

Lepidothenea nom. n., for *Lepidospongia* Dendy (pre-occ.), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 176.

†*Linochone* gen. n., *rimosa* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 186.

†*Lithostrobilus* gen. n., type = *L. stellatus* (Goldfuss), SCHRAMMEN Palaeontographica Stuttgart 84A p. 185.

†*Heloraphinia* gen. n., *arborescens* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 184.

†*Neosiphonia fungiformis* p. 114 pl. viii figs. 11-12, pl. ix fig. 13, *glauerti* p. 115 pl. ix fig. 14 spp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934.

†*Platychonia tertiaria* sp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 117 pl. x fig. 21.

†*Ragadinia placentifformis* sp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 116 pl. x fig. 20.

†*Rhytidoderma* gen. n. *berckhemeri* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 186.

†*Sphaeropegma* gen. n., *nuda* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 186.

†*Thamnospongia neoclavellata* p. 115 pl. ix fig. 16, *subglabra* p. 116 pl. ix figs. 17-18 pl. x fig. 19 spp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934.

†*Thecosiphonia lobosa* sp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 115 pl. ix fig. 15.

†*Verruculina albanyensis* sp. n. Cainozoic Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 117 pl. xi fig. 22.

(v) SIGMATOSCLEROPHORA.

Auaba gen. n., type = *Yvesia alecto* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 65.

Acamasina nom. n., for *Acamas* Duchassaing and Michelotti (pre-occ.), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 117.

Aka nom. n., for *Acca* Johnson (pre-occ.), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 155.

Arndtanchora gen. n., type = *Leptosia sirventi* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 110.

Athnacama gen. n., type = *Hamacantha lundbecki* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 52.

Axinomimus gen. n., type = *Axinella paradoxa* Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 163.

Axocielita gen. n., type = *Microciona similis* Stephens, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 118.

Aulospongoschoenus sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 100 pl. xiii fig. 3.

Bethia gen. n., type = *Dictyocylindrus laciniatus* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 108.

Burtonanchora gen. n., type = *Myxilla crucifera* Wilson, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 94.

Burtonispongia gen. n., type = *Desmacidon australis* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 52.

Caesarellum gen. n., type = *Bubaris gallica* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 144.

Callyspongia arcesiosa sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 56.

Calyxadocia gen. n., type = *Gellius calyx* Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 70.

Ciocalypta alleni nom. n., for *Spongia cavernosa* Lamarck nec Pallas (= *Ciocalypta penicillus* Auctt.), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 134.

Ciocalapata gen. n., type = *Ciocalypta amorphosa* Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 134.

Cionanchora gen. n., type = *Hymeraphia tuberoscapitata* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 108.

Cliona ? *arndti* nom. n., for *Suberites inconstans* Dendy nec Hansen, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 152.

Crellancistra gen. n., type = *Hamacantha integra* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 112.

Crellinspira gen. n., type = *Crella donsi* Burton, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 79.

Coelectys gen. n., *insinuans* sp. n. Mediterranean, TOPSENT Bull. Inst. océanogr. Monaco 636 p. 12 figs. 2-3.

Damonilla gen. n., type = *Crellomima incrustans* Hentschel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 65.

Damoseni gen. n., type = *Hymeraphia michaelсени* Hentschel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 110.

Dasychalina cyathina sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 45.

Delectona gen. n., type = *Alectona higgini* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 156.

Desmacella dendyi nom. n., for *Tylodesma vestibularis* Dendy nec Wilson, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 114.

Donotella gen. n., type = *Cliona acustella* Annandale, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 156.

Echinodictyum topsenti sp. n., for *Spongia bilamellata* (pars) Lamarck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 63.

Epipolasis gen. n., type = *Spongosorites suluensis* Wilson, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 162.

Euchelipluma congeri sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 115 pl. xxii fig. 3.

Evomerula gen. n., type = *Hamacantha agassizi* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 125.

Exaxinata gen. n., type = *Cladorhiza ozeata* Lundbeck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 122.

Fasubera gen. n., type = *Hymedesmia lipochela* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 119.

Ferrerhernandezia gen. n., type = *Hymedesmia aenigma* Lundbeck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 87.

Fisherispongia gen. n., *errea* sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83 p. 460 fig. 44.

Folitispia gen. n., type = *Hymedesmia laevissima* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 119.

Gapoda gen. n., type = *Raphyrus hixonii* Lendenfeld, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 144.

Grayax nom. n. (?), for *Pronax* Gray 1867 p. 526 ? (or for *Cliona* ?), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 63.

Grella gen. n., type = *Yvesia carnosa* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 64.

Halichondria baeri nom. n., for *H. reticulata* Baer nec *H. (Hymeniacidon) reticulata* (Bowerbank) Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 133 ; *H. brøndstedti* nom. n.,

for *H. incrustans* Kieschnick nec Johnston, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 133; *H. lona* nom. n., for *H. aspera* Swartschewsky nec Bowerbank, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 55.

†*Halichondrites actiniformis* p. 56, figs. 1-6, *robustus* p. 56 figs. 7-8 spp. n. Ordovician U.S.A., HOWELL & LANDES J. Paleont. Menasha Wis. 10.

Haliclona steuerei sp. n. Mediterranean, BURTON Notes Mem. Fisheries Res. Cairo 17 p. 10; *H. erina* p. 457, *doria* p. 458 spp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83; *H. longleyi* sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 44 pl. vii fig. 1, pl. viii fig. 2; *H. baeri* nom. n., for *Reniera mollis* Baer nec Lambe p. 40, *levenseni* nom. n., for *Reniera clavata* Levinsen p. 40, *H. thielei* nom. n., for *Pachychalina tenera* Thiel p. 40, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30.

Halicometes perastra sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 145.

Hiltonus gen. n., type = *Histodermella australis* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 72.

Histodermopsis gen. n., type = *Histodermella coriacea* Lundbeck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 72.

Holoplocamia gen. n. p. 75, *penneyi* sp. n. p. 76, Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30.

Holopsamma helwigi sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 97 pl. xiii fig. 2, pl. xx fig. 2.

Hymedesmia minuta sp. n. Sweden, ALANDER Ark. Zool. Stockholm 28 B 5 1935 p. 4 fig. 1; *H. gracilisigma* rissoi var. n. Mediterranean, TOPSENT Bull. Inst. océanogr. Monaco 686 p. 35; *H. nummota* sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 86.

Hymeniacidon amphilecta sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 137.

Iotaota gen. n., type = *Halichondria abyssii* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 95.

Iotroata gen. n., type = *Iotrochota acanthostylifer* Stephens, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 87.

Janulum gen. n., type = *Isodictya spinispiculum* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 79.

Jelissima gen. n., type = *Hymedesmia tenuissima* Thiele, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 79.

Jones gen. n., type = *Myxilla amaknakensis* Lambe, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 79.

Julavis gen. n., type = *Tedania levis* Kirkpatrick, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 79.

Kaira gen. n., type = *Tethya hebes* Lendenfeld, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 175.

Keratylum gen. n., type = *Suberites capillitium* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 125.

Ketosus gen. n., type = *Dictyocylindrus setosus* Bowerbank, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 130.

Kotimea gen. n., type = *Hymedesmia moorei* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 147.

Labacea gen. n., type = *Clathria juncea* Burton nec Lamarck (?), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 125.

Labisophlita gen. n., type = *Esperiopsis forcipula* Lundbeck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 120.

Laxosuberites zeteki sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83 p. 450 fig. 42.

Leptochelastra gen. n., type = *Hymeraphia toureti* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 111.

Ligrota gen. n., type = *Clathria lobata* Vosmaer, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 125.

Lissodendoryx arenaria p. 143 fig. 1, *stephensoni* p. 144 fig. 2 spp. n. South Africa, BURTON Ann. Mag. nat. Hist. 17.

Marcusoldia gen. n., type = *Leptolabis tenuissima* Hentschel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 87.

Merriamium gen. n., *tortugasensis* sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 83 pl. xi fig. 1; *M. lindgreni* nom. n., for *Dendoryx mollis* Lindgren nec Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 83.

Microciona svarchevskyi nom. n., for *Amphilectus armatus* Swartschewsky nec *Microciona armata* Bowerbank, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 111.

Mycale cecilia sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83 p. 447 fig. 41.

Mycalecarmia gen. n., type = *Esperilla* (sic) *lapidiformis* Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 120; *M. babici* nom. n., for *Esperella modesta* Lambe nec Schmidt, DE LAUBENFELS t.c. p. 120.

Myxichela gen. n., type = *Lissodendoryx tawiensis* Wilson, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 85.

Najax gen. n., type = *Halicnemia duplex* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 160.

Negombata gen. n., type = *Latrunculia corticata* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 159.

Nisibaris gen. n., type = *Hallmannia spirophora* Burton, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 144.

Okadaia gen. n., type = *Amphilectus unguiculatus* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 121.

Ommatosa gen. n., type = *Axinella rugosa* Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 132.

Paratimea galaxa sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 146.

†*Petrosites* gen. n. *humilis* p. 58 figs. 9-12, *tenuis* p. 58 figs. 13-15, *variabilis* p. 58 figs. 16-19 spp. n. Ordovician U.S.A., HOWELL & LANDES J. Paleont. Menasha Wis. 10.

Phakettia gen. n., type = *Phakellia cactoides* Burton, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 130; *P. wellsi* nom. n., for *Phakellia papyracea* Ridley & Dendy nec Carter, Id. t.c. p. 130.

Plumocolumetta gen. n., type = *Gellius bidens* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 54.

Pocilochela gen. n., type = *Myxilla decepta* Kirkpatrick, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 87.

Prosuberites microsclerus sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 149.

Psammascus psellus sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 96 pl. vi fig. 1.

Psammotoxa gen. n., type = *Phoriospongia guettardi* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 99.

Pseudosuberites melanos sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 pl. 149 pl. xvii fig. 2.

Pytheilla gen. n., type = *Grayella topsenti* Babić, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 64.

Querciclona gen. n., type = *Antherochalina quercifolia* Keller, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 46.

Quixilla gen. n., type = *Hymenaphia lacazii* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 88.

Quizciona gen. n., type = *Microciona heterospiculata* Brøndsted, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 111.

Ramoses gen. n., type = *Clathria pauper* Brøndsted, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 109.

Raoa gen. n., type = *Cladorhiza tridentata* Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 123.

Raspaciona gen. n., type = *Raspailia aculeata* (Johnston), TOPSENT Bull. Inst. océanogr. Monaco 686 p. 49.

Raspailia montagui nom. n., for *Spongia hispida* Montagu nec Lamarck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 102.

Rhaphidophilus flabellata sp. n. South Africa, BURTON Ann. Mag. nat. Hist. 17 p. 145 fig. 4.

Rhaphisia ambrosia sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 135.

Scantiletta nom. n., for *Scantilla* Johnson (pre-occ.), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 156.

Sigmatocia gen. n., type = *Siphonochalina pumila* Lendenfeld, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 70.

Sigmatocella gen. n., type = *Desmacella annexa* Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 121.

Strongylophora santa sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83 p. 459.

Tablis gen. n., type = *Echinochalina anomala* Hallmann, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 76.

Taboga gen. n., *taboga* sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83 p. 452 fig. 43.

Tedania brondstedii sp. n. South Africa, BURTON Ann. Mag. nat. Hist. 17 p. 145 fig. 3.

Tedaniphorbas gen. n., type = *Amphilectus ceratosus* Ridley & Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 95.

Teichaxinella gen. n. p. 128, *shoemakeri* sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 129 pl. xv fig. 2.

Tethytimea gen. n., type = *Donatia tylota* Hentschel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 164.

Thalyseurypon gen. n., type = *Clathria foliacea* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 107.

Thooce gen. n., type = *Thoosa socialis* Carter, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 156.

Tisrone gen. n., type = *Grayella spinulata* Hentschel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 78.

Toxadocia gen. n., type = *Gellius abbreviatus* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 69.

Trachygellius cinachyra sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 158 pl. xviii fig. 1.

Tumata gen. n., type = *Reniera megarrhaphaea* Lendenfeld, Pap. Tortugas Lab. Carn. Instn. 30 p. 77.

Uliczka gen. n., type = *Cinachyra schistospiculosa* Uliczka, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 174.

Ulosa gen. n., type = *Spongia angulosa* Lamarck, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 126.

Uplexoa gen. n., type = *Bubaris ozeata* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 132.

Vagocia gen. n., type = *Gellius arcuarius* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 133.

Valentis gen. n., type = *Desmacidon lentus* Vosmaer, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 96.

Valedictyum gen. n., type = *Raspailia vestigifera* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 102.

Waldoschmittia gen. n., type = *Orella schmidti* Ridley, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 95.

Waltherarndtia gen. n., type = *Hymeniacion caliculatum* Kirkpatrick, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 131.

Wetmoreus gen. n., type = *Microciona novaezealandica* Brøndsted, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 112.

Xytopsaga gen. n., type = *Plumocolumella myxillioides* Burton, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 54.

Xytopsibis nom. nud. (?), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 61.

Xytopsoocha gen. n., type = *Gellius macrosigma* Topsent, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 55.

Xytopsues gen. n., type = *Phoriospongia osburnensis* George & Wilson, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 55.

Ysila gen. n., type = *Esperiopsis schmidtii* Arnesen, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 126.

Ysiphonia gen. n., to replace *Polyisiphonia* Levinsen (pre-occ.), DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 46.

Yvesiorbas gen. n., type = *Myxilla pulvinar* Schmidt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 65.

Zetekispongia gen. n., *zonea* sp. n. Panama, DE LAUBENFELS Proc. U.S. Nat. Mus. 83 p. 446 fig. 40.

Zetekopsis gen. n., type = *Hastatus indistinctus* Fristedt, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 85.

Zottea gen. n., type = *Myxilla grata* Thiele, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 64.

Zyzzya gen. n., type = *Plocamia massalis* Dendy, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 64.

(v) INCERTAE SEDIS.

†*Euleraphe* gen. n., *incrusters* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 184.

†*Helminthophyllum* gen. n., *feifeli* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 183.

†*Ophiodesia* gen. n., *solivaga* sp. n. Jurassic Germany, SCHRAMMEN Palaeontographica Stuttgart 84A p. 183.

EUCERATOSA.

†*Aplysinofibria* gen. n., *carbonicola* sp. n. Carboniferous U.S.S.R., BOLKHOVITINOVA Bull. Moscow Mining Acad. 2 (1) 1923 p. (?).

Cacospongia camera sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 25 pl. v fig. 1.

Cerelpemma gen. n., type = *Psammopemma radiolarium* Haeckel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 33.

Cerelpsamma gen. n., type = *Holopsamma argillaceum* Haeckel, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 33.

Coscinoderma lanuga sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 10 pl. vi fig. 5.

Dysidea crawshayi p. 28, *etheria* p. 28 pl. vi fig. 4 spp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30.

Euryspongia rosea sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 29 pl. vi fig. 6.

Hippiospongia gen. n., type = *Spongia gossypina* Duchassaing & Michelotti, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 11.

Hircinia dickinsoni nom. n. for *H. ramosa* de Laubenfels nec Keller, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 18.

Oligoceras hemorrhages sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 16 pl. vi fig. 2.

Trypespongia gen. n., *columbia* sp. n. Tortugas, DE LAUBENFELS Pap. Tortugas Lab. Carn. Instn. 30 p. 13 pl. ii fig. 2 pl. v fig. 3.

PORIFERA INCERTAE SEDIS.

†*Dulmius* gen. n., *innovatus* sp. n. ? Permian Sicily, GREGORIO Ann. Géol. Paléont. Palermo 52 1930 p. 48 figs. 14-16.

†*Fissispongia spinosa* sp. n. Carboniferous U.S.A., KING [in] PLUMMER & HORNBERGER Univ. Texas Bull. 3534 1935 p. 19.

†CYATHOSPONGIA.

(= Archaeocyathinae Auct. See also section Coelenterata Zool. Rec.)

†*Archaeopharetra* gen. n., *typica* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 17 pl. xvii fig. 75.

†*Beltanacyathus* gen. n., *ionicus* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 23 pl. xxiii fig. 95, pl. xxiv fig. 96.

†*Bronchocyathus* gen. n., *sigmoideus* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus 3 p. 25 pl. xxv fig. 99.

†*Dictyocoscinus* gen. n., *beltana* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 14 pl. xii fig. 62.

†*Dictyocyathus annularis* p. 13 pl. xi fig. 55, *fragilis* p. 13 pl. xi fig. 57, *robustus* p. 13 pl. xii fig. 58, *quadruplex* p. 13 pl. xii figs. 59-60, *macdonnelli* p. 14 pl. xii fig. 61 spp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2.

†*Dokidocyathus nihilum* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 12 pl. xi fig. 54.

†*Heterocyathus tertius* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 22 pl. xxi fig. 90, pl. xxii fig. 91.

†*Metacoscinus insigne* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 18 pl. xx fig. 84.

†*Metalletes superbus* p. 18 pl. xviii fig. 78, *spiralis* p. 18 pl. xviii fig. 79 spp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2.

†*Monocyathus robustus* p. 12 pl. x fig. 47, *sparsipora* p. 12 pl. x fig. 48, *mellifer* p. 12 pl. x fig. 49, *spinusus* p. 12 pl. x fig. 50 spp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2.

†*Paracoscinus* gen. n., *mirabile* sp. n. Cambrian Australia, BEDFORD & BEDFORD

FORD Mem. Kyancutta Mus. 2 p. 18 pl. xx figs. 85-86.

†*Paracyathus* gen. n., *parvus* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 17 pl. xvii fig. 76.

†*Putapacyathus* gen. n., *regularis* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 24 pl. xxv fig. 97.

†*Pycnoidocoscinus* gen. n., *pycnoideum* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 19 pl. xx fig. 87.

†*Pycnoidocyathus vicinisepta* p. 15 pl. xvi fig. 72, *parvulus* p. 15 pl. xvi fig. 73 spp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2.

†*Sigmocyathus* gen. n., type = *Coscinocyathus didymoteichus* (Taylor), BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 23.

†*Sigmocoscinus* gen. n., *sigma* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 24 pl. xxv fig. 98.

†*Sigmoifungia* gen. n., *flindersi* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 16 pl. xix fig. 82.

†*Spirocycathus multifidus* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 2 p. 14 pl. xiii fig. 65.

†*Tunkia* gen. n., *incerta* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 21 pl. xxi fig. 88.

†*Uranosphaera ramosa* sp. n. Cambrian Australia, BEDFORD & BEDFORD Mem. Kyancutta Mus. 3 p. 22 pl. xxi fig. 89.

IV. COELENTERATA

ARRANGED BY

H. DIGHTON THOMAS, M.A., Ph.D.

CONTENTS.

| | PAGE |
|------------------------------|------|
| I. TITLES | 1 |
| II. SUBJECT INDEX | 11 |
| III. SYSTEMATIC INDEX | 15 |

I.—TITLES.

1.—Aisupiet, M. Ontogenie der Zelle und Entwicklungsmechanik. 3. Mitteilung. Über die Regeneration der Hydren nach Reibung durch sieb. [Russian, German summary p. 806.] *J. Biol. Moscou* 4 5 1935 pp. 802–806.

2.—Aitken, W. W. Fresh-water Medusae in Iowa. *Science* N.Y. N.S. 83 2147 1936 p. 186.

3.—Alferov, B. A. Geological Investigations in the Region of Kostin Strait. [Russian, English summary p. 93.] *Trans. Arctic Inst. Leningrad* 26 1935 pp. 1–97.

4.—Allan, R. S. The Fauna of the Reefton Beds, (Devonian) New Zealand. *Palaeont. Bull. N.Z.* 14 1935 pp. 4–7, 31–59, pls. 3, 5.

5.—Alloiteau, J. Polypiers fossiles de Madagascar. I. Formes du Crétacé de la Province d'Analalava. *Ann. géol. Serv. Mines Madagascar* 6 1936 pp. 43–53 pl. vi 2 text-figs.

6.—Andre, M. & Lamy, E. Colonies d'Hydriaires ou de Bryozoaires fixées sur des Coquilles à Pagures. *Bull. Soc. zool. Fr.* 61 1936 pp. 94–99 1 pl. 4 text-figs.

7.—Arkell, W. J. The Corallian Beds of Dorset. *Proc. Dorset nat. Hist. F. Cl.* 57 1936 pp. 59–93 pls. i–iv 4 text-figs.

Arkell, W. J., *vide* Hill, D.

8.—Arndt, W. & Pax, F. Das Zusammenleben von Krustenanemonen und Schwämmen im Mittelmeer, mit besonderer Berücksichtigung der Adria. *Thalassia* 2 3 1936 pp. 1–34 7 figs. map.

9.—Asselberghs, E. Le Dévonien du Bord nord du Bassin de Namur. *Mém. Inst. géol. Louvain* 10 1936 pp. 229–327 pls. xxi–xxii.

10.—Baker, E. G. S. Photoperiodicity in the spawning reaction of *Pennaria tiarella* McCr. *Proc. Indiana Acad. Sci.* 45 1936 pp. 251–252.

11.—Benazzi, M. La regolazione della irritabilità nelle attinie per opera dei sali dell'acqua di mare. *Boll. Zool. Torino* 7 1936 pp. 73–81.

12.—Benisch, J. Die Telestaceen-Gattung *Coelogorgia* Milne-Edwards. *Zool. Anz. Leipzig* 116 1936 pp. 91–98 6 text-figs.

13.—Benson, W. N. & Keble, R. A. The Ordovician Rocks of New Zealand. *Geol. Mag. London* 73 864 1936 pp. 241–251.

- 14.—Benson, W. N. & Keble, R. A. The Geology of the Regions Adjacent to Preservation and Chalky Inlets, Fiordland, New Zealand. Part IV. Stratigraphy and Palaeontology of the Fossiliferous Ordovician Rocks. Trans. Proc. Roy. Soc. N.Z. **65** 3 1935 pp. 244–294 pls. 30–33 5 text-figs.
- 15.—Benson, W. N., Keble, R. A., King, L. C. & McKee, J. T. The Ordovician Graptolites of North-west Nelson, N.Z., Second Paper; with Notes on other Ordovician Fossils. Trans. Proc. Roy. Soc. N.Z. **65** 4 1936 pp. 357–382 6 text-figs.
- 16.—Bigot, A. Les Récifs bathoniens de Normandie. Bull. Soc. géol. Fr. 5 IV 8–9 1935 pp. 697–736 7 pls.
- 17.—Billard, A. Les Fonds de Pêche près d'Alexandrie. VI. Hydroidea. Notes Mem. Fisheries Res. Cairo **13** 1936 pp. 1–11 3 text-figs. 4 maps.
- 18.—Boschma, H. Sur la croissance de quelques coraux des récifs de l'île d'Edam (Baie de Batavia). Mem. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 101–114.
- 19.—Bouxin, H. Observation de Physalies dans la Région de Concarneau en Novembre 1935. Bull. Soc. zool. Fr. **61** 1936 pp. 326–331 2 text-figs.
- 20.—Broch, H. Oktokorallen des nördlichsten pazifischen Ozeans und ihre Beziehungen zur atlantischen Fauna. Avh. Norske Vid. Akad. Oslo **1935** 1 1936 pp. 1–53 21 text-figs.
- 21.—Broch, H. Die Bedeutung der Drøbak-Schwelle für die Bodenfauna der Garnelen-Felder. Avh. Norske Vid. Akad. Oslo **1935** 5 1936 pp. 1–32 1 text-fig.
- 22.—Broch, H. Untersuchungen an Stylasteriden (Hydrokorallen). Teil I. Avh. Norske Vid.-Akad. Oslo **1936** 8 pp. 1–103 pls. i–xiii 32 text-figs.
- 23.—Bubnoff, S. von. Tabellen zur Einführung in die Palaeontologie der Wirbellosen für Anfänger. Mitt. Geol.-palaeont. Griefswald **10** 1935 pp. 12, 26, 32–38.
- 24.—Bulman, O. M. B. On the Graptolites prepared by Holm. Part VII. The Graptolite Fauna of the Lower *Orthoceras* Limestone of Hålluden, Öland, and its bearing on the Evolution of the Lower Ordovician Graptolites. Ark. Zool. Stockholm **28A** 17 1936 pp. 1–107 pls. 1–4 30 text-figs.
- 25.—Bulman, O. M. B. *Rhaphidograptus*, a new Graptolite Genus. Geol. Mag. London **73** 859 Jan. 1935 pp. 19–26 figs.
- 26.—Bulman, O. M. B. The Structure of *Oncograptus* T. S. Hall. Geol. Mag. London **73** 864 1936 pp. 271–278 figs.
- Burkenroad, M. D. *vide* Viosca, P.
- Butler, A. J. *vide* Hill, D.
- 27.—Cant, C. & Crichton, M. I. The Natural History of Barra, Outer Hebrides. The results of a scientific expedition organised by the Biological Society of the University of Edinburgh. Coelenterata. Proc. phys. Soc. Edinb. **22** 5 1936 pp. 263–264.
- 28.—Carlgrén, O. Über einige ostasiatische Zoantharien. Ark. Zool. Stockholm **28A** 5 1935 pp. 1–11 6 text-figs.
- 29.—Carlgrén, O. Some West American sea anemones. J. Wash. Acad. Sci. **26** 1 1936 pp. 16–23 5 text-figs.
- 30.—Carlgrén, O. Über eine neue südafrikanische Lucernariide, *Depastromorpha africana* n. gen. n. sp., nebst Bemerkungen über den Bau und die Systematik dieser Tiergruppe. K. svenska Vetensk. Akad. Handl. (3) **15** 1 1935 pp. 3–24 12 text-figs.
- 31.—Chapman, F. & Thomas, D. E. The Cambrian Hydroids of the Heathcote and Monegeeta Districts. Proc. Roy. Soc. Victoria **48** 2 1936 pp. 193–212 pls. xiv–xvii.
- 32.—Chappars, M. S. Catalog of the Type Specimens of Fossils in the University of Cincinnati Museum. Ohio J. Sci. **36** pp. 1–45.
- 33.—Chaubet, M. Sur la présence certaine du Llandovery dans le Gothlandien de la Montagne Noire. C.R. Acad. Sci. Paris **202** 4 1936 pp. 339–341.
- 34.—Coonfield, B. R. Apical Dominance and Polarity in *Mnemiopsis leidyi* Agassiz. Biol. Bull. Woods Hole **70** 1936 pp. 460–471 7 text-figs.
- 35.—Coonfield, B. R. Regeneration in *Mnemiopsis leidyi*, Agassiz. Biol. Bull. Woods Hole **71** 1936 pp. 421–428 1 pl. 1 text-fig.

- 36.—Cope, F. W. The Lower Carboniferous Succession in the Wye Valley Region of North Derbyshire. J. Manchester Geol. Assoc. **1** 3 1936 pp. 125-145 figs.
- 37.—Cox, I. On the Structure of *Monograptus dubius* (Suess). Ann. Mag. Nat. Hist. (10) **14** 1934 pp. 421-425 pl. xi 16 text-figs.
- 37A.—Cox, I. Revision of the Genus *Catapocia* Billings. Bull. Canada Dept. Mines Ottawa **80** 1936 pp. 1-40 pls. i-iv 1 text-fig.
- Cox, I. *vide* Foerste, A. F.
- Crichton, M. I. *vide* Cant, C.
- 38.—Dalcq, A. La régulation dans le germe et son interprétation. C.R. Soc. Biol. Paris **119** 28 1935 pp. 1421-1466 16 text-figs.
- 39.—Damas, D. Une narcoméduse parasite d'un ver polychète. Mém. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 1177-1197 pls. i-iv.
- 40.—Damas, D. Une méduse aberrante *Oonautes hansenii* n. g., n. sp. Mém. Soc. roy. Sci. Liège (4) **1** 1936 pp. 483-62 2 text-figs.
- 41.—Daresté de la Chavanne, J. Étude sur la Faune du Bajocien Supérieur du Mont d'Or Lyonnais (Ciret)—Zoanthaires. Trav. Lab. Géol. Lyon **28** 9 1936 pp. 126-130 pl. xiii 5 text-figs.
- 42.—Davies, A. M. Tertiary Faunas. Vol. I pp. 358-359. London 1935.
- 43.—Davis, A. G. The London Clay of Sheppey and the Location of its Fossils. Proc. Geol. Ass. London **47** 4 1936 pp. 340-345 1 fig.
- 44.—Dawydoff, C. Les Cténoplanidae des Eaux de l'Indochine française. Étude systématique. Bull. biol. France-Belg. **70** 4 1936 pp. 456-486 pl. xv 11 text-figs.
- 45.—Decker, C. E. Some Tentative Correlations on the Basis of Graptolites of Oklahoma and Arkansas. Bull. Amer. Assoc. Petrol. Geol. Oklahoma **20** 3 1936 pp. 301-311.
- 46.—Decker, C. E. Table of Tentative Lower Paleozoic Correlations on Basis of Graptolites. Bull. Amer. Assoc. Petrol. Geol. Oklahoma **20** 9 1936 pp. 1252-1257.
- 47.—Decker, C. E. Significance of the graptolites of Oklahoma. Proc. Okla. Acad. Sci. **13** 1933 pp. 27-29.
- 48.—Deichmann, E. Notes on Penatulacea and Holothurioidea collected by the First and Second Bingham Oceanographic Expeditions 1925-1926. Bull. Bingham Oceanogr. Coll. New Haven **5** 3 1936 pp. 1-11 1 text-fig.
- 49.—Deichmann, E. The Alcyonaria of the Western Part of the Atlantic Ocean. Mem. Mus. comp. Zool. Harvard **53** 1936 pp. 1-317 pls. i-xxxvii.
- 50.—Demel, K. Études sur la faune benthique et sa répartition dans les eaux polonaises de la Baltique. [Polish, French summary p. 310.], Arch. Hydrobiol. Ichthyol. Suwalki **9** 3-4 1935 pp. 239-311 21 pls. 8 text-figs.
- 51.—Desio, A. Primo notizie sulla presenza del Silurico fossilifero nel Fezzan. Bol. Soc. geol. ital. **55** 1 1936 p. 116-120.
- 52.—Dietrich, W. O. Neue jurassische Geschiebekorallen aus Ostpommern. Z. Geschiebeforsch. Berlin **12** 3 1936 pp. 123-126 4 text-figs.
- 53.—Dons, C. Zoologische Notizen XXIX. Die Verbreitung von Steinkorallen in West-Finnmark. K. norske vidensk. Selsk. Trondheim **8** 18 1936 pp. 57-60 1 text-fig.
- 54.—Douglas, J. A. A Permo-Carboniferous Fauna from South-West Persia (Iran). Palaeont. indica N.S. **22** 6 1936 pp. 10-27 pls. i-iii text-fig.
- 55.—Dubar, G. & Le Maître, D. Sur des gisements nouveaux de Spongiomorphides et d'Algues dans le Lias et le Bajocien du Maroc. C.R. Acad. Sci. Paris **203** 1936 pp. 339-340.
- 56.—Eguchi, M. The Madreporarian Coral Fauna of Tokyo Bay and its Environs. Botany & Zool. Tokyo **4** 2 1936 pp. 402-410 2 text-figs. [Japanese only.]
- 57.—Eguchi, M. Three New Genera of Corals from the Lower Cretaceous of Japan. Proc. Imp. Acad. Tokyo **12** 3 1936 pp. 70-72 4 text-figs.
- Eguchi, M. *vide* Yabe, H.
- Ehara, E. *vide* Yabe, H.

53.—Faessler, C. & Laverdière, J. W. Quelques observations sur la géologie de la côte de Beupré. *Nat. canad. Québec* 63 2 1936 pp. 33–34 5 text-figs.

Ferguson, H. G. *vide* Muller, S. W.

59.—Finkelstein, E. A. & Poljakow, J. M. Über die Beziehung zwischen der geschlechtlichen und ungeschlechtlichen Vermehrung und dem natürlichen Tode bei *Pelmatohydra oligactis* P. Sch. [Russian, German summary p. 133.] *Trav. Soc. Nat. Kharkov* 53 1930 pp. 123–134.

60.—Foerste, A. F. & Cox, I. Cephalopods and a *Beatricea* from Akpatok Island. *Geol. Mag. London* 73 865 1936 p. 304.

61.—Foster, V. M. New graptolite localities in Alabama. *J. Alabama Acad. Sci.* 4 1933 p. 32.

62.—Fraser, C. M. Hydroid Distribution in the Vicinity of the Queen Charlotte Islands. *Canad. Field Nat.* 50 7 1936 pp. 122–126.

63.—Fraser, C. M. Hydroids from the Queen Charlotte Islands. *J. biol. Board Canada* 1 6 1935 pp. 503–507 4 text-figs.

64.—Fraser, C. M. Some Japanese Hydroids, Mostly New. II. *Trans. roy. Soc. Can. (3)* V 30 1936 pp. 49–54 pls. i, ii.

65.—Gabounia, C. E. Contribution à l'étude de la faune des coraux dans les dépôts du Carboniférien inférieur près du village Roika sur la Tom. [Russian, English summary, p. 47.] *Bull. Com. géol. Sibérie Tomsk* 1 3 1919 pp. 1–48 pls. i–v.

66.—Gaggero, P. *Cordylophora lacustris* Allman in the River Plate. *Verh. int. Vereinig. Limnol. Beograd* 7 2 1935 pp. 464–465.

67.—Germain, H. Une Méduse d'eau douce *Craspedacusta Sowerbyi* (Lankester). *Bull. Soc. franç. micr. Paris* 5 2 1936 pp. 70–75 3 text-figs.

68.—Goldring, W. Geology of the Berne Quadrangle. *Bull. New York St. Mus. Albany* 303 1935 pp. 1–238 72 text-figs. 1 map.

69.—Gorsky, I. Some Coelenterata from the Lower Carboniferous Beds of the Nowaya Zemlya. [Russian, English summary p. 82.] *Trans. Arctic*

Inst. Leningrad 28 1935 pp. 1–128 pls. i–xii 27 text-figs.

70.—Gran, H. H., Hentschel, E. & Russell, F. S. Handliste zur Sicherung der Bestimmungen nordischen Planktons. *Rapp. Cons. Explor. Mer. Copenh.* 100 Pt. 3 1936 pp. 15–20.

71.—Gregorio, A. de. Monografia dei fossili liassici di Monte San Giuliano conservati nel mio privato gabinetto geologico. *Ann. Géol. Paléont. Palermo* 53 1930 p. 46 pl. xiv.

72.—Gregorio, A. de. Fossili triasici delle Cave di Billiemi presso Palermo conservati nel mio privato gabinetto geologico. *Ann. Géol. Paléont. Palermo* 54 1930 pp. 30–33 pl. vii.

73.—Gregorio, A. de. Fossili triassici della zona a *Rhynchonellina bilobata* Gemm. dei dintorni di Palermo conservati nel mio privato gabinetto geologico. *Ann. Géol. Paléont. Palermo* 55 1930 p. 14 pl. iv.

74.—Haberfelner, E. Ludlow-Graptolithen aus dem Massiv von Mouthoumet. *Chl. Min. Geol. Paläont. Stuttgart* 5 1936 pp. 211–216 1 text-fig.

75.—Hackemesser, M. Eine kretazische Korallenfauna aus Mittelgriechenland und ihre paläobiologischen Beziehungen. *Palaeontographica Stuttgart* 84A 1–3 1936 pp. 1–97 pls. i–viii.

76.—Haller, W. Einige biostratigraphische Untersuchungen in der Rohrer Mulde unter besonderer Berücksichtigung der Keriophyllen. *Jahrb. preuss. geol. LdAnst.* 56 1 1936 pp. 590–632 pls. 32–43 19 text-figs.

77.—Hammett, F. S. Comparison of d-Alanine, l-phenylalanine, and l-tyrosine with respect to their participation in developmental growth. *Protoplasma Leipzig* 27 1 1936 pp. 52–60.

78.—Hammett, F. S. The differentiation forwarding action of d-glutamic acid. *Protoplasma Leipzig* 27 1 1936 pp. 61–64.

79.—Hammett, F. S. The regeneration favoring activity of glycine. *Protoplasma Leipzig* 27 1 1936 pp. 65–68.

80.—Hanaoka, K. Experiments on the Polarity of a Stalked Medusa *Thaumatoscyphus distinctus* Kishinouye. *J. Fac. Sci. Hokkaido Univ. (6)* Zool. 4 3 1935 pp. 159–181 23 text-figs.

81.—Hayasaka, I. On some North American Species of *Lithostrotionella*. Mem. Fac. Sci. Agric. Taihoku Imp. Univ. Formosa **13** 5 1936 pp. 47-73 pls. xi-xvii.

Henderson, G. T. D. *vide* Lucas, C. E.

82.—Henschel, J. Untersuchungen über den chemischen Sinn der Scyphomedusen *Aurelia aurita* und *Cyanea capillata* und der Hydromeduse *Sarsia tubulosa*. Wiss. Meersuntersuch. Abt. Kiel (N.F.) **22** 1936 pp. 21-42 4 text-figs.

Henschel, E. *vide* Gran, H. H.

83.—Heritsch, F. A New Species of *Waagenophyllum* from the Permian of the Glass Mountains, Texas. Amer. J. Sci. New Haven (5) **31** 182 1936 pp. 144-148 1 text-fig.

84.—Heritsch, F. A New Rugose Coral from the Lower Permian of Texas, with Remarks on the Stratigraphic Significance of Certain Permian Coral Genera. Amer. J. Sci. New Haven (5) **32** 188 1936 pp. 134-144 2 pls.

85.—Heritsch, F. *Lophophyllum*, *Lophophyllidium* und *Sinophyllum*. Cbl. Min. Geol. Paläont. Stuttgart **B9** 1936 pp. 408-415.

86.—Heritsch, F. Zur Stratigraphie des Gotlandiums der Karnischen Alpen. Cbl. Min. Geol. Paläont. Stuttgart **B11** 1936 pp. 503-506.

87.—Hickson, S. J. Darwin's *Cavernularia*. Nature London **137** 3474 1936 p. 909.

88.—Hill, D. The British Silurian Rugose Corals with Acanthine Septa. Philos. Trans. London (B) **226** 534 1936 pp. 189-217, 2 pls. 35 text-figs.

89.—Hill, D. & Butler, A. J. *Cymatelasma*, a new Genus of Silurian Rugose Corals. Geol. Mag. London **73** 869 1936 pp. 516-527 1 pl. 14 text-figs.

90.—Hill, D., Butler, A. J., Oakley, K. P. & Arkell, W. J. Report of "Coral Reef" Meeting at Wenlock Edge, the Dudley District, and the Oxford District. Proc. Geol. Ass. London **47** 2 1936 pp. 130-139.

Hornberger, J., Jnr. *vide* Plummer, F. B.

Hosoi, K. *vide* Koizumi, T.

Hsu, T.-Y. *vide* Menchikoff, N.

91.—Hummelinck, P. W. Over het eerste optreden van *Craspedacusta sowerbii* in Nederland. Natura Breda **35** 12 1936 pp. 308-316 15 text-figs.

92.—Hundt, R. Neue Forschungen über mitteldeutsche Graptolithen. (*Diplograptus*, *Retiolites*, Grosskolonien.) Palaeont. Z. Berlin **18** 1-2 1936 pp. 39-48 5 text-figs.

93.—Hundt, R. Spuren vom Graptolithentier. Z. Geschiebeforsch. Berlin **12** 2 1936 pp. 76-90 7 text-figs.

94.—Hundt, R. Die Graptolithenfauna des obersten Obersilurs Thüringens (mit einem Beitrag über Graptolithen in Roteisensteinknollen). Z. Naturw. Halle **91** 1 1935 pp. 1-34 pls. i-xii.

95.—Ivanishevsky, M. Graptolites of Novaya Zemlya. [Russian, English summary p. 50.] Trans. Arctic Inst. Leningrad **25** 1935 pp. 1-55 pls. i-v 8 text-figs.

96.—Ishida, J. Note on the Digestion of *Charybdea rastoni*. Annot. zool. jap. **15** 1936 pp. 449-452.

97.—Jones, O. A. On the Silurian Corals: *Cyathophyllum shearsbyi* and *Heliophyllum yassense*. Mem. Qd. Mus. Brisbane **11** 1 1936 pp. 53-58 pls. v-vii.

Keble, R. A. *vide* Benson, W. N.

98.—Kettner, R. & Remeš, M. Auffindung von silurischen Schiefen mit einer Graptolithenfauna in Mähren. Cbl. Min. Geol. Paläont. Stuttgart **B1** 1936 pp. 21-26.

King, L. C. *vide* Benson, W. N.

99.—Kirchner, H. A. Die Bedeutung der interstitiellen Zellen für den Aufbau von *Cordyllophora caspia* Pall. Z. Zellforsch. **22** 1934 pp. 1-19 17 text-figs.

100.—Koizumi, T. & Hosoi, K. On the Inorganic Decomposition of the Medusae: *Aequorea coerulescens* (Brandt), *Dactylometra pacifica* Goette and *Cyanea capillata* Eschscholtz. Sci. Rep. Tôhoku Univ. (4) **10** 4 1936 pp. 709-719.

101.—Komai, T. On Another Form of *Stephanoscyphus*, found in the Waters of Japan. Mem. Coll. Sci. Kyoto (R) **11** 3 1936 pp. 175-183 4 text-figs.

102.—Komai, T. The Nervous System in Some Coelenterate Types. I. *Coeloplana*. Mem. Coll. Sci. Kyoto (B) 11 4 1936 pp. 185-191 3 text-figs.

103.—Komai, T. On the Peculiar Scyphopolyp, *Stephanoscyphus*. [Japanese, English summary p. 535.] Zool. Mag. Tokyo 48 1936 pp. 535-544 10 text-figs.

104.—Koo, S. Y. On a New Penatulid (*Litularia*) from Amoy. Nat. Sci. Bull. Univ. Amoy. 1 2 1935 pp. 157-164 pl. i 1 text-fig.

105.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. Vol. I pp. 158-220 text-figs. 203-275. Jena 1936.

106.—Kramp, P. L. Polypdyr (Coelenterata). I. Ferskvandspolypper og Goglepolypper. Danmarks Fauna Nr. 41. Fauna och Flora Kobenhavn 3 1936 p. 139.

107.—Kramp, P. L. On the Leptomedusae of the Genera *Eirene* Eschscholtz and *Helgicirrho* Hartlaub. Vid. Medd. Dansk. Foren 99 1936 pp. 239-262.

108.—Kühn, O. Eine mittelmioäne Zwergfauna aus Kreta und die Entstehung mariner Zwergfaunen. Cbl. Min. Geol. Paläont. Stuttgart 6 1936 pp. 255-259.

109.—Kühn, O. Die Hornsteinbreccie des Sonnwendgebirges und ihre Korallenfauna. Paläont. Z. Berlin 17 3-4 1935 pp. 178-204 1 pl. 2 text-figs.

110.—Kuhn, O. Revision der Opalinuston-(Dogger Alpha)-Fauna in Franken, mit Ausschluss der Cephalopoden. Paläont. Z. Berlin 17 3-4 1935 pp. 111-112 pls. 8-10.

111.—Kutassy, A. Faunen aus dem Hauptdolomit und Dachsteinkalk des Budaer Gebirges. [Hungarian, German summary p. 1045.] Math. term. Ért. Budapest 54 3 1936 pp. 1006-1050 pls. xi-xiii.

112.—Kuwabara, M. Beiträge zur Kenntnis der Sexualität von Süßwasser-Hydroiden. I. Die Sexuellen Rassen von *Hydra attenuata*. J. Fac. Sci. Hokkaido Univ. Zool. 5 1936 pp. 95-111 5 text-figs.

113.—Lambert, F. J. Jellyfish. The difficulties of the study of their life

history and other problems. Essex Nat. 25 2 1936 pp. 70-86 pls. iii-iv.

Lamy, E. *vide* Andre, M.

114.—Lang, W. D. & Smith, S. On the Genotype of *Columnaria* Goldfuss. Ann. Mag. Nat. Hist. (10) 16 1935 pp. 426-433 pl. xii 3 text-figs.

Laverdière, J. W. *vide* Faessler, C.

115.—Leblanc, E. L'Éodévonien de la Bordure occidentale de l'Anticlinal de Halleux. Mém. Inst. géol. Louvain 10 1936 pp. 329-358 pl. xxiii.

116.—Lecompte, M. Contribution à la connaissance des "Récifs" du Frasnien de l'Ardenne. Mém. Inst. géol. Louvain 10 1936 pp. 29-112 pls. vi-xi.

117.—Lecompte, M. Revision des Tabulés dévoniens décrits par Goldfuss. Mém. Mus. Hist. nat. Belg. 75 1936 pp. 3-112 pls. i-xiv.

118.—Lejeune, M. Les *Montlivaultia*. Contribution à l'étude biologique des hexacoralliaires fossiles. Ann. Paléont. Paris 24 3-4 1936 pp. 1-37 (97-133) pls. xi-xvii 9 text-figs.

119.—Leloup, E. Siphonophores récoltés dans la région de Monaco. Bull. Inst. océanogr. Monaco 703 1936 pp. 1-15.

120.—Leloup, E. Hydropolypes calyptoblastiques et Siphonophores récoltés au cours de la croisière (1934-1935) du navire-école belge "Mercator." Bull. Mus. Hist. nat. Belg. 11 No. 34 1936 pp. 1-6 3 text-figs.

121.—Leloup, E. Hydraires calyptoblastiques des Indes occidentales. Mém. Mus. Hist. nat. Belg. (2) 2 1935 pp. 1-73 32 text-figs.

122.—Leloup, E. Siphonophores calyphorides (suite) et Physophorides provenant des campagnes du Prince Albert 1^{er} de Monaco. Rés. Camp. sci. Monaco 93 1936 pp. 3-36 pls. i, ii.

Le Maître, D. *vide* Dubar, G.

123.—Llueca, F. G. Noticia sobre el hallazgo del "*Aspidiscus cristatus*" Lamarck en el Cenomanense de España. Bol. Inst. Geol. Esp. 52 1931 pp. 345-348 1 pl.

Lochter, H. *vide* Pax, F.

124.—Lucas, C. E. & Henderson, G. T. D. On the Association of Jellyfish and other Organisms with Catches of Herring. J. Mar. biol. Ass. Plymouth N.S. 21 1 1936 pp. 293-304.

125.—McConnell, C. H. Mitosis in *Hydra*. Mitosis in the indifferent interstitial cells of *Hydra*. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 202-210 22 text-figs.

126.—Macfadyen, D. M. I. Alcyonaria (Stolonifera, Alcyonacea, Telesatacea and Gorgonacea). Scient. Rep. Gt. Barrier Reef Exped. 1928-29 London 5 2 1936 pp. 19-71 pls. i-v 11 text-figs.

McKee, J. T. vide Benson, W. N.

127.—Maillieux, E. La faune et l'âge des quartzophyllades siegeniens de Longlier. Mém. Mus. Hist. nat. Belg. 73 1936 pp. 1-140 pls. i-iii.

128.—Maillieux, E. La Faune des Schistes de Matagne (Frasnien supérieur). Mém. Mus. Hist. nat. Belg. 77 1936 pp. 1-74 1 pl.

129.—Mathieu, G. Sur l'Age Givétien des Marbres de la Ville-Dé-d'Ardin (Deux-Sèvres). C.R. Acad. Sci. Paris 202 18 1936 pp. 1523-1525.

130.—Menchikoff, N. & Hsu, T.-Y. Les Polypiers carbonifères du Sahara occidental. Bull. Soc. géol. Fr. 5 V 4-5 1935 pp. 229-261 2 pls.

131.—Miethke, E. and Ulrich, W. *Craspedacusta (Microhydra) sowerbii* Lankester in einem Berliner Aquarium. Märk. Tierw. Berlin 1 1936 pp. 214-218.

132.—Miller, D. E. A Limnological Study of *Pelmatohydra* with Special Reference to their Quantitative Seasonal Distribution. Trans. Amer. micr. Soc. Menasha 55 2 1936 pp. 123-193 pls. xx-xxii 1 text-fig.

133.—Mitra, K. & Mukerjee, H. K. Reversal of Thigmotropism in *Hydra*. J. Dpt. Sci. Univ. Calcutta Zool. 6 1924 pp. 11-62.

134.—Montanaro, E. Per chiarire un riferimento cronologico dello "Schlier" di Pantano (Reggio E.). Atti Soc. Nat. Mat. Modena 65 1934 pp. 30-32.

135.—Moorhouse, F. W. The Cyclone of 1934 and its Effect on Low Isles, with Special Observations on

Porites. Rep. Gt. Barrier Reef Comm. Brisbane 4 2 1936 pp. 37-44 pls. viii-xi.

Morellet, J. vide Morellet, L.

136.—Morellet, L. & J. Faune des sables à *Nummulites variolarius* de Levignen (Oise). Bull. Mus. Hist. nat. Paris (2) 8 3 1936 pp. 293-310.

Mukerjee, H. K. vide Mitra, K.

137.—Muller, S. W. Triassic Coral Reefs in Nevada. Amer. J. Sci. New Haven (5) 31 183 1936 pp. 202-208.

138.—Muller, S. W. Triassic Coral Reefs in Nevada. Proc. Geol. Soc. Amer. (1935) 1936 p. 410.

139.—Muller, S. W. & Ferguson, H. G. Triassic and Lower Jurassic Formations of West Central Nevada. Bull. Geol. Soc. Amer. Washington 47 3 pp. 241-252.

140.—Naylor, G. F. K. The Palaeozoic Sediments near Bungonia: their Field Relations and Graptolite Fauna. J. Roy. Soc. N.S.W. 69 2 1936 pp. 123-134 3 text-figs.

141.—Nouvel, H. Notes sur la faune marine de la région de Roscoff. Trav. Sta. biol. Roscoff 13 p. 214.

142.—Oakley, K. P. An Ordovician Species of *Chaetetes*. Geol. Mag. London 73 868 1936 pp. 440-444 1 pl.

Oakley, K. P. vide Hill, D.

143.—Okulitch, V. J. On the Genera *Heliolites*, *Tetradium*, and *Chaetetes*. Amer. J. Sci. New Haven (5) 32 191 1936 pp. 361-379 1 text-fig.

144.—Okulitch, V. J. Some Chazyan Corals. Trans. roy. Soc. Can. (3) IV 30 1936 pp. 59-73 1 pl.

145.—Palombi, A. *Eugymnanthea inquietina* nuova leptomedusa derivante da un atecato idroide ospite interno di *Tapes decussatus* L. Pubbl. Staz. zool. Napoli 15 1936 pp. 159-168 pl. ii 8 text-figs.

146.—Panikkar, N. K. On *Apiactis bengalensis* species nova, a new pelagic larval Ceriantharian from the Madras plankton. Zool. Anz. Leipzig 115 1936 pp. 250-260 11 text-figs.

147.—Parks, W. A. Devonian Stromatoporoids of North America. Part I. Univ. Toronto Stud. Geol. 39 1936 pp. 1-125 pls. i-xix.

- 148.—Paspalew, G. W. *Thaumantias maeotica* Ostr. = *Pontia ostroumowi* gen. et sp. nov. Ammen- und Medusen-generation, Züchtung. Arb. biol. Meeressta. Varna 5 1936 pp. 1-34 1 pl. 29 text-figs.
- 149.—Paspalew, G. W. *Thaumantias maeotica* Ostr. = *Pontia ostroumowi* gen. et sp. nov. Zool. Anz. Leipzig 115 1936 pp. 311-316 10 text-figs.
- 150.—Patteisky, K. Regionale Lage, Schichtenfolge und Gebirgsbau des ostsudetischen Variscikums. Verh. naturf. Ver. Brünn 67 1936 pp. 88-104.
- 151.—Pax, F. & Lochter, H. *Epizanthus vatovai*, eine neue Carcinocien bildende Krustenanemone der Adria. Note Ist. Biol. mar. Rovigno 17 1935 pp. 1-16 7 text-figs.
- Pax, F. vide Arndt, W.
- 152.—Pearse, A. S. Estuarine Animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill 52 2 1936 pp. 174-222 pls. xv, xvi.
- 153.—Pesson, P. Notes de faunistique armoricaine. Bull. Soc. sci. Bretagne 11 1 & 2 1934 pp. 52-59.
- 154.—Philbert, M. Études sur *Cladocoryne floccosa* Rotch. Bull. Inst. océanogr. Monaco 708 1936 pp. 1-16 8 text-figs.
- 155.—Plummer, F. B. & Hornberger, J., Jr. Geology of Palo Pinto County, Texas. Univ. Texas Bull. 3534 1935 pp. 19-80.
- 156.—Poljak, J. Ein Beitrag zur Kenntnis der Chaetetiden aus dem Tithon der Velika Kapela. [Croatian, German summary p. 113.] Glasnik hrv. prirodosl. Dr. Zagreb 41-48 1936 pp. 105-117 pls. i-iii.
- 157.—Poljak, J. Ein Beitrag zur Kenntniss der Hydrozoenfamilie Ellipsactinidae aus dem Tithon der Velika Kapela Gebirges. [Croatian, German summary p. 269.] Glasnik hrv. prirodosl. Dr. Zagreb 41-48 1936 pp. 255-271 pls. i-vii.
- Poljakow, J. M. vide Finkelstein, E. A.
- Portier, P. vide Richet, C.
- 158.—Prat, H. Notes sur les atolls et les récifs coralliens des Bermudes. C.R. Soc. Biogéographie Paris 13 107 1936 pp. 13-14.
- 159.—Pratje, O. Der Nachweis von Hebungen und Senkungen durch Koralleninseln. (Innen-Makatumbi vor Dares-Salam bildet die Bewegungen der deutsch-ostafrikanischen Küste ab.) Natur. u. Volk 66 1 1936 pp. 29-37 7 text-figs.
- 160.—Precht, H. Epizoen der Kieler Bucht. Nova Acta Leop. Carol. Halle N.F. 3 15 1935 pp. 405-474.
- 161.—Puckett, W. O. The Effects of X-Radiation on the Regeneration of the Hydroid, *Pennaria tiarella*. Biol. Bull. Woods Hole 70 1936 pp. 392-399 1 text-fig.
- 162.—Ranson, G. Contribution à l'Interprétation objective des Formes et de leurs rapports dans la classe Hydrozoa (suite). Bull. Mus. Hist. nat. Paris (2) 7 5 1935 pp. 288-292.
- 163.—Ranson, G. Observations morphologiques, systématiques et biogéographiques sur une Scyphoméduse rare, *Paraphyllina intermedia* O. Maas 1903, trouvée sur la plage de Biarritz. Bull. Mus. Hist. nat. Paris (2) 8 3 1936 pp. 269-276 1 text-fig.
- 164.—Ranson, G. Méduses provenant des campagnes du Prince Albert 1^{er} de Monaco. Res. Camp. sci. Monaco 92 1936 pp. 1-245 pls. i, ii.
- 165.—Rawlinson, R. The Occurrence of *Diadumene cincta* T. A. Stephenson in the River Roach, Essex. J. Mar. biol. Ass. Plymouth N.S. 21 1 1936 pp. 91-93.
- 166.—Rees, W. J. On a New Species of Hydroid, *Staurocoryne filiformis*, with a Revision of the Genus *Staurocoryne* Rotch, 1872. J. Mar. biol. Ass. Plymouth N.S. 21 1 1936 pp. 135-142 11 text-figs.
- Rees, W. J. vide Russell, F. S.
- Remeš, M. vide Kettner, R.
- 167.—Richet, C. & Portier, P. Recherches sur la Toxine des Coelenterés et les Phénomènes d'Anaphylaxie. Rés. Camp. sci. Monaco 95 1936 pp. 3-24.
- 168.—Ripper, E. A. Some Victorian Graptolite and Stromatoporoid Faunas. Abs. Diss. Univ. Cambridge 1935-36 1936 pp. 68-69.
- 169.—Robson, G. C. In C. T. Regan. Natural History pp. 28-34 9 text-figs. London 1936.

170.—Roche, J. Les pigments hématiniques des Actinies (actinio-hématique) et le cytochrome b. C.R. Soc. Biol. Paris 121 1 1936 pp. 69–73 2 text-figs.

171.—Roxas, H. A. A fresh-water jellyfish in the Philippines. Philipp. J. Sci. Manila 60 1 1936 pp. 37–41.

172.—Ruedemann, R. Ordovician Graptolites from Quebec and Tennessee. J. Paleont. Menasha Wis. 10 5 1936 pp. 385–387 figs.

173.—Russell, F. S. On the Hydroid of *Laodicea undulata* (Forbes and Goodsir). J. Mar. biol. Ass. Plymouth N.S. 20 3 1936 pp. 581–587 7 text-figs.

174.—Russell, F. S. On a New Species of Medusa, *Eucheilota hartlaubi* n. sp. J. Mar. biol. Ass. Plymouth N.S. 20 3 1936 pp. 589–594 6 text-figs.

175.—Russell, F. S. On the First Stage of the Medusa *Eucheilota clausa* (Hincks) [= *E. hartlaubi* Russell]. J. Mar. biol. Ass. Plymouth N.S. 21 1 1936 pp. 131–133.

176.—Russell, F. S. A Review of Some Aspects of Zooplankton Research. Rapp. Cons. Explor. Mer. Copenh. 95 1936 pp. 3–30 9 text-figs.

177.—Russell, F. S. and Rees, W. J. On Rearing the Hydroid *Zanclea implexa* (Alder) and its Medusa *Zanclea gemmosa* McCrady, with a Review of the Genus *Zanclea*. J. Mar. biol. Ass. Plymouth N.S. 21 1 1936 pp. 107–130 12 text-figs.

Russell, F. S. vide Gran, H. H.

178.—Salin, E. Monographie des calcaires du Barrois. Bull. Soc. géol. Fr. 5 V 1–3 1935 p. 151 figs.

179.—Sama, M. R. y. Sobre las relaciones entre la mesoglea y los folículos testiculares de *Cerianthus membranaceus*. Rev. esp. Biol. Madrid 4 4 1935 pp. 179–186 5 text-figs.

180.—Sartory, P. K. Notes on the Marine Zoophytes of South Devon. J. Quekett micr. Cl. (3) 1 6 1936 pp. 217–224 pls. xv, xvi.

181.—Schreitmüller, W. Die Süßwasserseduse. Aquar. Berlin 10 1936 pp. 84–85 7 text-figs.

182.—Schwarzbach, M. Oberlausitzer Schiefergebirge und Boberkatzbach-

gebirge—ein stratigraphisch-tektonischer Vergleich. Abh. naturf. Ges. Görlitz 32 3 1936 pp. 31–63 pls. i–iv.

183.—Schwarzbach, M. Die Lebensweise der Korallengattung *Pleurodictyum* im Karbon. Z. deuts. geol. Ges. Berlin 88 1 1935 pp. 53–57.

184.—Sewell, R. B. S. An Account of Addu Atoll. Scient. Rpts. John Murray Exped. 1 3 1936 pp. 63–93 pls. i–viii 1 text-fig.

185.—Sewell, R. B. S. An Account of Horsburgh or Goifurfehendu Atoll. Scient. Rpts. John Murray Exped. 1 5 1936 pp. 109–125 pls. i–vi 1 text-fig.

186.—Smith, B. Geology and Mineral Resources of the Skaneateles Quadrangle. Bull. New York St. Mus. Albany 300 1935 pp. 1–120 64 text-figs. 2 maps.

187.—Smith, S. [Revised Carboniferous coral nomenclature.] Proc. Bristol Nat. Soc. (4) 8 1 1936 pp. 42–43.

Smith, S. vide Lang, W. D.

188.—Spriestersbach, J. Beitrag zur Kenntnis der Fauna des rheinischen Devon. Jahrb. preuss. geol. LdAnst. 55 1 1935 pp. 475–525 pls. 42–44.

189.—Stelfox, A. W. *Physalia*, "The Portuguese Man-of-War," and *Veleva* in Irish Waters. Irish Nat. Journ. Belfast 6 6 1936 pp. 142–143.

190.—Stephenson, L. W. Geology and Paleontology of the Georges Bank Canyons. Part II. Upper Cretaceous Fossils from Georges Bank (including Species from Banquereau, Nova Scotia). Bull. Geol. Soc. Amer. Washington D.C. 47 3 p. 386 pl. 3.

191.—Stewart, G. A. A New Coral from the Olentangy Shale of Ontario. Amer. Midl. Nat. Notre Dame 17 5 1936 pp. 878–880 4 text-figs.

192.—Stiasny, G. Gorgonaria von Cap Blanco (Westafrika, Mauretanien). Capita zool. The Hague 8 (2) 1936 pp. 1–44 pls. i–vi 12 text-figs. 1 map.

193.—Stiasny, G. Diagnosen einiger neuer Gorgonarien-Arten von Cap Blanco (Westafrika). Zool. Anz. Leipzig 113 1936 pp. 201–206.

194.—[Stiles, C. W.] Notice of possible suspension of rules of Nomenclature in certain cases. Zool. Anz. Leipzig 115 1936 pp. 110–111.

- 195.—**Stolte, H. A.** Die Herkunft des Zellmaterials bei regenerativen Vorgängen der wirbellosen Tiere. IV. *Coelenterata.* *Biol. Rev. Cambridge* 11 1 1936 pp. 8–13 1 text-fig.
- Sugiyama, T.** *vide* Yabe, H.
- 196.—**Tang, D. S. & Yang, P. F.** On the Occurrence of Fresh-water Medusae in Amoy. *Lingnan Sci. Journ. Canton* 15 3 1936 pp. 445–452.
- 197.—**Tétty, A.** Contribution à la connaissance de la faune de l'étang de Lindre. *Bull. Soc. Hist. nat. Metz* (3) 34 1935 pp. 249–265.
- 198.—**Thiel, M. E.** Scyphomedusae. *Bronns Klassen u. Ordnungen Leipzig* 2 Bd. 2 Abt. 2 Buch Liefg. 1–3 1936 pp. 1–480 224 text-figs.
- Thomas, D. E.** *vide* Chapman, F.
- 199.—**Thomas, H. D.** Note préliminaire sur les Coraux du Récif bathonien du Breuil. *Bull. Soc. géol. Fr.* 5 IV 8–9 1935 pp. 726–729 pl. 42.
- 200.—**Thoral, M.** Age et faune des schistes ordoviciens de Cabrières (Hérault) dits "Schistes à *Asaphus*." *C.R. Acad. Sci. Paris* 203 19 1936 pp. 942–944.
- 201.—**Thorp, E. M.** Calcareous shallow-water marine deposits of Florida and the Bahamas. *Pap. Tortugas Lab. Carn. Instn.* 29 1936 pp. 37–119 pls. i–v 10 text-figs.
- 202.—**Tortonese, E.** I Gorgonarii del golfo di Genova. *Boll. Zool. Torino* 7 1936 pp. 113–125 8 text-figs.
- 203.—**Totton, A. K.** Plankton of the Bermuda Oceanographic Expeditions. VII. Siphonophora taken during the Year 1931. *Zoologica New York* 21 1936 pp. 231–240.
- 204.—**Uchida, T.** Influence of the Currents upon the Distribution of Races and Frequency of Asexual Reproduction in the Actinian *Diadumene Luciae*. [Japanese, English summary p. 895.] *Zool. Mag. Tokyo* 48 1936 pp. 895–906 9 text-figs.
- Ulrich, W.** *vide* Miethke, E.
- 205.—**Ussing, H.** Fra den pelagiske Fauna i Lillebaelt. *Flora og Fauna Kjøbenh.* 44 2 1936 pp. 59–62.
- 206.—**Valkanov, A.** Notizien über die Brackwässer Bulgariens. I. [Bulgarian, German summary p. 286.] *Ann. Univ. Sofia* 31 3 1935 pp. 249–303 27 text-figs.
- 207.—**Valkanov, A.** Notizien über die Brackwässer Bulgariens. 2. Versuch einer hydrographischen und biologischen Erforschung derselben. [Bulgarian, German summary p. 327.] *Ann. Univ. Sofia* 32 3 1936 pp. 209–341 31 text-figs. 1 map.
- 208.—**Vallaux, C.** Croissance et dépérissement des récifs coralliens. *Scientia Bologna* 60 11 1936 pp. 255–261.
- 209.—**Van Cleave, H. J.** Fresh-water Jelly-fishes in Illinois. *Science N.Y. N.S.* 83 2158 1936 p. 443.
- 210.—**Vaughan, A.** The Carboniferous Limestone Series (Avonian) of the Avon Gorge. *Proc. Bristol Nat. Soc.* (4) 8 1 1936 pp. 29–90 pls. i–xiv.
- 211.—**Venzo, S.** I fossili del Neogene Trentino, Veronese e Bresciano. *Palaeontogr. ital. Siena* 35 1935 pp. 234–255 pls. 18–19.
- 212.—**Viosca, P. & Burkenroad, M. D.** The Fresh-water Medusa in Louisiana. *Science N.Y. N.S.* 84 2172 1936 pp. 155–156.
- 213.—**Weill, R.** Le fonctionnement des colloblastes. *C.R. Acad. Sci. Paris* 201 19 1935 pp. 850–852 3 text-figs.
- 214.—**Weill, R.** Le cnidome des Cladonémides *Eleutheria dichotoma* et *Cladonema radiatum*, son cycle et son interprétation. *C.R. Acad. Sci. Paris* 203 17 1936 pp. 816–818.
- 215.—**Weill, R.** Existence de larves polypoïdes dans le cycle de la Trachyméduse *Olinthias phosphorica* Delle Chiaje. *C.R. Acad. Sci. Paris* 203 20 1936 pp. 1018–1020 4 text-figs.
- 216.—**Weill, R.** Les "réservoirs sélectifs" et la maturation des nématocystes de *Lucernaria campanulata* Lam. *C.R. Soc. Biol. Paris* 120 36 1935 pp. 774–777.
- 217.—**Wells, J. W.** The Nomenclature and Type Species of Some Genera of Recent and Fossil Corals. *Amer. J. Sci. New Haven* (5) 31 182 1936 pp. 97–134.
- 218.—**Werner, C.** Synonymy of the Mid-Devonian Tabulate Corals of the Falls of the Ohio. *Washington Univ. Stud. St. Louis N.S.* 9 1936 pp. 53–64.

219.—Williams, W. A Deep Water Coral from Southern California. *J. Ent. Zool. Claremont Cal.* **28** 1936 pp. 27-28 1 text-fig.

220.—Wirtz, D. Die Korallen des norddeutschen Untermiozäns. *Jahrb. preuss. geol. LdAnst.* **55** 1 1935 pp. 84-92 pl. 4.

221.—Yabe, H. & Eguchi, M. Revision of Reef Coral Genera *Echinopora*, *Oxyphyllia*, *Mycedium*, *Oxypora* and *Physophyllia*. *Proc. Imp. Acad. Tokyo* **11** 10 1935 pp. 429-431.

222.—Yabe, H. & Eguchi, M. *Eohydncophora*, a New Genus of Cretaceous Corals. *Proc. Imp. Acad. Tokyo* **12** 5 1936 pp. 141-143 3 text-figs.

223.—Yabe, H. & Eguchi, M. Deep-water Corals from off Owasi, Mie Prefecture. *Proc. Imp. Acad. Tokyo* **12** 6 1936 pp. 167-168 3 text-figs.

224.—Yabe, H. & Ehara, E. Two New Corals from Taiwan (Formosa). *Proc. Imp. Acad. Tokyo* **12** 1 1936 pp. 25-27 7 text-figs.

225.—Yabe, H. & Sugiyama, T. Jurassic Stromatoporoids from Japan. *Sci. Rept. Tôhoku Imp. Univ.* **14** 2B 1935 pp. 135-192 pls. xl-lxxi 9 text-figs.

226.—Yabe, H., Sugiyama, T. & Eguchi, M. Recent Reef-Building Corals from Japan and the South Sea Islands under the Japanese Mandate, I. *Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I* 1936 pp. 1-66 pls. i-lxx.

Yang, P. F. *vide* Tang, D. S.

227.—Yermolaev, M. M. Notes on the Stratigraphy of the Novaya Semlya. [Russian, English summary p. 53.] *Trans. Arctic Inst. Leningrad* **27** 1935 pp. 1-63.

228.—Yonge, C. M. Studies on the Biology of Tortugas Corals. I. Observations on *Maecandra areolata* Linn. *Pap. Tortugas Lab. Carn. Instn.* **29** 1936 pp. 199-208 3 pls. 1 text-fig.

229.—Yonge, C. M. Studies on the Biology of Tortugas Corals. II. Variation in the Genus *Siderastrea*. *Pap. Tortugas Lab. Carn. Instn.* **29** 1936 pp. 185-198 pl. i.

230.—Zuffardi-Comerci, R. Corallari paleogenici dell' Isola di Rodi. *Atti Acc. Torino* **70** 3 1935 pp. 411-429 2 text-figs.

231.—Zuffardi-Comerci, R. Corallari neogenici del Sahel eritreo. *Atti Acc. Torino* **71** 1936 pp. 205-219 1 pl.

II.—SUBJECT INDEX.

GENERAL AND MISCELLANEOUS.

Textbooks.—BUBNOFF, **23**; ROBSON, **169**; DAVIES, **42**; KORSCHOLT, **105**.

General zoology of the Scyphomedusae, THIEL, **198**.

Classification.—*Heliolites*, *Tetradium* and *Chaetetes*, OKULITCH, **143**; Hydrozoa, RANSON, **162**; *Eleutheria dichotoma* and *Cladonema radiatum*, WEILL, **214**.

Nomenclature.—STILES, **194**; Nomenclature and genotypes of hexacorals, WELLS, **217**; Synonymy of the M. Devonian Tabulate corals of the Falls of the Ohio, WERNER, **218**.

Systematics of Lucernariidae, CARL-GREN, **30**.

Catalogue of type specimens of fossils in the University of Cincinnati Museum, CHAPPARS, **32**.

Traces of soft parts of graptolites, HUNDT, **93**.

Chemical composition of scyphozoa, KOISUMI & HOSOI, **100**.

Revision of *Eirene* and *Helgicirrha*, KRAMP, **107**.

Revision of the Tabulate corals described by Goldfuss, LECOMPTE, **117**.

Hematinic pigments and cytochrome b in Actinians, ROCHE, **170**.

Revision of reef coral genera, YABE & EGUCHI, **221**.

Monographs.—Stylasteridae, BROCH, **22**; The graptolite fauna of the Lower *Orthoceras* Limestone of Öland, BULMAN, **24**; Devonian stromatoporoids, PARKS, **147**; Medusae collected on the cruises of the Prince of Monaco, RANSON, **164**; Scyphomedusae, THIEL, **198**; W. Atlantic Alcyonaria, DEICHMANN, **49**.

Corals and Coral-reefs.—BIGOT, 16; Growth-rate of corals, BOSCHMA, 18; HILL, BUTLER, OAKLEY & ARKELL, 90; LECOMPTE, 116; MOORHOUSE, 135; MULLER, 137; MULLER, 138; PRAT, 158; PRATJE, 159; SEWELL, 184; SEWELL, 185; THOMAS, 199; VALLAUX, 208.

STRUCTURE.

Cordylophora caspia, KIRCHNER, 99; Stromatoporoids, YABE & SUGIYAMA, 225; Tremadocian and Lower Ordovician graptolites, BULMAN, 24; *Akidograptus*, *Dimorphograptus* and *Rhaphidograptus*, BULMAN, 25; *Oncograptus*, BULMAN, 26; *Monograptus dubius*, COX, 37; Scyphomedusae, THIEL, 198; Lucernariidae, CARLGREN, 30; *Stephanoscyphus*, KOMAI, 103; *Montlivaultia*, LEJEUNE, 118; *Calapoecia*, COX, 37A; Clisiophyllid and Lonsdaloid corals, DOUGLAS, 54; *Keriophyllum*, HALLER, 76; *Lithostrotionella*, HAYASAKA, 81; Septal structures in Silurian Rugose corals, HILL, 88; *Cymatelasma*, HILL & BUTLER, 89; *Columnaria*, LANG & SMITH, 114.

PHYSIOLOGY.

Scyphomedusae, THIEL, 198; Poisoning effects of coelenterates, RICHET & PORTIER, 167.

Action of salts on actinians, BENAZZI, 11.

Action of colloblasts, WEILL, 213.

Chemical reactions of coelenterates, HENSCHEL, 82.

Action of amino-acids on growth of *Obelia*, HAMMETT, 77, 78.

Effect of amino-acids on regeneration in *Obelia*, HAMMETT, 79.

Apical dominance and polarity in *Mnemiopsis*, COONFIELD, 34.

Polarity of *Thaumatoscyphus*, HANAOKA, 80.

Nervous system of *Coeloplana*, KOMAI, 102.

Digestion of *Charybdea rastonii*, ISHIDA, 96.

Relation between the mesoglea and the testicular follicles in *Cerianthus*, SAMA, 179.

Periodicity in spawning of *Pennaria*, BAKER, 10.

Hydra.—Mitosis, MCCONNELL, 125; Reversal of Thigmotropism, MITRA & MUKERJEE, 133; Sexuality, KUWARA, 112.

Reproduction. — Scyphomedusae, LAMBERT, 113; Reproduction and natural death in *Pelmatohydra*, FINKELSTEIN & POLJAKOW, 59; Influence of currents on asexual reproduction in *Diadumene*, UCHIDA, 204.

Regulation within the eggs of Coelenterates, DALCQ, 38.

Causes of death in *Porites*, MOORHOUSE, 135.

Feeding and cleansing action of *Macandra*, YONGE, 228.

DEVELOPMENT.

Nematocysts of *Lucernaria*, WEILL, 216.

Budding of "Miss Renton's scyphistoma," LAMBERT, 113.

Olindias phosphorica, WEILL, 215; *Cladocoryne floccosa*, PHILBERT, 154; *Laodicea undulata* and *Cuspidella*, RUSSELL, 173; *Zanlea implexa*, RUSSELL & REES, 177; *Eucheilota clausa*, RUSSELL, 175; *Eleutheria dichotoma* and *Cladonema radiatum*, WEILL, 214; *Pontias*, PASPALEW, 148; Scyphomedusae, THIEL, 198; *Aurelia*, *Chrysaora*, *Cyanea* and *Rhizostoma*, LAMBERT, 113; *Craspedacusta*, GERMAIN, 67; *Cunina lativentris*, DAMAS, 39; Tremadocian and Lower Ordovician graptolites, BULMAN, 24; *Monograptus dubius*, COX, 37; *Macandra*, YONGE, 228.

Regeneration.—*Hydra*, AISUPIET, 1; STOLTE, 195; *Pennaria*, PUCKETT, 161; *Mnemiopsis*, COONFIELD, 35.

ETHOLOGY.

Baltic hydrozoa and scyphozoa, DEMEL, 50.

Brackish water coelenterates of Bulgaria, VALKANOV, 206, 207.

Ecology of shallow-water areas of Florida and the Bahamas, THORP, 201.

Ecology of fossil corals, ALLAN, 4.

Porites and effects of cyclone, MOORHOUSE, 135.

Distribution of graptolite faunas, DECKER, 45, 46.

Limnological study of *Pelmatohydra*, MILLER, 132.

Studies on Scyphomedusae, THIEL, 198.

Stratigraphic distribution of Permian coral genera, HERITSCH, 84.

Cunina lativentris and a polychaete worm, DAMAS, 39.

Parasitism. — *Eugymnanthea* and *Tapes decussatus*, PALOMBI, 145.

Commensalism, Association and Symbiosis. — Hydrozoa and Protozoa, PRECHT, 160; Hydrozoa and shells containing pagurids, ANDRE & LAMY, 6; Jelly-fish and herrings, LUCAS & HENDERSON, 124; *Parazoanthus* and sponges, ARNDT & PAX, 8; *Epizoanthus* and sponges, PAX & LOCHTER, 151.

VARIATION AND PHYLOGENY.

Lower Ordovician and Tremadocian graptolites, BULMAN, 24; Evolutionary trends in graptolites and stromatoporphs, RIPPER, 168; Relationships of North Pacific and Atlantic octocoralla, BROCH, 20; Gorgonaria, STIASNY, 192; Variation in *Siderastrea*, YONGE, 229; *Calapoecia*, COX, 37A; *Lophophyllum*, *Lophophylidium* and *Sinophyllum*, HERITSCH, 85; Silurian Rugose corals, HILL, 88; Relationships of Palaeozoic corals, OKULITCH, 144.

DISTRIBUTION.

1.—GEOGRAPHICAL.

A.—MARINE.

Atlantic (including Mediterranean and Black Sea). — Hydrozoa and corals of Barra, CANT & CRICHTON, 27; Baltic coelenterates, DEMEL, 50; List of northern planktonic fauna, GRAN, HENTSCHEL & RUSSELL, 70; Distribution of Atlantic plankton, RUSSELL, 176; Scandinavian pelagic fauna, USSING, 205; Hydroidea near Alexandria, BILLARD, 17; *Physalia* of W. France, BOUXIN, 19; A new aberrant Cladonemid from Morocco, DAMAS, 40; Essex medusae, LAMBERT, 113; Medi-

terranean Siphonophora, LELOUP, 119; Hydrozoa of the Sargasso Sea and the West Indies, LELOUP, 120; West Indian hydrozoa, LELOUP, 121; Atlantic siphonophora and physophoridae, LELOUP, 122; Hydrozoa of Roscoff, NOUVEL, 141; A new leptomedusa from the Gulf of Naples, PALOMBI, 145; A new genus of hydromedusa from the Sea of Azov, PASPALEW, 149; Hydrozoa of the Kiel Canal, PRECHT, 160; Atlantic medusae, RANSON, 164; A new English hydroid, REES, 166; A new British Medusa, RUSSELL, 174; Hydrozoa of South Devon, SARTORY, 180; Irish Hydromedusae, STELFOX, 189; Stylasteridae, BROCH, 22; Siphonophora of Bermuda, TOTTEN, 203; A new scyphomedusa from South Africa, CARLGREN, 30; A rare scyphomedusa at Biarritz, RANSON, 163; West Indian Pennatulacea, DEICHMANN, 48; West Atlantic Alcyonaria, DEICHMANN, 49; W. African Gorgonaria, STIASNY, 192; New gorgonarians from W. Africa, STIASNY, 193; Gorgonaria of the Gulf of Genoa, TORTONESE, 202; *Parazoanthus* in the Adriatic Sea, ARNDT & PAX, 8; Norwegian corals, BROCH, 21; A new zoantharian from the Adriatic Sea, PAX & LOCHTER, 151; *Maeandra* at Tortugas, YONGE, 228; *Siderastrea* at Tortugas, YONGE, 229.

Pacific Ocean. — Stylasteridae, BROCH, 22; Hydroids of the Queen Charlotte Islands, FRASER, 62; Hydroids from the Queen Charlotte Islands, FRASER, 63; Japanese hydroids, FRASER, 64; A new species of *Litularia* from S. China, KOO, 104; Hydrozoa of Easter Island and Ecuador, LELOUP, 120; *Stephanoscyphus* off Japan, KOMAI, 101, 103; *Coelogorgia* from the Philippine Islands, BENISCH, 12; Octocorals of the North Pacific Ocean, BROCH, 20; Pennatulacea from California, DEICHMANN, 48; *Cavernularia* from California, HICKSON, 87; Gt. Barrier Reef Alcyonaria, MACFADYEN, 126; E. Asiatic zoantharia, CARLGREN, 28; N. American sea anemones, CARLGREN, 29; Japanese corals, EGUCHI, 56; Japanese *Diadumene luciae*, UCHIDA, 204; Deep-water coral from California, WILLIAMS, 219; Japanese deep-water corals, YABE & EGUCHI, 223; Two new corals from Taiwan, YABE & EHARA, 224; Japanese and South Sea Island corals, YABE, SUGIYAMA & EGUCHI, 226.

Indian Ocean.—Stylasteridae, BROCH, 22; A new species of *Apiactis* from Madras, PANIKKAR, 146; Ctenoplanidae of French Indo-China, DAWYDOFF, 44; Indian zoantharia, CARLGREN, 28.

Arctic Ocean.—Distribution of Arctic plankton, RUSSELL, 176; Planktonic fauna, GRAN, HENTSCHEL & RUSSELL, 70; Norwegian stony-corals, DONS, 53.

B.—FRESH WATER.

Danish brackish-water hydrozoa, KRAMP, 106.

New genus of brackish-water hydroid in the Black Sea, PASPALEW, 148.

Estuarine coelenterates of North Carolina, PEARSE, 152.

Brackish-water coelenterates of Bulgaria, VALKANOV, 206, 207.

Hydra.—In Barra, CANT & CRICHTON, 27; in a Lorraine marsh, TÉTRY, 197; *Pelmatohydra* in American lakes, MILLER, 132.

Craspedacusta.—In France, GERMAIN, 67; in Berlin, SCHREITMÜLLER, 181, MIETHKE & ULRICH, 131; in Holland, HUMMELINCK, 91; in Illinois, VAN CLEAVE, 209; in Iowa, AITKEN, 2; in Louisiana, VIOSCA & BURKENROAD, 212; in the Philippine Islands, ROXAS, 171.

Cordylophora.—In the Ille-et-Rance canal, PESSON, 153; in the River Plate, GACGERO, 66; near Alexandria, BIL-LARD, 17.

Medusae of S. China, TANG & YANG, 196.

Diadumene cincta in an Essex river, RAWLINSON, 165.

2.—GEOLOGICAL.

Cainozoic.—Neogene corals of Italy, VENZO, 211; Neogene corals from Eritrea, ZUFFARDI-COMERCI, 231; Miocene corals of Crete, KÜHN, 108; Miocene coral from Italy, MONTANARO, 134; Miocene corals of Germany, WIRTZ, 220; Palaeogene corals from the I. of Rhodes, ZUFFARDI-COMERCI, 230; Eocene corals of England, DAVIS, 43; Eocene corals of France, MORELLET & MORELLET, 136.

Mesozoic.—Tithonian Chaetetids of Croatia, POLJAK, 156; Tithonian

hydrozoa from Jugo-Slavia, POLJAK, 157; Jurassic hydrozoan from France, SALIN, 178; Jurassic Stromatoporoids from Japan, YABE & SUGIYAMA, 225; Cretaceous corals from Madagascar, ALLOITEAU, 5; Three new Cretaceous coral genera of Japan, EGUCHI, 57; Cretaceous coral fauna of Greece, HACKEMESSER, 75; *Aspidiscus cristatus* in the Cenomanian of Spain, LLUECA, 123; Cretaceous coral from Nova Scotia, STEPHENSON, 190; A new genus of Cretaceous corals, YABE & EGUCHI, 222; Jurassic corals of Dorset, ARKELL, 7; Jurassic corals of Pomerania, DIETRICH, 52; Jurassic Spongiomorphid corals of Morocco, DUBAR & LE MAÎTRE, 55; Jurassic corals of Germany, KÜHN, 109; Lower Jurassic corals of France, KUHN, 110; Bathonian corals from Normandy, THOMAS, 199; Bajocian corals from France, DARESTE DE LA CHAVANNE, 41; Liassic coral from Italy, GREGORIO, 71; Liassic species of *Montlivaultia* from Belgium, LEJEUNE, 118; Triassic corals from Sicily, GREGORIO, 72, 73; Triassic coral from Hungary, KUTASSY, 111; Triassic coral reefs of Nevada, MULLER, 137; Triassic corals of Nevada, MULLER & FERGUSON, 139; Triassic corals of America, MULLER, 138.

Palaeozoic.—New Permian species of *Waagenophyllum* from Texas, HERITSCH, 83; A new Permian coral from Texas, HERITSCH, 84; Permo-Carboniferous corals of Iran, DOUGLAS, 54; Carboniferous corals of Derbyshire, COPE, 36; Carboniferous coral fauna from Siberia, GABOUNIA, 65; Lower Carboniferous stromatoporoids and corals of Nowaya Zemlya, GORSKY, 69; Carboniferous species of *Lithostrotionella* from North America, HAYASAKA, 81; Carboniferous corals of the Sahara, MENCHIKOFF & Hsu, 130; Carboniferous corals of Texas, PLUMMER & HORNBERGER, 155; A Carboniferous coral from Germany, SCHWARZBACH, 183; English Carboniferous corals, S. SMITH, 187; English Carboniferous corals, VAUGHAN, 210; Devonian corals from Belgium, ASSELBERGHS, 9; Devonian fossils from New York, GOLDBERG, 68; Devonian corals of Belgium, LECOMPTE, 116; Devonian Tabulate corals of Europe, LECOMPTE, 117; Frasnian corals from the Ardennes, MAILLIEUX, 128; Devonian corals and stromatoporoids of France, MATHIEU, 129; Devonian corals from Germany, LANG & SMITH, 114; Devonian corals of

C. Europe, PATTEISKY, 150; Devonian corals and hydrozoa of Germany, SPRIESTERSBACH, 188; Devonian corals of Ohio, WERNER, 218; Middle Devonian corals of the Eifel, HALLER, 76; Lower Devonian corals from Belgium, LEBLANC, 115; Siluro-Devonian fauna of Belgium, MAILLIEUX, 127; Silurian and Devonian corals and stromatoporoids of New York, B. SMITH, 186; Devonian stromatoporoids of North America, PARKS, 147; Lower and Upper Palaeozoic faunas of Novaya Zemlya, ALFEROV, 3; Silurian and Devonian Corals of New Zealand, ALLAN, 4; Silurian Rugose Corals, HILL, 88; A new Silurian coral genus, HILL & BUTLER, 89; Silurian corals of Australia, JONES, 97; Lower and Upper Palaeozoic fauna of Novaya Zemlya, YERMOLAEV, 227; A new *Homolophyllum* from Ontario, STEWART, 191; Silurian graptolites of Britain, BULMAN, 25; Valentian graptolites of S. France, CHAUBET, 33; *Monograptus dubius* from Gotland, COX, 37; Silurian graptolites of Fezzan, DESIO, 51; Silurian graptolites from France, HABERFELNER, 74; Silurian graptolites from Czechoslovakia, KETTNER & REMES, 98; Silurian graptolites from the Tyrol, HERITSCH, 86; Silurian graptolites of Germany, HUNDT, 92; Upper Silurian graptolites of Thuringia, HUNDT, 94; Silurian graptolites of Novaya Zemlya, LANISHEVSKY, 95; Ordovician graptolites of New Zealand, BENSON & KEBLE, 13, 14; Ordovician graptolites of South Island, New Zealand, BENSON, KEBLE, KING & MCKEE, 15; Ordovician graptolite from Texas, BULMAN, 26; Ordovician and Silurian graptolites of Oklahoma and Arkansas, DECKER, 45; Lower Palaeozoic graptolites of North America, DECKER, 46; Ordovician graptolites of Oklahoma, DECKER, 47; Ordovician graptolites of Alabama, FOSTER, 61; Ordovician graptolites of Canada, FAESSLER & LAVERDIÈRE, 58; Ordovician graptolites of New York, GOLDBRING, 68; Ordovician graptolites from S. France, THORAL, 200; Lower Palaeozoic graptolite faunas of Saxony, SCHWARZBACH, 182; Ordovician graptolites of Canada and Tennessee, RUEDEMANN, 172; Victorian graptolites and stromatoporoids, RIPPER, 168; Lower Palaeozoic graptolites of New South Wales, NAYLOR, 140; Ordovician graptolites of Germany, HUNDT, 93; Lower Ordovician and Tremadocian

graptolites, BULMAN, 24; Ordovician stromatoporoid from Canada, FOERSTE & COX, 60; Ordovician *Calapoccia*, COX, 37A; Ordovician *Columnaria* from N. America, LANG & SMITH, 114; A new Ordovician coral from Canada, OAKLEY, 142; North American Chazyan Corals, OKULITCH, 144; Cambrian hydrozoa of Australia, CHAPMAN & THOMAS, 31.

III.—SYSTEMATIC INDEX.

Full references are only given in the case of new species. In other cases the numeral in "Large bold clarendon" refers to the list of titles where the full reference may be found. In the case where a reference is given in the Systematic Part, the volume number is printed in "Small bold clarendon."

HYDROZOA.

(Vide also Graptolitoidea.)

Abietinaria abietna, *amphora*, *anguina*, *costata*, *filicula*, *gigantea*, *greenei*, *rigida*, *turgida*, *variabilis* p. 125, FRASER 62.

Abyla trigona p. 5, LELOUP 120.—*A. dentata* p. 233, TOTTON 203.

Abylopsis tetragona p. 6, LELOUP 119.—*A. eschscholtzi* p. 5, LELOUP 120.—*A. eschscholtzi*, *tetragona* p. 233, TOTTON 203.

Acryptolaria tortugasensis sp. n. p. 13 fig. Dry Tortugas, LELOUP Mém. Mus. Hist. nat. Belg. (2) 2 1935.

†*Actinodictyon* discussed p. 112, *vagans* sp. n. p. 113 fig. Devonian Ohio, PARKS Univ. Toronto Stud. Geol. 39 1936.

†*Actinostroma* discussed p. 117, *expansum* p. 118 fig., *tyrrelli* p. 121 fig., PARKS 147.—*A.* discussed p. 153, *tokadiensis* sp. n. p. 175 figs. Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.—*A.* evolutionary trends p. 69, RIPPER 168.—*A. irregulare*, *rockfordense* p. 4, CHAPPARS 32.—*A. contortum* sp. n. pp. 10, 88 fig., *furcatopilosum* sp. n. pp. 12, 89 fig., Etroeungian Novaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

†*Actinostromaria* discussed p. 153, *shimizu* sp. n. p. 175 figs., *asiatica* sp. n. p. 176 figs., Jurassic Japan, YABE & SUGIYAMA 14 2 B 1935.—*A. mosensis* sp. n. p. 151 fig. Jurassic France, SALIN Bull. Soc. géol. Fr. 5 v 1-3 1935.

Aegina citrea p. 209 fig., RANSON 164.

Aeginopsis mediterranea p. 174 fig., KORSCHOLT 105.—*A. laurentii* p. 212, RANSON 164.

Aeginura grimaldii p. 211, RANSON 164.

Aequorea forskalea p. 159 fig., KORSCHOLT 105.—*A. forskalea* p. 118, RANSON 164.—*A. forskalea* p. 29 fig., ROBSON 169.

Agalma sarsii p. 179 fig., KORSCHOLT 105.—*A. elegans* p. 11, *okeni* p. 12, LELOUP 122.—*A. elegans* p. 16, RUSSELL 176.—*A. elegans, okeni* p. 236, TOTTON 203.

Aglantha digitalis p. 19, GRAN, HENTSCHEL & RUSSELL 70.—*A. digitale* p. 177, forma *typica* p. 181 fig.; forma *rosea* p. 182, *krampi* p. 183 fig., RANSON 164.—*A. digitalis* var. *rosea* p. 16, RUSSELL 176.

Aglaophenia pluma, elongata p. 10, BILLARD 17.—*A. latirostris, struthionides* p. 126, FRASER 62.—*A. latecarinata* p. 4, LELOUP 120.—*A. latecarinata, A. (?) allmani* p. 57, LELOUP 121.

Aglaura hemistoma p. 184, RANSON 164.

Allophota sp. p. 179 fig., KORSCHOLT 105.

Amphicaryon acaule p. 9, RUSSELL 176.—*A. acaule* p. 231, TOTTON 203.

Amphisbetia operculata p. 1424 fig., DALCQ 38.

†*Anostylostroma* gen. n. p. 44, genotype *hamiltonense* sp. n. p. 46 fig., var. *papillatum* var. n. p. 50 fig., Devonian Michigan, PARKS Univ. Toronto Stud. Geol. 39 1936.

Antenella variabilis sp. n. p. 52 fig. Japan, FRASER Trans. roy. Soc. Canada (3) v 30 1936.—*A. diaphana* forma *typica* p. 52, forma *siliquosa, secundaria* p. 53, LELOUP 121.

Anthophysa formosa p. 237, TOTTON 203.

Apolemia uvaria p. 2, LELOUP 119.—*A. uvaria* p. 10, LELOUP 122.

Arctapodema amplum p. 158 fig., RANSON 164.

Athorybia rosacea, sp. p. 237, TOTTON 203.

†*Balatonia kochi* p. 164, YABE & SUGIYAMA 225.

Bassia bassensis p. 7, LELOUP 119.—*B. bassensis* p. 8, LELOUP 122.

Bathypphysa abyssorum p. 19 fig., *grandis* p. 20, *grimaldi* p. 21 fig., *studerii* p. 21, *sibogae* p. 22 fig., *confiera* p. 23 fig., LELOUP 122.

Bathypphysinae discussed p. 15, LELOUP 122.

†*Beatricea undulata* p. 304, FOERSTE & COX 60.

Bimeria gracilis p. 123, FRASER 62.

Blackfordia virginica pp. 278, 289 fig., VALKANOV 206.—*B. virginica* pp. 276, 281, 283, 303, VALKANOV 207.

Bougainvillea supercilialis, britannica p. 17, RUSSELL 176.

Bythotiarra murrayi p. 98 fig., RANSON 164.

Calycella syringa p. 124, FRASER 62.

Campanularia gelatinosa, gigantea?, *groenlandica, integra, raridentata, speciosa, urceolata, verticillata, volubilis* p. 123, FRASER 62.—*C. gigantea* ? p. 507, FRASER 63.—*C. macroscypha* p. 28 fig., *noliformis* p. 29, *sargassicola* p. 30, LELOUP 121.—*C. integriformis* pp. 257, 303, VALKANOV 207.

Campanulina lacerata p. 430, PRECHT 160.—*C. (?) pontica* sp. n. pp. 279, 289 fig., VALKANOV Ann. Univ. Sofia 31 3 1935.—*C. pontica* pp. 257, 274, 277, 280, 282, VALKANOV 207.—*C. (Opercularella) lacerata* p. 12, LELOUP 121.

Catablema vesicarium p. 80, RANSON 164.—*C. eurystoma* p. 17, RUSSELL 176.

†*Ceraostroma steinmanni* p. 164, YABE & SUGIYAMA 225.

Ceratocymba sagittata p. 233, TOTTON 203.

Chelophyes appendiculata p. 5, LELOUP 119.—*C. appendiculata* p. 5, LELOUP 120.—*C. appendiculata, contorta* p. 234, TOTTON 203.

Chlorohydra viridissima p. 170 fig., KORSCHOLT 105.—*C. viridissima* pp. 282, 292, VALKANOV 207.

Chromatonema rubrum p. 102 fig., RANSON 164.

Chuniphyes multidentata p. 10, LELOUP 122.—*C. multidentata*, problematica p. 9, RUSSELL 176.

Cladocoryne floccosa p. 1 fig., pelagica, haddoni, simplex p. 1, PHILBERT 154.

Cladonema radiatum p. 816, WEILL 214.

†*Clathrodictyon* discussed p. 10, *laxum* p. 13 fig., var. *columnare* var. n. p. 16 fig. Devonian Ohio, *substriatellum* p. 18 fig., *arvense* sp. n. p. 23 fig. Devonian Ontario, *ohioense* p. 24 fig., *townsendi* p. 26 fig., *insulare* p. 29 fig., spp. n. Devonian Ohio, *retiforme* p. 30 fig., *latum* sp. n. p. 33 fig. Devonian Michigan, *moosense* p. 34 fig., var. *proximale* var. n. p. 35 fig. Devonian Ontario, *jewetti* p. 36 fig., *vulgare* sp. n. p. 38 fig. Devonian Michigan, *undulatum* sp. n. p. 40 fig. Devonian Michigan, *ponderosum* p. 42 fig., PARKS Univ. Toronto Stud. Geol. 39 1936.—*C.* evolutionary trends p. 69, RIPPER 168.

Clausophyes ovata p. 8, LELOUP 122.—*C. ovata* p. 9, RUSSELL 176.

Clava sp. p. 160 fig., *squamata* pp. 161, 163 fig., KORSCHOLT 105.—*C. multicornis* p. 430, PRECHT 160.—*C. multicornis* p. 219, SARTORY 180.

Clytia johnstoni p. 3, BILLARD 17.—*C. cylindrica*, *edwardsi* p. 123, *johnstoni*, *kincaidi*, *minuta* p. 124, FRASER 62.—*C. minuta* p. 507, FRASER 63.—*C. obliqua* p. 49 fig., FRASER 64.—*C.* sp. p. 160 fig., KORSCHOLT 105.

Coeloplana bocki p. 185 fig., KOMAI 102.

Colobonema sericeum p. 152 fig., RANSON 164.

Conaria sp. p. 180 fig., KORSCHOLT 105.

Conopora discussed p. 84, *tenuis* p. 88 fig., *major* p. 91 fig., BROCH 22.

Cordylophora caspia p. 2, BILLARD 17.—*C. caspia* p. 273, DEMEL 50.—*C. lacustris* p. 464, GAGGERO 66.—*C. caspia* p. 1 fig., KIRCHNER 99.—*C. lacustris* p. 163 fig., KORSCHOLT 105.—*C. lacustris* p. 177, PEARSE 152.—*C. lacustris* p. 55, PESSON 153.—*C. caspia* p. 430, PRECHT 160.—*C. caspia* p. 257, VALKANOV 206.—*C. caspia* pp. 257, 271, 274, 280, 282, 302, VALKANOV 207.

Corymorpha palma p. 166 fig., KORSCHOLT 105.—*C. nutans* p. 51, RANSON 164.

Coryne pintneri p. 140, *cerberus* p. 141, REES 166.—*C. sessilis*, *cylindrica* p. 122, *pelagica*, *briareus*, *margarica*, *implexa* p. 124, RUSSELL & REES 177.—*C. vaginata* p. 219 fig., SARTORY 180.

Corynitis agassizii p. 118, RUSSELL & REES 177.

Cosmatira megalota p. 16, *pilosella* pp. 16, 17, RUSSELL 176.

Craspedacusta sowerbyi p. 186, AITKEN 2.—*C. sowerbyi* p. 70 fig., GERMAIN 67.—*C. sowerbii* p. 308 fig., HUMMELINOK 91.—*C. sowerbii* p. 214, MIETHKE & ULRICH 131.—*C. kawaii* p. 37, ROXAS 171.—*C. sowerbii* p. 84 fig., SCHREITMÜLLER 181.—*C.* sp. p. 445, TANG & YANG 196.—*C. sowerbyi* p. 443, VAN CLEAVE 209.—*C.* p. 155, VIOSCA & BURKENROAD 212.

Crossota rufobrunnea p. 162, RANSON 164.

Crypthelia discussed p. 93, *pubica* p. 95 fig., BROCH 22.

Crystallophyes amygdalina p. 9, RUSSELL 176.

Cunina lativentris p. 1177 fig., DAMAS 39.—*C. rubiginosa* p. 199, *proboscidea*, *mucilaginoso* p. 200, RANSON 164.

Cunocantha octonaria p. 175 fig., KORSCHOLT 105.

Cupulita (Halistemma) picta p. 178 fig., KORSCHOLT 105.—*C. sarsi* p. 17, RUSSELL 176.

Cuspidella grandis, *humilis* p. 124, FRASER 62.—*C.* sp. p. 581 fig., *costata*, *humilis*, *grandis* p. 581, *procumbens* p. 586, RUSSELL 173.

Cyclactinia sp. p. 96 fig., ANDRE & LAMY 6.

Dimophyes arctica p. 9, LELOUP 122.—*D. arctica* p. 9, RUSSELL 176.

Dinotheca dofleini p. 87 fig., HUNDT 93.

Diphyes dispar p. 9, LELOUP 122.—*D. antarctica* p. 9, *arctica* p. 16, RUSSELL 176.—*D. dispar* p. 233, TOTTEN 203.

Diplocyathus caciniiformis p. 10, *gracilis* p. 11 fig., LELOUP 121.

†*Disjctopora dubia* p. 164, YABE & SUGIYAMA 225.

Dismorphosa carnea p. 302, VALKANOV 207.

- Dynamena cornica* p. 7, BILLARD 17.—*D. cornica* pp. 2, 4, LELOUP 120.—*D. cornicina* forma *peculiaris* form. n. p. 39 fig. West Indies, *crisioides* forma *peculiaris* p. 41 fig., forma *typica* p. 42, *quadridentata* var. *nodosa* forma *peculiaris* form. n. p. 43 fig. West Indies, LELOUP Mém. Mus. Hist. nat. Belg. (2) 2 1935.—*D. pumilis* p. 430, PRECHT 160.
- Egmundella humilis* sp. n. p. 50 fig. Japan, FRASER Trans. Roy. Soc. Canada (3) v 30 1936.—*E. gracilis* p. 124, FRASER 62.
- Eirene* discussed pp. 239, 252, *viridula* p. 244, *pellucida* p. 245, *gibbosa*, *pyramidalis*, *lactea* p. 247, *hexanemalis*, *kambara* p. 248, *elliceana*, *ceylonensis* p. 249, *palkensis*, *mollis* p. 250, sp. p. 251, KRAMP 106.
- Eleutheria dichotoma* p. 816, WEILL 214.
- †*Ellipsactinia ellipsoidea* p. 258 fig., *tyrrhenica* p. 261 fig., *caprense* p. 262 fig., *polypora* p. 264 fig., POLJAK 157.
- Enneagonum hyalinum* p. 8, LELOUP 122.
- †*Epistromatopora* subgen. n. (of *Stromatopora*) type *E. torinosuensis* sp. n. pp. 156, 183 figs., *delicata* sp. n. p. 183 figs., Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.
- Ereuna richardi* p. 11, LELOUP 122.
- Eucheilota hartlaubi* sp. n. p. 589 fig. Plymouth, *maculata* p. 592, *maasi* p. 594, RUSSELL J. Mar. biol. Ass. Plymouth N.S. 20 3.—*E. clausa* p. 131 fig., RUSSELL 175.
- Eucopella caliculata*, *everta* p. 124, FRASER 62.
- Eudendrium rameum*, *tenellum*, *vaginatulum* p. 123, FRASER 62.—*E. ramosum* p. 162 fig., sp. p. 172 fig., KORSCHOLT 105.—*E. carneum* p. 178, PEARSE 152.—*E. ramosum* p. 220, SARTORY 180.
- Eudoxoides spiralis* p. 6, LELOUP 119.—*Eudoxides* [sic] *spiralis* p. 5, LELOUP 120.—*E. mitra*, *spiralis* p. 9, LELOUP 122.—*E. mitra*, *spiralis* p. 234, TOTTON 203.
- Eugymnanthea* gen. n. p. 167 genotype *inquilina* sp. n. p. 167 fig. Gulf of Naples, PALOMBI Pubbl. Staz. zool. Napoli 15 1936.
- Euphysa flammea* p. 48, RANSON 164.
- Filellum serratum* p. 3, BILLARD 17.—*F. serpens* p. 125, FRASER 62.—*F. (Grammaria) serpens* p. 13, LELOUP 121.
- Forskalia contorta* p. 3, LELOUP 119.—*F. contorta* p. 10, sp. p. 11, LELOUP 122.—*F. sp.* p. 21, RICHET & PORTIER 167.—*F. sp.* p. 235, TOTTON 203.
- Galeolaria* sp. p. 177 fig., KORSCHOLT 105.
- Garveia annulata*, *groenlandica* p. 123, FRASER 62.
- Gastroblasta* sp. p. 170 fig., KORSCHOLT 105.
- Gemmaria implexa*, *costata*, *gemmosa* p. 118, *nitida* p. 123, *cladophora*, *sagittaria* p. 123, RUSSELL & REES 177.
- Geryonia proboscidalis* p. 191, RANSON 164.
- Gonactinia prolifera* p. 171 fig., KORSCHOLT 105.
- Gonothyraea clarki*, *gracilis*, *inornata* p. 124, FRASER 62.—*G. loveni* p. 160 fig., KORSCHOLT 105.
- Grammaria immersa* p. 125, FRASER 62.
- Güntherella implexa* p. 124, RUSSELL & REES 177.
- Gymnocoryne coronata* p. 122, RUSSELL & REES 177.
- Halecium schneideri* p. 9, BILLARD 17.—*H. annulatum*, *articulosum*, *corrugatum*, *densum*, *labrosum*, *parvulum*, *pygmaeum*, *tenellum* p. 124, *washingtoni*, *wilsoni* p. 125, FRASER 62.—*H. nanum* var. *alta* p. 4, LELOUP 120.—*H. bermudense* p. 7, *dyssymetrum* p. 7 fig., *nanum* p. 7, *tenellum* p. 9, LELOUP 121.
- Haleremita (Gonionemus) sp.* p. 167 fig., KORSCHOLT 105.
- Halicornaria indivisa* sp. n. p. 52 fig. Japan, FRASER Trans. roy. Soc. Can. (3) v 30 1936.—*H. elegans* p. 88 fig., *longirostris* p. 89 fig., HUNDT 93.
- Halicreas papillosum* p. 164, *glabrum* p. 167, RANSON 164.
- Haliscera conica* p. 171, *platygonon* p. 173, RANSON 164.
- Halocharis spiralis* p. 119, *gemmosa* p. 124, RUSSELL & REES 177.
- Hebella venusta* p. 15 fig., LELOUP 121.
- Helgicirrha* discussed pp. 253, 258, *cari* p. 253, *schulzei* p. 254, *dandruensis*, *medusifera*, *malayensis* p. 255, *madrassensis* p. 256, KRAMP 107.

Hippopodius hippopus p. 4, LÉLOUP 119.—*H. hippopus* p. 5, LÉLOUP 120.—*H. hippopus, glabrus* p. 7, LÉLOUP 122.—*H. hippopus* p. 232, TOTTON 203.

Homoeonema discussed p. 171, RANSON 164.

Hydra attenuata p. 95, KUWABARA 112.—*H.* reaction to stimuli, MITRA & MUKERJEE 133.—*H.* sp. p. 11 fig., STOLTE 195.—*H.* sp. p. 252, TÉTRY 197.—*H.* sp. p. 292, VALKANOV 207.

Hydractinia aggregata p. 123, FRASER 62.—*H. echinata* p. 178, PEARSE 152.

Hydrallmania distans p. 125, FRASER 62.

Idiella pristis p. 37 fig., LÉLOUP 121.

†*Jillua* discussed p. 161, YABE & SUGIYAMA 225.

†*Kerunia cornuta* p. 94 fig., ANDRE & LAMY 6.

Köllikeria fasciculata p. 56, RANSON 164.

†*Labechia variabilis* p. 13 fig., compacta sp. n. pp. 14, 90 fig., Etroeungtian Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

Lafœa dumosa, fruticosa, gracillima p. 125, FRASER 62.

Laodicea undulata p. 111, RANSON 164.—*L. undulata* p. 581 fig., RUSSELL 173.—*L. undulata* p. 17, RUSSELL 176.

Laomedea flexuosa p. 273, DEMEL 50.—*L.* sp. p. 160 fig., KORSCHOLT 105.—*L. dubia* p. 1 fig., LÉLOUP 120.—*L. coronata* p. 18, hummelincki sp. n. p. 19 fig. West Indies, kincaidi, longicyatha p. 20, macrotheca p. 21 fig., michael-sarsi sp. n. p. 22 fig. Dry Tortugas, raridentata p. 23, sargassi p. 24, sinuosa sp. n. p. 25 fig. West Indies, spinulosa var. minor p. 26, tottoni sp. n. p. 26 fig. Dry Tortugas, LÉLOUP Mém. Mus. Hist. nat. Belg. (2) 2 1935.—*L. loveni* p. 430, PRECHT 160.

Lensia subtilis, truncata p. 6, LÉLOUP 119.—*L. conoidea, multicristata, profunda*, sp. p. 235, TOTTON 203.

Leuckartiara octona p. 75, nobilis p. 77, grimaldi sp. n. p. 78 fig. Azores, RANSON Res. Camp. sci. Monaco 92 1936.

Liriope mucronata p. 173 fig., KORSCHOLT 105.—*L. exigua* p. 189, eurybia, tetraphylla p. 190, RANSON 164.—*L. exigua* p. 17, RUSSELL 176.

Lovenella clausa p. 593, RUSSELL 174.

Lytoscyphus marginatus p. 31, LÉLOUP 121.

Melicerium octocostatum p. 17, RUSSELL 176.

†*Milleporella* discussed p. 159, fasciculata sp. n. p. 184 figs. Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.

†*Milleporidium* discussed p. 160, steinmanni nom. n. for *M. remesi*? Yabe & Toyama p. 185 figs., lamellatum sp. n. p. 187 figs., arinokiense sp. n. p. 187 figs., fasciculatum sp. n. p. 188 figs., styliferum sp. n. p. 188 figs., hanabataense sp. n. p. 189 figs., sómaense sp. n. p. 189 figs., Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.

†*Millestroma* discussed p. 159, YABE & SUGIYAMA 225.

Mitrocoma polydiademata p. 17, RUSSELL 176.

Mitrocomium sp. p. 592, RUSSELL 174.

Monobrachium parasitum p. 123, FRASER 62.

Monostaechas quadridens forma stechowi form. n. p. 2 fig. Easter Island, LÉLOUP Bull. Mus. Hist. nat. Belg. 11 34 1936.

Muggiaea atlantica, kochi p. 19, GRAN, HENTSCHEL & RUSSELL 70.—*M.* sp. p. 177 fig., KORSCHOLT 105.—*M. atlantica, kochi* p. 17, RUSSELL 176.

†*Myriopora* discussed p. 157, YABE & SUGIYAMA 225.

Nectalia loligo p. 236, TOTTON 203.

Nectopyramis thetis p. 6, LÉLOUP 122.—*N.* sp. n. ? p. 232 Bermuda, TOTTON Zoologica New York 21 1936.

Nemopsis bachei p. 178, PEARSE 122.

Neoturrsi pileata p. 73 fig., RANSON 164.

Obelia dichotoma p. 3, BILLARD 17.

O. borealis, dichotoma, dubia, geniculata, longissima, plicata p. 124, FRASER 62.—*O.* p. 19, GRAN, HENTSCHEL & RUSSELL 70.—*O. geniculata* p. 52, HAMMETT 77.—*O.* sp. p. 61, HAMMETT 78.—*O.* sp. p. 65, HAMMETT 79.—*O.* sp. p. 30 fig., ROBSON 169.—*O. geniculata* p. 219 fig., flabellata, dichotoma p. 219, SARTORY 180.—*O. geniculata* ? p. 257, VALKANOV 207.

- Oceania armata* p. 57, RANSON 164.
Otocanna funeraria p. 113, RANSON 164.
Olin dias phosphorica p. 1018 fig., WEILL 215.
Oonautes gen. n. genotype *hanseni* sp. n. p. 43 fig. Morocco, DAMAS Mém. Soc. roy. Sci. Liège (4) 1 1936.
Ophiodes corrugata, gracilis, p. 125, FRASER 62.—*O. corrugata* sp. n. p. 504 fig. Queen Charlotte Islands, FRASER J. biol. Board Canada 1 6 1935.
Ostroumovia inkermanika pp. 277, 289 fig., VALKANOV 203.—*O. inkermanika* pp. 257, 274, 277, 280, 282, 292 fig., VALKANOV 207.
Pandaea conica p. 84 fig., *rubra* p. 91, RANSON 164.
Pantachogon rubrum p. 147 fig., RANSON 164.
†*Parallelopora* subgen. of *Stromatopora* discussed p. 155, YABE & SUGIYAMA 225.
†*Parastromatopora* subgen. n. (of *Stromatopora*) type *P. japonica* sp. n. pp. 156, 176 figs., *subjaponica* sp. n. p. 178 figs., *crassifibra* sp. n. p. 179 figs., *kiiensis* sp. n. p. 179 figs., *mitodaensis* sp. n. p. 179 figs., *minutissima* sp. n. p. 180 figs., *memoria-naumanni* p. 180 figs., var. *tenuissima* var. n. p. 181 figs., *inouei* sp. n. p. 181 figs., *kotoi* sp. n. p. 182 figs., var. *tosaensis* var. n. p. 182 figs., Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.
Pegantha smaragdina p. 175 fig., KORSCHOLT 105.
Pelmatohydra oligactis, FINKELSTEIN & POLJAKOW 59.—*P. oligactis* p. 204 fig., MCCONNELL 125.—*P. oligactis, pseudo-oligactis* p. 124, MILLER 132.
Pennaria tiarella p. 251, BAKER 10.—*P. disticha* var. *australis* p. 3, BILLARD 17.—*P. tiarella* p. 164 fig., sp. p. 171 fig., KORSCHOLT 105.—*P. tiarella* p. 392, PUCKETT 161.
Perigonomus repens, serpens p. 123, FRASER 62.—*P. serpens* p. 505, FRASER 63.
Perinema cerberus p. 141, REES 166.
Physalia arethusa p. 328 fig., BOUXIN 19.—*P. physalis* p. 6, LELOUP 120.—*P. physalis* p. 24, LELOUP 122.—*P. pelagica* p. 178, PEARSE 152.—*P. pelagica* p. 4, RICHET & PORTIER 167.—*P. sp. ? arethusa* p. 143, STELFOX 189.—*P. physalis* p. 237, TOTTON 203.
Physophora hydrostatica p. 14, LELOUP 122.—*P. borealis* p. 17, RUSSELL 176.
Plumatella sp. p. 87 fig., HUNDT 93.
Plumularia obliqua p. 9, BILLARD 17.—*P. lagenifera, setacea* p. 126, FRASER 62.—*P. setacea* p. 2, sargassi p. 4, LELOUP 120.—*P. margaretta* p. 54 fig., sargassi p. 55 fig., LELOUP 121.—*P. pinnata* p. 214, NOUVEL 141.
Podocoryne carnea p. 468, PRECHT 160.
Pontia gen. n. p. 1 genotype *ostroumowi* sp. n. p. 1 fig. Black Sea, PASPALLEW Arb. biol. Meeresta. Varna 5 1936.—*Pontia* gen. n. genotype *ostroumowi* sp. n. p. 311 fig. Sea of Azov, PASPALLEW Zool. Anz. Leipzig 115 1936.
Porpita porpita p. 3, LELOUP 119.—*P. porpita* p. 5, LELOUP 120.—*P. porpita* p. 238, TOTTON 203.
Praya dubia ? p. 232, TOTTON 203.
Protoerrina discussed p. 99, *stylifera* p. 101 fig., BROCH 22.
Pterophysa (*Bathypphysa*) *studer*, sibogae p. 9, RUSSELL 176.
Ptychogena lactea p. 16, RUSSELL 176.
Pyrostephos vanhoeffeni p. 9, RUSSELL 176.
Ratarula sp. p. 180 fig., KORSCHOLT 105.
Rhizophysa eysenhardti, sp. p. 15, *conifera* p. 19, LELOUP 122.—*R. sp.* p. 237, TOTTON 203.
†*Rhizoporioidium* discussed p. 161, YABE & SUGIYAMA 225.
†*Rhizostromella appenina* p. 162, YABE & SUGIYAMA 225.
Rhopalonema velatum p. 137, *funerarium* p. 144, RANSON 164.
Rosacea cymbiformis p. 4, LELOUP 119.—*R. cymbiformis* p. 6, LELOUP 122.—*R. cymbiformis* ? p. 232, TOTTON 203.
†*Rosenella labechioides* sp. n. pp. 19, 94 fig., *latevesiculosa* sp. n. pp. 20, 95 fig., Etroeungtian Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

†*Roseoporella* gen. n. p. 485, *rhenana* sp. n. p. 487 fig. Devonian Germany, SPRIESTERSBACH Jahrb. preuss. geol. LdAnst. 55 1 1935.

Sarsia tubulosa p. 37 fig., HENSCHEL 82.—*S. princeps* p. 45, RANSON 164.—*S. princeps* pp. 16, 17, *flammea* p. 17, RUSSELL 176.

Scandia neglecta p. 50 fig., FRASER 64.—*S. mutabilis* p. 17 fig., LELOUP 121.

Selaginopsis cylindrica, mirabilis, pin-nata, trilateralis p. 125, FRASER 62.—*S. trilateralis* sp. n. p. 504 fig., Queen Charlotte Islands, FRASER J. biol. Board Canada 1 6 1935.

Sertularella fusiformis p. 5 fig., *medi-terranea* var. p. 7, BILLARD 17.—*S. albidia* p. 125, *conica, pinnata, polyzonias, rugosa, tanneri, tenella, tricuspidata, turgida* p. 126, FRASER 62.—*S. conica* p. 44, *minuscule* p. 45, *tenella* forma *peculiaris* form. n. p. 45 fig. West Indies, LELOUP Mém. Mus. Hist. nat. Belge (2) 2 1935.

Sertularia perpusilla p. 4, BILLARD 17.—*S. exigua* p. 50 fig., *pyriformis* sp. n. p. 51 fig., Japan, FRASER Trans. roy. Soc. Canada (3) v 30 1936.—*S. distans* var. *gracilis* forma *peculiaris* form. n. p. 47 fig. West Indies, *marginata, mayeri* p. 49, *rathbuni* p. 50 fig., *turbinata* p. 50, LELOUP Mém. Mus. Hist. nat. Belge (2) 1935.—*S. sp.* pp. 29, 30 fig., ROBSON 169.—*S. pumila* p. 218 fig., SARTORY 180.

†*Siphostroma* discussed p. 158, YABE & SUGIYAMA 225.

Sminthea eurygaster p. 145, RANSON 164.

Solmaris corona p. 213, RANSON 164.

Solmissus albescens p. 201, *incisa* p. 206, *marshalli* p. 208, RANSON 164.

†*Sphaeractinia dichotoma* p. 265 fig., POLJAK 157.

Staurocoryne defined p. 141, *filiformis* sp. n. p. 135 fig. Plymouth, *wortleyi, lovenii* p. 140, REES J. Mar. biol. Ass. Plymouth N.S. 21 1 1936.

Stauraphora mertensii p. 17, RUSSELL 176.

Stegopoma fastigiatum p. 12, LELOUP 121.

Stephanomia bijuga, rubra p. 3, LELOUP 119.—*S. rubra* p. 12, *S. (?) richardi* sp. n. p. 13 fig. Atlantic, LELOUP Res. Camp. sci. Monaco 93 1936.—*S.*

cara, convoluta p. 9, *bijuga* pp. 9, 16, RUSSELL 176.—*S. amphitridis* p. 236, TOTTON 203.

†*Stictostroma* gen. n. p. 77, *mammilla-tum* p. 78 fig., *erienne* sp. n. p. 81 fig. Devonian Ohio, *huronense* sp. n. p. 83 fig. Devonian Michigan, *alpenense* sp. n. p. 85 fig. Devonian Michigan, *insolutum* sp. n. p. 86 fig. Devonian Ohio, *problematicum* p. 88 fig., PARKS Univ. Toronto Stud. Geol. 39 1936.

Stomatoca pterophylla p. 63, RANSON 164.

†*Stromactinia triasica* p. 162, YABE & SUGIYAMA 225.

†*Stromatoceryum eximium* sp. n. pp. 16, 91 fig. Etroeungtian Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

†*Stromatopora* discussed p. 155, subgen. p. 156, *torngusti* p. 162, *saccoi, virgilioi, costai* p. 163, *moluccana* p. 164, *tibetica* p. 165, YABE & SUGIYAMA 225.—*S. evolutionary trends* p. 69, RIPPER 168.—*S. concentrica, constellata* p. 81, *S. (Syringostroma) barretti* p. 91, GOLD-RING 68.

†*Stromatoporella* discussed p. 90, *granulata* p. 95 fig., var. *distans* var. n. p. 100 fig. Devonian Ontario, *selwyni* p. 101 fig., *tuberculata* p. 104 fig., *cellulosa* p. 108 fig., *elevata* sp. n. p. 110 fig. Devonian Ontario, *kayi* sp. n. p. 111 fig. Devonian Ohio, PARKS Univ. Toronto Stud. Geol. 39 1936.

†*Stromatoporellata mamillaris* p. 162, YABE & SUGIYAMA 225.

†*Stromatoporellina* discussed p. 157, *S. (?) undulata* sp. n. p. 184 figs. Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.

†*Stromatoporidium globosum* p. 163, YABE & SUGIYAMA 225.

†*Stromatostroma triasica* p. 162, YABE & SUGIYAMA 225.

Stylaster discussed p. 8, *S. (Eu-Stylaster) eximius* forma *typica* nom. n. p. 18 fig. Philippine Is., forma *atlantica* form. n. p. 20 fig. N. Atlantic, forma *minor* p. 22 fig., *crassior* sp. n. p. 23 fig. Mauritius, *gracilis* p. 26 fig., *profundiporus* sp. n. forma *typica* form. n. p. 29 fig. Japan, forma *crassicaulis* form. n. p. 31 fig. Japan, *sanguineus* p. 33 fig., *asper* p. 36 fig., *echinatus* sp. n. p. 39 fig. W. Indies, aff. *echinatus* p. 41 fig., *dentatus*

sp. n. p. 42 fig. Japan, filigranus p. 44 fig., microstriatus sp. n. p. 47 fig. Japan, S. (Allopora) norvegicus forma atlantica form. n. p. 49 fig. N. Atlantic, forma pacifica form. n. p. 52 fig. N. Pacific, carinatus sp. n. p. 54 fig. Japan, boreopacificus forma typica nom. n. p. 56 fig. Japan, forma incrassata form. n. p. 61 fig. Japan, aff. boreopacificus p. 62 fig., nobilis p. 63 fig., subviolaceus ? p. 66 fig., solidus p. 68 fig., bocki sp. n. p. 70 fig. Gilbert Island, scabiosa p. 72 fig., bithalamus sp. n. p. 74 fig. Faden Deep, granulosus p. 76 fig., sp. p. 79 fig., S. (Stenohelia) complanatus p. 81 fig., BROCH Avh. Norske Vid.-Akad. Oslo 1936 8.—S. elegans p. 25, BROCH 21.

Sulculeolaria quadrivalvis p. 4, LELOUP 119.

Syncoryne mirabilis p. 123, FRASER 62.—Syncoryna [sic] lovenii p. 140, REES 166.—S. cylindrica p. 122, RUSSELL & REES 177.

Syntheicum cylindricum var. pusilla p. 31 fig., tubithecum p. 33, LELOUP 121.

†*Syringostroma* evolutionary trends p. 69, RIPPER 168.

Thalassophyes crystallina p. 9, RUSSELL 176.

Thaumantias maeotica discussed p. 1, PASPALEW 148.—*T. maeotica p. 311, PASPALEW 149. — Taumantias [sic] maeotica pp. 275, 288 fig., VALKANOV 206.—Thaumantia [sic] maeotica pp. 276, 281, 295 fig., VALKANOV 207.*

Thaumatoscyphus distinctus p. 159 fig., HANAOKA 80.

Thuriaria alba, argentea, dalli, distans, fabricii, similis, thuiariodes p. 126, FRASER 62.—T. distans p. 504 fig., FRASER 63.

Thyroscyphus intermedius forma peculiaris form. n. p. 33 fig. West Indies, LELOUP Mém. Mus. Hist. nat. Belg. (2) 2 1935.

Tiara sp. p. 160 fig., KORSCHOLT 105.

Tiarrana rotunda p. 67 fig., RANSON 164.

†*Tosastroma gen. n. p. 158 type tokunagai sp. n. p. 185 figs., kiiensis sp. n. p. 185 figs., Jurassic Japan, YABE & SUGIYAMA Sci. Rept. Tôhoku Imp. Univ. 14 2 B 1935.*

†*Trupetostroma gen. n. p. 52, genotype warreni sp. n. p. 55 fig. M, Devonian*

Canada, iowense sp. n. p. 57 fig. U. Devonian Iowa, coralvillense p. 60 fig., planulatum p. 62 fig., solidulum p. 64 fig., maculosum sp. n. p. 67 fig. Devonian Iowa.—*T. (?) incrustans p. 71 fig., T. (?) erraticum p. 74 fig., PARKS Univ. Toronto Stud. Geol. 39 1936.*

Tubiclava cornucopiae p. 123, FRASER 62.—T. cornucopiae p. 505, FRASER 63.

Tubularia aurea, crocea p. 123, FRASER 62.—T. aurea sp. n. p. 504 fig. Queen Charlotte Islands, FRASER J. biol. Board Canada 1 6 1935.—T. mesembryanthemum p. 165 fig., KORSCHOLT 105.—T. crocea p. 178, PEARSE 152.—T. implexa p. 124, RUSSELL & REES 177.—T. larinx p. 220, SARTORY 180.

Turris neglecta ? p. 123, FRASER 62.—T. neglecta ? p. 505, FRASER 63.

Turritopsis nutricula p. 163 fig., KORSCHOLT 105.

Urashimea maasi p. 123, RUSSELL & REES 177.

Verella sp. p. 180 fig., KORSCHOLT 105.—V. spirans p. 3, LELOUP 119.—V. spirans pp. 5, 6, LELOUP 120.—V. spirans p. 25, LELOUP 122.—V. sp. p. 12, RICHT & PORTIER 167.—V. sp. ? spirans p. 142, STELFOX 189.—V. vellela p. 238, TOTTON 203.

Ventromma halecioides p. 51, LELOUP 121.

Vogtia pentacantha p. 7, LELOUP 122.—V. glabra p. 232, TOTTON 203.

Zanclea implexa p. 107 fig., var. neapolitana p. 118, gemmosa p. 107 fig., costata p. 118, protecta p. 122, orientalis, dichotoma, maasi p. 123, hargitti, sessilis p. 124, RUSSELL & REES 177.

Zancleopsis dichotoma p. 123, RUSSELL & REES 177.

Zancloidea philippina p. 130, RUSSELL & REES 177.

GRAPTOLITOIDEA.

†*Abiesgraptus gen. n. p. 3, multiramosus p. 4 fig., deubeli p. 6 fig., tenuiramosus p. 7 fig., ramsbachensis p. 8 fig., spp. n. Silurian Thuringia, HUNDT Z. Naturw. Halle 91 1-1935.*

†*Acanthograptus candelabrum sp. n. p. 208 fig. Cambrian Australia, CHAPMAN & THOMAS Proc. Roy. Soc. Victoria 48 2 1936.*

†*Akidograptus ascensus* p. 23 figs., BULMAN 25.

†*Amplexograptus* aff. *coelatus* pp. 61, 91 fig., *confertus* p. 91, BULMAN 24.

†*Archaeocryptolaria recta* p. 198 fig., var. *flexilis* var. n. p. 198 fig., *skeatsi* p. 199 fig., *flabelloides* sp. n. p. 199 fig., Cambrian Australia, CHAPMAN & THOMAS Proc. Roy. Soc. Victoria 48 2 1936.

†*Archaeolafoea longicornis* p. 199 fig., *monogettæ* p. 200 fig., *serialis* sp. n. p. 201 fig., *fruticosa* sp. n. p. 201 fig., Cambrian Australia, CHAPMAN & THOMAS Proc. Roy. Soc. Victoria 48 2 1936.

†*Azygograptus suecicus* p. 44 fig., *A. ? oelandicus* sp. n. p. 46 fig., Lower Orthoceras Limestone Öland, BULMAN Ark. Zool. Stockholm 28A 17 1936.—*A. sp. n.* p. 63, GOLDRING Bull. New York St. Mus. Albany 303 1935.

†*Bryograptus clarkei*, cf. *divergens* p. 268, var. *subsimus* var. n. p. 268 fig., *hunnebergensis* p. 269 fig., cf. *lapworthi* p. 270, *simplex* p. 270 fig., *victoria* p. 270, sp. ? p. 293 fig., *B. ? antiquus* p. 266, var. *inusitatus* var. n. p. 267 fig., Ordovician New Zealand, BENSON & KEBLE Trans. Proc. Roy. Soc. N.Z. 65 3 1935.—*B. hunnebergensis* p. 81, *kjerulfi* p. 83, BULMAN 24.

†*Cactograptus crassus* p. 207 fig., *flexispinosus* sp. n. p. 207 fig., *plumigerus* sp. n. p. 208 fig., CHAPMAN & THOMAS Proc. Roy. Soc. Victoria 48 2 1936.

†*Chaunograptus gemmatus* ? p. 204 fig., CHAPMAN & THOMAS 31.

†*Climacograptus scharenbergi* pp. 48, 90 fig., *orthoceratophilus* p. 93 fig., *bekkeri* (= *haljstens*) p. 93 fig., *diplacanthus* p. 93 fig., *typicalis* p. 93 fig., BULMAN 24.—*C. spinifer* p. 63 fig., *typicalis* p. 63 fig., GOLDRING 68.—*C. largivirgularis* sp. n. p. 31 fig., Silurian Thuringia, HUNDT Z. Naturw. Halle 91 1 1935.—*C. scalaris* p. 82 fig., HUNDT 93.—*C. scalaris* pp. 11, 43 fig., cf. *scalaris* p. 53 fig., *rectangularis* p. 13 fig., *medius* p. 14, cf. *medius* p. 53 fig., sp. p. 14 fig., IANISHEVSKY 95.

†*Clonograptus abnormis* p. 270 fig., *flexilis* cf. *magnificus* p. 271, *rigidus* p. 271 fig., *tenellus* p. 271 fig., var. *callavei* p. 271, var. *kingi* var. n. p. 271 fig., Ordovician New Zealand, BENSON

& KEBLE Trans. Proc. Roy. Soc. N.Z. 65 3 1935.—*C. tenellus* p. 70 fig., BULMAN 24.

†*Corynoides* sp. p. 63, GOLDRING 68.

†*Cryptograptus* cf. *antennarius* p. 290, BENSON & KEBLE 14.—*C. circinus* p. 381 fig., *hopkinsoni* p. 381, BENSON, KEBLE, KING & MCKEE 15.

†*Cyrtograptus murchisoni* p. 39 fig., IANISHEVSKY 95.

†*Dendrograptus rigidus* sp. n. p. 16 fig., Lower Orthoceras Limestone Öland, BULMAN Ark. Zool. Stockholm 28A 17 1936.

Dichograptidae discussed p. 63, BULMAN 24.

†*Dichograptus octobrachiatus* p. 273 fig., BENSON & KEBLE 14.

†*Dicranograptus nicholsoni* p. 71 fig., GOLDRING 68.

†*Dictyonema macgillivrayi* p. 266 fig., BENSON & KEBLE 14.—*D. cotyledon*, *dubium*, *rhinanthiforme* p. 15, *flabelliforme* p. 66 fig., BULMAN 24.—*D. multiramum* p. 63 fig., *arbusculum* p. 71 fig., GOLDRING 68.

†*Didymograptus adamantinus* p. 280 fig., *affinis* p. 280 fig., *artus* p. 280 fig., cf. *aureus* p. 281, *bartrumi* sp. n. p. 281 fig., *bidens* p. 281, *dependulus* p. 281 fig., cf. *ellesi* p. 282 fig., *eocaduceus* p. 282 fig., cf. *euodus*, *extensus* p. 282 fig., cf. *extensus* p. 293 fig., *extensus* ? p. 283 fig., *extensus-nitidus* trans. p. 282 fig., *hirundo* p. 282, *nitidus* p. 282 fig., *patulus* p. 282, *nitidus-patulus* trans. p. 282 fig., *gracilis* p. 283, *harrisi* p. 283 fig., *latus* p. 284 fig., *mundus* p. 284 fig., *nicholsoni* var. *aotea* var. n. p. 284 fig., var. *planus* p. 285 fig., *pritchardi* p. 285, *protobifidus* p. 285 fig., *procumbens* p. 286, *similis* p. 286 fig., cf. *simulans* p. 286 fig., *taylori* p. 286 fig., Ordovician New Zealand, BENSON & KEBLE Trans. Proc. Roy. Soc. N.Z. 65 3 1935.—*D. suecicus* p. 379 fig., BENSON, KEBLE, KING & MCKEE 15.—*D. callotheca* p. 23 fig., *cucullus* p. 23, *formosus* sp. n. p. 24 fig., Lower Orthoceras Limestone Öland, *acutidens*, *geometricus*, *nicholsoni*, var. *planus* p. 26, *gracilis* mut. p. 26 fig., *minutus* p. 28 fig., *extensus* p. 75 fig., *hirundo* p. 75 fig., *praenuntius* p. 77 fig., *patulus* p. 77 fig., *bifidus* p. 84 fig., *murchisoni* p. 84 fig., *protobifidus*, *nanus* p. 84, BULMAN Ark. Zool. Stockholm

28A 17 1936.—*D. artus* p. 28, DECKER 47.—*D. protobifidus* p. 68, *bifidus* p. 68, RIPPER 168.

†*Dimorphograptus elongatus* p. 23 figs., BULMAN 25.

†*Diplograptus* cf. *inutilis* p. 289, cf. *longicaudatus* p. 290, *D. ?* sp. p. 293 fig., BENSON & KEBLE 14.—*D. vesperinus* p. 63 fig., cf. *nexus* p. 71, GOLDRING 68.—*D. cystiferus* sp. n. p. 39 fig. Silurian Germany, HUNDT Palaeont. Z. Berlin 18 1-2 1936.—*D. palmeus* p. 79 figs., *modestus* p. 82 fig., *laasiae* sp. n. p. 83 fig., HUNDT Z. Geschiebeforsch. Berlin 12 2 1936.—*D. sp.* p. 17 fig., *D. (Orthograptus) vesiculosus* p. 15 fig., *D. (O. ?)* sp. p. 16 fig., *bellulus* p. 42 fig., *D. (Mesograptus) modestus* p. 17 fig., *D. (Petalograptus) palmeus* p. 19, LANISHEVSKY 95.—*D. (Orthograptus) quadrimucronatus* p. 134 fig., *calcaratus* var. *tenuicornis* p. 134 fig., NAYLOR 140.

†*Glyptograptus dentatus* pp. 49, 88 fig., *teretiusculus* pp. 57, 88 fig., BULMAN 24.

†*Goniograptus crinitus*, *thureau* p. 272, *G. (?) macer* p. 272 fig., sp. juv. p. 293 fig., BENSON & KEBLE 14.

†*Graptolithus* suppression proposed p. 110, STILES 194.

†*Isograptus caduceus* p. 287 fig., var. *primula* p. 287 fig., var. *lunata* p. 288 fig., var. *victoriae* p. 288 fig., *hastatus* p. 288 fig., BENSON & KEBLE 14.—*I. gibberulus* pp. 29, 31 fig., BULMAN 24.—*I. gibberulus* p. 272 fig., BULMAN 26.

†*Lasiograptus hystrix* p. 93 fig., BULMAN 24.—*I. (Thysanograptus) eucharis* p. 63 fig., GOLDRING 68.

†*Linograptus thuringiacus* sp. n. pp. 8, 12, fig., *creunitzii* sp. n. p. 13 fig., *posthumus* p. 33 fig., sp. p. 34 fig. Silurian Thuringia, HUNDT Z. Naturw. Halle 91 1 1935.

†*Loganograptus logani* p. 273, BENSON & KEBLE 14.

†*Marsipograptus* gen. n. p. 385, *bullatus* sp. n. p. 385, *percensis* sp. n. p. 385 fig. Ordovician North America, RUEDEMANN J. Paleont. Menasha Wis. 10 5 1936.

†*Mastigograptus* cf. *gracillimus* p. 202 fig., *tenuiramosus* p. 202 fig., *circularis* p. 203 fig., *arundinaceus* p. 203 fig., CHAPMAN & THOMAS 31.—*M. sp. n.* cf.

simplex p. 63, sp. n. p. 63, GOLDRING Bull. New York St. Mus. Albany 303 1935.

†*Mesograptus* sp. p. 387 figs., RUEDEMANN 172.

†*Monograptus* genotype proposed *priodon* p. 110, STILES 194.—*M. dubius* p. 421 fig., COX 37.—*M. nilssoni* p. 212 fig., cf. *comis* p. 213 figs., cf. *kosoviensis* fig., *roemeri* p. 215 fig., HABERFELNER 74.—*M. priodon* p. 44 fig., HUNDT 92.—*M. machäroides* p. 10 fig., *weigelti* p. 29 fig., *cidarisformis* p. 30 fig., spp. n. Silurian Thuringia, *colonus* p. 33 fig., *flemingi* p. 34 fig., *nilssoni* p. 34 fig., HUNDT Z. Naturw. Halle 91 1 1935.—*M. cf. regularis* p. 21 fig., *jaculum* p. 22 fig., aff. *nudus* pp. 23, 50 fig., *dubius* var. var. n. p. 24 fig., sp. cf. *revolutus* p. 24 fig., aff. *varians* pp. 25, 51 fig., *chimaera* var. *salweyi* p. 25 fig., *sander-soni* p. 26 fig., *incommodus* p. 27 fig., *tenuis* p. 27 fig., *vomerinus* p. 28 fig., *priodon* p. 29 fig., *pandus* p. 31 fig., cf. *acus* p. 32 fig., *turriculatus* p. 32 fig., aff. *turriculatus* pp. 33, 51 fig., cf. *lobiferus* p. 33 fig., *clingani* p. 34 fig., aff. *convolutus* pp. 35, 52 fig., *spiralis* p. 35 fig., *arcticus* sp. n. p. 36 fig., *communis* p. 37 fig., Silurian Novaya Zemlya, LANISHEVSKY Trans. Arctic Inst. Leningrad 25 1935.—*M. spp.* p. 23, cf. *capillaceus* p. 23, KETTNER & REMES 98.—*M. bohemicus* p. 132 fig., *exiguus* p. 132 fig., *barrandei* p. 132 fig., cf. *decipiens* p. 132 fig., *undulatus* p. 133 fig., cf. *tortilis* p. 133 fig., NAYLOR 140.

†*Oncograptus upsilon* p. 272 fig., sp. p. 272 fig., BULMAN 26.

†*Palaeodictyota* aff. *clintonensis* p. 79, GOLDRING 68.

†*Phyllograptus* evolutionary trends p. 68, RIPPER 168.—*P. angustifolius* p. 288 fig., *anna* p. 289, *ilicifolius* p. 289 fig., cf. *typus* p. 289, BENSON & KEBLE 14.—*P. angustifolius* p. 39 fig., BULMAN 24.

†*Protohalecium* gen. nov. p. 203 genotype *hallianum* sp. n. p. 204 fig. Cambrian Australia, CHAPMAN & THOMAS Proc. Roy. Soc. Victoria 48 2 1936.

†*Pterograptus elegans* p. 380 fig., BENSON, KEBLE, KING & MCKEE 15.

†*Rastrites peregrinus* p. 38 fig., LANISHEVSKY 95.

†*Retiolites* genotype proposed *geinitzianus* p. 110, STILES 194.—*Retiolites swanstoni* p. 43 fig., HUNDT 92.—*R. (Gladiograptus) geinitzianus* p. 20 fig., LANISHEVSKY 95.

†*Rhaphidograptus* gen. n. p. 19; *törnquisti* p. 20 figs., BULMAN Geol. Mag. London 73.

†*Sigmagraptus* emended p. 272, *laxus* p. 273 fig., sp. p. 294 fig., BENSON & KEBLE 14.

†*Sphenoecium* gen. n. p. 205, *filicoides* p. 205 fig., *discoidalis* p. 205 fig. spp. n. Cambrian Australia, CHAPMAN & THOMAS Proc. Roy. Soc. Victoria 48 2 1936.

†*Strophograptus trichomanes* p. 290, BENSON & KEBLE 14.

†*Tetragraptus acclinans, amii* p. 274, *approximatus* p. 275 fig., *chapmani, decipiens*, var. *bipatens* p. 275, *fruticosus* p. 275 fig., var. *conferticosus* var. n. p. 276 fig., *harti* p. 276 fig., cf. *harti* p. 294 fig., *pendens* p. 276 fig., *postlethwaiti* p. 294 fig., cf. *postlethwaiti* p. 277 fig., *pygmaeus* p. 277 fig., *quadribrachiatus* p. 277 fig., *serra* p. 278, *similis* p. 278 fig., *tarazacum* p. 279 fig., *whitelawii* p. 279 fig., *woodi* p. 279 fig., Ordovician New Zealand, BENSON & KEBLE Trans. Proc. Roy. Soc. N.Z. 65 3 1935.—*T. reclinatus* p. 378 fig., BENSON, KEBLE, KING & MCKEE 15.—*T. bigsbyi* pp. 30, 43 fig., *phylograptoides* pp. 34, 43, BULMAN 24.—*T. reclinatus* p. 28, DECKER 47.—*T. fruticosus* p. 68, RIPPER 168.

†*Thallograptus cf. succulentus* p. 209 fig., CHAPMAN & THOMAS 1.

†*Triograptus otagoensis* sp. n. p. 279 fig. Ordovician New Zealand, BENSON & KEBLE Trans. Proc. Roy. Soc. N.Z. 65 3 1935.

SCYPHOZOA.

Aequorea coerulescens p. 709, KOIZUMI & HOSOI 100.

Atolla wyvillei p. 4 fig., sp. pp. 308, 311, 322, 329, 339, 353, 356, 403 fig., THIEL 198.

Aurelia aurita p. 274, DEMEL 50.—*A. aurita* p. 25, HENSCHEL 82.—*A. aurita* p. 184 fig., KORSCHOLT 105.—*A. aurita* p. 70 fig., LAMBERT 113.—*A. aurita* p. 1, THIEL 198.—*A. aurita* p. 303, VALKANOV 207.

Brochiella sezradiata p. 19, CARLGREN 30.

Capria sturdzii p. 56 fig., THIEL 198.

Cassiopeia xamachana p. 7 fig., THIEL 198.

Charybdea rastonii p. 449, ISHIDA 96.—*Charybdea marsupialis* pp. 5, 187, 196, 201, 202, 207, 208, 211, 212, 218, 221, 225–228, 232, 240, 241 fig., *xaymacana* pp. 180, 193, 206, 214, 215, 216, 227, 230, 231 fig., *rastoni* pp. 243–245, 247, 249, 269 fig., THIEL 198.

Chiropsalmus quadrigatus pp. 5, 173, 174 fig., *buitendijki* p. 175 fig., THIEL 198.

Chrysaora sp. p. 188 fig., KORSCHOLT 105.—*C. isosceles* p. 70 fig., LAMBERT 113.—*C. isosceles* p. 28 fig., ROBSON 169.—*C. hysoscella* p. 473 fig., THIEL 198.

Craterolophus tethys p. 19, CARLGREN 30.—*C. tethys* pp. 48, 57, 69, 73, 83, 92, 99, 118 fig., THIEL 198.

Cyanea capillata p. 274, DEMEL 50.—*C. capillata* p. 33 fig., HENSCHEL 82.—*C. capillata* p. 709, KOIZUMI & HOSOI 100.—*C. capillata* p. 70 fig., *lamarcki* p. 75, LAMBERT 113.—*C. capillata, lamarcki* p. 17, RUSSELL 176.—*C. aunaskala* p. 472 fig., *capillata* p. 476 fig., THIEL 198.

Dactylometra pacifica p. 709, KOIZUMI & HOSOI 100.—*D. quinquecirra* p. 178, PEARSE 152.—*D. quinquecirra* p. 478 fig., THIEL 198.

Depastrinae sub-fam. restricted p. 22, CARLGREN 30.

Depastromorpha gen. n. type *africana* sp. n. p. 1 fig. South Africa, CARLGREN K. svenska Vetensk. Akad. Handl. (3) 15 1 1935.

Depastrum cyathiforme p. 19, CARLGREN 30.

Desmonema chierchiana p. 475 fig., THIEL 198.

Drymonema victoria p. 474 fig., THIEL 198.

Gemmaria gemmosa p. 818, WEILL 214.

Halicystus octoradiatus p. 7 fig., *steinigeri, antarcticus* p. 18, CARLGREN 30.—*H. octoradius* p. 191 fig., KORSCHOLT 105.—*H. octoradiatus* p. 214, NOUVEL 141.—*H. auricula* pp. 6, 43, 44, 63, 100, 138 fig., *octoradiatus* pp. 70, 71, 73, 83, 92, 103, 105, 106, 108, 110, 111, 115, 123, 126, 140 fig., THIEL 198.

Halimocyathus (?) *lagena* p. 19, CARLGREN 30.

Kishinouyia discussed p. 19, CARLGREN 30.

Kishinouyia sub.fam. n. p. 23, CARLGREN K. svenska Vetensk. Akad. Handl. (3) 15 1 1935.

Linnuche unguiculata pp. 4, 320, 373, 375, 376, 397 fig., *aquila* p. 320 fig., sp. pp. 327, 403 fig., THIEL 198.

Lipkea (*Capria*) *stephensoni* p. 19, CARLGREN 30.

Lucernaria pyramidalis p. 11 fig., *quadricornis*, *walteri*, *haekeli*, *australis* p. 18, CARLGREN 30.—*L. campanulata* p. 214, NOUVEL 141.—*L. campanulata* pp. 75, 97, 99 fig., sp. pp. 79, 131, 132 fig., *quadricornis* pp. 86, 88, 89, 93, 95 fig., THIEL 198.—*L. campanulata* nematocysts, WEILL 216.

Lucernariinae sub.fam. n. p. 23, CARLGREN K. svenska Vetensk. Akad. Handl. (3) 15 1 1935.

Lucernariopsis campanulata p. 18, *vanhöffeni* p. 19, CARLGREN 30.

Nausithoe punctata pp. 308, 376, 377 fig., sp. pp. 313, 321, 330, 331, 333, 334, 341, 349, 351, 362, 371, 394, 395, 403, 410 fig., THIEL 198.

Palephyra sp. p. 325 fig., THIEL 198.

Paraphyllina intermedia p. 269 fig., RANSON 163.—*P. intermedia* p. 335, THIEL 198.

Pelagia noctiluca, *perla* p. 192 fig., KORSCHOLT 105.—*P. noctiluca* p. 474 fig., THIEL 198.

Periphyllina hyacintha pp. 4, 408 fig., sp. pp. 323, 330, 336, 343, 347, 348, 355, 357, 362, 368 fig., *dodecabostrycha* p. 408 fig., THIEL 198.

Rhizostoma pulmo p. 303, VALKANOV 207.

Sanderia malayensis p. 479 fig., THIEL 198.

Sasakiella discussed p. 19, CARLGREN 30.—*S. cruciformis* pp. 45, 55 fig., THIEL 198.

Stenoscyphus discussed p. 18, CARLGREN 30.—*S. inabai* pp. 44, 84 fig., THIEL 198.

Stephanoscyphus corniformis sp. n. p. 175 fig. Japan, *racemosus* sp. n. p. 182 Japan, *mirabilis*, *fistularis* p. 182, KOMAI Mem. Coll. Sci. Kyoto (B) 11 3

1936.—*S. mirabilis* p. 535 fig., *fistularis* p. 535 fig., *racemosus*, *corniformis* p. 535, KOMAI 103.—*S. fistularis* pp. 379, 381, 382, 384, 386–388, 392 fig., *bianconis* p. 379 fig., THIEL 198.

Tamoya haplonema p. 194 fig., *quadrumania* p. 242 fig., THIEL 198.

Thaumatoscyphinae sub.fam. n. p. 22, CARLGREN K. svenska Vetensk. Akad. Handl. (3) 15 1 1935.

Thaumatoscyphus distinctus p. 19, CARLGREN 30.—*T. sp.* p. 82 fig., *distinctus* p. 108 fig., THIEL 198.

Tripedalia cystophora pp. 178, 181, 210 fig., THIEL 198.

ANTHOZOA.

ALCYONARIA.

Acanella arbuscula p. 243, *normani* p. 244, *eburnea* p. 245, DEICHMANN 49.

Acanthacis gen. n. p. 130 genotype *scabra* p. 131 fig., *austera* p. 132 fig., spp. n. W. Indies, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Acanthogorgia armata p. 149 fig., *aspera* p. 150 fig., *schrammi* p. 151 fig., *hirsuta*, *muricata*, *horrida*, *truncata* p. 153, DEICHMANN 49.

Acanthoptilum pourtalesii, *agassizii* p. 282, DEICHMANN 49.

Alcyonium discussed p. 30, *australe* sp. n. p. 31 fig. Gt. Barrier Reef, *haddoni*, *sollasi* p. 32, MACFADYEN Scient. Rep. Bt. Barrier Reef Exped. 5 2 1936.—*A. digitatum* p. 48, *rubistella* sp. n. p. 49 fig. Barbados, *glomeratum* p. 50, *palmatum*, var. *acule*, *bocagei*, *clavatum* p. 51, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Anthelia discussed p. 23, MACFADYEN 126.—*A. armata* sp. n. p. 6 fig. North Pacific, BROCH Avh. Norske Vid. Akad. Oslo 1935 1 1936.

Anthomastus gradiflorus p. 52 fig., *agassizii* p. 54 fig., *purpureus* p. 55, DEICHMANN 49.

Anthomuricea antillarum p. 148, DEICHMANN 49.

Anthoplexaura dimorpha p. 194 fig., KORSCHOLT 105.

Anthopodium rubens p. 37, DEICHMANN 49.

Anthoptilum grandiflorum p. 276, *murrayi* p. 277, *sertum* p. 278, DEICHMANN 49.

Anthothela grandiflora p. 78, DEICHMANN 49.

Balticina finmarchica p. 279, *christii* p. 280, DEICHMANN 49.

Bebryce grandis p. 125 fig., *cinerea* p. 126 fig., *parastellata* p. 127 fig., spp. n. W. Indies, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Briareum discussed p. 22, MACFADYEN 126.—*Briareum asbestinum* p. 79 fig., var. ? p. 80, DEICHMANN 49.—*B. sp.* fig., THORP 201.

Calcigorgia gen. n. type *spiculifera* sp. n. p. 22 fig. North Pacific, BROCH Avh. Norske Vid. Akad. Oslo 1935 1 1936.

Caliacis gen. n. p. 106, genotype *nutans* p. 107 fig., DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Caligorgia gracilis p. 158 fig., *verticillata* p. 159 fig., *flabellum* p. 161, *grimaldii* p. 161, DEICHMANN 49.—*C. verticillata* p. 119, TORTONESE 202.

Calyptrophora ijimai p. 26 fig., BROCH 20.—*C. trilepis* p. 171 fig., *josephinae* p. 172 fig., DEICHMANN 49.

Capnella discussed p. 48, *fungiformis* p. 48, *imbricata* p. 49, *lacertiliensis* sp. n. p. 49 fig., *rugosa* p. 51, Gt. Barrier Reef, MACFADYEN Scient. Rep. Gt. Barrier Reef Exped. 5 2 1936.

Cavernularia darwini, var. *binghami* p. 909, HICKSON 87.

Ceratoisis flexibilis p. 247, *simplex* p. 248, *ornata* p. 249, *grayi* pp. 249, 250, *palmae* p. 249, *macrospiculata*, *siemensii* p. 250, *grandis* ? p. 250, DEICHMANN 49.

Cespitularia erecta sp. n. p. 26 fig., *simplex*, *wisharti* p. 27, Gt. Barrier Reef, MACFADYEN Scient. Rep. Gt. Barrier Reef Exped. 5 2 1936.

Chelidonisis aurantiaca p. 253, *capensis* p. 253, DEICHMANN 49.

Chrysogorgia desbonni p. 228 fig., var. *thyrsiformis* var. n. p. 230 Barbados, *fewkesi* p. 230 fig., var. *multiflora* var. n. p. 231 fig. Dominica, *elegans* p. 231 fig., *squamata* p. 232 fig., *agassizii* p. 233 fig., DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Clavularia discussed pp. 22, 24, *inflata* var. *luzoniana* p. 24, MACFADYEN 126.—*C. rigida* sp. n. p. 12 fig., aff. *peterseni* p. 15 fig., North Pacific, BROCH Avh. Norske Vid. Akad. Oslo 1935 1 1936.—*C. modesta* p. 34, *tubaria* p. 35, *C. ? bathybius* p. 35 fig., *rudis* p. 36, DEICHMANN 49.

Coelogorgia palmosa p. 93 fig., *roxasi* sp. n. p. 96 fig. Philippine Is., BENISCH Zool. Anz. Leipzig 116 1936.

Corallium rubrum p. 116, TORTONESE 202.

†*Corallium* sp. p. 415, ZUFFARDI-COMERCI 230.

Cyathopodium elegans sp. n. p. 38 fig. Barbados, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Dendronephthya discussed p. 59, *bicolor*, *florida* p. 60, *heterocyathus* p. 61, *nigrotincta* p. 62 fig., *spinifera* p. 63, MACFADYEN 126.

Diodogorgia ceratosa p. 86, *nodulifera* p. 87 fig., DEICHMANN 49.

Distichoptilum gracile p. 265, DEICHMANN 49.

Echinomuricea atlantica p. 145 fig., *borealis*, *annectens*, *intermedia*, *scolopendra* p. 147, DEICHMANN 49.

Ellisella paraplexauroides p. 22 fig., *vermeuleni* p. 24 fig., *gruveli* p. 27 fig., spp. n. W. Africa, STIASNY Capita zool. The Hague 3 (2) 1936.—*E. paraplexauroides* p. 204, *vermeuleni* p. 205 spp. n. W. Africa, STIASNY Zool. Anz. Leipzig 113 1936.

Erythropodium discussed p. 22, MACFADYEN 126.—*E. caribaeorum* p. 77, *polyanthes* p. 77 fig., DEICHMANN 49.

Eubrandella nom. n. for *Lissogorgia* Verrill p. 128, *flabellum* p. 129 fig., DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Eumuricea atlantica p. 104, DEICHMANN 49.

Eunephthya rubiformis p. 17, *fruticosa* p. 19, BROCH 20.—*E. nigra* p. 60 fig., *glomerata* p. 61, *florida* p. 62, *rubiformis* p. 63 fig., *fruticosa* p. 64 fig., DEICHMANN 49.

Eunicella tenuis p. 92, *modesta* p. 93, DEICHMANN 49.—*E. ctenocelloides* sp. n. p. 17 fig. W. Africa, *verrucosa* p. 20 fig., STIASNY Capita zool. The Hague 8

(2) 1936.—*E. otenocelloides* sp. n. p. 204 W. Africa, STIASNY Zool. Anz. Leipzig 113 1936.—*E. verrucosa* p. 117 fig., TORTONESE 202.

Euplexaura abietina p. 20, *arbuscula* sp. n. p. 20 fig. North Pacific, BROCH Avh. Norske Vid. Akad. Oslo 1935 1 1936.—*E. maghrebensis* p. 7 fig., var. *gracilis* p. 9 fig., *purpureoviolacea* spp. n. p. 11 fig., STIASNY Capita zool. The Hague 8 (2) 1936.—*E. maghrebensis* sp. n. p. 201, var. *gracilis* var. n., *purpureoviolacea* sp. n. p. 202, West Africa, STIASNY Zool. Anz. Leipzig 113 1936.

Evagora discussed p. 22, MACFADYEN 126.—*E. incrustans* sp. n. p. 9 fig. North Pacific, BROCH Avh. Norske Vid. Akad. Oslo 1935 1 1936.

Filigella gracilis p. 147, DEICHMANN 49.

Funiculina quadrangularis p. 262, *armata* p. 263, DEICHMANN 49.

Gersemia mirabilis p. 66, DEICHMANN 49.

Gorgonia hartii p. 175, DEICHMANN 49.—*G. verrucosa* p. 178, PEARSE 152.

†*Graphularia wetherelli* p. 340, DAVIS 43.—*G. beyrichi* p. 88 fig., WIRTZ 220.

Gyrophyllum hironellei p. 286, DEICHMANN 49.

Heliopora discussed p. 369 fig., OKULITCH 143.

†*Heliopora edwardsana* p. 76 fig., HACKEMESSER 75.

Hicksonia discussed p. 23, MACFADYEN 126.

Hypnogorgia pendula p. 105 fig., DEICHMANN 49.

Iciligorgia discussed p. 68, *orientalis* p. 68, MACFADYEN 126.—*I. schrammi* p. 82 fig., DEICHMANN 49.

Iridogorgia pourtalesii p. 235 fig., DEICHMANN 49.

Isidella elongata p. 240, *lofotensis* p. 240, DEICHMANN 49.—*I. elongata* p. 122, TORTONESE 202.

†*Isis melitensis* p. 416, ZUFFARDI-COMERCI 230.

Junceella antillarum p. 204, *juncea* p. 214, DEICHMANN 49.

Keroeides richardi p. 89, DEICHMANN 49.

Kophobelemnon stelliferum p. 260, DEICHMANN 49.

Leiopiltilus a synonym of *Ptilosarcus* p. 8, DEICHMANN 48.

Lemnalia discussed p. 51, *brassica*, *elegans* p. 52, MACFADYEN 126.

Lepidisis caryophyllia p. 241, *longiflora* p. 242, DEICHMANN 49.

Leptogorgia virgulata p. 177 fig., *setacea* p. 178 fig., *hebes* p. 179 fig., *miniata* p. 180 fig., *sanguinolenta* p. 181 fig., *purpurea* p. 182 fig., sp. p. 184 fig., DEICHMANN 49.—*L. albipunctata* p. 29 fig., *purpureomaculata* p. 31 fig. spp. n. W. Africa, STIASNY Capita zool. The Hague 8 (2) 1936.—*L. sarmentosa* p. 120 fig., TORTONESE 202.

Lituarina amoyensis sp. n. p. 158 fig. S. China, Koo Nat. Sci. Bull. Univ. Amoy 1 2 1935.

Lobophyllum discussed p. 43, *crassum* p. 43, *crebriplicatum* p. 45, *gazellae*, *lighti* p. 46, *pauciflorum* p. 47 fig., var. *validum* p. 48, MACFADYEN 126.

Lophogorgia occidafriana sp. n. p. 28 fig. W. Africa, STIASNY Capita zool. The Hague 8 (2) 1936.

Metallogorgia splendens p. 226 fig., DEICHMANN 49.

Microspicularia gen. n. p. 28 genotype *Alcyonium pachyclados* p. 29 fig., Gt. Barrier Reef, *sphaerophora*, *globuliferum*, *digitulatum brachyclados*, *globuliferoides* p. 29, MACFADYEN Scient. Rep. Gt. Barrier Reef Exped. 5 2 1936.

Muricea muricata p. 100 fig., *laxa* p. 101 fig., *spicifera* p. 102 fig., *pendula* p. 103 fig., DEICHMANN 49.

Narella regularis p. 169 fig., *laxa* sp. n. p. 170 fig. W. Atlantic, *pauciflora* sp. n. p. 170 fig. West Indies, *versluysi*, *almanni* p. 171, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Neospongodes portoricensis p. 67 fig., *agassizii* sp. n. p. 69 fig. Cuba, *caribaea* sp. n. p. 70 fig. Martinique, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Nephthya discussed p. 56, *aurantiaca* p. 56, *gracillima* p. 57, *mollis* sp. n. p. 57 fig. Gt. Barrier Reef, MACFADYEN Scient. Res. Gt. Barrier Reef Exped. 5 2 1936.

Nephtthyigorgia discussed p. 64, *annectens* p. 64, *pinnata* p. 65, MACFADYEN 126.

Nicella obesa sp. n. p. 217 fig. W. Atlantic, *granifera* p. 218, *guadalupensis* p. 218 fig., *ramosa* p. 220, *americana* p. 220, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Nidalia occidentalis p. 56 fig., *rigida* sp. n. p. 57 fig. W. Indies, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Pachyclavularia discussed pp. 22, 25, *erecta* p. 25, MACFADYEN 126.

Paragorgia arborea p. 20, BROCH 20.—*P. arborea* p. 81 fig., DEICHMANN 49.

Paralemnalia discussed p. 53, *digitiformis* sp. n. p. 53 fig., *thyrsoides* p. 55, Gt. Barrier Reef, MACFADYEN Scient. Res. Gt. Barrier Reef Exped. 5 2 1936.

Paramuricea echinata sp. n. p. 135 fig. St. Croix, *placomus* p. 135 fig., *multispina* sp. n. p. 137 fig. W. Indies, *grandis* p. 137 fig., *borealis* p. 147, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.—*P. chamaeleon* p. 118 fig., TORTONESE 202.

Paraspongodes clavata p. 66, DEICHMANN 49.

Pavonaria finmarchia p. 33, *willemoesi* ?, sp. juv. p. 34, BROCH 20.

Pennatula grandis, *aculeata* pp. 283, 285, var. *laxa* p. 284, *bellissima* p. 283, *americana*, *phosphore* p. 284, *rubra*, *prolifera* p. 285, DEICHMANN 49.

Phyllogorgia dilatata p. 202, DEICHMANN 49.

Placogorgia mirabilis sp. n. p. 142 fig. Florida, *tenuis* p. 143 fig., *rudis* sp. n. p. 144 fig. Barbados, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Plexaura capoblancoi sp. n. p. 13 fig., W. Africa, STIASNY Capita zool. The Hague 8 (2) 1936.—*P. capoblancoi* sp. n. p. 203 W. Africa, STIASNY Zool. Anz. Leipzig 113 1936.

Plexauropsis mauretaniensis sp. n. p. 15 fig. W. Africa, *bicolor*, *tricolor*, *flavida*, *humilis* p. 17, STIASNY Capita zool. The Hague 8 (2) 1936.—*P. mauretaniensis* sp. n. p. 203 W. Africa, STIASNY Zool. Anz. Leipzig 113 1936.

Plumarella longispina p. 25, BROCH 20.—*P. portalesii* p. 156 fig., var. *robusta* var. n. p. 156 fig. Florida, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Primnoa resedaeformis p. 29 fig., forma *pacifica* p. 29 fig., *willei* p. 31 fig., BROCH 20.—*P. resedaeformis* p. 157, DEICHMANN 49.

†*Primnoa* sp. p. 88 fig., WIRTZ 220.

Primnoella polita sp. n. p. 162 fig., *delicatissima* p. 163 W. Atlantic, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Primnois humilis sp. n. pp. 251, 252 Florida, *ramosa* p. 251, *rigida* p. 251, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Protoptilum carpenterii p. 264, *aberrans*, *thomsonii*, *denticulatum*, *smithi* p. 264, DEICHMANN 49.

Pteroeides griseum, *lusitanicum* p. 285, DEICHMANN 49.

Pterogorgia bipinnata p. 195 fig., *americana* p. 196 fig., *sparsiramosa* p. 197 fig., *acerosa* p. 198 fig., var. *elastica* p. 199, *ellisiana* p. 199 fig., DEICHMANN 49.

Ptilosarcus undulatus p. 7, *guernei*, *brevicaulis*, *sinuosus*, *grayi* p. 8, DEICHMANN 48.

Radicipes verrilli p. 33, BROCH 20.—*R. gracilis* p. 237, *pleurocristatus* p. 236, *challengeri* p. 237, DEICHMANN 49.

Renilla mulleri p. 258, *reniformis* forma *typica*, forma *americana*, *kollikeri* p. 259, DEICHMANN 49.—*R. sp.* p. 195 fig., KORSCHOLT 105.

Rhipidogorgia flabellum p. 193 fig., *occatoria*, *coarctata*, *elegans* p. 193, DEICHMANN 49.

Rhizoxenia discussed p. 22, MACFADYEN 126.

Riisea paniculata p. 225 fig., DEICHMANN 49.

Sarcodictyon discussed pp. 22, 24, *herdmani* p. 24, MACFADYEN 126.—*S. rugosum* p. 37, DEICHMANN 49.

Sarcophyton discussed p. 41, *digitatum* p. 41, *elegans*, *glaucum*, *trocheliophorum* p. 42, MACFADYEN 126.

Scirpearia atlantica p. 206 fig., *ochracea* pp. 207, 208, 216, *flagellum* pp. 208, 215, *barbadensis* p. 208 fig., *funiculina* p. 210 fig., *grandiflora* sp. n. p. 211 fig. Martinique, *elongata* p. 212 fig., *grandis* p. 214 fig., *extans* p. 216, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Scleracis guadaloupensis p. 108 fig., *petrosa* sp. n. p. 110 fig. W. Atlantic, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Sclerogorgia mexicana p. 88, DEICHMANN 49.

Scleroptilum grandiflorum p. 266, *gracile* p. 266, DEICHMANN 49.

Sinularia discussed p. 32, *conferta* var. *gracilis* var. n. p. 32 fig., *dura* p. 33, *flexibilis* p. 34, *gardineri* p. 34 fig., *gyrosa* p. 36, *leptoclados* p. 37, *lochmodes* p. 37 fig., *polydactyla* p. 38 fig., *robusta* sp. n. p. 39 fig., Gt. Barrier Reef, MACFADYEN Scient. Rep. Gt. Barrier Reef Exped. 5 2 1936.

Solenopodium discussed p. 22, *stechei* p. 67, MACFADYEN 126.

Stenella imbricata p. 167 fig., *johnsoni* p. 168, DEICHMANN 49.

Stereonephthya discussed p. 64, *unicolor* p. 64, MACFADYEN 126.

Stolonifera discussed p. 22, MACFADYEN 126.

Studeriotis discussed p. 65, *semperi* p. 65, MACFADYEN 126.

Stylatula antillarum p. 2, *elongata*, *brasiliensis*, *gracilis*, * *darwini* p. 3, DEICHMANN 48.—*S. elegans* p. 270, *brasiliensis*, *darwini*, *antillarum* p. 271, sp. p. 272, DEICHMANN 49.

Suberia clavaria p. 85, DEICHMANN 49.

Swiftia casta p. 187 fig., *pourtalesei* nom. n. for *Gorgonia miniata* Pourtalès p. 188 fig., *koreni* p. 189 fig., *exserta* p. 190 fig., sp. p. 192 fig., DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Sympodium coralloides p. 193 fig., KORSCHOLT 105.

Telesto discussed p. 66, *arborea*, *rubra* p. 66, *rigida* p. 67, MACFADYEN 126.—*T. rigida* p. 41, *sanguinea* sp. n. p. 41 fig. Florida, *flavula* sp. n. p. 42 fig. Florida, *fruticulosa* p. 43 fig., *risei* p. 44 fig., *rupicola* p. 45, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Thesea solitaria p. 112 fig., *granulosa* sp. n. p. 113 fig., *bicolor* sp. n. p. 114 fig., *rubra* sp. n. p. 115 fig. Cariacou, *gracilis* sp. n. p. 116 fig. Dominica, *citrina* sp. n. p. 116 fig. Florida, *rugosa* sp. n. p. 117 fig. W. Atlantic, *parviflora* sp. n. p. 118 fig. Dominica, *guadaloupensis*

p. 119 fig., *grandiflora* sp. n. p. 120 fig. W. Atlantic, var. *rugulosa* var. n. p. 121 fig. W. Indies, *hebes* sp. n. p. 121 fig. W. Indies, *nivea* sp. n. p. 122 fig. Guadeloupe, *plana* sp. n. p. 123 Florida, *T. ?* sp. p. 124 fig., DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Thouarella goësi p. 164 fig., *aurea* sp. n. p. 165 fig. Florida, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Titanideum suberosum p. 83 fig., *obscurum* p. 84, DEICHMANN 49.

Toeplitzella nom. n. (for *Ellisella* partim Toeplitz non Gray) genotype *laevis* p. 205, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Trachymuricea gen. n. p. 132, genotype *hirta* p. 133 fig., DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Trichogorgia viola sp. n. p. 223 fig. W. Atlantic, *flexilis* p. 224, DEICHMANN Mem. Mus. comp. Zool. Harvard 53 1936.

Tubipora musica p. 26, MACFADYEN 126.

Umbellula guntheri p. 2, DEICHMANN 48.—*U. guntheri* p. 268, *lindahlii* p. 268, *gracilis* p. 268, *crassiflora*, *thomsoni*, *encrinus* var. *ambigua* p. 269, DEICHMANN 49.

Umbellulifera discussed p. 55, *plano-regularis* p. 55, MACFADYEN 126.

Verrucella guernei p. 218, DEICHMANN 49.

Veretillum binghami sp. n. p. 4 fig., California, DEICHMANN 48.—*V. binghami* p. 909, HICKSON 87.

Villogorgia nigrescens p. 140 fig., *bébrycoides* p. 141, DEICHMANN 49.

Virgularia mirabilis p. 273, *kophameli* sp. p. 274, *tuberculata* p. 275, DEICHMANN 49.

Xiphogorgia anceps p. 201, *citrina* p. 201, DEICHMANN 49.

TABULATA.

† *Alveolites suborbicularis*, cf. *tenuissimus*, *gosseleti* sp. n. p. 99 fig., *subaequalis* p. 100, Devonian Belgium, LECOMPTE Mém. Inst. géol. Louvain 10 1936.—*A. suborbicularis* p. 6 fig., LECOMPTE 117.

†*Aulopora confluens, cerebriformis, delicata* p. 6, *irregularis, linearis, michiganensis, modulata, munda, noraensis* p. 7, CHAPPARS 32.—*O. tubaeformis* p. 80 fig., *conglomerata* p. 83 fig., *spicata* p. 86 fig., LECOMPTE 117.

†*Bauneia chablaisensis* pp. 110, 114 fig., POLJAK 156.

†*Billingsaria* gen. n. p. 60 genotype *parva* pp. 61, 62 fig., *occidentalis* p. 61, OKULITCH Trans. roy. Soc. Can. (3) iv 30 1936.

†*Blastochaetetes capilliformis* pp. 106, 113 fig., POLJAK 156.

†*Brignus* (subgen. n. of *Favosites*) type *dispersus* sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 pp. 31–32 figs.

†*Calamopora gothlandica* p. 59 fig., *basaltica* p. 63 fig., LECOMPTE 117.

†*Calapoecia* discussed p. 1, *canadensis* p. 7 fig., var. *ungava* var. n. p. 12 fig. Ordovician Canada, var. *anticostensis* p. 12 fig., forma *arctica* p. 16 fig., *borealis* p. 18, *favositoidea* p. 21, Cox Bull. Canada Dept. Mines Ottawa 80 1936.

†*Chaetetes* discussed p. 374; *radians* p. 374, OKULITCH 143.—*C. akpatokensis* sp. n. p. 441 fig. Ordovician Akpatok Island, OAKLEY Geol. Mag. London 73 1936.

†Chaetetidae discussed p. 374, OKULITCH 143.

†Chaetetina order n. p. 379, OKULITCH Amer. J. Sci. New Haven (5) 32 191 1936.

†*Cladopora dispansa* p. 58, WERNER 218.

†*Cleistopora geometrica* p. 27, COX 37A.

†*Columnaria alveolata* p. 65, *simplicissima* sp. n. p. 65 fig. Ordovician Virginia, OKULITCH Trans. roy. Soc. Can. (3) iv 30 1936.

†*Drymopora auloporoidea* p. 60, *incrustans* p. 61, *nanus, fruteciosa* p. 62, WERNER 218.

†*Emmonsia* sp. p. 63 fig., LECOMPTE 117.

†*Favosites murrumbidgeensis* Jones MS. sp. n. p. 7 figs. Devonian New Zealand, ALLAN Palaeont. Bull. N.Z. 14 1935.—*F. helderbergiae* p. 102 fig., var. *precedens* p. 81 fig., *sphaericus, conicus*

p. 110, *basalticus* p. 148, cf. *helderbergiae* p. 148, sp. p. 172, GOLDRING 68.—*F.?* sp. n. p. 32 fig. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*F. boloniensis* p. 97, aff. *boloniensis* p. 98, LECOMPTE 116.—*F. cervicornis* pp. 9, 97 fig., var. *minor* var. n. p. 21 fig., *polymorphus* pp. 34, 102 fig., var. *cronigerus* p. 40 fig., spp. pp. 22, 52 fig., *reticulatus* p. 45 fig., *dubius* pp. 54, 103 fig., *gothlandicus* p. 59 fig., *basalticus* pp. 33, 61 fig., *forbesi* p. 63 fig., *alveolaris* p. 66 fig., *barroisi* sp. n. p. 99 fig., Devonian Europe, LECOMPTE Mém. Mus. Hist. nat. Belg. 75 1936.—*F. baculus* p. 53, *limitaris* p. 54, *proximus* p. 56, WERNER 218.

†Favositidae discussed p. 376, OKULITCH 143.

†*Halysites catenulatus* p. 80 fig., GOLDRING 68.

†Halysitidae discussed p. 376, OKULITCH 143.

†*Heliolites porosus* p. 93 fig., LECOMPTE 117.

†*Heliolitidae* discussed p. 369, OKULITCH 143.

†*Heliolitina* order n. p. 378, OKULITCH Amer. J. Sci. New Haven (5) 32 191 1936.

†*Lamottia heröensis* p. 63 fig., OKULITCH 144.

†*Lyopora favosa* p. 27 fig., COX 37A.

†*Michelinia siyangensis* p. 26 fig., DOUGLAS 54.—*M. tenuisepta* p. 8, aff. *tenuisepta, megastoma* p. 9, *rossica* p. 10, *conica* sp. n. p. 12 fig., *magniformis* sp. n. var. *alta* var. n. p. 13 fig., var. *hemisphaerica* var. n. p. 13 fig., Carboniferous Siberia, GABOUNIA Bull. Com. géol. Sibérie Tomsk 13 1919.—*M. lenticularis* p. 110 fig., GOLDRING 68.—*M. concinnaeformis* sp. n. pp. 36, 99 fig., Etroeungting Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

†*Monilopora dendroidea* p. 26, DOUGLAS 54.

†*Pachypora* discussed p. 24, *lamellicornis* p. 27 fig., LECOMPTE 117.—*P. (Platyaxum) orthosoleniska* p. 63, *prokrepa* p. 64, spp. n. Devonian U.S.A., WERNER Washington Univ. Stud. St. Louis N.S. 9 1936.

†*Plagiopora kaisini* sp. n. p. 101 fig., *maillieuxi* sp. n. p. 102 fig., Devonian Belgium, LECOMPTE Mém. Inst. géol. Louvain 10.

†*Plasmoporella convexotabulata* p. 23 fig., COX 37A.

†*Pleurodictyum* cf. *problematicum* p. 7 figs., ALLAN 4.—*P. dechenianum* p. 54 figs., SCHWARZBACH 183.

†*Procteria papillosa* p. 58, WERNER 218.

†*Roemeria* discussed p. 74, *infundibuliformis* p. 68 fig., LECOMPTE 117.

†*Sarcinula organum* p. 23 fig., COX 37A.

†*Schizocoralla* sub-class n. p. 378, OKULITCH Amer. J. Sci. New Haven (5) 32 191 1936.

†*Streptelasma parasiticum* p. 64 fig., OKULITCH 144.

†*Striatopora bellistriata* p. 59, WERNER 218.

†*Stylaraea roemeri* discussed p. 61, OKULITCH 144.

†*Syringolites* discussed p. 77, LECOMPTE 117.

†*Syringopora catenoides* p. 27, DOUGLAS 54.—*S. distans* p. 2, cf. *distans*, *gigantea* p. 3, *reticulata* p. 4, *ramulosa* p. 5, *parallela* p. 6, cf. *parallela* p. 8, GABOONIA 65.—*S.* discussed p. 23, *ramulosa* p. 26 fig., *reticulata* p. 27 fig., *distans* p. 28 fig., *conferta* p. 28 fig., *gracilis* p. 30 fig., sp. p. 32, GORSKY 69.—*S. caespitosa* p. 90 fig., LECOMPTE 117.

†*Syringoporidae* discussed p. 376, OKULITCH 143.

†*Tetradidae* discussed p. 364, OKULITCH 143.

†*Tetradina* order n. p. 378, OKULITCH Amer. J. Sci. New Haven (5) 32 191 1936.

†*Tetradium* discussed p. 364, OKULITCH 143.—*T. syringoporoides* p. 64, OKULITCH 144.

†*Tetrapora* discussed p. 32, *septentrionalis* sp. n. pp. 33, 97 fig., var. *intermedia* var. n. pp. 35, 98 fig., Etroeungtian Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

†*Tumularia* discussed p. 61, *roemeri* p. 61, OKULITCH 144.

ZOANTHARIA.

Acanthastrea cf. *echinata* p. 47 fig., *hemprichii* p. 48 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Acanthocyclus porpitoides* p. 196 fig., *fletcheri* p. 201 fig., *transiens* sp. n. p. 202 fig. Salopian England, aff. *transiens* p. 204 fig., *binus* p. 204, HILL Philos. Trans. London (B) 226 534 1936.

†*Acanthogyra* discussed, genolecto-type chosen *columnaris* p. 98, WELLS 217.

†*Acervularia* discussed p. 111, WELLS 217.—*A. ? inaequalis* p. 81, GOLDRING 68.

Acropora discussed p. 99, *muricata* p. 99, WELLS 217.

Actinia bermudensis p. 197 fig., KORSCHOLT 105.—*A. sulcata* p. 14, RICHET & PORTIER 167.—*A.* sp. pp. 257, 271, 274, 303, VALKANOV 207.

Adamsia sp. p. 199 fig., KORSCHOLT 105.

Agaricia (?) *ponderosa* p. 55 fig., *A. (?) minikoensis* p. 55 fig., YABE, SUGIYAMA & EGUCHI 226.

Agecyathus discussed, genolecto-type chosen *helenae* p. 100, WELLS 217.

Aiptasia couchi p. 214, NOUVEL 141.

†*Allocoenia* discussed, genolecto-type chosen *furcata* p. 100, WELLS 217.

Alveopora discussed p. 100, genolecto-type chosen *daedalea* p. 101, WELLS 217.

Ammophilactis rapiformis p. 178, PEARSE 152.

Amphelia ramea p. 57, DONS 53.

Amphianthus californicus sp. n. p. 20 fig. California, CARLGRÉN J. Wash. Acad. Sci. 26 1 1936.

†*Amphiastrea aethiopica* p. 9, HACHE-MESSER 75.

†*Amplexus bicostatus*, *fragilis*, *blairi*, *corniculum* p. 5, CHAPPAIS 32.

Anactinia pelagica p. 201 fig., KORSCHOLT 105.

Anemone sulcata p. 214, NOUVEL 141.

Anomocora discussed p. 127, WELLS 217.

†*Anthophyllum fenestellops* sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 31 figs.

Antillophyllia constricta var. *kienensis*, *flabelliformis* p. 21, YABE, SUGIYAMA & EGUCHI 226.

†*Aphragmastraea* genolectotype chosen *crassisepta* p. 101, WELLS 217.

Apiactis bengalensis sp. n. p. 250 fig. Madras, PANIKKAR Zool. Anz. Leipzig 115 1936.

†*Aplophyllia orbignyi* p. 107, WELLS 217.

Arachnactis valdiviae p. 201 fig., KORSCHOLT 105.

†*Aspidiscus cristatus* p. 347 figs., var. *bernedensis* var. n. p. 348 figs. Cenomanian Spain, LLUECA Bol. Inst. Geol. Esp. 52 1931.

†*Astraea* sp., *modesta* spp. n. p. 31 figs. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*A. mam-milaris* discussed p. 55, HAYASAKA 81.

†*Astraeopora decaphylla* p. 417, *dubiosa* p. 418, ZUFFARDI-COMERCI 230.

Astrangia danae p. 178, PEARSE 152.

†*Astraraea* genolectotype chosen *media* p. 101, WELLS 217.

†*Astrocoenia* discussed pp. 100, 105, *whitneyi* p. 100, WELLS 217.—*A. pumila* p. 52, ALLOITEAU 5.—*A. ramosa* p. 69, *subreticulata* sp. n. p. 69 fig., sp. p. 70, aff. *kunthi* p. 71 fig., *pseudominima* p. 71 fig., cf. *pseudominima*, aff. *minima* p. 72, *retifera* p. 72 fig., *decaphylla* p. 73 fig., *aequibernensis* sp. n. p. 74 fig., aff. *aequibernensis* p. 75 fig., Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.—*A. micropora* p. 420, ZUFFARDI-COMERCI 230.

Astroides calycularis p. 202 fig., KORSCHOLT 105.

Aulactinia stelloides p. 198 fig., sp. p. 199 fig., KORSCHOLT 105.

†*Aulastraea* genolectotype chosen *schaferi* p. 102, WELLS 217.

†*Aulophyllum fungites* p. 248 figs., MENCHIKOFF & HSU 130.

†*Axinura canadensis* discussed p. 54, HAYASAKA 81.

Balanophyllia discussed p. 129, WELLS 217.—*B.* cf. *socialis* p. 167, YABE & EGUCHI 223.

†*Balanophyllia pygmaea* p. 256, KÜHN 108.—*B.* sp. p. 85, WIRTZ 220.

Baryhelia discussed, genolectotype chosen *archiaci* p. 102, *melchlini* p. 102, WELLS 217.

†*Baryphyllia* discussed, genolectotype chosen *gregaria* p. 102, WELLS 217.

Bathycyathus discussed, genolectotype chosen *chilensis* p. 102, *indicus* p. 102, WELLS 217.

Biflabellum discussed p. 120, WELLS 217.

†*Blastosmilia* genolectotype chosen *fromenteli* p. 103, WELLS 217.

Blastotrochus nutrix p. 205 fig., KORSCHOLT 105.

Bolocera longicornis p. 25, BROCH 21.—*B. turdiae* p. 197 fig., KORSCHOLT 105.

Boninastraea boninensis p. 45 fig., YABE, SUGIYAMA & EGUCHI 226.

Cactosoma arenaria p. 20, CARLGREN 29.

†*Calamophyllia* discussed p. 192, KÜHN 109.—*C.?* *giulianensis* sp. n. Lias Italy p. 46 fig., GREGORIO Ann. Géol. Paléont. Palermo 53 1930.

Calliactis parasitica p. 73, BENAZZI 11.

Calpanthula guinensis p. 201 fig., KORSCHOLT 105.

†*Campophyllum* sp. p. 56 fig., GORSKY 69.

†*Caninia cylindrica* p. 20, *gigantea* var. α var. n. p. 23, var. β p. 26 fig., *usvae* p. 27, *ussowi* sp. n. p. 28 fig., cf. *ussowi* p. 33, *verneuili* p. 33, *meglitzkyi* p. 35, *obruschewi* sp. n. p. 36 fig., sp. p. 38, *C. (?)* sp. p. 38, Carboniferous Siberia, GABOUNI Bull. Com. géol. Siberia Tomsk 1 3 1919.—*C. dortodoti* pp. 42, 104 fig., aff. *cornucopiae* pp. 43, 105 fig., sp. p. 44 fig., GORSKY 69.—*C. cylindrica* p. 238, *concavea* p. 239, *delepinei* sp. n. p. 240 figs., Lower Carboniferous Sahara, MENCHIKOFF & HSU Bull. Soc. géol. Fr. 5 v 4-5 1935.

†*Cantrillia prisca* p. 212, HILL 88.

†*Carcinophyllum* sp. p. 65 fig., GORSKY 69.—*C.* cf. *welchi* p. 249 figs., *C. (?)* sp. p. 249 figs., *C.* sp. p. 250, MENCHIKOFF & HSU 130.

Caryophyllia arcuata p. 167, YABE & EGUCHI 223.

†*Caryophyllia arcotensis* p. 45, *cupuliformis* p. 46 figs., ALLOITEAU 5.—*C. inops* p. 255, KÜHN 108.—*C. cyathus* p. 21 figs., LEJEUNE 118.—*C. granulata* p. 86 figs., WIRTZ 220.

Carulastraea furcata p. 19 fig., *tumida* p. 19 fig., forma *gracilis* p. 20 fig., forma *multiseptata* p. 20 fig., sub-sp. *conglobata* sub-sp. n. p. 20 fig., *aiharai* sp. n. p. 20 fig, Japan, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tōhoku Imp. Univ. Spec. Vol. I 1936.

†*Cellastraea* discussed, genolectotype chosen *irregularis* p. 103, WELLS 217.

†*Centrastraea* aff. *insignis* p. 56 fig., HACKEMESSER 75.

Ceratotrochus sp. p. 167, YABE & EGUCHI 223.

†*Ceratotrochus duodecimcostatus* p. 237 figs., *multiserialis* p. 237 figs., VENZO 211.

Cereus pedunculatus p. 264, CANT & CRICHTON 27.

Cerianthula braemi p. 201 fig., KORSCHOLT 105.

Cerianthus sp. p. 31 fig., ROBSON 169.—*C. membranaceus* p. 179 fig., SAMA 179.

Citharocyathus discussed p. 103, genolectotype chosen *conicus* p. 104, WELLS 217.

†*Cladocora jamaicensis* p. 38 fig., HACKEMESSER 75.—*C. caespitosa* p. 235, VENZO 211.

†*Cladophyllia* discussed p. 192, KÜHN 109.

Cladorbicella gen. n. p. 27 genotype *taiwanensis* p. 27 fig. Taiwan, YABE & EHARA Proc. Imp. Acad. Tokyo 12 1 1936.

†*Clisiophyllidae* discussed p. 10, DOUGLAS 54.

†*Clisiophyllum* sp. p. 245, MENCHIKOFF & HSU 130.

Coeloria discussed, *daedalea*, *rustica* p. 104, WELLS 217.—*C. rustica* p. 36 fig., *lamellina* p. 36 fig., *astreiformis* p. 37 fig., *C. (?) gigantea* sp. n. p. 37 fig. Japan, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tōhoku Imp. Univ. Spec. Vol. I 1936.

Coeloseria mayeri p. 63 fig., YABE, SUGIYAMA & EGUCHI 226.

Coelosmilia discussed, *fecunda* p. 127, WELLS 217.

Coenopsammia discussed p. 132, WELLS 217.

Coenosmilia discussed p. 127, WELLS 217.

Colpophyllia discussed, *gyrosa*, *natans*, *willoughbiensis* p. 104, WELLS 217.

†*Colpophyllia bernardi* p. 43, HACKEMESSER 75.

†*Columnaria* discussed p. 426, *sulcata* p. 428 fig., *alveolata* p. 429 fig., LANG & SMITH 114.—*C. halli* p. 16, CHAPPARS 32.

†*Columnastraea* (?) sp. p. 76, HACKEMESSER 75.

†*Columniphyllum* ? *pellegrinense* sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 55 1930 p. 14 fig.

Corallimorpheae tribe nom. n. p. 16, CARLGREN 29.

†*Corofolius* (subgen. n. of *Lithodendron*) type *C. mirus* sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 30 figs.

†*Corwenia* discussed p. 10, DOUGLAS 54.

Corynactis californica sp. n. p. 17 fig. California, CARLGREN J. Wash. Acad. Sci. 26 1 1936.

Coscinastrea columna p. 61 fig., *hahazimaensis* sp. n. p. 61 fig., *kusimotoensis* sp. n. p. 62 fig., Japan, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tōhoku Imp. Univ. Spec. Vol. I 1936.

†*Craspedophyllum iowaensis* p. 17 CHAPPARS 32.

Cribrina sp. p. 200 fig., KORSCHOLT 105.

†*Cryptocoenia* (?) *formai* p. 29, HACKEMESSER 75.

Culicia discussed, genolectotype chosen *stellata* p. 105, WELLS 217.—*C. japonica* sp. n. p. 167 fig. Japan, YABE & EGUCHI Proc. Imp. Acad. Tokyo 12 6 1936.

†*Cyathaxonia rushiana* p. 234, var. *mitrata* var. n. p. 235 figs., sp. p. 235, Lower Carboniferous Sahara, MENCHIKOFF & HSU Bull. Soc. géol. Fr. 5 v 4-5 1935.

Cyathoceras genolectotype chosen *cornu* p. 106, WELLS 217.

†*Cyathocoenia* Duncan discussed, *incrustans*, *andreaei* p. 105, WELLS 217.

†*Cyathocoenia* de Fromentel discussed, genolectotype chosen *neocomiensis* p. 106, WELLS 217.

†*Cyathophora* discussed p. 123, WELLS 217.—*C. turonensis* p. 31, aff. *bourgueti* p. 32.—*Heterocoenia* sp. p. 32, HACKEMESSER 75.—? *C. sp.*, p. 728, THOMAS 199.

†*Cyathophyllum dunstani* p. 6 figs., ALLAN 4.—*C. lincolniensis* p. 18, CHAPPARS 32.—*C. ? sp.* p. 172, GOLDRING 68.—*C. sp.* p. 48 fig., GORSKY 69.—*C. panormicola* sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 31 fig.—*C. shearsbyi* p. 53 fig. (genotype of *Hercophyllum* gen. n.), JONES Mem. Qd. Mus. Brisbane 11 1 1936.—*C. quadrigeminum* discussed p. 426, pentagonum, ananas, hexagonum p. 432, LANG & SMITH 114.—*C. cf. roemeri* figs., LEJEUNE 118.—*C. (Palaeosmilia) murchisoni* p. 242 figs., regium p. 243 figs., resotti sp. n. p. 243 figs., sp. p. 244, Lower Carboniferous Sahara, MENCHIKOFF & HSU Bull. Soc. géol. Fr. 5 v 4-5 1935.

†*Cyclolites* discussed pp. 113, 127, orbignyi p. 113, WELLS 217.—*C. appenninica* p. 30, MONTANARO 134.

†*Cycloseris* discussed, alpina p. 132, WELLS 217.

†*Cylindrophyllum floydense* p. 18, CHAPPARS 32.

†*Cymatelasma* gen. n. genotype multi-septatum p. 517 fig., corniculum p. 518 fig., carinatum p. 519 fig., tardens p. 520 fig., spp. n. Silurian England, HILL & BUTLER Geol. Mag. London 73 1936.

Cyphastrea microphthalma p. 23 fig., serailia p. 24 fig., chalcidium p. 24 fig., sub-sp. tanabensis sub-sp. n. p. 25 fig., japonica sp. n. p. 25 fig., cf. suadivae p. 25 fig., Japan, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tōhoku Imp. Univ. Spec. Vol. I 1936.

†*Cystiphyllum vesiculosum* p. 172 fig., sp. p. 172, GOLDRING 68.—*C. densum* sp. n. p. 210 fig. Wenlock Shale, England, siluriense p. 212, HILL Philos. Trans. London (B) 225 534 1936.

†*Dendracis seriata* p. 416, ZUFFARDI-COMEROI 230.

Dendrophyllia cribrosa p. 402 fig., EGUCHI 56.—*D. dichotoma* p. 107, WELLS 217.—*D. oldroydi ?* p. 28 fig., WILLIAMS 219.—*D. boschmai* p. 167, YABE & EGUCHI 223.

†*Dendrophyllia cornigera* p. 257, KÜHN 108.

Dentipora discussed, genoelectotype chosen virginea p. 106, WELLS 217.

†*Dermoseris* genoelectotype chosen schardti p. 107, WELLS 217.

†*Dermosmilia* discussed, genoelectotype chosen divergens p. 107, WELLS 217.

Diadumene cincta p. 91, RAWLINSON 165.—*D. luciae* p. 895 fig., UCHIDA 204.

†*Dibunophyllum vauhani* p. 64 fig., GORSKY 69.—*D. muirheadi* p. 245 figs., cf. derbiense p. 246 figs., sp. p. 246 figs., MENCHIKOFF & HSU 130.

Dictuophyllia discussed, reticulata p. 108, WELLS 217.

†*Digitium* (subgen. n. of *Cyathophyllum*) type taxum sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 31 fig.

†*Dimorphastraea mirabilis* sp. n. p. 55 fig., bellula p. 56, Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.

†*Dimorphophyllia* discussed, genoelectotype chosen oxylopha p. 107, WELLS 217.

†*Diphyphyllum lateseptatum* p. 251, MENCHIKOFF & HSU 130.

Diploastrea heliopora p. 54 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Diploctenium* discussed, genoelectotype chosen cordata p. 108, WELLS 217.

†*Diplogyra* gen. n. p. 72 genotype lamellosa sp. n. p. 72 fig. Cretaceous Japan, EGUCHI Proc. Imp. Acad. Tokyo 12 3 1936.

Diploria discussed p. 108, cerebri-formis, labyrinthiformis p. 108, WELLS 217.

†*Diploria* aff. crassolamellosa p. 43 fig., HACKEMESSER 75.

Dipsastrea discussed, genoelectotype chosen favus p. 109, WELLS 217.

†*Disaraea* discussed, genoelectotype chosen cotteai, strangulata p. 108, WELLS 217.

†? *Discocoenia bononiensis* p. 727, THOMAS 199.

Doederleinia discussed, genoelectotype chosen irregularis p. 110, WELLS 217

†*Donacosmilia* genoelectotype chosen corallina p. 110, WELLS 217

Echinastraea discussed, genolectotype chosen *rosularia* p. 110, WELLS 217.

Echinophyllia genolectotype chosen *aspera* p. 111, WELLS 217.

Echinopora revised p. 429, YABE & EGUCHI 221.—*E.* discussed p. 110, WELLS 217.—*E. lamellosa* p. 48 fig., YABE, SUGIYAMA & EGUCHI 226.

Edwardsia californica p. 18, CARLGRÉN 29.—*E.* sp. p. 178, PEARSE 152.

†*Elasmocoenia* genolectotype chosen *explanata* p. 111, WELLS 217.—*E.* sp. p. 27 fig., HACKEMESSER 75.

†*Elasmophyllia grandis* sp. n. p. 34 fig. Cretaceous Greece, HACKEMESSER *Palaeontographica* Stuttgart 84A 1-3 1936.

†? *Enallohelia* sp., THOMAS 199.

†*Endophyllum* discussed p. 49, *caninoides* sp. n. pp. 49, 107 fig., *alferovi* sp. n. pp. 51, 109 fig., *nalivkini* sp. n. pp. 53, 110 fig., *plativesciculosum* sp. n. pp. 55, 112 fig., Etroungtian Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

†*Enterolasma caliculum* p. 81 fig., GOLDRING 68.—*E.* sp. p. 39 fig., GORSKY 69.

†*Eohydnothophora* gen. n. p. 141 genotype *tosaensis* sp. n. p. 142 fig. Lr. Cretaceous Japan, YABE & EGUCHI Proc. Imp. Acad. Tokyo 12 5 1936.

†*Epismilia* sp. p. 124 figs., *E.* (?) sp. p. 124 figs., DIETRICH 52.—*E. robusta* p. 66, *excavata* sp. n. p. 66 fig., var. n. p. 67 fig., aff. *crassisepta* p. 67 fig., Cretaceous Greece, HACKEMESSER *Palaeontographica* Stuttgart 84A 1-3 1936.

†*Epistreptophyllum* genolectotype chosen *commune* p. 111, WELLS 217.

Epizoanthus ramosus p. 1 fig. Japan, *mortenseni* p. 5 fig. Jolo spp. n., *indicus* p. 6 fig., CARLGRÉN Ark. zool. Stockholm 28A 5 1935.—*E. vatovai* sp. n. p. 1 fig. Adriatic Sea, PAX & LOCHTER Note Ist. Biol. mar. Rovigno 17 1935.

†*Eridophyllum bartrumi* sp. n. Dev. New Zealand, ALLAN *Palaeont. Bull. N.Z.* 14 p. 4 figs.

†*Eugyra bernardi* p. 10 fig., *robusta* sp. n. p. 11 fig., var. n. p. 11 fig., Cretaceous Greece, HACKEMESSER *Palaeontographica* Stuttgart 84A 1-3 1936.

Euphyllia fimbriata p. 17 fig., *glabrescens* p. 17 fig., *picteti* p. 17 fig., var. *flexuosa* p. 18 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Eupsammia narindensis* sp. n. Cretaceous Madagascar, ALLOITEAU Ann. géol. Serv. Mines Madagascar 6 p. 50 figs.

†*Favastrea* discussed, genolectotype chosen *ananas* p. 111, WELLS 217.

Favia discussed pp. 109, 112, WELLS 217.—*F. speciosa* p. 28 fig., *pallida* p. 29 fig., *rotumana* p. 29 fig., *stelligera* p. 29 fig., cf. *danae* p. 30 fig., cf. *ehrenbergi* p. 30 fig., *palauensis* sp. n. p. 30 fig., Palau Islands, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I 1936.

†*Favia exilis* p. 422, ZUFFARDI-COMERCI 230.—*F. (Septastrea) ambigua* p. 39 fig., HACKEMESSER 75.

Favites discussed, *irregularis* p. 103, WELLS 217.—*F. abdita* p. 31 fig., *complanata* p. 32 fig., *flexuosa* p. 32 fig., *favosa* p. 32 fig., *pentagona* p. 32 fig., *virens* p. 33 fig., *yamanarii* sp. n. p. 33 fig., Japan, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I 1936.

†*Felixigyra* genolectotype chosen *deangelisi* p. 112, WELLS 217.—*F. dollfusi* p. 12, HACKEMESSER 75.

Fissicella discussed, genolectotype chosen *ananas* p. 112, WELLS 217.

†*Flabellum avicula* p. 238, *suessi* p. 238 figs., VENZO 211.—*F. tuberculatum* p. 86 fig., *waelii* p. 87 fig., WIRTZ 220.

†*Fletcheria incerta* p. 69, OKULITCH 144.

†*Fromentellia* discussed, genolectotype chosen *fabryana* p. 112, WELLS 217.

Fungia sp. p. 205 fig., KORSCHOLT 105.

†*Funginella* discussed, genolectotype chosen *haueriana*, *semiglobosa* p. 113, WELLS 217.

Galaxea fascicularis p. 27 fig., *musicalis* p. 27 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Gemnastrea* discussed, genolectotype chosen *tubulosa* p. 113, WELLS 217.

†*Glyphephyllia* discussed, genolectotype chosen *dumortieri* p. 113, *martiniana* p. 113, WELLS 217.—*G. sinuosa* p. 35, *dumortieri* p. 36, *crassisepta* sp. n. p. 37 fig., *G. (?)* sp. p. 38, Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.

Goniastrea retiformis p. 34 fig., *parvistella* p. 34 fig., *pectinata* p. 34 fig., *planulata* p. 35 fig., *aspera* p. 35 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Goniastrea cocchii* p. 421, *confertissima* p. 422, ZUFFARDI-COMERCI 230.

†*Gyrodendron* discussed, genolectotype chosen *lobatum* p. 114, WELLS 217.

Halcampa duodecimcirrata ? p. 19, CARLGREN 29.

†*Hallia* cf. *alatum* var. *divisum* p. 484 fig., SRIESTERSBACH 188.

Harenactis attenuata p. 19, CARLGREN 29.

†*Heliastrea* discussed p. 120, WELLS 217.

†*Heliocoenia affinis* sp. n. p. 20 fig., HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.

†*Heliophyllum* discussed p. 623, HALLER 76.—*H. yassense* p. 55 fig., JONES 97.

†*Hercophyllum* gen. n. p. 53 genotype *Cyathophyllum shearsbyi* p. 54 fig., Silurian E. Australia, JONES Mem. Qd. Mus. Brisbane 11 1 1936.

Heterocoenia discussed, *archiaci* p. 102, WELLS 217.

†*Heterocoenia decipiens* p. 29, var. *ramosa* var. n. p. 29 fig., sp. p. 30, *preveri* sp. n. p. 30 fig., Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.

†*Holocoenia* cf. *indica*, aff. *jaccardi* p. 21, cf. *polymorpha (?) collinaria* p. 22, HACKEMESSER 75.

†*Holocystis* discussed, *neocomiensis* p. 106, WELLS 217.

†*Homalophyllum thedfordensis* sp. n. p. 878 fig. Olentangy Shale Ontario, STEWART Amer. Midl. Nat. Notre Dame 17 5 1936.

Hydnophora exesa p. 39 fig., *grandis* p. 40 fig., *microconos* p. 40 fig., *rigida* p. 40 fig., YABE, SUGIYAMA & EGUCHI 226.

Hydnophyllia discussed p. 107, WELLS 217.

†*Iranophyllum* gen. n. type *splendens* p. 18 fig., *simplex* p. 19 fig., *carcinophylloides* p. 19 fig., spp. n., sp. p. 20, Permo-Carboniferous Iran, DOUGLAS Palaeont. indica N.S. 22 6 1936.

†*Isastraea siva* p. 41, cf. *gracilis* p. 42, HACKEMESSER 75.—*I. serialis* p. 728, aff. *serialis* p. 728 fig., *limitata* p. 728 fig., THOMAS 199.

†*Keriophyllum* discussed p. 597 fig., *dahlemense* p. 615 fig., *yakowlevi* p. 618 fig., *rohri* sp. n. p. 618 fig., *remotum* sp. n. p. 618 fig., *sociale* sp. n. p. 618 fig., *turbinatum* p. 618 fig., *crassum* p. 618 fig., *zylindricum* p. 620 fig., *alternatum* p. 620 fig., *degener* sp. n. p. 620 fig., *cuneatum* p. 621 fig., *schizoseptatum* sp. n. p. 621 fig., *regeressum* sp. n. p. 621 fig., *perforatum* p. 621 fig., var. *spongiosum* p. 621 fig., *tabulatum* p. 622 fig., *heiligensteini* p. 622 fig., *globosum* p. 622 fig., DEVONIAN Eifel, HALLER Jahrb. preuss. geol. LdAnst. 56 1 1936.

†*Lasmoggyra* discussed, *dumortieri* p. 113, WELLS 217.

†*Latimaeandraraea* cf. *confusa* p. 57 fig., *tignaria* p. 57, *pillai*, *paronai*, *felixi* p. 58, *submorchella* p. 59, *provaei*, cf. *osimoi*, sp. p. 60, *L.-Isastraea (?)* sp. p. 61, HACKEMESSER 75.

†*Latiphyllia* genolectotype chosen *requieni* p. 114, WELLS 217.

†*Lepidophyllia* discussed, genolectotype chosen *hebridensis* p. 114, *stricklandi* p. 115, WELLS 217.

Leptastrea purpurea p. 26 fig., *immersa* p. 26 fig., *bottae* p. 27 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Leptastraea (?) cremai*, var. *aquilana* p. 22, HACKEMESSER 75.

†*Leptocyathus hexacristatus* sp. n. Cretaceous Madagascar, ALLOITEAU Ann. géol. Serv. Mines Madagascar 6 p. 47 figs.

†*Leptophyllastraea* discussed, genolectotype chosen *irregularis* p. 115, WELLS 217.

Leptopenus genolectotype chosen *discus* p. 115, WELLS 217.

†*Leptophyllia* cf. *eturbensis*, aff. *conica* p. 44, *kossmati* sp. n. p. 45 fig., Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.—*L. intermedia* p. 196 figs., KÜHN 109.

Leptoria discussed p. 125, WELLS 217.

Leptoseris gardineri p. 59 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Lichenaria* discussed p. 67, *prima* sp. n. p. 67 fig. Ordovician U.S.A., *carterensis* p. 68, OKULITCH Trans. roy. Soc. Canada (3) IV 30 1936.

†*Lingulosmia* genolectotype chosen *cornuta* p. 115, WELLS 217.

Lithodendron discussed, genolectotype chosen *angulosa* p. 116, WELLS 217.

†*Lithostrotion canadense* discussed p. 55, *mamillare* discussed p. 56, HAYASAKA 81.—*L. martini*, *irregulare* p. 250, *minus*, sp. p. 251, MENCHIKOFF & HSU 130.

†*Lithostrotionella* diagnosed p. 49, *castelnavi* sp. n. p. 58 figs., *hemisphaerica* sp. n. p. 61 figs., *americana* sp. n. p. 62 figs., *floriformis* sp. n. p. 64 figs., *girtyi* sp. n. p. 65 figs., *multiradiata* sp. n. p. 66 figs., *vesicularis* sp. n. p. 68 figs., *tabulata* sp. n. p. 69 figs., *tubifera* sp. n. p. 69 figs., *simplex* sp. n. p. 70 figs., Lower Carboniferous North America, HAYASAKA Mem. Fac. Sci. Agric. Taihoku Imp. Univ. Formosa 13 5.

Lobophyllia discussed, *corymbosa* p. 117, WELLS 217.—*L. corymbosa* p. 43 fig., *costata* p. 43 fig., *hemprichii* p. 43 fig., *robusta* sp. n. p. 44 fig., Japan, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I 1936.

†*Lonsdaleia* discussed p. 10, sp. p. 14 fig., *indica* p. 52, DOUGLAS 54.—*L.* discussed p. 65, *longiseptata* sp. n. pp. 67, 119 fig. Lower Carboniferous Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.—*L. pictoensis* discussed p. 72, HAYASAKA 81.—*L. duplicata* var. *alstonensis* p. 252, MENCHIKOFF & HSU 130.

†*Lonsdaleidae* emended p. 13, DOUGLAS 54.

Lophelia prolifera p. 57, DONS 53.

†*Lophophyllidium* p. 408, HERITSCH 85.

†*Lophophyllum* *caninoides* sp. n. pp. 40, 101 fig., var. *densa* var. n. pp. 42, 103 fig., *Etroeungtian*, *vacuum* sp. n. pp. 57, 113 fig., aff. *cherneyense* pp. 59, 115 fig., *stellatum* sp. n. p. 59, 115 fig., Lower Carboniferous Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.—*L.* p. 408, HERITSCH 85.—*L. interruptum* p. 245 figs., sp. p. 245, MENCHIKOFF & HSU 130.

†*Lophosmia* (*Placosmia*) cf. *similaris* p. 64, HACKEMESSER 75.

Madrepora sp. p. 32 fig., ROBSON 169.

Maecandra discussed, *maecandrites*, p. 117, *labyrinthiformis* p. 118, WELLS 217.—*M. areolata* p. 203 fig., KORSCHOLT 105.—*M. areolata* p. 199 fig., YONGE 228.

M[ae]andrina discussed pp. 104, 119, *maecandrites* p. 119, WELLS 217.—*M. labyrinthica* p. 204 fig., KORSCHOLT 105.

Maecandroseris discussed, genolectotype chosen *bottae*, *australiae* p. 118, WELLS 217.

Manicaria discussed pp. 104, 118, *gyrosa* p. 104, *areolata* p. 118, WELLS 217.—*M. areolata* pp. 198, 204 fig., KORSCHOLT 105.

Merulina ampliata p. 41 fig., *laxa* p. 41 fig., YABE, SUGIYAMA & EGUCHI 226.

Metridium senile var. *fimbriatum* p. 23, CARLGREN 29.—*M. marginatum* p. 196 fig., KORSCHOLT 105.

†*Metriophyllum* sp. cf. *bouchardi* p. 13, MAILLIEUX 128.

†*Microsaraea distefanoi* p. 46, HACKEMESSER 75.

†*Microsolena* discussed, *plana* p. 126, WELLS 217.—*M. porosa* p. 728, THOMAS 199.

†*Miyakopora* gen. n. p. 72 genotype *miyakoense* sp. n. p. 72 fig., Cretaceous Japan, Proc. Imp. Acad. Tokyo 12 3 1936.

†*Miyakosmia* gen. n. p. 70 genotype *densa* sp. n. p. 70 fig., *ishidai* sp. n. p. 72 fig., Cretaceous Japan, EGUCHI Proc. Imp. Acad. Tokyo 12 3 1936.

Monomyces discussed, genolectotype chosen *anthophyllum*, *patella* p. 120 WELLS 217.

†*Montastraea* discussed, genolectotype chosen *guettardi*, *annularis*, *cavernosa* p. 120, WELLS 217.

†*Montlivaultia graeca* sp. n. p. 32 fig., cf. *tourtienensis*, sp. ? *fromenteli*, cf. *icaunensis*, cf. *pauciradiata* p. 34, Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.—*M. spengleri* sp. n. p. 191 fig. Jurassic Germany, KÜHN Palaeont. Z. Berlin 17 3-4 1935.—*M. guettardi* figs., *haimeii* figs., *caryophyllata* figs.,

cupuciformis fig., cf. *conveza* fig., sp. fig., *dilatata* fig., *decipiens* figs., *crassisepta* fig., LEJEUNE 118.—*Montilivaltia caryophyllata* p. 726, sp. (? *orbitolites*) p. 727, sp. (? *Thecosmilia* sp.) p. 727, THOMAS 199.

Mussa discussed pp. 116, 117, 120, *angulosa* p. 121, WELLS 217.

Mycedium revised p. 429, YABE & EGUCHI 221.—*M.* discussed, *elephantotus* p. 121, WELLS 217.—*M. elephantotus* p. 49 fig., *tubifex* p. 49 fig., *tenuicostatum* p. 50 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Nefocoenia* genolectotype chosen *lobata* p. 122, WELLS 217.—*N.* (?) sp. p. 26, HACKEMESSER 75.

†*Neocoenia* gen. n. p. 23, *renzi* p. 24 fig., *subpolygonalis* p. 25 fig., spp. n. Cretaceous Greece, HACKEMESSER *Palaeontographica Stuttgart* 84A 1-3 1936.

Oculina discussed, *virginea*, *coalescens* p. 106, WELLS 217.

†*Odontocyathus* discussed p. 131, WELLS 217.

†*Opisthophyllum* genolectotype chosen *zitteli* p. 122, WELLS 217.—*O. ampfereri* sp. n. p. 191 fig. Jurassic Germany, KÜHN *Pälaont. Z. Berlin* 17 3-4 1935.

Orbicella discussed, *annularis*, *cavernosa* p. 120, WELLS 217.—*O. curta* p. 22 fig., *versipora* p. 23 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Orbicella sulcatolamellosa*? p. 38, HACKEMESSER 75.—*O. irradians* p. 420, cf. *alpina* p. 421, ZUFFARDI-COMEROI 230.—*O. ellisiana* p. 209, *defrancei* p. 210 fig., *planulata* p. 211, *reussiana* var. *minor* p. 212, ZUFFARDI-COMEROI 231.

Oulastraea crispata p. 405 fig., EGUCHI 56.—*O. crispata* p. 54 fig., YABE, SUGIYAMA & EGUCHI 226.

Oulophyllia crispa p. 42 fig., YABE, SUGIYAMA & EGUCHI 226.

Oxyphyllia revised p. 429, YABE & EGUCHI 221.—*O. aspera* p. 50 fig., var. *losaensis* p. 51 fig., var. *sugiyamai* p. 51 fig., YABE, SUGIYAMA & EGUCHI 226.

Oxypora revised p. 429, sp. p. 431, YABE & EGUCHI 221.—*O.* discussed, genolectotype chosen *lacera*, *contorta*, p. 122, WELLS 217.—*O. lacera* p. 53 fig., *titizimaensis* sp. n. p. 53 fig. Japan, YABE, SUGIYAMA & EGUCHI 226.

Oxyporidae fam. n. p. 431, YABE & EGUCHI *Proc. Imp. Acad. Tokyo* 11 10 1935.

†*Pachyphyllum websteri* p. 32, CHAPPARS 32.

Pachyseris rugosa p. 63 fig., *speciosa* p. 63 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Palaeocyclus porpita* p. 193 fig., *rugosus* p. 196, HILL 88.—*P.* sp. fig., LEJEUNE 118.

†*Palaeopsammia* genolectotype chosen *multiformis* p. 122, WELLS 217.

†*Palaeosmilia ampfereri* sp. n. p. 134 fig. Lr. Permian S. Alps, *theta*, *stutchburyi*, *murchisoni* p. 135, *schucherti* sp. n. p. 137 fig. Lr. Permian Texas, *hammeri*, sp. p. 137, HERITSCH *Amer. J. Sci. New Haven* (5) 32 188 1936.—*P. (Cyathophyllum) murchisoni* var. *extravesicularis* var. n. pp. 62, 117 fig. Lower Carboniferous Nowaya Zemlya, GORSKY *Trans Arctic Inst. Leningrad* 28 1935.

Palauphyllia subgen. n. (of *Lobophyllia*) type *hataii* sp. n. p. 44 fig., Palau Islands, YABE, SUGIYAMA & EGUCHI *Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I* 1936.

†*Paracyathus* cf. *firmus* p. 256, KÜHN 108.

†*Parasmilia* (?) *compressa* p. 64, HACKEMESSER 75.—*Parasmelia* [sic] ? sp. p. 386 fig., STEPHENSON 190.

Parazoanthus axinellae p. 3 fig., ARNDT & PAX 8.—*P. gracilis* p. 8 fig., CARLGREN 28.

Pavona garanbiensis sp. n. p. 25 fig. Taiwan, YABE & EHARA *Proc. Imp. Acad. Tokyo* 12 1 1936.—*P. cactus* p. 56 fig., *decrussata* p. 56 fig., cf. *divaricata* p. 56 fig., *frondifera* p. 57 fig., *maldivensis* p. 57 fig., *varians* p. 57 fig., *lilacea* p. 58 fig., *praetorta* p. 58 fig., cf. *seriata* p. 58 fig., YABE, SUGIYAMA & EGUCHI 226.

Pectinia discussed, *lactuca*, *maean-drites* p. 123, WELLS 217.

†*Pentacoenia* discussed, genolectotype chosen *elegantula* p. 123, WELLS 217.

†*Peplosmilia iberica* p. 65, HACKEMESSER 75.

†*Petalaxis sibiricus* sp. n. p. 39 fig., Carboniferous Siberia, GABOUNI *Bull. Com. géol. Sibérie Tomsk* 1 3 1919.

Phyllastrea discussed, genotype *tubifer* p. 121, WELLS 217.

†*Phyllocoenia felixi* sp. n. p. 16 fig., var. *minor* var. n. p. 17 fig., *diplothecata* sp. n. p. 17 fig., *major* sp. n. p. 18 fig., *corallaris*, *lepida* p. 19, *P. (?) polluciformis* p. 19 fig., Cretaceous Greece, HACKEMESSER *Palaeontographica Stuttgart* 84A 1-3 1936.—*P.* discussed p. 120, WELLS 217.

†*Phyllocoeniella* discussed, genotype chosen *carryana* p. 123, WELLS 217.

†*Phyllogyra*, genotype chosen *etheridgei* p. 124, WELLS 217.

Phymastrea valenciennesii p. 31 fig., YABE, SUGIYAMA & EGUCHI 226.

Physogyra lichtensteini p. 18 fig., YABE, SUGIYAMA & EGUCHI 226.

Physophyllia revised p. 429, YABE & EGUCHI 221.—*P. ayleni* p. 53 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Placocoenia* cf. *bulgarica* p. 26, cf. *dumortieri* p. 27, HACKEMESSER 75.

†*Placosmia* sp. p. 727, THOMAS 199.

Placotrochoides genotype chosen *scaphula* p. 124, WELLS 217.

Platygyra discussed, *phrygia*, *labyrinthica* p. 125, WELLS 217.—*P. phrygia* p. 38 fig., *gracilis* p. 38 fig., *ryukyuensis* sp. n. p. 38 fig. Japan, YABE, SUGIYAMA & EGUCHI *Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I* 1936.

†*Plerastraea saheliana* sp. n. p. 216 fig. Neogene Eritrea, ZUFFARDI-COMERCI *Atti Acc. Torino* 71 2 1936.

Plerogyra sinuosa p. 18 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Plesiastraea* cf. *fungiformis* p. 213, ZUFFARDI-COMERCI 231.

Plesioseria australiae p. 118, WELLS 217.

†*Plesiosmia* genotype chosen *turbinata* p. 125, WELLS 217.

†*Pleurosmilia* discussed p. 103, WELLS 217.—*P. crassa* p. 65, HACKEMESSER 75.

†*Pleurostylina* genotype chosen *corallina* p. 125, WELLS 217.

Pocillopora damicornis p. 12 fig., var. *bulbosa* p. 13 fig., var. *cespitosa* p. 13 fig., cf. *eydouxii* p. 13 fig., cf. *ligulata* p. 13 fig., cf. *modumanensis* p. 14 fig., mean-

drina var. *nobilis* p. 14 fig., *setchelli* p. 14 fig., *verrucosa* p. 14 fig., YABE, SUGIYAMA & EGUCHI 226.

Podabacia crustacea p. 64 fig., *elegans* p. 64 fig., forma *plicata* f. n. p. 64 fig., forma *varians* f. n. p. 65 fig., var. *lobata* p. 65 fig., var. *lobata* forma *kiiensis* f. n. p. 65 fig., var. *lobata* forma *nomaensis* f. n. p. 66 fig., var. *lobata* forma *vanderhorsti* f. n. p. 66 fig., *formosa* sp. n. p. 66 fig., Japan, YABE, SUGIYAMA & EGUCHI *Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I* 1936.

Podasteria discussed, *gyrosa* p. 125, *areolata* p. 126, *mayori* nom. n. p. 125 for *Manicina gyrosa* Ehrenberg, WELLS *Amer. J. Sci. New Haven* (5) 31 182 1936.

†*Polyphyllastrea* discussed, genotype chosen *plana*, *toucasiana* p. 126, WELLS 217.

†*Polyphyloseris* genotype chosen *convexa* p. 126, WELLS 217.

†*Polythecalis* aff. *chinensis* p. 16 fig., *grayi* sp. n. p. 17 fig. Permo-Carboniferous Iran, DOUGLAS *Palaeont. indica N.S.* 22 6 1936.

Porites sp. p. 37 fig., MOORHOUSE 135.

†*Porpites* discussed, genotype chosen *globulatus* p. 127, WELLS 217.

Pourtalosmia discussed, genotype chosen *pourtalei* p. 127, WELLS 217.

†*Praestephanoecenia* genotype chosen *schafhäutli* p. 127, WELLS 217.

†*Prionastraea cretacea* sp. n. p. 40 fig. Cretaceous Greece, HACKEMESSER *Palaeontographica Stuttgart* 84A 1-3 1936.—*P. irregularis* p. 214, *vasta* var. *superficialis* p. 215 fig., *porroi* sp. n. p. 215 fig. Neogene Eritrea, ZUFFARDI-COMERCI *Atti Acc. Torino* 71 2 1936.

†*Prismatophyllum oweni* p. 37, CHAPPAIS 32.—*P. quadrigeminum* pp. 427, 430 fig., *pentagonum*, *ananas*, *hexagonum* p. 432, LANG & SMITH 114.

Protolobophyllia japonica p. 45 fig., YABE, SUGIYAMA & EGUCHI 226.

Psammocora contigua p. 59 fig., *exesa* p. 59 fig., *profundacella* p. 60 fig., *superficiales* p. 60 fig., *vaughani* sp. n. p. 60 fig., sp. ? sp. n. p. 61 fig. Japan, YABE, SUGIYAMA & EGUCHI *Sci. Rep. Tôhoku Imp. Univ. Spec. Vol. I* 1936.

†*Pseudocoenia* discussed, genoelectotype chosen *bernardina* p. 128, WELLS 217.

Pseudocolumnastrea yamanarii p. 58 fig., YABE, SUGIYAMA & EGUCHI 226.

Pseudosiderastrea tayamai p. 62 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Pseudothecosmilia rofanica* p. 188 fig., KÜHN 109.

†*Psilogyra telleri* var. *graeca* var. n. p. 13 fig., *P. (?) oceani* p. 14, Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.

†*Phytophyllum* sp. fig., LEJEUNE 118.

†*Pycnactis mitratus* p. 523 figs., HILL & BUTLER 89.

†*Rabdstrea* discussed, genoelectotype chosen *jurensis* p. 128, WELLS 217.

†*Rhabdocora* discussed, genoelectotype chosen *cretacea* p. 128, WELLS 217.

†*Rhabdophyllia* sp. p. 42, HACKEMESSER 75.—*R. stipata* p. 423, sp. sp. n. cf. *crenaticosta* p. 424 fig. Palaeogene I. of Rhodes, ZUFFARDI-COMEROI Atti Acc. Torino 70 3 1935.

†*Rhipidogyra* discussed p. 131, WELLS 217.—*R. aff. crispa* p. 199 figs., KÜHN 109.

Rhizotrochus discussed p. 120, WELLS 217.

†*Rhodophyllum tazoultense* sp. n. p. 247 fig. Lower Carboniferous Sahara, MENCHIKOFF & HSU Bull. Soc. géol. Fr. 5 v 4-5 1935.

Rhodopsammia discussed, genoelectotype chosen *parallela* p. 129, WELLS 217.

†*Sabinotrochus* discussed p. 131, WELLS 217.

Sagartia parasitica p. 196 fig., KORSCHOLT 105.—*S. luciae* p. 178, PEARSE 152.

Scapophyllia cylindrica p. 42 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Schizosmilia* genoelectotype chosen *excelsa* p. 129, WELLS 217.

†*Sclerosmilia* genoelectotype chosen *rugosa* p. 129, WELLS 217.

†*Septastraea minor* p. 40 fig., HACKEMESSER 75.

Seriatopora cf. *angulata* p. 11 fig., *caliendrum* p. 11 fig., *hystrix* p. 12 fig., *stellata* p. 12 fig., YABE, SUGIYAMA & EGUCHI 226.

Siderastraea radians pp. 201, 205 fig., KORSCHOLT 105.—*S. radians* p. 201 fig., *siderea* p. 201, YONGE 229.

†*Sinophyllum* p. 408, HERITSCH 85.

†*Smilitrochus jacobi* sp. n. Cretaceous Madagascar, ALLOITEAU Ann. géol. Serv. Mines Madagascar 6 p. 48 figs.

Solenastraea hyades p. 26 figs., LEJEUNE 118.

†*Stelloria* discussed, genoelectotype chosen, *elegans*, *sulcata*, *rustica* p. 130, WELLS 217.

†*Stenogyra* discussed, genoelectotype chosen *corallina* p. 130, WELLS 217.—*S. sinuosa* ? p. 13, HACKEMESSER 75.

Stephanauge annularis sp. n. p. 22 fig. California, CARLGREN J. Wash. Acad. Sci. 26 1 1936.

†*Stephanocoenia microcalyx* sp. n. p. 198 fig. Jurassic Germany, KÜHN Paläont. Z. Berlin 17 3-4 1935.

†*Stephanocyathus* discussed, genoelectotype chosen *elegans* p. 131, WELLS 217.

†*Stephanophyllia languinei* sp. n. Cretaceous Madagascar, ALLOITEAU Ann. géol. Serv. Mines Madagascar 6 p. 51 figs.

†*Stephanotrochus* discussed p. 131, WELLS 217.

†*Streptelasma* (*Enterolasma*) *strictum* p. 109 fig., sp. p. 139, *rectum* p. 172, GOLDRING 68.

†*Stylastraea* discussed, genoelectotype chosen *sinemuriensis* p. 129, WELLS 217.

†*Styldiphyllum* discussed p. 13, *kueichowense* p. 14 fig., *jenningsi* p. 15 fig., *orientalis* p. 16 fig. spp. n. Permian-Carboniferous Iran, DOUGLAS Palaeont. indica N.S. 22 6 1936.

†*Stylina* discussed pp. 112, 128, WELLS 217.—*Stylina* sp. α , sp. β fig., sp. γ p. 727, sp. (?) *Cyathophora* sp.) p. 728, THOMAS 199.—*S. sp. ? sp. n.* p. 28, Cretaceous Greece, HACKEMESSER Palaeontographica Stuttgart 84A 1-3 1936.

Stylocoenia japonica p. 16, YABE, SUGIYAMA & EGUCHI 226.

†*Stylocoenia taurinensis* p. 418, *lobato-rotundata* p. 419, ZUFFARDI-COMERCI 230.

Stylocoeniella hanzawai p. 16 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Stylohelicia* genolectotype chosen *mammillata* p. 131, WELLS 217.

†*Stylomadrepore* discussed, genolectotype chosen *madreporeacea*, *dinarica* p. 130, WELLS 217.

Stylophora pistillata p. 15 fig., *mordax* p. 15 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Stylophora contorta*, *distans* p. 426, ZUFFARDI-COMERCI 230.

Stylosmilia brevis p. 15 fig., HACKE-MESSER 75.

Symphyllia recta p. 46 fig., *agaricia* p. 46 fig., *radians* p. 46 fig., *valencien-nesii* p. 47 fig., YABE, SUGIYAMA & EGUCHI 226.

†*Synastrea toucasiana* p. 126, WELLS 217.

Tealia crassicornis p. 33 fig., ROBSON 169.

†*Teleophyllia* discussed, genolectotype chosen *grandis* p. 131, WELLS 217.

†*Tethocyathus microphyllus* p. 256, KÜHN 108.

†*Thamnasteria langrunensis* p. 728, THOMAS 199.—*Thamnastraea acutisepta* sp. n. p. 197 fig., *wachneri* sp. n. p. 198 fig. Jurassic Germany, KÜHN Paläont. Z. Berlin 17 3-4 1935.—*T. aff. firmasiana* p. 46, cf. *splendida*, *corbarica* p. 47, cf. *decipiens* p. 48, *diversisepta* sp. n. p. 48 fig., *columellaris* sp. n. p. 49 fig., *stricta* p. 49, *brevipes*, cf. *lamellistriata*, *pullata* p. 50, *hieroglyphica*, *prae-turonica* p. 51, *toucasiana*, *composita* p. 52, aff. *induta*, cf. *conferta*, cf. *frondescens* p. 53, sp. n., p. 54 fig.; Cretaceous Greece, HACKE-MESSER Palaeontographica Stuttgart 84A 1-3 1936.

†*Thecocyathus discus* p. 129 figs., DARESTE DE LA CHAVANNE 41.—*T. mactra* p. 111 figs., *tintinnabulum* p. 111 figs., KÜHN 110.

Thecopsammia fistula p. 167, YABE & EGUCHI 223.

†*Thecosmilia* discussed p. 192, *costata* p. 193, *T. (Calamophyllia) flabellum* p. 194, *T. (Cladophyllia) ramea* p. 196,

KÜHN 109.—*Thecosmilia* (?) *banzensis* sp. n. p. 112 fig. Jurassic France, KÜHN Paläont. Z. Berlin 17 3-4 1935.—*T. sp.* p. 1017 fig., KUTASSY 111.—? *T. sp.* p. 727, THOMAS 199.

†*Thysanus* discussed p. 131, WELLS 217.

Trachyphyllia discussed, *geoffroyi* p. 119, WELLS 217.—*T. amarantum* p. 22 fig., YABE, SUGIYAMA & EGUCHI 226.

Trachyphyllidae fam. n. p. 19, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tōhoku Imp. Univ. Spec. Vol. I 1936.

Tridacophyllia lactuca p. 51 fig., sub-sp. *japonica*, *tanabensis* sub-spp. n. p. 52 fig. Japan, *alcicornis*, YABE, SUGIYAMA & EGUCHI Sci. Rep. Tōhoku Imp. Univ. Spec. Vol. I 1936.

†*Trochocyathus besairiei* sp. n. p. 46 fig. Cretaceous Madagascar, ALLOITEAU Ann. géol. Serv. Mines Madagascar 6 1936.—*T. calcar* p. 126 figs., *intermedius* p. 127 figs., *cuneolus* p. 126 figs., *mag-nevillianus* p. 128 figs., DARESTE DE LA CHAVANNE 41.—*T. armatus* p. 235, var. *longispina* var. n. p. 235 figs., *latero-cristatus* p. 236, *oboesus* p. 236, *versicostatus* p. 237, Neogene Italy, VENZO Palaeontogr. ital. Siena 35 1935.

†*Trochosmilia archiaci*, *cuneolus* p. 61, *didymoides*, cf. *polymorpha* p. 62, sp. n. p. 63 fig. Cretaceous Greece, HACKE-MESSER Palaeontographica Stuttgart 84A 1-3 1936.—*T. sp. sp. n.* cf. *acutimargo* p. 425 fig. Palaeogene I. of Rhodes, ZUFFARDI-COMMERCI Atti Acc. Torino 70 3 1935.

†*Tryplasma primum* sp. n. p. 204 fig. Wenlock Shale, England, *loveni* p. 206 fig., *malvernense* sp. n. p. 208 fig. Wenlock Limestone England, *rugosum*, *flexuosum*, p. 209, HILL Philos. Trans. London (B) 226 534 1936.

Tubastraea discussed p. 132, WELLS 217.

†*Turbinolia androiavehsis* sp. n. Cretaceous Madagascar, ALLOITEAU Ann. géol. Serv. Mines Madagascar 6 p. 45 figs.

†*Uralinia* discussed p. 45, *megacystosa* sp. n. pp. 46, 105 fig. Etroeungian Nowaya Zemlya, GORSKY Trans. Arctic Inst. Leningrad 28 1935.

Urticina crassicornis p. 196 fig., *felina* p. 199 fig., KORSCHOLT 105.

†*Waagenophyllum* discussed p. 10, *persicum* p. 20 fig., *tabellatum* p. 21 fig., *muricatum* p. 22 fig. spp. n., cf. *omiensis* p. 22 fig., *magnificum* sp. n. p. 23 fig., Permo-Carboniferous Iran, DOUGLAS Palaeont. indica N.S. 22 6 1936.—*W. texanum* sp. n. p. 144 fig. Permian Texas, *akasakense*, *chitralicum*, *columbicum*, *indicum*, var. *mongoliense*, var. *akagouense*, var. *kueichowense*, *jourdyi*, *katoi*, *mixtum*, *omiense*, *wengchengense*, sp. p. 147, HERITSCH Amer. J. Sci. New Haven (5) 31 182 1936.

†*Wentzelella* discussed p. 13, *subtimorica* p. 23 fig., *persica* sp. n. p. 24 fig., *harrisoni* sp. n. p. 24 fig., Permo-Carboniferous Iran, DOUGLAS Palaeont. indica N.S. 22 6 1936.

†*Xylodes yassense* p. 56 fig., JONES 97.

†*Yatsengia asiatica* p. 25 fig., DOUGLAS 54.

†*Zaphrentis calyculus*, *chouteauensis* p. 44, *tantilla*, *tenella* p. 48, CHAPPAIS 32.—*Z.* sp. p. 139, *prolifera* p. 148 fig., cf. *prolifera* p. 172, GOLDBERG 68.—*Zaphrentis* cf. *tortuosa* fig., LEJEUNE 118.—*Z. delanouei* p. 235, *enniskilleni*, *omalusi* p. 236, *crassisepta* sp. n. p. 237 figs., cf. *disjuncta* p. 238 figs., sp. p. 238 figs., Lower Carboniferous Sahara, MENCHIKOFF & HSU Bull. Soc. géol. Fr. 5 v 4-5 1935.—*Z. coronata* p. 483 fig., SPRIESTERSBACH 188.

†*Zaphrentoides* discussed p. 14, *ianischevskiyi* sp. n. p. 16 fig., *gudkovi* sp. n. p. 18 fig., Carboniferous Siberia, GABOUNIA Bull. Com. géol. Sibérie Tomsk 1 3 1919.

†*Zittelfungia* discussed, genolectotype chosen *vicaryi* p. 132, WELLS 217.

Zoanthella henseni, *americana* p. 201 fig., KORSCHOLT 105.

CTENOPHORA.

Aulacotena acuminata p. 9, RUSSELL 176.

Bathytene chuni p. 9, RUSSELL 176.

Beroë p. 19, GRAN, HENTSCHEL & RUSSELL 70.—*B.* sp., *ovata* p. 214 fig., sp. p. 216 fig., KORSCHOLT 105.—*B. compacta*, *cucumis*, *abyssicola* p. 9, RUSSELL 176.

Bolina hydatina p. 217 fig., KORSCHOLT 105.—*B. infundibulum* p. 9, RUSSELL 176.

Bolinopsis vitrea p. 217 fig., KORSCHOLT 105.

Callianira bialata p. 215 fig., KORSCHOLT 105.—*C. antarctica*, *cristata* p. 9, RUSSELL 176.

Cestus veneris p. 217 fig., KORSCHOLT 105.

Coeloplana bocki pp. 215, 218 fig., KORSCHOLT 105.—*C. gonotena* colloblasts p. 850, WEILL 213.

Ctenoplana discussed p. 459, *rosacea*, *korotnevi*, *maculomarginata*, *maculosa* p. 460, *kowalevskii* p. 473 fig., *perrieri* sp. n. p. 479 fig., *dubosqui* p. 483 fig., Indo-China, DAWYDOFF Bull. biol. France-Belg. 70 4 1936.

Eucharis multicornis pp. 211, 216 fig., KORSCHOLT 105.

Hormiphora plumosa colloblasts p. 850, WEILL 213.

Lampetia pancerina p. 212 fig., KORSCHOLT 105.—*L. pancerina* colloblasts p. 850 fig., WEILL 213.

Mertensia ovum pp. 9, 16, RUSSELL 176.

Mnemiopsis leidyi p. 460 fig., COONFIELD 34.—*M. leidyi* p. 421 fig., COONFIELD 35.—*M. leidyi* p. 179, PEARSE 152.

Planotena subgen. n. (of *Ctenoplana*) subgenotype *agniae* p. 461 fig., *caulleryi* sp. n. p. 465 fig., *yuri* sp. n. p. 470 fig., Indo-China, DAWYDOFF Bull. biol. France-Belg. 70 4 1936.

Pleurobrachia pileus p. 19, GRAN, HENTSCHEL & RUSSELL 70.—*P. crinita*, *pileus* p. 9, RUSSELL 176.—*P. pileus* p. 303, VALKANOV 207.—*P. pileus* colloblasts p. 850, WEILL 213.

INCERTAE SEDIS.

(For the ARCHAEOCYATHINAE vide SECTION III. PORIFERA.)

†*Cycloporidium tuberiforme* p. 165, YABE & SUGIYAMA 225.

†*Lithopora koeneni* p. 165, YABE & SUGIYAMA 225.

†*Neostroma* p. 165, YABE & SUGIYAMA 225.

†*Stromatopora tibetica* p. 165, YABE & SUGIYAMA 225.

†*Stromatorhiza* p. 165, YABE & SUGIYAMA 225.

V. ECHINODERMA

ARRANGED BY

A. G. BRIGHTON, M.A.

CONTENTS.

| | PAGE |
|-------------------------------------|------|
| I. TITLES | 2 |
| II. SUBJECT INDEX | 9 |
| III. SYSTEMATIC INDEX | 12 |
| Holothurioidea | 12 |
| Echinoidea | 13 |
| Asteroidea | 22 |
| Ophiuroidea | 24 |
| Crinoidea | 26 |
| Machaeridia | 28 |
| Cystidea and Edrioasteroidea | 28 |
| Blastoidea | 29 |

I.—TITLES.

- Aiyar, R. G.** *see* Subramaniam, M. K.
- 1.—**Angelini, G.** Distribuzione geografica dei Clypeasteridae fossile e viventi. *Mem. Soc. tosc. Sci. nat.* **45** 1935 pp. 141–152.
- 2.—**Baldwin, E. & Needham, D. M.** Phosphagen in echinoid muscle and in electrical tissue. *Nature London* **138** 1936 p. 506.
- 3.—**Bartenstein, H.** Kalk-Körper von Holothurien in norddeutschen Lias-Schichten. *Senckenbergiana Frankfurt* **18** 1936 pp. 1–10 12 figs.
- 4.—**Bassler, R. S.** New species of American Edrioasteroidea. *Smithson. misc. Coll.* **95** 6 1936 pp. 1–33 pls. i–vii.
- 5.—**Beck, L. V. and Shapiro, H.** Permeability of germinal vesicle of the starfish egg to water. *Proc. Soc. exp. Biol.* **34** 1936 pp. 170–172 1 fig.
- 6.—**Berthoumeyroux, M.** Recherches sur le pouvoir réducteur des liquides du milieu intérieur de quelques invertébrés marins. *Bull. Sta. biol. Arcachon* **32** 1935 pp. 111–153.
- 7.—**Bertolini, F.** Ricerche sulla escrescenza degli Oloturoidi. *Pubb. Staz. zool. Napoli* **15** 1936 pp. 322–338.
- 8.—**Beurlen, K.** Die Saleniiden und ihre Bedeutung für die Stammesgeschichte der Echinoiden. *Paläont. Z. Berlin* **18** 1936 pp. 17–38 7 figs.
- 9.—**Bialaszewicz, K. & Kupfer, C.** De la composition minérale des muscles des animaux marins. *Arch. int. Physiol.* **42** 1936 pp. 398–404.
- 10.—**Bigot, A.** Les récifs Bathoniens de Normandie. *Bull. Soc. géol. Fr.* (5) **4** 1935 pp. 697–736. [Echinoidea at pp. 725–726 pl. xlii figs. 4–7.]
- 11.—**Blanchet, F.** Étude géologique des Montagnes d'Escreins. *Trav. Lab. Géol. Univ. Grenoble* **19** 1936 178 pp.
- 12.—**Boone, L.** Scientific results of the world cruise of the yacht "Alva," 1931, William K. Vanderbilt, Commanding. Part II. Echinodermata. *Bull. Vanderbilt Mar. Mus. Huntingdon* **6** 1935 pp. 235–260 pls. lxix–xcvi.
- 13.—**Borei, H. & Wernstedt, C.** Zur Ökologie und Variation von *Psammochinus miliaris*. *Ark. Zool. Stockholm* **28A** 14 1936 pp. 1–15.
- Brachet, J.** *see* Dalcq, A.
- 14.—**Breistroffer, M.** Révision de la faune Hauterivienne du Néron en Chartreuse (Isère). *Bull. Soc. sci. Dauphiné* **55** 1935 pp. 53–555. [Echinoderma on pp. 550–552]; [and] *Trav. Lab. Géol. Univ. Grenoble* **18** 1936 pp. 131–155. [Echinoderma on pp. 150–152.]
- 15.—**Brighton, A. G.** On a cup of *Uintacrinus* from the English Chalk. *Naturalist London* **1936** pp. 169–172 figs. 1–6.
- 16.—**Broch, H.** Die Bedeutung der Dröbak-Schwelle für die Bodenfauna der Garnelen-Felder. *Avh. Norske Vid. Akad. Oslo* **1935** 5 1936 pp. 1–32. [Echinoderma at pp. 16–18.]
- 17.—**Brooks, S. T.** The exploration of Southampton Island. *Zoology. Echinodermata and Mollusca. Mem. Carnegie Mus.* **12** II 5 1935 pp. 1–2.
- 18.—**Burrows, R. B.** Further observations on parasitism in the starfish. *Science N.Y.* **84** 1936 p. 329.
- 19.—**Cant, C.** The Natural History of Barra, Outer Hebrides. *Echinodermata. Proc. phys. Soc. Edinb.* **22** 1936 p. 266.
- 20.—**Chaigne, M.** Recherches biochimiques sur le Glycogène des Invertébrés. *Bull. Sta. biol. Arcachon* **31** 1934 pp. 1–79.
- 21.—**Chaloux, J.** A propos d'une Comatulé à douze bras. *Bull. Soc. sci. Bretagne* **11** 1935 pp. 91–94 figs. 1–3.
- 22.—**Chapman, F. & Crespin, I.** The palaeontology of the Plantagenet Beds of Western Australia. *J. Roy. Soc. W. Aust.* **20** 1934 pp. 103–136. [Echinoidea at pp. 118–119.]

- 23.—Chappars, M. S. Catalog of the type specimens of fossils in the University of Cincinnati Museum. Ohio J. Sci. 36 1936 pp. 1-45.
- 24.—Chavanne, J. D. de. Étude sur la faune du Bajocien Supérieur du Mont d'Or Lyonnais. VII.—Echinodermes. Trav. Lab. Geol. Lyon 28 9 1936 pp. 121-125 pl. xiii figs. 1-17.
- 25.—Checchia-Rispoli, G. Su alcuni Echinidi della Sicilia. Bol. Soc. geol. ital. 55 1936 pp. 295-310 pls. xvi-xvii.
- 26.—Checchia-Rispoli, G. Su di una Echinofauna pliocenica dei dintorni di Lentini (provincia di Siracusa). Rend. Acc. Lincei (6) 23 1936 pp. 383-386.
- 27.—Child, C. M. Differential reduction of vital dyes in the early development of echinoderms. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 426-456 38 figs.
- 28.—Child, C. M. A contribution to the physiology of exogastrulation in echinoderms. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 457-493 48 figs.
- 29.—Churney, L. The quantitative determination of mitotic elongation. Biol. Bull. Woods Hole 70 1936 pp. 400-407.
- 30.—Clark, A. H. Echinoderms collected by Capt. Robert A. Bartlett in the seas about Baffin Land and Greenland. J. Wash. Acad. Sci. 26 1936 pp. 294-296 figs. 1-4.
- 31.—Clark, A. H. Five new genera and two new species of unstalked crinoids. Proc. U.S. Nat. Mus. 83 1936 pp. 245-250.
- 32.—Clark, A. H. Crinoidea. Sci. Rep. John Murray Exped. 4 1936 pp. 87-108 pl. i.
- 33.—Clark, A. H. Four new Brittlestars from Puerto Rico. Smith. misc. Coll. 91 24 1936 pp. 1-8 3 pls.
- 34.—Clark, A. H. Biological results of the Snellius Expedition. I. The unstalked crinoids of the Snellius Expedition. Temminckia Leiden 1 1936 pp. 295-320 pls. vii-ix.
- 35.—Clark, H. L. & Deichmann, E. On *Psolucucumis* Heding and its allies. Ann. Mag. nat. Hist. (10) 17 1936 pp. 564-568.
- 36.—Clark, J. M. An experimental study of polyspermy. Biol. Bull. Woods Hole 70 1936 pp. 361-384.
- 37.—Cline, L. M. Blastoids of the Osage Group, Mississippian: Part I. The genus *Schizoblastus*. J. Paleont. Menasha Wis. 10 pp. 260-281 pls. xlv-xlv.
- 38.—Cole, K. S. & Cole, R. H. Electric impedance of *Asterias* eggs. J. gen. Physiol. Baltimore 19 1936 pp. 609-623, 625-632.
- Cole, R. H. see Cole, K. S.
- 39.—Colombini, N. Distribuzione geografica della Scutellidae Gray fossili e viventi. Mem. Soc. tosc. Sci. nat. 45 1935 pp. 254-270 map.
- 40.—Cottreau, J. Sur la présence du genre *Millericrinus* dans le Jurassien de la province de Betichy (S.W. de Madagascar). C.R. Soc. géol. Fr. 1936 pp. 289-290 fig.
- 41.—Creac'h, P. Étude de la respiration des différents tissus de "*Asterias rubens*" et des variations de cette respiration en présence de divers colorants. Bull. Sta. biol. Arcachon 32 1935 pp. 7-29.
- Crespin, I. see Chapman, F.
- 42.—Cuvillier, J. Note sur *Clypeaster fourtani* Lambert. C.R. Soc. géol. Fr. 1936 pp. 255-257.
- 43.—Dalcq, A., Pasteels, J. & Brachet, J. Données nouvelles (*Asterias glacialis*, *Phascolion strombi*, *Rana fusca*) et considérations théoriques sur l'inertie de l'oeuf vierge. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 881-912 9 figs.
- 44.—Davis, A. G. The London Clay of Sheppey and the location of its fossils. Proc. Geol. Ass. London 47 1936 pp. 339-345. [Echinoderma on pp. 339-340.]
- 45.—Deichmann, E. The Arctic species of *Molpadia* (Holothuriodea), and some remarks on Heding's attempt to subdivide the genus. Ann. Mag. nat. Hist. (10) 17 1936 pp. 452-464 figs. 1-6.
- 46.—Deichmann, E. Notes on Pennatulacea and Holothuriodea collected by the first and second Bingham Oceanographic Expeditions, 1925-1926. Bull. Bingham Oceanogr. Coll. New Haven 5 3 1936 pp. 1-11.
- 47.—Deichmann, E. Notes on *Molpadia oolitica* (Pourtalès). Proc. New Engl. Zool. Cl. 15 1936 pp. 57-62 9 figs.

48.—Deichmann, E. A new species of *Thyone* from the west coast of Mexico. *Proc. New Engl. Zool. Cl.* 15 1936 pp. 63–66 fig.

Deichmann, E. *see* Clark, H. L.

49.—Diebschlag, E. Ganzheitliches Verhalten bei einigen See- und Schlangensterne. *Verh. Deutsch. zool. Ges. Leipzig* 38 1936 pp. 150–157.

50.—Döderlein, L. Die Asteriden der Siboga-Expedition. III. Die Unterfamilie Oreasterinae. *Siboga Exped. Leiden* 46c 1936 pp. 295–369 pls. xxi–xxxii.

51.—Dollfus, R. P. *Stellasteropsis foudi*, n. gen., n. sp. *Stelleride commun dans le Golfe de Suez.* *Bull. Soc. zool. Fr.* 61 1936 pp. 151–158 3 figs.

52.—Dons, C. Zoologische Notizen XXVI. *Pseudoporania stormi*, n. gen., n. sp. *K. norske vidensk. Selsk. Trondheim* 8 1936 pp. 17–20 4 figs.

53.—Dons, C. Norges strandfauna VIII. Asteroider. *K. norske vidensk. Selsk. Trondheim* 8 1936 pp. 29–32 4 figs.

54.—Dons, C. Norges strandfauna IX. Ophiurider. *K. norske vidensk. Selsk. Trondheim* 8 1936 pp. 37–40 3 figs.

55.—Dons, C. Ophiuriden aus Nord-Norwegen. *K. norske vidensk. Selsk. Trondheim* 8 1936 pp. 61–64 3 figs.

56.—Dons, C. Norges strandfauna X. Echinider. *K. norske vidensk. Selsk. Trondheim* 8 1936 pp. 65–67 2 figs.

57.—Dons, C. Norges strandfauna XI. Holothurier. *K. norske vidensk. Selsk. Trondheim* 8 1936 pp. 68–70 6 figs.

58.—Elster, H. J. Über die Rolle der Eisekrete bei der Befruchtung der Echinoideen. *Verh. Deutsch. zool. Ges. Leipzig* 38 1936 pp. 168–172.

59.—Fisher, W. K. Note on a starfish from Christmas Island, Indian Ocean. *Bull. Raffles Mus. Singapore* 9 1936 p. 74.

60.—Foerste, A. F. Several new Silurian Cephalopods and Crinoids, chiefly from Ohio and Hudson Bay. *Ohio J. Sci.* 36 1936 pp. 261–276 pls. i–ii.

61.—Fox, H. M. Rates of cleavage of sea urchin eggs in different latitudes. *Nature London* 138 1936 p. 839.

Francis, D. S. *see* Henshaw, P. S.

62.—Frentzen, K. Die Lias Delta (Amaltheen-Schichten) im Gebiete zwischen Aselfingen und Aalen. *Sitz-Ber. heidelberg Akad. Wiss.* 1934 2 pp. 1–73. [*Echinoderma* on p. 45.]

63.—Fry, H. J. Studies of the mitotic figure. V. The time schedule of mitotic changes in developing *Arbacia* eggs. *Biol. Bull. Woods Hole* 70 1936 pp. 89–99.

64.—Geis, H. L. Recent and fossil pedicellariae. *J. Paleont. Menasha Wis.* 10 1936 pp. 427–448 1 fig. pls. lviii–lxi.

65.—Gerth, H. The occurrence of isolated calicular plates of *Dinocrinus* in the Permocarboneous of Australia and India and its stratigraphical significance. *Proc. K. Akad. Wet. Amsterdam* 39 1936 pp. 865–870 4 figs.

66.—Goldring, W. Some Hamilton (Devonian) Crinoids from New York. *J. Paleont. Menasha Wis.* 10 1936 pp. 14–22 1 fig. pls. vi–vii.

67.—Gregorio, A. De. Monografia dei Fossili Liassici di Monte San Giuliano. *Ann. Géol. Paléont. Palermo* 53 1930 pp. 1–56 14 pls. [*Echinoderma* at pp. 45–46.]

68.—Gregorio, A. De. Fossili triassici delle Cave di Billiemi presso Palermo. *Ann. Géol. Paléont. Palermo* 54 1930 pp. 1–40 7 pls. [*Echinoderma* on pp. 29–30.]

69.—Grimpe, G. *Echinodermata* (Stachelhäuter). *Tab. biol. Berlin* 6 1930 pp. 490–535.

70.—Gruvel, A. Contribution à l'étude de la bionomie générale et de l'exploitation de la faune du Canal de Suez. *Mém. Inst. Egypt* 29 1936 pp. 1–255. [*Echinoderma* at pp. 188–189.]

71.—Häntzschel, W. Seeigel-Spülsäume. *Natur u. Volk* 66 1936 pp. 293–298 4 figs.

72.—Harvey, E. B. Parthenogenetic merogony or cleavage without nuclei in *Arbacia punctulata*. *Biol. Bull. Woods Hole* 71 1936 pp. 101–121 figs. 1–41.

73.—Hayashi, R. Studies on the morphology of Japanese Sea-stars. II. Internal anatomy of two short-rayed sea-stars, *Patiria pectinifera* (Müller & Troschel) and *Asterina batheri* Goto. J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 pp. 197–212 12 figs. pl. ix.

74.—Hayashi, R. Variations of the sea-star, *Asterias amurensis* Lütken, due to growth stages. J. Fac. Sci. Hokkaido Univ. Zool. 5 1936 pp. 5–20 10 figs. pls. i–ii.

75.—Heding, S. G. 6. Og 7. Thule Expedition til Sydøstgrønland 1931–1933. Echinoderms. Medd. Grønland 103 1 1936 pp. 1–34 6 figs.

76.—Heilbrunn, L. V. Protein Lipid Binding in Protoplasm. Biol. Bull. Woods Hole 71 1936 pp. 299–305 3 figs.

77.—Henshaw, P. S. and Francis, D. S. The effect of X-Rays on cleavage in *Arbacia* eggs: evidence of nuclear control of division rate. Biol. Bull. Woods Hole 70 1936 pp. 28–35.

78.—Hörstadius, S. Über die zeitliche Determination im Keim von *Paracentrotus lividus*. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 1–39 10 figs.

79.—Hörstadius, S. Weitere Studien über die Determination im Verlaufe der Eiachse bei Seeigeln. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 40–68 15 figs.

80.—Hörstadius, S. Studien über Heterosperme seeigelmerogone nebst bemerkungen über einige keimblattchimären. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 801–880 28 figs.

81.—Hörstadius, S. & Wolsky, A. Studien über die Determination der Bilateralsymmetrie des jungen Seeigelkeimes. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 69–113 20 figs.

82.—Ikeda, H. Preliminary note on a new family of the Cidaroidae. Annot. zool. jap. 15 1936 pp. 486–489 pls. xxxiii–xxxiv.

83.—Ikeda, H. Note on a new *Echinarachnius* from Japan. Botany & Zool. Tokyo 4 1936 pp. 1231–1233 figs. 1–2.

84.—International Commission on Zoological Nomenclature. Opinion 129. *Bipinnaria* 1835 vs. *Luidia* 1839. Smithsonian. misc. Coll. 73 8 1936 pp. 32–33.

85.—International Commission on Zoological Nomenclature. Opinion 131. The type species of *Tromikosoma* Mortensen, 1903. Smithsonian. misc. Coll. 73 8 1936 pp. 37–38.

86.—Ishida, J. An enzyme dissolving the fertilization membrane of sea-urchin eggs. Annot. zool. jap. 15 1936 pp. 453–458 pl. xxxi.

87.—Jeannet, A. Description de quelques Échinides sculptés du Lutétien supérieur des environs de Bordeaux. Abh. schweiz. paläont. Ges. 52 2 1936 pp. 1–13 16 figs. pls. i–ii.

88.—Jeannet, A. Sur quelques grands Echinides irréguliers du Nummulitique des environs d'Iberg (Schwyz). Ber. Schweiz. naturf. Ges. Einsiedeln 1 1936 pp. 52–70 figs. 1–15 pl. iii.

89.—Kirk, E. A new *Allagecrinus* from Oklahoma. J. Wash. Acad. Sci. 26 1936 pp. 162–165 figs. 1–10.

90.—Kolosváry, G. v. Die Echinodermaten-Sammlung des Ungarischen National-Museums. Folia zool. hydrobiol. Riga 9 1936 pp. 76–84 1 fig.

91.—Kongiel, R. Contribution à l'étude du "Siwak" dans les environs de Puławy (plateau de Lublin). Trav. Soc. Sci. Wilno 9 1935 pp. 171–227. [Echinoidea at pp. 196–207. Résumé in Franch at p. 217.]

92.—Kopas, M. J. Intracellular pH determinations on marine ova. Yearb. Carnegie Inst. Washington 34 1935 pp. 85–86.

93.—Korschelt, E. Echinodermen [in] Vergleichende Entwicklungsgeschichte der Tiere. Jena 1936 pp. 482–536 figs. 518–560.

94.—Kühn, O. Revision der Opalinuston—(Dogger Alpha)—Fauna in Franken, mit Ausschuss der Cephalopoden. Paläont. Z. Berlin 17 1935 pp. 109–158. [Echinoderma at pp. 112–113 pls. viii–x.]

95.—Kühn, O. Die Fauna des Amaltheentons (Lias δ) in Franken. N. Jahrb. Min. Geol. Paläont. Stuttgart 75 1936 pp. 239–311. [Echinoderma on pp. 239–242 pls. ix, xii.]

96.—Kühn, O. Eine neue Burdiglausbildung bei Horn. Sitzber. Akad. Wiss. Wien 145 1936 pp. 35–45 3 figs. pl. i.

Kupfer, C. see Bialaszewicz, K.

97.—Lambert, J. Notes sur quelques Échinides fossiles. III. Echinides du Mexique recueillis par M. F. Mullerried. Bull. Soc. géol. Fr. (5) 5 1935 pp. 369–374 fig. 2. [Continuation of Lambert 152 in Zool. Record for 1935.]

98.—Lambert, J. Nouveaux Echinides fossiles de Madagascar. Ann. géol. Serv. Mines Madagascar 6 1936 pp. 1–32 pls. i–iv.

99.—Lambert, J. Sur quelques nouveaux échinides fossiles d'Égypte. Bull. Inst. égypt 18 1936 pp. 39–43 1 pl.

100.—Lambert, J. Quelques nouveaux Échinides fossiles du Crétacé du Mexique. Bull. Soc. géol. Fr. (5) 6 1936 pp. 3–6 pl. i.

101.—Lami, R. Sur la présence de cupules subfossiles d'oursins sur le littoral du Minho (Portugal). Bull. Lab. Maritime St. Servan 16 1936 pp. 2–6 pl. i.

102.—Laudon, L. R. Notes on the Devonian Crinoid fauna of the Cedar Valley Formation of Iowa. J. Paleont. Menasha Wis. 10 pp. 60–66 figs. 1–15.

103.—Leitch, J. L. A Physico-chemical study of Marine eggs. Yearb. Carnegie Instn. Washington 33 1934 pp. 255–257.

104.—Leitch, J. L. The water exchanges of living cells. III: the application of a photographic method to the determination of the non-solvent volume of the eggs of *Echinometra lacunter*. Pap. Tortugas Lab. Carn. Instn. 29 1936 pp. 349–358 1 pl.

105.—Lindahl, P. E. Über dei Rolle des SO_4 -Jons in der Entwicklung des Seeigelkeims. Ark. Zool. Stockholm 28 B4 1935 pp. 1–4.

106.—Lindahl, P. E. Zur Kenntnis der physiologischen Grundlagen der Determination im Seeigelkeim. Acta zool. Stockholm 17 1936 pp. 179–365 108 figs.

107.—Livingstone, A. A. Descriptions of new Asteroidea from the Pacific. Rec. Aust. Mus. Sydney 19 1936 pp. 383–387 pls. xxvii–xxviii.

108.—Lönnberg, E. Note on the presence of Carotenoids in the "Liver"-organs of Invertebrates. Ark. Zool. Stockholm 28A 6 1935 pp. 1–4.

109.—MacDonald, R. A study of symmetry in the Centrechinoidea, based on behavior, with special reference to *Lytechinus variegatus*; including a short discussion of linguistic difficulties in describing biological phenomena. Proc. Amer. Phil. Soc. Philad. 76 1936 pp. 87–123.

110.—MacGinitie, G. E. Ecological aspects of a California Marine Estuary. Amer. Midl. Nat. Notre Dame 16 1935 pp. 629–765. [Echinoderma at pp. 697–699.]

111.—Machado, A. Notas de zoologia. 2. A destruição em aquário da *Marthasterias glacialis* (L.) pela *Asterias rubens* L. An. Fac. Scienc. Porto 16 1931 pp. 191–192 fig. 3.

112.—Magrou, J. & Magrou, M. Action à distance de l'oxydation diastatique de l'hydroquinone sur le développement de la moitié animale de l'oeuf d'Oursin. C.R. Soc. Biol. Paris 121 1936 pp. 801–803.

113.—Magrou, M. & Magrou, J. Action à distance de l'oxydation diastatique de l'hydroquinone sur l'oeuf d'Oursin traité par le lithium. C.R. Soc. Biol. Paris 121 1936 pp. 955–957.

Magrou, M. see Magrou, J.

114.—Mailieux, E. La faune et l'âge des Quartzophyllades Siegeniens de Longlier. Mém. Mus. Hist. nat. Belg. 73 1936 pp. 1–141. [Crinoidea at pp. 41–42 pl. i.]

115.—Mailieux, E. La faune des schistes de Matagne (Frasnien supérieur). Mém. Mus. Hist. nat. Belg. 77 1936 pp. 1–74 pl. i. [Crinoidea at p. 14.]

116.—Maury, C. J. O Cretaceo de Sergipe. Monog. Serv. geol. min. Brasil 11 1936 pp. 1–283 pls. i–xxviii. [Echinoderma on pp. 254–282 pls. ii–iv.]

117.—Melinossi, R. Su di un echinide della Patagonia. Proc. verb. Soc. tosc. Sci. nat. 44 1935 pp. 32–39 figs. 1–2.

118.—Mercier, J. Les Stellérides Mésozoïques du Bassin de Paris. Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 pp. 1–66 pls. i–iii.

119.—Mercier, J. Les Astéries du Coniacien d'Aulnay-sur-Iton (Eure). Bull. Soc. linn. Normandie Caen (8) 8 1936 pp. 23–25.

- 120.—Mercier, J. A propos de deux genres de Stellérides. Bull. Soc. linn. Normandie Caen (8) 8 1936 pp. 97-98.
- 121.—Meschkat, A. Untersuchungen über den Aufbau der Kabeljaunahrung im Bereich der Vestmannainseln. Rapp: Cons. Explor. Mer. Copenh. 99 3 1936 pp. 1-19.
- 122.—Moore, H. B. The biology of *Echinocardium cordatum*. J. Mar. biol. Ass. Plymouth 20 1936 pp. 655-671 5 figs. 2 pls.
- 123.—Mortensen, T. A monograph of the Echinoidea. II. Bothriocidaroida, Melonechinoidea, Lepidocentroida, and Stirodonta. Copenhagen C.A. Reitzel and London Oxford Univ. Press 1935 pp. 1-647 377 text-figs. 89 pls.
- 124.—Mortensen, T. Echinoidea and Ophiuroidea. Discovery Rpts. Cambridge 12 1936 pp. 199-348 figs. 1-53 pls. i-ix.
- 125.—Mortensen, T. *Phyllacanthus forcipulatus*, sp. nov., a new Cidarid from the Indian Ocean. Rec. Ind. Mus. Calcutta 38 1936 pp. 307-308 1 fig. pls. x-xii.
- 126.—Motomura, I. On the cytoplasmic structure of the egg of a sea-urchin, *Strongylocentrotus pulcherrimus*, from the view-point of Embryology. Zool. Mag. Tokyo 48 1936 pp. 89-97 5 figs. [Résumé in English on p. 89.]
- 127.—Motomura, I. Notes on the cytoplasmic structure of the egg of a sea-urchin, *Strongylocentrotus pulcherrimus* (A. Agassiz). Zool. Mag. Tokyo 48 1936 pp. 753-758 3 figs. [Résumé in English on p. 753.]
- Needham, D. M. see Baldwin, E.
- 128.—Nicholls, G. E. The composition and biogeographical relations of the fauna of Western Australia. Rep. Aust. Ass. Adv. Sci. for 1932 1933 pp. 93-138. [Echinoderma on pp. 96-100.]
- 129.—Ohshima, H. On the generic name *Ostergrenia*. Annot. zool. jap. 15 1936 pp. 480-482.
- 130.—Ohuye, T. On the coelomic corpuscles in the body fluid of some invertebrates. IV. On the coelomic corpuscles of a holothurid, *Molpadia roretzii* (v. Marenzeller) with reference to those of *Caudina chilensis* (J. Müller).
- V. Reaction of the coelomic corpuscles of an echinid, *Temnopleurus hardwickii* (Gray), to vital dyes and some chemical reagents. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 207-230 18 figs.
- 131.—Okuda, S. Description of two polychaetous annelids found in the burrows of an apodous holothurian. Annot. zool. jap. 15 1936 pp. 410-415 4 figs.
- 132.—Okuda, S. Japanese commensal Polynoids. Annot. zool. jap. 15 1936 pp. 561-571 7 figs.
- 133.—Onoda, K. Preliminary notes on the experiments of hybridization of some Echinoids. Annot. zool. jap. 15 1936 pp. 325-329 pls. xix-xx.
- 134.—Onoda, K. Notes on the development of some Japanese Echinoids with special reference to the structure of the larval body. Japan. J. Zool. 6 1936 pp. 637-654 figs. 1-9 pls. x-xiv.
- 135.—Örström, A. Über Ammoniakbildung bei der Entwicklungserregung des Seeigeleies. Ark. Zool. Stockholm 28B 6 1935 pp. 1-4.
- 136.—Pallary, P. Les échinodermes du Golfe d'Oran. Bull. Soc. Hist. nat. Alger 26 bis 1935 pp. 48-60 fig. 1.
- 137.—Panning, A. Die Gattung *Holothuria*. 5. Teil, Schluss. Mitt. zool. Staatsins. Hamburg 46 1936 pp. 1-18 figs. 103-121.
- 138.—Panning, A. Seewalzen. Senckenbergiana Frankfurt 18 1936 pp. 10-20 8 figs.
- 139.—Parker, G. H. Direction and means of locomotion in the regular sea-urchin *Lytechinus*. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 197-208 6 figs.
- 140.—Pasquini, P. Studi sullo sviluppo di uova centrifugate di ricci di mare (*Arbacia punctulata* Gray). Pubbl. Staz. zool. Napoli 15 1936 pp. 285-316 5 figs.
- Pasteels, J. see Daleq, A.
- 141.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina, J. Elisha Mitchell sci. Soc. Chapel Hill 52 1936 pp. 174-222.
- 142.—Peck, R. E. Lower Mississippian micro-crinoids of the Kinderhook and Osage Groups of Missouri. J. Paleont. Menasha Wis. 10 1936 pp. 282-293 pls. xlvii-xlviii.

143.—Phillips, W. The structure of *Acentrotremites*. Proc. Swansea sci. Field Nat. Soc. 1 1936 pp. 360–366 12 figs.

144.—Phleger, F. B. An Ordovician Auluroid from California. Bull. S. Calif. Acad. Sci. 35 2 1936 pp. 82–83 pl. xx.

145.—Pora, E. A. Sur les différences chimiques et physico-chimiques du sang des deux sexes de quelques invertébrés marins. Bull. Inst. océanogr. Monaco 689 1936 pp. 1–4.

146.—Powers, P. B. A. Studies on the Ciliates of Sea-Urchins. A general survey of the infestations occurring in Tortugas Echinoids. Pap. Tortugas Lab. Carn. Instn. 29 1936 pp. 293–326 2 pls.

147.—Precht, H. Epizoen der Kieler Bucht. Nova Acta Leop. Carol. Halle N.F. 3 1935 pp. 405–474. [Echinoderma at p. 409.]

148.—Rennie, J. V. L. On *Placocystella*, a new genus of Cystids from the Lower Devonian of South Africa. Ann. S. Afr. Mus. 31 1936 pp. 269–275 pl. xxxvi.

149.—Robson, G. C. Phylum Echinodermata [in] Regan Natural History London 1936 pp. 40–45 7 figs.

150.—Röpke, W. Eine Cystoidee aus dem Thüringer Untersilur im Inter-glazial der Saale bei Weissenfels. Z. naturw. Halle 90 1933 pp. 40–47 figs. 1–2.

151.—Sawano, E. Contribution to the knowledge on the digestive enzymes in marine invertebrates. 2. Proteolytic enzymes in the starfish, *Distolasterias nipon* (Döderlein). Sci. Rep. Tokyo Bun. Daig. B 2 1936 pp. 179–199 12 figs.

152.—Schmidt, F. J. Vergleichende Untersuchungen an Chimären und Bastarden von Seeigelpolizei. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 211–252 42 figs.

153.—Schmidt, M. Fossilien der spanischen Trias. Abh. heidelberg Akad. Wiss. 22 1936 pp. 1–140. [Echinoderma at pp. 34–38 figs. 1–2, pl. iii fig. 16.]

154.—Schmidt, W. J. Doppelbrechung von Chromosomen und Kernspindel in der lebenden sich teilenden Zelle. Verh. Deutsch. zool. Ges. Leipzig 38 1936 p. 268.

155.—Schwarzbach, M. & Zimmermann, F. Ophiuren aus dem Waldenburger Kulm (*Sileciaster longivertebra* n. g., n. sp.). Cbl. Min. Geol. Paläont. Stuttgart 10 1936 pp. 438–444.

156.—Serra, G. Di alcuni Echinidi del Pliocene di Matera (Lucania). Bol. Soc. geol. ital 54 1935 pp. 220–222.

Shapiro, H. see Beck, L. V.

Sheppard, E. M. see Tattersall, W. M.

157.—Sieverts, H. Neues über *Cupressocrinus* Goldfuss. SitzBer. naturh. Ver. preuss. Rheinl. Westf. 1932–33 1934 pp. 89–102 figs. 1–4.

158.—Sieverts, H. Das erste Machaerid aus Deutschland: *Lepidocoleus eifeliensis* n. sp. aus dem rheinischen Mitteldevon. Z. deuts. geol. Ges. Berlin 87 1935 pp. 683–687 pl. xxxv.

159.—Smiser, J. S. A Monograph of the Belgian Cretaceous Echinoids. Mém. Mus. Hist. nat. Belg. 68 1935 98 pp. 9 pls.

160.—Smiser, J. S. Cretaceous Echinoids from Trans-Pecos Texas. J. Paleont. Menasha Wis. 10 1936 pp. 449–480 fig. 1 pls. lxii–lxvii.

161.—Souché, G. Sur la présence d'oursins chez la sole. Bull. Sta. biol. Arcachon 32 1935 pp. 51–52.

162.—Stephenson, L. W. Geology and paleontology of the Georges Bank Canyons. Part II. Upper Cretaceous fossils from Georges Bank (including species from Banquereau, Nova Scotia). Bull. Geol. Soc. Amer. Washington 47 1936 pp. 367–410. [Echinoidea at pp. 371–372 pl. i figs. 2–4.]

163.—Stolte, H.-A. Das Werden der Tierformen Stuttgart 1936. [Echinoderma at pp. 28–47 figs. 15–35.]

164.—Subramaniam, M. K. & Aiyar, R. G. On the possible effect of the environment on the cytoplasmic inclusions in the oocytes and oogonia of *Dasychone cingulata*, *Salmacis bicolor*, and *Clibanarius olivaceus*. Proc. Indian Acad. Sci. (B) 3 1936 pp. 175–194 19 figs. 1 pl.

165.—Tattersall, W. M. & Sheppard, E. M. Observations on the Bipinnaria of the Asteroid genus *Luidia*. James Johnstone Memorial Vol. pp. 35–61 8 figs. Lancashire Sea-Fisheries Laboratory Liverpool 1934.

166.—Tavani, G. Sulle anomalie negli ambulacri di alcuni Echini del Miocene della Cirenaica. Proc.-verb. Soc. tosc. Sci. nat. **44** 1935 pp. 119-123 figs. 1-3.

167.—Tétay, A. Déformation parasitaire sur la tige d'un *Pentacrinus* du Lias. Arch. Zool. exp. gén. Paris Notes et Revue **78** 1936 pp. 8-12 fig. 1.

168.—Thirring, J. T. Paläontologische Neuigkeiten aus dem Bakony-Gebirge. Mag. K. földt. Int. Évk. Pest. **66** 1936 pp. 51-68 pls. i-ii. [Echinoidea at pp. 56-61.]

169.—Thorslund, P. Siljansområdet brännkalkstenar och kalkindustri. Sverig. geol. Undersökn. Arsb. **C 30** 5 1936 pp. 1-64 pls. i-iii.

170.—Thorson, G. The larval development, growth, and metabolism of Arctic marine bottom invertebrates compared with those of other seas. Medd. Grønland **100** 6 1936 pp. 1-155. [Echinoderma on pp. 18-26.]

171.—Tyler, A. On the energetics of differentiation. III. Comparison of the temperature coefficients for cleavage and later stages in the development of the eggs of some marine animals. IV. Comparison of the rates of oxygen consumption and of development at different temperatures of eggs of some marine animals. Biol. Bull. Woods Hole **71** 1936 pp. 59-100 4 figs.

172.—Tzankov, V. Échinides fossiles de la Craie supérieure de Bulgarie de Nord. Ann. Univ. Sofia **30** 1934 pp. 189-233 pls. i-v. [Résumé in French at p. 216.]

173.—Ubisch, L. von. Über die Organisation des Seeigelkeims. Arch. Entw. Mech. Org. Berlin **134** 1936 pp. 599-643 7 figs.

174.—Ubisch, L. von. Untersuchungen über Formbildung. VII. Über die Fortsatzbildung in "reinen" Keimblattchimären. Arch. Entw. Mech. Org. Berlin **134** 1936 pp. 644-652 11 figs.

175.—Valette, A. Sur un nouvel *Antedon* cénoomanien du sud de la Tunisie. Bull. Soc. géol. Fr. (5) **5** 1935 pp. 374-375 figs. 3.

176.—Venzo, S. I fossili del Neogene Trentino, Veronese e Bresciano. II. Cefalopodi, Gasteropodi, Scafopodi,

Echinidi e Celenterati—Conclusioni Palaeontogr. ital. Siena **35** 1935 pp. 201-255. [Echinoidea on pp. 222-234 pls. xvii-xix.]

177.—Vialli, V. Un caso di rigenerazione in un echinide. Riv. ital. Paleont. Pavia **42** 1936 pp. 19-23 2 figs.

178.—Waterman, A. J. The effect of alcohol in gastrulation in *Arbacia*. Biol. Bull. Woods Hole **71** 1936 pp. 413-420.

Wernstedt, C. see Borei, H.

179.—Whitaker, D. M. Permeability to water and staining rate of developing and resting sea-urchin eggs. Proc. Soc. exp. Biol. **34** 1936 pp. 708-712 1 fig.

180.—Wickwire, G. T. Crinoid stems on fossil wood. Amer. J. Sci. New Haven (5) **32** 1936 pp. 145-146 fig. 1.

Wolsky, A. see Hörstadius, S.

181.—Wright, J. New Scottish Carboniferous Crinoids. Geol. Mag. London **73** 1936 pp. 385-412 figs. 1-41 pls. vii-x.

182.—Wroost, V. Vorgänge der Keiselung am Beispiel des Feuersteins der Kreide. Abh. senckenb. naturf. Ges. **432** 1936 pp. 1-68 36 figs.

Zimmermann, F. see Schwarzbach, M.

183.—Zirpolo, G. Sul potere rigenerativo della regione del disco dell' *Astropecten aurantiacus* L. Arch. zool. Torino **22** 1936 pp. 175-180 3 figs.

II.—SUBJECT INDEX.

GENERAL.

General Treatises, Monographs and Popular Works.—Monograph Echinoidea II, MORTENSEN, 123; Text-book, ROBSON, 149.

Museums, Collections and Expeditions.—Types in Univ. Cincinnati Mus., CHAPPARS, 23; John Murray Exped., CLARK, A. H., 32; First Johnson-Smithsonian Deep-Sea Puerto Rican Exped., CLARK, A. H., 33; Snellius

Exped., CLARK, 34; Bingham Oceanographic Exped. 1925-26, DEICHMANN, 46; Siboga Exped., Oreasterinae, DÖDERLEIN, 50; 7th Thule Exped., Greenland, 1931-1933, HEDING, 75; KOLOSVÁRY, 90; Discovery Report, Echinoidea Ophiuroidea, MORTENSEN, 124.

Classification and Nomenclature.—CLARK & DEICHMANN, 35; *Molpadia*, DEICHMANN, 45; INTERNAT. COMM. Zool. NOMEN., 84 & 85; *Tylasteria*, MASTATER, MERCIER, 120; *Bothriocidaris*, MORTENSEN, 123 p. 6; Melonechinoida (Palaeoechinidae), Lepidocentroida (Lepidocentridae, Echinothuridae), Stirodonta (Acrosaleniidae, Saleniidae, Arbaciidae, Hemicidaridae, Phymosomatidae, Pseudodiadematidae, Stomopneustidae, Tiarechinidae), MORTENSEN, 123; *Oestergrenia*, OHSHIMA, 129; *Holothuria*, PANNING, 137.

Vulgar Names of Certain Species.—GRUVEL, 70 p. 189.

STRUCTURE.

General Accounts.—Oreasterinae, DÖDERLEIN, 50; *Pateria* and *Asterina*, HAYASHI, 73.

Skeletal Anatomy.—Apical disc and Ambulacra in Saleniidae, BEURLEN, 8; *Uintacrinus* Plating-structure, BRIGHTON, 15; *Acentrotremites*, PHILLIPS, 143; Internal structure of *Schizoblastus*, CLINE, 37; Recent and fossil echinoid Pedicellariae, GEIS, 64; Melonechinoida, Lepidocentroida, Stirodonta, MORTENSEN, 123.

Body Cavities.—OHUYE, 130.

PHYSIOLOGY.

General.—GRIMPE, 69.

Alimentation.—SAWANO, 151.

Chemical Constituents.—BIALASZEWICZ & KUPFER, 9; LÖNNBERG, 108; PORA, 145; SAWANO, 151.

Experimental.—BALDWIN & NEEDHAM, 2; BERTHOUMEYROUX, 6; BECK & SHAPIRO, 5; BERTOLINI, 7; CHAIGNE, 20; CHILD, 27 & 28; COLE, K. S. & COLE, R. H., 38; CREACH, 41; HEIL-

BRUNN, 76; KOPAC, 92; LEITCH, 103 & 104; LINDAHL, 105; MOTOMURA, 126 & 127; OHUYE, 130; ÖRSTRÖM, 135; TYLER, 171; WHITAKER, 179.

DEVELOPMENT.

General.—KORSCHOLT, 93; STOLTE, 163.

Oviposition, Fertilization and Segmentation.—FOX, 61; ISHIDA, 86; Japanese echinoidea, ONODA, 134; THORSON, 170.

Larval Stages.—Japanese Echinoidea, ONODA, 134; TATTERSALL & SHEPPARD, 165.

Post-larval Growth-stages.—MORTENSEN, 123; Japanese echinoidea ONODA, 134; TATTERSALL & SHEPPARD, 165.

Parthenogenesis.—GRIMPE, 69 p. 513; HARVEY, 72; Ophiuroidea, MORTENSEN, 124.

Experimental Embryology.—BOREI & WERNSTEDT, 13; CHILD, 27 & 28; CHURNEY, 29; CLARK, J. M., 36; DALCQ, PASTEELS & BRACHET, 43; DIEBSCHLAG, 49; ELSTER, 58; FRY, 63; GRIMPE, 69; HARVEY, 72; HENSHAW & FRANCIS, 77; HÖRSTADIUS, 78, 79 & 80; HÖRSTADIUS & WOLSKY, 81; ISHIDA, 86; LINDAHL, 106; Mitogenesis, MAGROU & MAGROU, 112 & 113; MOTOMURA, 126 & 127; ONODA, 133; PASQUINI, 140; SCHMIDT, F. J., 152; SCHMIDT, W. J., 154; SUBRAMANIAM & AIYAR, 164; TYLER, 171; UBISCH, 173 & 174; WATERMAN, 178.

ETHOLOGY.

Habitat.—*Echinocardium cordatum*, MOORE, 122.

Feeding Habits.—*Asterias rubens*, MACHADO, 111.

Breeding Habits.—THORSON, 170.

Sexual Dimorphism.—*Amphineustes lorioli*, MORTENSEN, 124 p. 230.

Hermaphroditism.—Ophiuroidea, MORTENSEN, 124 pp. 205-206; THORSON, 170.

Autotomy and Regeneration.—GRIMPE, 69 p. 524; *Mastater villersensis* pl. iii fig. 1, *Metopaster parkinsoni* pl. i fig. 13, MERCIER, 118 p. 57; SIEVERTS, 157; VIALLI, 177; *Astropecten aurantiacus*, ZIRPOLO, 183.

Parasites and Commensals, etc.—*Orchitophyra stellarum* parasitic in gonads and ovaries of *Asterias forbesi*, BURROWS, 8; GRIMPE, 69 p. 530; MORTENSEN, 123; *Echinophyes mirabilis* parasitic on *Ctenocidaris speciosa* p. 210, *Lepton* and *Montacuta* commensal with *Abatus* p. 225, parasites on Ophiuroidea p. 208, MORTENSEN, 124; Polychaetes living commensally in burrows of *Protankyra bidentata*, OKUDA, 131; Polynoids commensal with Echinoderms, OKUDA, 132; POWERS, 146; PRECHT, 147; SOUCHÉ, 161; Deformation in *Pentacrinus* (Lias) probably due to parasite, TÉTRY, 167.

Enemies, Defence and Protection.—MACHADO, 111; MESCHKAT, 121.

Protection of Young.—THORSON, 170.

Movements and Locomotion.—MACDONALD, 109; PARKER, 139; Asteroid larvae, TATTERSALL & SHEPHERD, 165.

Communities and Zones.—MACGINITIE, 110.

Environmental Effects.—FOX, 61.

Effect of Temperature and Salinity.—PEARSE, 141.

Echinoderms as Food.—Gulf of Suez (*Diadema setosum* and *Echinometra mathaei*), GRUVEL, 70 p. 188.

Geological Aspect.—Echinoderma as rock builders, HÄNTZSCHEL, 71; LAMI, 101; Habitat of French Mesozoic Asteroidea, MERCIER, 118; MORTENSEN, 123; WICKWIRE, 180.

VARIATION AND AETIOLOGY.

Variation Teratological.—TAYANI, 166.

Variation Meristic, Numerical.—*Antedon*, CHALAUX, 21; GRIMPE, 69 p. 524.

Variation due to Age.—*Asterias amurensis*, HAYASHI, 74.

Phylogeny and Relationship.—Saleniidae, BEURLEN, 8; Mesozoic Asteroidea, MERCIER, 118; Melonechinoida, Lepidocentroida, Stirodonta, MORTENSEN, 123.

DISTRIBUTION.

GEOGRAPHICAL.

General.—Clypeasteridae, ANGELINI, 1; Scutellidae, COLOMBINI, 39; Stirodonta, MORTENSEN, 123.

Atlantic Ocean.—CLARK, A. H., 33; Norway, BROCH, 16; Outer Hebrides, CANT, 19; CLARK, A. H., 31; DEICHMANN, 47; DONS, 52, 53 & 54; Norway, DONS, 55, 56 & 57; MORTENSEN, 124; PEARSE, 141.

Mediterranean Sea, etc.—PALLARY, 136.

Indian Ocean, Red Sea, etc.—CLARK A. H., 32; DOLLFUS, 51; MORTENSEN 125; W. Australia, NICHOLLS, 128.

Pacific Ocean.—BOONE, 12; CLARK, A. H., 31; DEICHMANN, 46 & 48; FISHER, 59; Japan, IKEDA, 83; MACGINITIE, 110.

Malaysia.—BOONE, 12; CLARK, 34; Oreasterinae, DÖDERLEIN, 50; IKEDA, 82; LIVINGSTONE, 107.

Southern Ocean.—CLARK, A. H., 31; LIVINGSTONE, 107; MORTENSEN, 124; Holothuricoidea, PANNING, 138.

Arctic Ocean.—BROOKS, 17; CLARK, A. H., 30; DEICHMANN, 45; HEDING, 75.

Antarctic Ocean.—CLARK, A. H., 31; MORTENSEN, 124.

GEOLOGICAL.

Quaternary.—*Ex* Silurian, RÖPKE, 150.

Tertiary.—Clypeasteridae, ANGELINI, 1; Scutellidae, COLUMBINI, 39.

Pliocene.—Sicily, CHECCHIA-RISPOLI, 25 & 26; Italy, SERRA, 156.

Miocene.—W. Australia, CHAPMAN & CRESPIN, 22; KÜHN, 96; Italy, VENZO, 176.

Eocene.—Sicily, CHECCHIA-RISPOLI, 25; N. Africa, CUVILLIER, 42; England, DAVIS, 44; France, JEANNET, 87; Switzerland, JEANNET, 88; Echinoidea Madagascar, LAMBERT, 98; Echinoidea Egypt, LAMBERT, 99; Hungary, THIRING, 168.

Cretaceous.—France, BREISTROFFER, 14; England, BRIGHTON, 15; Sicily, CHECCHIA-RISPOLI, 25; Poland, KONGIEL, 91; Echinoidea Mexico, LAMBERT, 97; Echinoidea Madagascar, LAMBERT, 98; Mexico, LAMBERT, 100; Brazil, MAURY, 116; S. America, MELINOSI, 117; Asteroidea France, MERCIER, 118 & 119; Echinoidea Belgium and Holland, SMISER, 159; Texas Echinoidea, SMISER, 160; N. America, STEPHENSON, 162; Bulgaria, TZANKOV, 172; N. Africa, VALETTE, 175; WROOST, 182.

Jurassic.—Lias Holothurioidea Germany, BARTENSTEIN, 3; France, BIGOT, 10; France, BLANCHET, 11; France, CHAVANNE, 24; Madagascar, COTTEAU, 40; FRENTZEN, 62; Italy, GREGORIO, 67; Germany, KÜHN, 94 & 95; Echinoidea Madagascar, LAMBERT, 98; Asteroidea France, MERCIER, 118.

Trias.—Italy, GREGORIO, 63; Spain, SCHMIDT, M., 153.

Permian.—*Dinocrinus* in Australia and India, GERTH, 65.

Carboniferous. — Edrioasteroidea U.S.A., BASSLER, 4; *Schizoblastus* U.S.A., CLINE, 37; Echinoid pedicellariae, U.S.A., GEIS, 64; U.S.A., KIRK, 89; Egypt, LAMBERT, 99; Crinoidea U.S.A., PECK, 142; Blastoid Wales, PHILLIPS, 143; Germany, SCHWARZBACH & ZIMMERMANN, 155; Scotch Crinoids, WRIGHT, 181.

Devonian.—Edrioasteroidea U.S.A., BASSLER, 4; Crinoidea U.S.A., GOLDRING, 66; Crinoidea U.S.A., LAUDON, 102; Belgium, MAILLIEUX, 114 & 115; Cystidea S. Africa, RENNIE, 148; *Cupressocrinus*, SIEVERTS, 157; *Machæridia* Germany, SIEVERTS, 158; U.S.A., WICKWIRE, 180.

Silurian. — U.S.A., FOERSTE, 60; Germany, RÖPKE, 150.

Ordovician.—Edrioasteroidea U.S.A., BASSLER, 4; U.S.A., PHLEGER, 144; Sweden, THORSLUND, 169.

Cambrian.—Edrioasteroidea U.S.A., BASSLER, 4.

III.—SYSTEMATIC INDEX.

HOLOTHURIOIDEA.

†Holothurian spicules, BARTENSTEIN 3 p. 1 figs. 1-9, 12.

Ankyroderma, DEICHMANN 45 p. 462.

Auricularia excluded from availability as generic name and reserved as designation of developmental stage, INTERNAT. COMM. ZOOLOG. NOMEN. 84 p. 32.

Becheria nom. n. for *Oestergrenia* Heding 1931 non *Oestergrenia* Mitsukuri 1912, OHSHIMA Annot. zool. jap. 15 p. 480.

Chiridota laevis, DONS 57 p. 70 fig. 6.

†*Chiridota heptalampra* sp. n. Jurassic Germany, BARTENSTEIN Senckenbergiana Frankfurt 18 pp. 6-8 figs. 10-11.

Cucumaria frondosa, DONS 57 p. 68 fig. 1.—*C. georgiana* p. 14, *steineni* p. 15 figs. 6-7, PANNING 138.

Deima blakei, DEICHMANN 46 p. 9.

Euapta godeffroyi, DEICHMANN 46 p. 9.

Eumolpadia, DEICHMANN 45 p. 462.

Haplodactyla, DEICHMANN 45 p. 461.

Holothuria lubrica, DEICHMANN 46 p. 9.—*H. (Holothuria) curiosa* p. 5 (with vars. *fusco-rubra* p. 5, *pervicax* p. 6 and *philippinensis* p. 7), *dietrichii* p. 8, *discrepans* p. 1, *enalia* p. 10, *exilis* p. 8, *forskali* p. 12, *imperator* p. 9, *isuga* p. 9, *michaelseni* p. 11, *notabilis* p. 10, *occidentalis* p. 8, *papillata* p. 2, *pardalis* p. 3 (with var. *cebuensis* p. 4), *platei* p. 11, *saecularis* p. 12, *submersa* p. 2, *whitmaei* p. 12, PANNING 137.

Leptosynapta inhaerens, DONS 57 p. 70 fig. 5.

Molpodia arctica p. 458 figs. 1-3, *borealis* p. 455 figs. 4-6, DEICHMANN 45.—*M. intermedia* figs. 5-9, *oolitica* p. 58 figs. 1-4, DEICHMANN 47.

Paracucumis antarctica, PANNING 138 p. 11 figs. 1-5.

Phyllophorus pellucidus, DONS 57 p. 68 fig. 2.

Pseudomolpadia, DEICHMANN 45 p. 461.

Psollicucumis apneumona a synonym of *Staurocucumis nocturna*, CLARK & DEICHMANN 35 p. 564.

Psolus phantapus fig. 3, *squamatus* fig. 4, DONS 57 p. 69.

Staurocucumis abyssorum, *nocturna*, *stueri*, CLARK & DEICHMANN 35.

Taeniogyrus contortus antarcticus, PANNING 138 p. 5 fig. 8.

Thyone glasselli sp. n. W. Mexico, DEICHMANN Proc. New Engl. Zool. Cl. 15 p. 65 fig.

Thyonidium barthii p. 19 figs. 3-4, 5 (1-11), *pellucidum* p. 21 fig. 5 (12-21), HEDING 75.

Trochodota dunedinensis, PANNING 138 p. 16.

Trochostoma thomsonii, HEDING 75 p. 26 fig. 6.—*T.*, DEICHMANN 45 p. 463.

†*Trochostoma* sp., DAVIS 44 p. 340.

ECHINOIDEA.

†Undetermined echinoid pedicellariae, including ? Irregularia, GEIS 64.

Abatus curvidens sp. n. Antarctic Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 226-228 pl. iii fig. 9, pl. ix figs. 17-20; *agassizi* p. 228, *cavernosus* p. 224 pl. iii figs. 11-12 with var. *bidens* p. 226 pl. iii fig. 10, pl. ix figs. 9-11, *phillippii* p. 228, Id.

†*Acanthechinopsis humei*, MORTENSEN 123 p. 448 fig. 253, pl. lxxiii fig. 2.

†*Acanthechinus*, MORTENSEN 123 p. 490.

†*Acrocidaris*, MORTENSEN 123 pp. 452, 641.

†*Acropeltis*, MORTENSEN 123 p. 585.

†*Acrosalenia basseae* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 17 pl. iv figs. 4-6.—*A. gauthieri*, CHAVANNE 24 p. 123 pl. xiii figs. 2, 2a.—*A.* p. 312, *hemiciदारoides* p. 640 figs. 375, 377, *pustulata* p. 306 figs. 165-167c, pl. lxxxiii fig. 6, MORTENSEN 123.

†*Acrosaster*, MORTENSEN 123 p. 592.

†*Actinophyma*, MORTENSEN 123 p. 489.

†*Aeolopneustes*, MORTENSEN 123 p. 479.

†*Alloma*, MORTENSEN 123 p. 416.

Amphipneustes similis sp. n. Antarctic Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 231-233 pl. iv figs. 1-7, pl. ix figs. 21-26; *koehleri* p. 229, *lorioli* p. 230 pl. iii figs. 5-8, pl. iv fig. 8, pl. ix fig. 27, Id.

Araeosoma alternatum p. 270 fig. 148b; *belli* p. 239 figs. 133-134; *coriaceum* p. 241 fig. 135a, pls. xxxii-xxxiv, pl. lxxix figs. 10-15 with var. *indicum* p. 245 figs. 135b-c, pl. xxxv; *A. euryptatum* p. 255 fig. 72e; *fenestratum* p. 233 figs. 52, 57a, 62c, 68e, 70, 72c, 130-132c, pls. xxix-xxx, pl. lxxviii fig. 11; *leptaleum* p. 256 pl. lxxxii figs. 7-8; *owstoni* p. 261 figs. 142-146, pls. xlvii-xlviii, pl. xlix fig. 1, pl. l fig. 1, pl. lxxx fig. 11 with vars. *bicolor* p. 265 and *nudum* p. 266 pls. li-lii, pl. lxxvii figs. 9-12, pl. lxxx figs. 1-2; *A. parviungulum* p. 254 fig. 140a, pls. xliii-xliv, pl. lxxvii figs. 1-8; *paucispinum* p. 251 fig. 139, pls. xli-xlii, pl. lxxix figs. 1-9; *splendens* p. 259 fig. 141, pl. xlv, pl. lxxx figs. 12-19; *tessellatum* p. 246 figs. 67c, 136-137, pls. xxxvi-xxxvii, pl. xxxviii figs. 1-2, pl. xxxix, pl. lxxxi figs. 1-22 with var. *carinatum* p. 250 fig. 138, pl. xl, pl. lxxxii fig. 23; *A. thetidis* p. 267 figs. 64f, 69f, 147-148a, pl. lxxx figs. 3-10; *violaceum* p. 237 figs. 64b, 132d, pl. xxiv fig. 2, pl. xxxi, pl. lxxviii figs. 15-21; *A.* sp. p. 257 fig. 140b, pl. xlix fig. 2, pl. l fig. 2, pl. lxxviii figs. 6-10, MORTENSEN 123.

†*Araeosoma*? *brunnichi*, *lovisatoi*, *mortenseni*, MORTENSEN 123 p. 111 [Radioles].

Arbacia crassispina p. 580, *dufresnei* p. 579 fig. 326, *lixula* p. 566 pl. lxx fig. 13, pl. lxxxvii figs. 11-12 with var. *africana* p. 570; *A. punctulata* p. 573 fig. 328a, pl. lxxxvii figs. 7-10; *spatuligera* p. 577 fig. 328b, pl. lxx figs. 1-5, pl. lxxxii fig. 6, pl. lxxxvii figs. 1-6; *stellata* p. 575 figs. 320c, 325a, 328c-d, pl. lxxviii figs. 8-10, pl. lxx figs. 6-9, pl. lxxi fig. 7, pl. lxxxvii figs. 13-14, MORTENSEN 123.—*A. dufresnii*, MORTENSEN 124 p. 215.

Arbaciella, MORTENSEN 123 p. 580.

†*Arbacia romana*, CHECCHIA-RIS-POLI 25 p. 307 pl. xvi fig. 6.

†*Asterocidaris besairiei* p. 16 pl. i figs. 22–24, *ragoti* p. 15 pl. iv figs. 11–13 spp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6.—A., MORTENSEN 123 p. 408.

Asthenosoma dilatatum p. 292 pl. lxxv figs. 3–4, pl. lxxxii fig. 4, pl. lxxxiii figs. 15, 17; *ijimai* p. 288 figs. 152b, 155, pl. xxxviii fig. 3, pls. lxiii–lxiv, lxxv figs. 1–2; *varium* p. 280 figs. 54b–c, 59b, 64g, 65b, 67b, 67d, 68b, 76–77, 152a & c, 153–154, pls. lv–lviii, pl. lxi figs. 1–6, pl. lxi figs. 1–2, pl. lxxxii figs. 1–3, 5–6, 9–14 with var. *album* p. 287 pls. lix–lx, pl. lxi fig. 7, pl. lxii fig. 3, MORTENSEN 123.

†*Asthenosoma* ? *striatissimum*, MORTENSEN 123 p. 111 [Radiole].

†*Atopochinus cellensis*, MORTENSEN 123 p. 585 figs. 317a, 340, pl. lxxiii figs. 13–14.

†*Aulechinus*, MORTENSEN 123 p. 53.

Austrocidaris canaliculata, MORTENSEN 124 p. 212 pl. i fig. 1.

†*Basseaster* gen. n. for type *B. rostratus* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 25 pl. iii figs. 8–12, pl. iv fig. 10.

†*Baueria*, MORTENSEN 123 p. 638.

†*Bothriocidaris* diagnosis and discussion of spp., MORTENSEN 123 p. 6.

†*Brissoides cuvillieri* sp. n. Eocene Egypt, LAMBERT Bull. Inst. égypt 18 pp. 42–43 pl. figs. 7–8.

Calveriosoma gracile p. 227 fig. 129, pls. xxv–xxviii, pl. lxxviii figs. 13–14; *hystrix* p. 222 figs. 53a, 72b, 126–128, pl. xxiii, pl. xxiv fig. 1, pl. lxxviii fig. 12, MORTENSEN 123.

†*Calveriosoma* ? *homoi*, MORTENSEN 123 p. 110 [Radiole].

†*Caratomus peltiformis*, TZANKOV 172 p. 199 pl. i fig. 8.

†*Cardiaster orientalis*, LAMBERT 98 p. 25 pl. iii fig. 7.

†*Cardiotaxis ananchytes*, SMISER 159 p. 68 pl. vii fig. 5.

†*Catopygus irregularis* sp. n. pp. 56–57 pl. v figs. 7a–i, *subcircularis* sp. n. p. 56 pl. v figs. 6a–d Cretaceous Belgium and Holland, SMISER Mém. Mus. Hist. nat. Belg. 68 1935; *conformis* p. 55 pl. v fig. 5, *fenestratus* p. 54 pl. v fig. 4,

? *laevis* p. 54 pl. v fig. 3, Id.—*C. conformis* var. *conoideus* var. n. Cretaceous Bulgaria, TZANKOV Annu. Univ. Sofia 30 1934 pp. 203, 218 pl. i fig. 12; *C. conformis* p. 202 pl. i fig. 11, *fenestratus* p. 203, Id.—*C. aequalis*, MAURY 116 p. 276 pl. iii figs. 3–4.

†*Cidaris anellatus* figs. 12–15, *mirandus* fig. 11, *percostatus* figs. 16–17, *tuberculinus* figs. 5–6, spp. n. Trias Italy, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 29 pl. vi [Radioles].—*C. conoideus* p. 45 pl. xiv fig. 13, *mitratus* p. 46 pl. xiv fig. 14, GREGORIO 67 [Radioles].—*C. sp.*, KONGIEL 91 p. 199 pl. iv fig. 2 [Radiole].—“*C.*” sp., KÜHN 94 p. 113 pl. viii figs. 8, 14, pl. x fig. 31 [Radiole].—*C. branneri* p. 258 pl. iv figs. 19–20, *C. sp.* p. 260, MAURY 116.—*C. sp.*, SCHMIDT 153 p. 34 fig. 1.—*C. cipyensis* p. 18, *distincta* p. 19 pl. i fig. 6, *filamentosa* p. 19 pl. i fig. 5, *forchammeri* p. 18 pl. i fig. 4, *hirudo* p. 17 pl. i fig. 2, *pseudosceptrifera* p. 18 pl. i fig. 3, *vesiculosa* p. 16 pl. i fig. 1, SMISER 159.—*C. subvesiculosa*, TZANKOV 172 p. 189 pl. i fig. 1.

†*Cidaris (Balanocidaris) hardouini* p. 21 pl. i fig. 9, *schlüteri* p. 20 pl. i fig. 8, *sorigneti* p. 20 pl. i fig. 7, SMISER 159 [Radioles].

†*Cidaris* with *Crinocidaris* subgen. n. for type *C. unicus* sp. n. Trias Italy GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 29 pl. vi figs. 29–31.

†*Cidaris (Dorocidaris) faujasi* p. 22 pl. i fig. 11, *perornata* p. 21 pl. i fig. 10, SMISER 159.

†*Cidaropsis*, MORTENSEN 123 p. 403.

†*Circopeltis*, MORTENSEN 123 p. 513.

†*Clitopygus basseae* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 22 pl. iv figs. 14–16.—*C. cantrainaei* sp. n. Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935 p. 51 pl. iv fig. 12.

†*Clypeaster latirostris* var. *prolata* var. n. Miocene Italy, VENZO Palaeontogr. ital. Siena 35 1935 p. 227 pl. xviii fig. 6.—*C. fourtaui*, CUVILLIER 42 p. 255.—*C. ventiensis* var. *sublaganoides*, TAVANI 166 p. 119 figs. 1–2.

†*Clypeopygus bulgaricus* sp. n. Cretaceous Bulgaria, TZANKOV Annu. Univ. Sofia 30 1934 pp. 200–201, 217 pl. ii figs. 1a–b.

†*Codiopsis*, MORTENSEN 123 p. 602.—*C. doma* var. *conicus* var. n. p. 34 pl. ii fig. 10, *pierrensis* sp. n. p. 35 pl. iii figs. 2a–h Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935; *C. arnaudi* p. 35 pl. iii fig. 1, *doma* p. 34 pl. ii fig. 9, Id.

Coelopleurus australis p. 627, *elegans* p. 630 pl. lxxxviii figs. 24–25, *floridanus* p. 612 figs. 323a, 363–365, pl. lxxviii figs. 5–7, pl. lxxxviii figs. 17–18, 31–34; *granulatus* p. 635 fig. 371, pl. lxxvii figs. 1–2, pl. lxxix fig. 4, pl. lxxxviii figs. 1–6; *interruptus* p. 626 pl. lxxxviii fig. 30; *longicollis* p. 619 fig. 366, pl. lxxvii figs. 7–9, pl. lxxxviii figs. 19–21; *maculatus* p. 631 figs. 325b–c, 330, 369–370, pl. lxxvii fig. 4, pl. lxxviii figs. 1–3, pl. lxxix figs. 10–16, pl. lxxxviii figs. 26–29; *maillardi* p. 627 pl. lxxvii fig. 3, pl. lxxviii fig. 4, pl. lxxix figs. 1–3, pl. lxxxviii figs. 22–23; *undulatus* p. 622 figs. 327c, 367–368, pl. lxxix figs. 5–7, pl. lxxxviii figs. 13–16 with vars. *polymorphus* p. 625 pl. lxxvii fig. 6, pl. lxxix figs. 8–9, pl. lxxxviii figs. 7–12 and *ruber* p. 624 pl. lxxvii fig. 5; *C. vittatus* p. 626, MORTENSEN 123.

†*Coelopleurus*, MORTENSEN 123 p. 605.

†*Colpotiara*, MORTENSEN 123 p. 415.

†*Conoclypeus nettoanus*, MAURY 116 p. 274 pl. iii figs. 5–7.

†*Conulus chiapasensis* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 6 p. 3 pl. i figs. 5–6.—*C. laevis* p. 40 pl. iv fig. 1, *nucula* p. 39 pl. iii fig. 6, *subrotundus* p. 39 pl. iii fig. 7, *subphaeroidalis* p. 40 pl. iii fig. 8, SMISER 159.

†*Cottaldia australis*, MAURY 116 p. 270 pl. iv figs. 6–7.—*C.* p. 600 with subg. *Eucosmechinus* p. 602, MORTENSEN 123.

†*Crinocidaris* subgen. n. see *Cidaris*.

Otenocidaris geliberti p. 212 pl. ix fig. 8, *perrieri* p. 211, *speciosa* p. 209 pl. i figs. 2–12, MORTENSEN 124.

†*Cyclaster pfenderae* sp. n. Cretaceous Madagascar, Basse & Lambert in LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 27 pl. iv figs. 17–19.

†*Cyphosoma sanctae-luciae* sp. n. Cretaceous Brazil, MAURY Monog. Serv. géol. min. Brasil 11 pp. 266–267 pl. iv figs. 4–5; *binexile* p. 262 pl. iv fig. 15, *brasilense* p. 264 pl. iv figs. 9–11, Id.

†*Dallonia*, MORTENSEN 123 p. 112.

†*Deneechinus*, MORTENSEN 123 p. 63.

†*Devonocidaris*, MORTENSEN 123 p. 70.

Diadema setosum, ONODA 134 p. 648 fig. 9, pl. xiii figs. 10–11.

Dialithocidaris, MORTENSEN 123 p. 550.

Diplechinus, MORTENSEN 123 p. 503.

†*Diplopodia*, MORTENSEN 123 p. 445.

†*Diplogtagma*, MORTENSEN 123 p. 518.

†*Disaster* sp., CHECCHIA-RISPOLI 25 p. 297 pl. xvii fig. 2.

†*Discoides minimus*, SMISER 159 p. 38 pl. iii fig. 5.

†*Dorocidaris besairiei* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 23 pl. iii figs. 1–6.

†*Dumbea symmetrica*, SMISER 160 p. 457 pl. lxii figs. 17–20.

†*Echinanthus basseae* sp. n. Eocene Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 31 pl. iii figs. 27–30.—*E. corneti*, SMISER 159 p. 64 pl. vi fig. 7.

Echinarachnius brevis sp. n. Japan, IKEDA Botany Zool. Tokyo 4 pp. 1231–1233 figs. 1a–c; *griseus*, Id. p. 1232 fig. 2.

†*Echinobrissus* [*Nucleolites*] *scrobiculatus*, TZANKOV 172 p. 200 pl. i fig. 9.

Echinocardium connectens, MORTENSEN 124 p. 234 pl. iv figs. 9–10.

†*Echinoconus sulcatoradiatus*, SMISER 159 p. 44 pl. iv fig. 4.—*E. conicus* p. 196, *raulini* p. 195 pl. i fig. 5, *subrotundus* p. 197, TZANKOV 172.

†*Echinocorys obliquus* with var. *assymetrica* p. 205 pl. vii figs. 1a–b, 2a–c, 3, var. *lata* p. 204 pl. vi figs. 4a–c, var. *recta* p. 205 pl. vii figs. 4a–d, var. n. Cretaceous Poland, KONGIEL Trav. Soc. Sci. Wilno 9 1935; *E. depressus* p. 202 pl. v fig. 8, pl. vi fig. 1, *obliquus* p. 204 pl. vi figs. 2–3, *stellaris* p. 205 pl. vii fig. 5, Id.—*E. conoideus* p. 209 pl. iii fig. 5, *depressus* p. 209 pl. iii fig. 1, *gibbus* p. 208 pl. iii fig. 4, *ovatus* p. 206 pl. ii fig. 4 with vars. *humilis* p. 208 pl. iii fig. 3, *marginatus* p. 207 pl. iii fig. 2, and *pyramidatus* p. 208, *E.* sp. p. 210 pl. iv fig. 3, TZANKOV 172.

†*Echinocyamus basseae* p. 30 pl. iii fig. 26, *maropiensis* p. 30 pl. iii figs. 23-25, spp. n. Eocene Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6; *rostratus*, Id. p. 30 pl. iii figs. 20-22.

†*Echinocystis*, MORTENSEN 123 p. 60.

†*Echinolampas parvula* sp. n. Eocene Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 31 pl. iii figs. 13-15.—*E. rombellipsoidalis* sp. n. Eocene Hungary, THIRING Mag. K. földt. Int. Évk. Pest. 66 pp. 57-58 pl. ii figs. 13-14.

†*Echinolampas (Isolampas) cavaionensis* sp. n. Miocene Italy, VENZO Palaeontogr. ital. Siena 35 1935 p. 229 pl. xvii figs. 27-28; *bathystoma*, Id. p. 228.

†*Echinolampas (Macrolampas) discus*, VENZO 176 p. 230 pl. xix figs. 2-3.

Echinometra mathaei, BOONE 12 p. 257 pls. xciii-xciv.—*E. mathaei*, ONODA 134 p. 641 pl. xi figs. 5-7, pl. xii figs. 1-2.

†*Echinopygus cottreui*, LAMBERT 98 p. 22 pl. iv fig. 9.

†*Echinospatangus argillaceous*, VIALLI 177 p. 19 figs. 1-2.

Echinostrephus moralis, ONODA 134 p. 646 pl. xiii figs. 2-5.

Echinothrix calamaris p. 252 pls. lxxxv-lxxxvi, *diadema* p. 251 pls. lxxxiii-lxxxiv, BOONE 12.

†*Echinothuria*, MORTENSEN 123 p. 219.

†*Echinotiara*, MORTENSEN 123 p. 500.

†*Egyptechinus* subgen. n. see *Thylechinus*.

†*Engelia amalthei*, KUHN 95 p. 241 pl. ix figs. 12, 23.

†*Eosalenia*, MORTENSEN 123 pp. 311, 318.

†*Epiaster chiapasensis* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 5 1935 pp. 370-371 pl. xvi fig. 22.—*E. crassissimus*, SMISER 159 p. 79 pl. vii figs. 6a-d.

Eucidaris thouarsii, BOONE 12 p. 247.—*E. tribuloides*, MORTENSEN 124 p. 213 pl. i figs. 13-15.

†*Eurypneustes*, MORTENSEN 123 p. 491.

†*Faujasia ? transversus* sp. n. Cretaceous Holland, SMISER Mém. Mus.

Hist. nat. Belg. 68 1935 p. 65 pl. vii figs. 1a-e; *F. apicalis*, Id. p. 65 pl. vi fig. 8.

†*Fournierechinus*, MORTENSEN 123 p. 72.

†*Gautheria*, MORTENSEN 123 p. 478.—*G. corneti* p. 31, *radiata* p. 30 pl. ii fig. 8, SMISER 159.

†*Globator bulloides*, SMISER 160 p. 462 pl. lxiii figs. 20-22; *G. (Pseudopyrina) clarki* p. 463 pl. lxiii figs. 7-10, *inaudita* p. 463 pl. lxiii figs. 5-6, *parryi* p. 463 pl. lxiii figs. 11-14, Id.

†*Glypticus* p. 594, *G. heiroglypticus* p. 594 fig. 350, pl. lxxiii figs. 18-19, MORTENSEN 123.

Glyptocidaris p. 480, *G. crenularis* p. 482 figs. 264, 280-283a, pl. lxxi figs. 1-2, pl. lxxxix figs. 1-15, MORTENSEN 123.

†*Gomphechinus*, MORTENSEN 123 p. 517.

†*Goniophorus*, MORTENSEN 123 p. 346.

†*Goniopygus stocktonensis* sp. n. Cretaceous Texas, SMISER J. Paleont. Menasha Wis. 10 p. 459 pl. lxii figs. 7, 16; *budaensis*, Id. p. 459.—*G.* p. 587, *G. (Polygoniopygus) zitteli* p. 591 fig. 347, pl. lxxiii figs. 7-8, MORTENSEN 123.—*G. minor*, SMISER 159 p. 36 pl. iii fig. 3.

†*Gymnocidaris*, MORTENSEN 123 p. 406.

Habrocidaris, MORTENSEN 123 p. 549.

Hapalosoma gemmiferum p. 276 fig. 151, pl. liv figs. 3-6, pl. lxxxiii figs. 3, 11-13; *pellucidum* p. 271 figs. 53c, 59a, 63d, 69d, 149-150, pl. liii, pl. liv figs. 1-2, pl. lxxxiii figs. 1-2, 4-10, 14, 16, 18, MORTENSEN 123.

†*Hardouinia potosiensis* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 6 p. 5 pl. i figs. 2-4.—*H. ? stetsoni* sp. n. Cretaceous N. America, STEPHENSON Bull. geol. Soc. Amer. Washington 47 pp. 371-372 pl. i figs. 2-4.

†*Hemiaster gemellaroi* sp. n. Cretaceous Sicily, CHECHIA-RISPOLI Bol. Soc. geol. ital. 54 p. 302 pl. xvi fig. 5, pl. xvii fig. 4.—*H. sphericus* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 5 1935 pp. 372-373 pl. xvi figs. 18-19.—*H. heteropneustes* pp. 28-29 pl. iv figs. 20-22, *hourcqi* p. 28 pl. ii figs. 7-8, spp. n. Cretaceous Madagascar, LAMBERT

Ann. géol. Serv. Mines Madagascar 6.—*H. cedroensis* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. min. Brasil 11 pp. 280–283 pl. ii figs. 3, 7; *jacksoni*, Id. p. 279 pl. iii figs. 1–2, 8–10.—*H. calvini*, SMISER 160 p. 478 pl. lxvi figs. 9, 11–13, pl. lxvii figs. 8.—*H. angustipneustes*, TZANKOV 172 p. 215 pl. ii fig. 5.

†*Hemiaster* (*Bolbaster*) *prunella*, SMISER 169 p. 86 pl. vii fig. 9.

†*Hemicara pomeranum*, KONGIEL 91 p. 201 pl. v fig. 7.

†*Hemicidaris luciensis* var. *hourcqi* var. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 17.—*H.* p. 409, *crenularis* fig. 205c, *luciensis* figs. 205d, 206c–d, pl. lxxiii fig. 12, *intermedia* figs. 206a–b, *stramonium* fig. 207, MORTENSEN 123.—*H.* sp., SMISER 159 p. 25 pl. ii fig. 3 [Radioles].

Hemiphormosoma paucispinum, MORTENSEN 123 p. 149 figs. 63c, 91–92, pl. lxxiv figs. 16–18.

†*Hemithylus*, MORTENSEN 123 p. 472.

†*Hemitiaris*, MORTENSEN 123 p. 411.

†*Hessotiarra*, MORTENSEN 123 p. 405.

†*Heteraster adkinsi* p. 468 pl. lxiii figs. 16–19, *bravoensis* p. 467 pl. lxiv figs. 22–24, *inflatus* p. 467 pl. lxv figs. 1–4, *mexicanus* p. 468 pl. lxiv figs. 19–21, *obliquatus* p. 468 pl. lxiv fig. 25, *texanus* p. 468 pl. lxv figs. 10–11, *texasus* p. 468 pl. lxiv figs. 15–18, cf. *traski* p. 469 pl. lxv fig. 8, *wenoensis* p. 469 pl. lxv figs. 5–7, SMISER 160.

Heterocentrotus trigonarius, BOONE 12 p. 258 pl. xc–xcvi.

†*Heterocidaris*, MORTENSEN 123 p. 296.

†*Heterodiadema*, MORTENSEN 123 p. 439.

†*Heteropodia*, MORTENSEN 123 p. 638.

†*Heterosalenia*, MORTENSEN 123 p. 316.

†*Holaster feruglioi* sp. n. Cretaceous S. America, MELINOSI Proc. verb. Soc. tosc. Sci. nat. 44 1935 pp. 32–39 figs. 1–2.—*H. nodulosus* p. 66 pl. vii fig. 2, *H.* sp. p. 67 pl. vii fig. 4, SMISER 159.

†*Holotypus adkinsi* sp. n. Cretaceous Texas, SMISER J. Paleont. Menasha Wis.

10 p. 461 pl. lxii figs. 12–15; *engerrandi* p. 460 pl. lxii figs. 21–24, *planatus* p. 460 pl. lxii figs. 8–9, 11, Id.—*H. pennanus*, MAURY 116 p. 272 pl. iv figs. 1–3.—*H. turonensis*, TZANKOV 172 p. 195 pl. i fig. 4.

†*Hyattechinus*, MORTENSEN 123 p. 59.

Hygrosoma hoplakantha p. 208 figs. 58, 59c, 61, 120–121, 122a–c, pl. xviii fig. 1, pl. xix fig. 1, pl. xx, pl. lxxviii fig. 2; *luculentum* p. 215 figs. 64c, 67d, 69c, 122d, 123–124, pls. xxi–xxii, pl. lxxviii figs. 22–23; *petersii* with var. *atlanticum* p. 202 figs. 68d, 118–119, pls. xiii–xvii, pl. xviii fig. 2, pl. xix fig. 2, pl. lxxviii figs. 1, 3–5, 24–25, MORTENSEN 123.

†*Hypodiadema*, MORTENSEN 123 p. 429.

†*Hyposalenia*, MORTENSEN 123 p. 344.

†*Idiocidaris*, MORTENSEN 123 p. 344.

†*Ilarionia defiorei* sp. n. Eocene Sicily, CHECCHIA-RISPOLI Bol. Soc. geol. ital. 54 p. 305 pl. xvi fig. 2, pl. xvii fig. 7.

†*Isomicraster mexicanus* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 5 1935 pp. 371–372 fig. 2.

†*Isopneustes gindrei*, TZANKOV 172 p. 212 pl. ii fig. 3.

†*Jacksonechinus* gen. n. for type *J. andrewi* sp. n. Carboniferous Egypt, LAMBERT Bull. Inst. égypt. 18 pp. 39–40 pl. figs. 1–3.

Kamptosoma asterias, MORTENSEN 123 p. 157 figs. 55d, 62b, 64e, 68f, 97, pl. iii figs. 5–8, pl. lxxvi figs. 17–19.

†*Koninckocidaris*, MORTENSEN 123 p. 57.

†*Lambertechinus*, MORTENSEN 123 p. 488.

†*Lambertiaster fischeuri*, SMISER 160 p. 475 pl. lxiv figs. 1–3, 9, 10.

†*Lampadaster lamberti* sp. n. Cretaceous Bulgaria, TZANKOV Annu. Univ. Sofia 30 1934 pp. 211–212, 220 pl. iv figs. 1a–b, 2a–b.

†*Leiotomaster bösei* sp. n. Cretaceous Texas, SMISER J. Paleont. Menasha Wis. 10 p. 476 pl. lxiv figs. 4–8.

†*Lepidechinoides*, MORTENSEN 123 p. 58.

†*Lepidechinus*, MORTENSEN 123 p. 66.

- †*Lepidesthes*, MORTENSEN 123 p. 76.
- †*Lepidocentrus*, MORTENSEN 123 p. 64.
- †*Lepidocidaris*, MORTENSEN 123 p. 68.
- †*Leptarbacia arguta*, SMISER 160 p. 457 pl. lxii figs. 1-3.
- †*Leptechinus*, MORTENSEN 123 p. 464.
- †*Linthia heimeii* sp. n. pp. 56-59 figs. 6-8, *suitensis* sp. n. pp. 65-69 figs. 13-15, Eocene Switzerland, JEANNET Ber. Schwyz. Naturf. Ges. Einsiedeln 1; *blombergensis* p. 54 figs. 4-5, *damiani* p. 60 figs. 10-12 pl. iii, *insignis* p. 52 figs. 1-3, *L.* sp. p. 59 fig. 9, Id.—*L. mullerriedi* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 5 1935 p. 373 pl. xvi figs. 20-21.—*L. pseudoglobalis* sp. n. Eocene Hungary, THIRING Mag. K. földt. Int. Évk. Pést. 66 pp. 60-61 pl. i figs. 6-8.—*L. houzeauvi*, SMISER 159 p. 87 pl. viii fig. 3.
- †*Loriolia*, MORTENSEN 123 p. 441.
- †*Lovenechinus*, MORTENSEN 123 p. 39.
- †*Lychnidius scrobiculatus*, SMISER 159 p. 49 pl. iv fig. 10.
- †*Lysechinus*, MORTENSEN 123 p. 528.
- †*Maccoya*, MORTENSEN 123 p. 38.
- †*Macraster denisonensis* sp. n. p. 471 pl. lxvi figs. 1-4, *solitariensis* sp. n. p. 472 pl. lxv figs. 13, 15-16, 18-19, *roberti* var. *ovatus* var. n. p. 472 pl. lxiv figs. 11-14, Cretaceous Texas, SMISER J. Paleont. Menasha Wis. 10; *M. aquilerae* p. 474 pl. lxvii fig. 7, *pseudoelegans* p. 473 pl. lxvii fig. 2, *subobesus* with var. *kentensis* p. 474 pl. lxvii fig. 4, *texasus* p. 473 pl. lxvii fig. 1, *washitae* p. 471 pl. lxvii figs. 3, 5-6, 9-10, Id.
- †*Macrodiadema*, MORTENSEN 123 p. 112.
- †*Magnosia mortenseni* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 20 pl. i figs. 33-34.—*M. jacobii*, BIGOT 10 p. 726 pl. xlii figs. 4-5.—*M.* p. 598, *M.* sp. fig. 329, MORTENSEN 123.
- †*Mariania euglypha* var. *brevistella* var. n. Miocene Italy, VENZO Palaeontogr. ital. Siena 35 1935 p. 233 pl. xvii figs. 29a-b.
- †*Medoechinus castexi* sp. n. pp. 7-9 figs. 6-10, pl. i figs. 8-10, *daguini* sp. n. pp. 5-7 figs. 3-5, pl. i figs. 4-7, pl. ii figs. 10-12, Eocene France, JEANNET Abh. schweiz. paläont. Ges. 52 2; *fabrei* p. 3 figs. 1-2, pl. i figs. 1-3, pl. ii figs. 1-4, *neuvillei* p. 9 figs. 11-15, pl. i figs. 11-13, pl. ii figs. 5-9, Id. [*M. fabrei* is stated by Jeannet to be sp. n.; but see JEANNET 132 in Zool. Record for 1935.]
- †*Meekchinus*, MORTENSEN 123 p. 78.
- †*Melonechinus*, MORTENSEN 123 p. 40.
- Mespilia globulus*, ONODA 134 p. 637 figs. 1-8, pl. x figs. 1-7, pl. xi figs. 1-4.
- †*Micraster trangahyensis* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 27 pl. ii figs. 9-10.—*M. duponti*, KONGIEL 91 p. 207 pl. viii fig. 1.—*M. brongniarti* p. 82, *coranguinum* var. *schroederi* p. 82, *M. decipiens* p. 81, *duponti* p. 81, *leskei* p. 80 pl. vii fig. 3, SMISER 159.—*M. cortestudinarium* p. 214 pl. v fig. 1-2, *decipiens* p. 214 pl. v fig. 3, *gibbus* p. 213, TZANKOV 172.
- †*Micraster* (*Brissopneustes*) *maestrichtensis*, SMISER 159 p. 85 pl. viii fig. 2.
- †*Micraster* (*Gibbaster*) *belgicus*, SMISER 159 p. 83.
- †*Micraster* (*Isopneustes*) *eysdenensis* p. 84 pl. vii figs. 7a-g, *montensis* p. 84 pl. vii figs. 8a-d, spp. n. Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935.
- †*Microdiadema*, MORTENSEN 123 p. 438.
- †*Micropsis*, MORTENSEN 123 p. 475.
- †*Mokotibaster hourcqii*, LAMBERT 98 p. 26 pl. ii figs. 1-5.
- †*Myriastiches*, MORTENSEN 123 p. 56.
- Notechinus marionis* sp. n. Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 221-223 fig. 1, pl. ii figs. 5-10, pl. ix fig. 1-4; *magellanicus*, Id. p. 220.
- †*Nucleolites tornacensis* sp. n. Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935 p. 50 pl. iv figs. 11a-d.—*N. freitasi*, MAURY 116 p. 276 pl. iv figs. 16-18.
- †*Nucleopygus coravium*, SMISER 159 p. 52 pl. v fig. 1.—*N. coravium*, TZANKOV 172 p. 201 pl. i fig. 10.
- †*Oligoporus*, MORTENSEN 123 p. 40.

†*Oolopygus convexus* sp. n. p. 59 pl. vi figs. 1a-d, *jandrainensis* sp. n. p. 58 pl. v figs. 9a-d, Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935; *periformis*, Id. p. 57 pl. v fig. 8.

†*Orthodiadema subangulatum*, MORTENSEN 123 p. 450 pl. lxxiii figs. 4-5.

†*Orthopsis miliaris*, SMISER 159 p. 26 pl. ii fig. 4.—*O. miliaris*, TZANKOV 172 p. 192 pl. i fig. 3.

†*Palaeechinus*, MORTENSEN 123 p. 37.

†*Palaeodiscus*, MORTENSEN 123 p. 54.

†*Palhemiaster comanchei*, SMISER 160 p. 475 pl. lxvi figs. 5-8, 10.

†*Paracidaris* cf. *zschokkei*, CHAVANNE 24 p. 122 pl. xiii fig. 4 [Radiole].

Paraphormosoma alternans, MORTENSEN 123 p. 152 figs. 56a, 93-96, pl. iv figs. 5-8, pl. lxxvi figs. 14-16.

Parapneustes cordatus, MORTENSEN 124 p. 233 pl. iii figs. 1-4.

Parasalenia gratiosa, BOONE 12 p. 256 pls. xci-xcii.

†*Pedina madagascariensis* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 19 pl. iv figs. 23-24.—*P. davousti*, BIGOT 10 p. 725 pl. xlii figs. 6-7.

†*Pedinopsis*, MORTENSEN 123 p. 451.

†*Pelanechinus corallina*, MORTENSEN 123 p. 161.

†*Peltastes* cf. *heliophorus*, KONGIEL 91 p. 199 pl. v fig. 5.

†*Periaster maugeri* sp. n. Cretaceous Sicily, CHECCHIA-RISPOLI Bol. Soc. geol. ital. 54 p. 304 pl. xvi fig. 4, pl. xvii fig. 5.

†*Pericosmus marianii*, VENZO 176 p. 234 pl. xix fig. 1.

†*Perischocidaris*, MORTENSEN 123 p. 75.

†*Perischodomus*, MORTENSEN 123 p. 66.

†*Petalobrissus burckhardti* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 6 p. 5 pl. i figs. 7-8.

†*Pholidechinus*, MORTENSEN 123 p. 68.

†*Pholidocidaris*, MORTENSEN 123 p. 73.

Phormosoma bursarium p. 135 figs. 54a, 63a-b, 64a, 83-85, pl. ii fig. 20, pl. iii figs. 1-2, pl. lxxiv figs. 11-15;

placenta with var. *africana* p. 125 figs. 60, 66, 67a, 68a, 72a, 75, 80-82, pl. i figs. 1-5, pl. ii figs. 1-19, pl. lxxiv figs. 1-6, 19; *rigidum* p. 145 figs. 89-90, pl. i figs. 6-7; *verticillatum* p. 142 figs. 64d, 86-88, pl. iii figs. 3-4, pl. iv fig. 4, pl. lxxiv figs. 7-10, MORTENSEN 123.

Phyllacanthus forcipulatus sp. n. Indian Ocean, MORTENSEN Rec. Ind. Mus. Calcutta 38 pp. 307-309 1 fig. pls. x-xii.—*P. imperialis*, BOONE 12 p. 249 pls. lxxxix-lxxxii.

†*Phyllobrissus oblongus* sp. n. Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935 p. 53 pl. v figs. 2a-f.

†*Phymechinus*, MORTENSEN 123 p. 518.

†*Phymosoma*, MORTENSEN 123 p. 486.—*P. mexicanum*, SMISER 160 p. 458.

†*Phymotaxis*, MORTENSEN 123 p. 514.

†*Plegiocidaris bifrons* p. 12 pl. i figs. 10-11, *cauliculus* p. 11 pl. i figs. 1-3, *pseudohorrida* p. 12 pl. i fig. 9, spp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6; *jacobi* sp. n. Jurassic Madagascar, Basse & Lambert in LAMBERT, Id. p. 11 pl. iv figs. 1-3, ? fig. 8.—*P. alpina*, BLANCHET 11 p. 70 pl. ix fig. 7.—*P. cf. chantrei* p. 121 pl. xii figs. 5-6, *charmassei* p. 121 pl. xiii fig. 3, CHAVANNE 24 [Radioles].

†*Pleiocyphus*, MORTENSEN 123 p. 597.

†*Plesiocidaris*, MORTENSEN 123 p. 400.

†*Pleurodiadema*, MORTENSEN 123 p. 466.

Plexechinus nordenskjöldi, MORTENSEN 124 p. 235 pl. ix figs. 5-7.

†*Pliolampas trevisani* sp. n. Eocene Sicily, CHECCHIA-RISPOLI Bol. Soc. geol. ital. 54 p. 306 pl. xvi fig. 3, pl. xvii fig. 6.

†*Pliotoxaster inflatus* sp. n. Cretaceous Texas, SMISER J. Paleont. Menasha Wis. 10 p. 465 pl. lxiii figs. 1, 4, 15, 23-25; *whitei*, Id. p. 464 pl. lxv figs. 9, 12, 14, 17, 20.

Pluteus excluded from availability as generic name and reserved as designation of developmental stage, INTERNAT. COMM. ZOOL. NOMEN. 84 p. 32.

Podocidaris ornata p. 561; *sculpta* p. 557 figs. 320d, 323b, 328g, 338-339, pl. lxxxvii figs. 20-23; *sibogae* p. 560 pl. lxxxvii figs. 24-26, MORTENSEN 123.

†*Polycyphus hourqi* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 20 pl. i figs. 31-32.—*P.*, MORTENSEN 123 p. 502.

†*Polydiadema* p. 442, *P. wiltshirei* fig. 233b, MORTENSEN 123.

†*Polysalenia*, MORTENSEN 123 p. 382.

†*Poropeltaris*, MORTENSEN 123 p. 345.

†*Porosoma*, MORTENSEN 123 p. 473.

Prionocidaris baculosa var. *annulifera*, BOONE 12 p. 248 pls. lxxix-lxxx.

†*Procassidulus basseae* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 24 pl. ii figs. 13-15; *apianus*, Id. p. 31 pl. iii figs. 18-19.—*P. gliberti* sp. n. Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935 p. 60 pl. vi figs. 3a-d; *chalmasi* p. 61 pl. vi fig. 4, *lapiscancrini* p. 60 pl. vi fig. 2, *mortenseni* p. 62, Id.

†*Proterocidaris*, MORTENSEN 123 p. 71.

Psammechinus miliaris, DONS 56 p. 65 figs. 1-2.

†*Psephechinus*, MORTENSEN 123 p. 501.

†*Pseudarbacia*, MORTENSEN 123 p. 513.

Pseudocentrotus depressus, ONODA 134 p. 649 pl. xiv figs. 10-13.

†*Pseudocidaris collignoni* p. 13 pl. i figs. 12-16, *levis* p. 13 pl. iv fig. 7, *truncata* p. 14 pl. i figs. 18-21, spp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6; *rupellensis*, Id. p. 13 pl. i fig. 17.—*P.* MORTENSEN 123 p. 401.

†*Pseudodiadema grangeri* sp. n. Cretaceous Brazil, MAURY Monog. Serv. géol. min. Brasil 11 pp. 270-271 pl. ii figs. 1-2.—*P.* cf. *criniferus*, KÜHN 95 p. 241 pl. xii fig. 14.—*P.* p. 430, *mamilianum* p. 641 pl. lxxiii fig. 9, *pseudodiadema* figs. 232-233a, pl. lxxiii fig. 1, MORTENSEN 123.—*P. rotula*, SMISER 160 p. 455 pl. lxii figs. 4-6, 10.

†*Pseudopyrina orchoterenui* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 5 1935 p. 370 pl. xvi figs. 15-17.—*P. hourqi* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 24 pl. ii figs. 11-12.—*P. minuta* sp. n. Cretaceous

Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935 pp. 42-43 pl. iv figs. 3a-e; *desmoulinsi*, Id. p. 42 pl. iv fig. 2.

†*Pseudosalenia*, MORTENSEN 123 p. 315.

†*Pygaster truncatus*, SMISER 159 p. 37 pl. iii fig. 4.

†*Pygaulus pulvinatus*, SMISER 159 p. 47 pl. iv fig. 6.

Pygmaeocidaris prionigera, MORTENSEN 123 p. 553 figs. 328e-f, 335-337, pl. lxxxvii figs. 27-35.

†*Pygorhynchus conicus* sp. n. p. 48 pl. iv figs. 9a-d, *ovalis* sp. n. p. 47 pl. iv figs. 7a-d Cretaceous Belgium, SMISER Mém. Mus. Hist. nat. Belg. 68 1935; *houzeaui*, Id. p. 48 pl. iv fig. 8.

†*Pygurus lampassiformis** sp. n. Cretaceous Bulgaria, TZANKOV Annu. Univ. Sofia 30 1934 pp. 204-205, 218 pl. ii fig. 2.

†*Pyrina mexicana* sp. n. Cretaceous Mexico, LAMBERT Bull. Soc. géol. Fr. (5) 6 p. 4 pl. i fig. 1.—*P.* sp., SMISER 160 p. 462 pl. lxiii figs. 2-3.—*P. ovulum* p. 198 pl. i fig. 6, *P.* sp. n. p. 198 pl. i fig. 7, TZANKOV 172.

Pyschocidaridae fam. n. for type *Psychocidaris* Ikeda 1935 Malaysia, IKEDA Annot. zool. jap. 15 p. 486 pls. xxxiii-xxxiv.

†*Rachiosoma cottreai* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 24 pl. ii figs. 16-17.—*R. raulini* p. 201 pl. v fig. 1, ? *R.* sp. p. 201 pl. v fig. 3, KONGIEL 91.—*R.*, MORTENSEN 123 p. 476.

†*Radiocyphus hungaricus* sp. n. Eocene Hungary, THIRRING Mag. K. földt. Int. Évk. Pest. 66 pp. 58-59 pl. ii fig. 15.

†*Recrosalenia*, MORTENSEN 123 pp. 311, 318.

†*Rhabdocidaris kisombyensis* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 12 pl. i figs. 5-7; *R. crassissima*, Id. p. 12 pl. i fig. 8.—*R. brasiliensis* sp. n. Cretaceous Brazil, MAURY Monog. Serv. géol. min. Brasil 11 pp. 262-263 pl. ii figs. 4-5.—*R. impar*, GREGORIO 67 p. 46 pl. xiv figs. 15-17 [Radiole].

†*Rhyncholampas pygmaea*, LAMBERT 98 p. 31 pl. iii figs. 16-17.

†*Rhynchopygus macari* sp. n. Cretaceous Holland, SMISER Mém. Mus. Hist. nat. Belg. 68 1935 p. 63 pl. vi figs. 6a-e; *marmini*, Id. p. 62 pl. vi fig. 5.

Salenia cincta p. 374 figs. 196a, 197b, pl. lxvi figs. 10-11, pl. lxxxiv fig. 3, pl. lxxxv figs. 9-10; *goësiiana* p. 371 pl. lxxxiv fig. 6, pl. lxxxv figs. 24-26, 34, pl. lxxxvi figs. 28-31, 41; *phoinissa* p. 377 fig. 196c, pl. lxxxiv fig. 1; *sculpta* p. 376 figs. 196b, 197a, pl. lxxxiv fig. 5, pl. lxxxvi fig. 15; *unicolor* p. 379 figs. 196d, 197c, pl. lxvi figs. 7-8, pl. lxxxiv fig. 7, pl. lxxxv figs. 12-13, 39-40, pl. lxxxvi figs. 5-8, MORTENSEN 123.

†*Salenia similis lastroensis* subsp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. min. Brasil 11 pp. 268-269; *S. sergipensis* p. 266 pl. iv figs. 12-13, *similis* p. 268 pl. iv fig. 14, Id.—*S.*, MORTENSEN 123 p. 367.—*S. anthophora* p. 29, *bourgeoisii* p. 28 pl. ii fig. 7, *minima* p. 28 pl. ii fig. 6, *petalifera* p. 27 pl. ii fig. 5, SMISER 159.—*S. prestensis*, SMISER 160 p. 457.

†*Salenidia*, MORTENSEN 123 p. 347.

Salenocidaris brachygnatha p. 363 pl. lxxxvi figs. 3-4, 14, 16; *crassispina* p. 366; *hastigera* p. 360 fig. 193d, pl. lxvi figs. 1-2, pl. lxxxv figs. 5-7, 31-33, pl. lxxxvi figs. 9-10, 17-20, with var. *acuminata* p. 363 pl. lxxxv fig. 14, pl. lxxxvi figs. 11-13; *S. incrassata* p. 366 figs. 184d, 194, pl. lxvi figs. 5-6, pl. lxxxv figs. 11, 18-21, pl. lxxxvi figs. 21-24, 32-37; *miliaris* pp. 358, 640 figs. 175c, 180b, 182g-h, 185, 193c, pl. lxvi fig. 12, pl. lxxxv figs. 15 & 38, pl. lxxxvi figs. 25-27, 38-40; *pacifica* p. 364 fig. 193e, pl. lxxxiv fig. 2, pl. lxxxv figs. 22-23; *profundi* p. 354 figs. 181c, 183e, 193b, pl. lxxxv figs. 1-2, 30, 35-36, pl. lxxxvi figs. 1-2 with var. *occlusa* p. 358 pl. lxvi figs. 3-4, pl. lxxxv figs. 27-29; *S. varispina* p. 350 figs. 179c, 180a, 183d-e, 186-187, 193a, pl. lxvi fig. 9, pl. lxxxiv fig. 4, pl. lxxxv figs. 3-4, 8, 16-17, 37, MORTENSEN 123.

†*Schizaster pappi* sp. n. Eocene Hungary, THIRRING Mag. K. földt. Int. Évk. Pest. 66 pp. 56-57 pl. ii fig. 17.

†*Scutella höbarthi* sp. n. Miocene Austria, KÜHN SitzBer. Akad. Wiss. Wien 145 pp. 40-43 figs. 2-3, pl. i figs. 1-3 (? figs. 4-5, juv.).—*S. scurellensis* sp. n. Miocene Italy, VENZO Palaeontogr. ital. Siena 35 1935 pp. 226-227 pl. xviii

figs. 1-2, pl. xix fig. 4; *pseudo-subrotundaeformis* nom. n. pro *S. subrotundaeformis* Oppenheim non Schauroth, Id. p. 223 pl. xviii fig. 4; *S. guehardi* p. 225 pl. xviii fig. 3, pl. xix fig. 5, *subrotundaeformis* p. 223 pl. xviii fig. 5, Id.

†*Spatagoides striatoradiatus* var. *conicus* p. 71 pl. viii fig. 1g, var. *depressus* pp. 71-72 pl. viii fig. 1h, var. *elevatus* p. 71 pl. viii fig. 1e, vars. n. Cretaceous Holland, SMISER Mém. Mus. Hist. nat. Belge 68 1935; *S. oculatus* p. 72, *striatoradiatus* p. 69 pl. viii figs. 1a-d, f, Id.

†*Spatagoides* (*Toxopatagus*) *rutoti*, SMISER 159 p. 73 pl. ix fig. 1.

Sperosoma antillense p. 187 figs. 109-110a, pl. ix fig. 1, pl. x fig. 1, pl. lxxxvi figs. 5-6; *armatum* p. 193; *biseriatum* p. 191 figs. 113, 114b, pl. xi, pl. lxxxvi fig. 13; *crassispinum* p. 195 figs. 114d, 116, pl. ix fig. 2, pl. x fig. 2, pl. lxxxvii figs. 13-17; *durum* p. 193; *giganteum* p. 199; *grimaldi* p. 184 figs. 55b, 69b, 72d, 73, 107-108, 110b, pl. viii; *obscurum* p. 194 figs. 114c, 115, pl. xii fig. 1, pl. lxxxvi figs. 1-4; *quincunciale* p. 189 figs. 111-112, 114a, pl. lxxxvi figs. 7-12; *tristichum* p. 197 figs. 114e, 117, pl. xii figs. 2-3, pl. lxxxvii figs. 18-22; *S. sp.* p. 639 fig. 374, MORTENSEN 123.

†*Sphaeotiaris*, MORTENSEN 123 p. 412.

†*Stegaster* sp., TZANKOV 172 p. 211 pl. iv fig. 4.

Sterechinus agassizii p. 217 pl. ii figs. 11-16, *antarcticus* p. 218, *neumayeri* p. 219 pl. ii figs. 1-4, MORTENSEN 124.

†*Stomechinus serratus*, CHAVANNE 24 p. 123 pl. xiii fig. 1.—*S. p.* 504, *S. perlatus* figs. 293, 296, pl. lxxiii fig. 11, MORTENSEN 123.

Stomopneustes variolaris, MORTENSEN 123 p. 507 figs. 293, 296, 301-302, pl. lxxi figs. 3-5, pl. lxxii, pl. lxxxix figs. 16-26.

Strongylocentrotus drobachiensis, CLARK 30 p. 296 figs. 1-4.—*S. pulcherimus*, ONODA 134 p. 649 pl. xiv figs. 1-9.

Temnopleurus toreumaticus, BOONE 12 p. 253 pls. lxxxvii-lxxxviii.—*T. toreumaticus*, ONODA 134 p. 646 pl. xiii figs. 6-7.

†*Tetragramma antsingyensis* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. Serv. Mines Madagascar 6 p. 19 pl. i figs. 28–30; *malbosi*, Id. p. 23 pl. ii fig. 6.—*T.* p. 448, *T. subangulatum* p. 450 pl. lxxiii figs. 4–5, MORTENSEN 123. —*T. streeruwitzi*, SMISER 160 p. 456.

Tetrapygos niger, MORTENSEN 123 p. 582 fig. 315c, pl. lxx figs. 10–12, pl. lxxxvii figs. 15–19.

†*Thylechinus* with *Egyptechinus* subgen. n. for type *E. cuvillieri* sp. n. Eocene Egypt, LAMBERT Bull. Inst. égypt. 18 p. 41 pl. figs. 4–6.

†*Thylechinus* p. 468, with subgen. *Orthocyphus* p. 470, *Orthechinus* p. 471, MORTENSEN 123.

†*Tiarechinus*, MORTENSEN 123 p. 527.

†*Tiaridea*, MORTENSEN 123 p. 406.

†*Tiaromma*, MORTENSEN 123 p. 444.

†*Tithonia* cf. *heinzi*, CHECCHIA-RISPOLI 25 p. 299 pl. xvii fig. 1.

†*Tornquistellus*, MORTENSEN 123 p. 65.

†*Toxaster millosevichi* sp. n. Cretaceous Sicily, CHECCHIA-RISPOLI Bol. Soc. geol. ital. 54 p. 300 pl. xvi fig. 1, pl. xvii fig. 3.

Toxopneustes pileolus, ONODA 134 p. 644 pl. xii figs. 3–7, pl. xiii fig. 1.

†*Trematopygus analis*, SMISER 159 p. 45 pl. iv fig. 5.

†*Triadechinus*, MORTENSEN 123 p. 512.

Tripneustes gratilla, BOONE 12 p. 254 pls. lxxxix–xc.—*T. gratilla*, ONODA 134 p. 647 pl. xiii figs. 8–9.

†*Trisalenia*, MORTENSEN 123 p. 381.

†*Trochalosoma*, p. 515, with subgen. *Plistophyma* p. 516, MORTENSEN 123.

†*Trochodiadema stefaninii*, LAMBERT 98 p. 18 pl. i figs. 25–27.—*T.* p. 414, *T. abramense* pl. lxxiii figs. 15–17, MORTENSEN 123.

†*Trochotiara* p. 434, *T. bourgeti* fig. 233c–f, *T.* sp. p. 641 fig. 376, pl. lxxiii fig. 3, MORTENSEN 123.

Tromikosoma, type species, *T. koehleri* Mortensen, INTERNAT. COMM. Zool. NOMEN. 85 p. 37.—*T. australe* p. 177; *hispidum* p. 178 figs. 53b, 62a, 106, pl. lxxv fig. 18; *koehleri* p. 167 figs. 69a, 71, 100, pl. v; *panamense* p. 180 figs. 56b, 57b, pl. lxxv figs. 1–7; *tenu-*

p. 171 figs. 65a, 74, 102–105, pl. vi fig. 1, pl. vii, pl. lxxv figs. 8–17; *uranus* p. 168 figs. 55a, 101, pl. vi figs. 2–3, pl. lxxv figs. 19–21, MORTENSEN 123.

†*Tylocidaris sorigneti*, TZANKOV 172 p. 191 pl. i fig. 2 [Radiole].

†*Typocidaris*? cf. *herthae*, KONGIEL 91 p. 199 pl. iv fig. 1.—*T. marginata*, LAMBERT 98 p. 13 pl. i fig. 4 [Radiole]. —*T. serrata* p. 23 pl. i fig. 12, *subvesiculosa* p. 23 pl. ii fig. 1, SMISER 159.

†*Typocidaris* (*Stereocidaris*) *sceptrifera*, SMISER 159 p. 24 pl. ii fig. 2 [Radiole].

†*Valsalenia*, MORTENSEN 123 p. 347.

ASTEROIDEA.

Acanthaster planci, BOONE 12 p. 245 pls. lxxvii–lxxviii.

†*Arthraster spenceri* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 46 pl. ii figs. 17a–b.

†*Asteriaceros stelliferum*, MERCIER 118 p. 37 pl. ii fig. 6.

Asterias rubens, DONS 53 p. 30 figs. 3–4.—*A. amurensis*, HAYASHI 74 p. 5 pls. i–ii.

†*Asterias deslongchampsii* p. 47 pl. iii fig. 7, *gaveyi* p. 47 pl. ii fig. 18, MERCIER 118.

†*Astropecten casterasi* sp. n. p. 43 pl. ii figs. 13a–b, *corroyi* sp. n. p. 44 pl. ii figs. 14a–b, *delaunayi* sp. n. p. 41 pl. ii figs. 10a–b, *moutieri* sp. n. p. 43 pl. ii figs. 12a–b, *piveteaui* sp. n. p. 42 pl. ii figs. 11a–b, Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935; *clavaeformis* p. 44 pl. ii fig. 15, *ranvillensis* p. 40 pl. iii fig. 6, Id.

Bipinnaria excluded from availability as generic name and reserved as designation of developmental stage, INTERNAT. COMM. Zool. NOMEN. 84 p. 32.

Brachiolaria excluded from availability as generic name and reserved as designation of developmental stage, INTERNAT. COMM. Zool. NOMEN. 84 p. 32.

Calliaster erucaradiatus sp. n. Southern Ocean, LIVINGSTONE Rec. Aust. Mus. Sydney 19 p. 382 pl. xxvii figs. 1–5.

†*Calliderma smithiae*, MERCIER 118 p. 16 pl. i fig. 7.

†*Calliderma* with *Mastaster* subgen. n. ex Lenoir ms. for type *M. villersensis* sp. n. ex Lenoir ms. Cretaceous France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 21 pl. iii fig. 1.

†*Calliderma* (*Tylaster*) *aalensis* sp. n. p. 17 pl. i figs. 8a-b, *argenciensis* sp. n. ex Lenoir ms. p. 19 pl. iii figs. 4a-c, *luciensis* sp. n. p. 19 pl. i figs. 10a-b, Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935; *C. (T.) priscum*, Id. p. 17 pl. i fig. 9.

Chaetaster longipes, PALLARY 136 p. 52 fig. 1.

†*Crateraster quinqueloba*, MERCIER 118 p. 23 pl. i fig. 11.

Culcita novae-guinæ, BOONE 12 p. 239 pls. lxix-lxx.

†*Dictydaster* gen. n. for type *D. miloni* sp. n. Cretaceous France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 32 pl. i figs. 19a-d.

†*Goniaster* cf. *impressae*, CHAVANNE 24 p. 124 pl. xiii figs. 15-17.

Henricia sanguinolenta, DONS 53 p. 29 figs. 1-2.

Henricia with *Henricia* subgen. n. for type *H. sanguinolenta* (Müller), and *Spinohenricia* subgen. n. for type *H. scabrior* (Michailovskij), HEDING Medd. Grønland 108 1 p. 8.

Henricia subgen. n. see *Henricia*.

†*Jacobella* gen. n. for type "J. cenomanensis Guéranger 1853" Cretaceous France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 26 pl. iii figs. 2a-b.

†*Lambertella* gen. n. for type *L. valetti* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 13 pl. i figs. 6a-f.

Leptasterias discussion of species p. 31, *L. canuti* sp. n. p. 13 fig. 1, *clavispina* sp. n. p. 14 fig. 2, East Greenland, HEDING Medd. Grønland 108 1; *L. groenlandica*, Id. p. 11.

Linokia guildingii p. 241 pls. lxxi-lxxiii, *laevigata* p. 243 pls. lxxiv-lxxvi, BOONE 12.

†*Lophidiaster hawkinsi* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 45 pl. ii figs. 16a-b.

Luidia Forbes 1839 with monotype *fragilissima* 1839 (subjective synonym *Luidia ciliaris* 1837) placed in the official list of generic names, INTERNAT. COMM. ZOOL. NOMEN. 84 p. 32.—*L. sarsi* fig. 1, *ciliaris* fig. 2, TATTERSALL & SHEPPARD 165 p. 38 [larvae].

†*Mastaster* subgen. n. see *Calliderma*.

†*Mastaster* Lenoir ms. 1911 a synonym of *Phocidaster* Spencer 1913, MERCIER 120 p. 98.

†*Metopaster exsculptus* p. 30 pl. i fig. 16, *parkinsoni* p. 28 pl. i fig. 13, *tumidus* p. 30 pl. i fig. 17, *uncatus* p. 29 pl. i fig. 14, *undulatus* p. 29 pl. i fig. 15, MERCIER 118.

†*Miopentagonaster*, subgen. n. see *Pentagonaster*.

†*Mitraster hunteri*, MERCIER 118 p. 31 pl. i fig. 18.

Neoferdina insolita sp. n. Malaysia, LIVINGSTONE Rec. Aust. Mus. Sydney, 19 p. 384 pl. xxviii figs. 2, 4, 6.—*N. cumingi*, type locality of, FISHER 59 p. 74.

Nidorellia armata, DÖDERLEIN 50 p. 316 pl. xxi figs. 1-6.

Ophidiaster watsoni sp. n. Queensland, LIVINGSTONE Rec. Aust. Mus. Sydney 19 p. 386 pl. xxviii figs. 1, 3, 5, 7.

†*Ophryaster lunatus*, MERCIER 118 p. 24 pl. i fig. 12.

Oreaster clavatus p. 321 pl. xxi figs. 7-9, *reticulatus* p. 319 pl. xxi fig. 3, DÖDERLEIN 50.

Pentacaster multispinus forma *crassimana* forma n. Malaysia pp. 339-340 pl. xxvi fig. 4, *regulus* ? forma *cebuana* forma n. Malaysia pp. 352-353 pl. xxv fig. 8, DÖDERLEIN Siboga Exped. Leiden 46c.—*P. affinis* p. 348 pl. xxii figs. 1-4, *alveolatus* p. 332 pl. xxiv figs. 1-11, pl. xxv figs. 1-7, pl. xxix fig. 10, *cumingi* p. 355 pl. xxx figs. 5-9, *gracilis* p. 357 pl. xxxi figs. 1-2, *horridus* p. 345 pl. xxix figs. 1-9, *japonicus* p. 340 pl. xxv fig. 9, *magnificus* p. 359, *mammillatus* p. 341 pl. xxvii figs. 1-11, pl. xxviii figs. 10-11, *multispinus* p. 336 pl. xxiv fig. 12, pl. xxvi figs. 1-3,

orientalis p. 356 pl. xxx fig. 4, *regulus* p. 350 pl. xxvi figs. 5-6, *sibogae* p. 353 pl. xxx figs. 1-4, *tuberculatus* p. 344 pl. xxviii figs. 1-9, *westermanni* p. 354, Id.

†*Pentagonaster* ? sp. cf. *prisca*, KÜHN 94 p. 112 pl. x fig. 28.

Pentagonaster with †*Miopentagonaster* subgen. n. for type *M. calloviensis* sp. n. ex Lenoir ms. Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 pl. xiv pl. iii figs. 3a-c.

Pentaster nom. n. for *Pentaceropsis* Sladen 1889 non Steindachner 1884, *P. hybridus* sp. n. Malaysia p. 364 pl. xxvi fig. 7, *obtusatus* forma *spinosa* forma n. Malaysia p. 363 pl. xxvi fig. 8, DÖDERLEIN Siboga Exped. Leiden 46c; *P. obtusatus*, Id. p. 360 pl. xxvi figs. 9-11.

Porania pulvillus, DONS 52 p. 20 fig. 4b.

Poraster superbus bengalensis var. n. Indian Ocean, DÖDERLEIN Siboga Exped. Leiden 46c p. 367 pl. xxxii fig. 5; *P. superbus* p. 364 with vars. *indicus* p. 367, *productus* p. 367 and *superbus* p. 366 pl. xxxii fig. 6, Id.

Protoreaster gotoi nom. n. p. 330, lincki p. 328 pl. xxii fig. 6, pl. xxiii figs. 1-7, pl. xxviii fig. 12, *nodosus* p. 324 pl. xxii figs. 7-8, pl. xxiii figs. 8-12, *nodulosus* p. 323 pl. xxii figs. 1-5, DÖDERLEIN 50.

Pseudoporania gen. n. for type *P. stormi* sp. n. Norway, DONS K. norske vidensk. Selsk. Trondheim 8 pp. 19-20 figs. 1-4a.

†*Pycinaster boulei* sp. n. Jurassic France p. 11 pl. i figs. 3a-d, *bradfordiensis* sp. n. ex Lenoir ms. Jurassic France p. 10 pl. i figs. 2a-b, pl. iii fig. 5, *mortenseni* sp. n. Jurassic France p. 9 pl. i figs. 1a-d, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935; *angustatus* p. 12 pl. i fig. 5, *crassus* p. 12 pl. i fig. 4, Id.

Solaster syrtensis, HEDING 75 p. 9.

Spinohenricia subgen. n. see *Henricia*.

†*Stauranderaster boysii* p. 36 pl. ii fig. 5, *bulbiferus* p. 35 pl. ii fig. 3, *senonensis* pl. ii fig. 4, MERCIER 118.

†*Stauraster mazetieri* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 34 pl. ii figs. 2a-f; *billodense*, Id. p. 33 pl. ii fig. 1.

Stellasteropsis gen. n. for type *S. fouadi* sp. n. Gulf of Suez, DOLFFUS Bull. Soc. zool. Fr. 61 pp. 151-158 3 figs.

†*Uraster janettae* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. min. Brasil 11 pp. 254-257 pl. iv fig. 8.

†*Valettaster dangeardi* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie N.S. Sect. Géol. 1 2 1935 p. 38 pl. ii figs. 7a-c; *argus* p. 39 pl. ii fig. 9, *ocellatus* p. 39 pl. ii fig. 8, Id.

OPHIUROIDEA.

Amphiodia ascia sp. n. W. Africa, MORTENSEN Discovery Reports Cambridge 12 pp. 290-291 figs. 24a-c, pl. vii fig. 11; *affinis*, Id. p. 288 fig. 23.

Amphiophiura gibbosa sp. n. Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 342-343 figs. 51a-c; *rowetti*, Id. p. 340 fig. 50.

Amphioplus aciculatus sp. n. West Africa pp. 296-297 figs. 27a-b, *acutus* sp. n. Antarctic Ocean pp. 294-296 figs. 26a-c, pl. viii fig. 14, MORTENSEN Discovery Reports Cambridge 12; *peregrinator*, Id. p. 297 pl. vii figs. 12-15.

Amphipholis squamata, MORTENSEN 124 p. 292.

Amphiura da Cunhae sp. n. Southern Ocean pp. 282-283 figs. 20a-b, *grandisquama* var. *guineensis* var. n. West Africa pp. 269-270 figs. 10a-b, *microplax* sp. n. Southern Ocean pp. 270-271 figs. 11a-c with var. *disjuncta* var. n. Antarctic Ocean pp. 271-272 figs. 12a-c, *monorima* sp. n. Southern Ocean pp. 272-274 figs. 13a-b, MORTENSEN Discovery Reports Cambridge 12; *angularis* p. 267 with subsp. *protecta* p. 268, *A. belgicae* p. 279 fig. 18, *chiajei* p. 287, *deficiens* p. 276 fig. 15, *dilatata* subsp. *gaussi* p. 277, *A. eugeniae* p. 283 fig. 21, *incana* p. 286, *joubini* p. 277 figs. 16-17, *lymani* p. 274 fig. 14, *princeps* p. 285 fig. 22, pl. vii fig. 10, Id.

Astroclamys sol sp. n. Antarctic Ocean, MORTENSEN Discovery Reports Cambridge 12 p. 293 fig. 2d, pl. vii fig. 9; *bruneus*, Id. p. 237 figs. 2a-c, pl. vii fig. 8.

Astrotoma agassizii, MORTENSEN 124 p. 236 pl. v figs. 1-2, pl. vi figs. 1-2.

Dictenophiura skoogi, MORTENSEN 124 p. 340.

Gorgonocephalus chilensis, MORTENSEN 124 p. 240.

Homalophiura inornata var. *tuberosa* var. n. Antarctic Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 329-330 figs. 43a-b; *H. inornata*, Id. p. 327 fig. 42, pl. viii figs. 4-5.

†*Ingoaster* gen. n. for type *I. bradleyi* sp. n. Ordovician U.S.A., PHLEGER Bull. S. Calif. Acad. Sci. 35 2 pp. 82-83 pl. xx figs. 1-2.

Ophiacantha densispina sp. n. Southern Ocean pp. 249-251 figs. 6a-c, pl. vii fig. 1; *angolensis* var. *inermis* var. n. W. Africa p. 255; *vivipara* var. *pen-tactis* var. n. Antarctic Ocean pp. 248-249 fig. 5b, pl. vii figs. 3-4, MORTENSEN Discovery Reports Cambridge 12; *antarctica* p. 254, *disjuncta* p. 252 fig. 7, *vivipara* p. 246 fig. 5a, pl. vii fig. 2, Id.

Ophiactis seminuda sp. n. Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 264-265 figs. 9a-b.—*O. balli*, DONS 55 p. 62 fig. 1.

Ophiocentrus novae-zealandiae, MORTENSEN 124 p. 287.

Ophioceres incipiens, MORTENSEN 124 p. 307 pl. vii fig. 7.

Ophiochondrus stelliger, MORTENSEN 124 p. 259.

Ophiocirce antillarum sp. n. Atlantic Ocean, CLARK Smith. misc. Coll. 91 24 pp. 5-7 pl. iii figs. 7-9.

Ophiocomina nigra, DONS 54 p. 38 fig. 2.

Ophiocten bisquamatum sp. n. Southern Ocean pp. 338-339 figs. 49a-b, *amitinum* var. *simulans* var. n. S. Africa p. 337 fig. 48b, MORTENSEN Discovery Reports Cambridge 12; *O. amitinum* p. 335 fig. 48a, pl. viii fig. 2, *dubium* p. 338, Id.

Ophiogona döderleini p. 308 fig. 34, *laevigata* p. 309 fig. 35, MORTENSEN 124.

Ophiolebella gen. n. for type *Ophiolebes biscutifer* Smith 1923 Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 305-307 figs. 33a-c.

Ophiomages cristatus, MORTENSEN 124 p. 313.

Ophiomastus conveniens, MORTENSEN 124 p. 343.

Ophiomitrella falklandica sp. n. Southern Ocean, MORTENSEN Dis-

covery Reports Cambridge 12 pp. 256-259 figs. 8c-d, pl. vii fig. 5; *ingrata*, Id. p. 256 figs. 8a-b.

Ophiomusium alecto pp. 4-5 pl. ii figs. 5-6, *regulare* pp. 1-3 pl. i figs. 1-2, *rosaceum* pp. 3-4 pl. ii figs. 3-4, spp. n. Atlantic Ocean, CLARK Smith. misc. Coll. 91 24.—*O. constrictum* sp. n. Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 344-345 figs. 52a-c.

Ophiomyxa vivipara var. *capensis* var. n. S. Africa, MORTENSEN Discovery Reports Cambridge 12 p. 242.

Ophionephthys magellanica sp. n. Argentina, MORTENSEN Discovery Reports Cambridge 12 pp. 291-292 figs. 25a-d.

Ophionereis novae-zealandiae sp. n. New Zealand pp. 299-301 figs. 29a-c, *sexradia* sp. n. W. Africa pp. 298-299 figs. 28a-b, MORTENSEN Discovery Reports Cambridge 12.

Ophionotus hexactis p. 312, *victoriae* p. 311, MORTENSEN 124.

Ophiopeltis borealis, DONS 55 p. 63 figs. 2-3.

Ophioperla koehleri, MORTENSEN 124 p. 310.

Ophiopholis aculeata, DONS 54 p. 39 fig. 3.

Ophiopyren regularis, MORTENSEN 124 p. 345 fig. 53, pl. viii fig. 1.

Ophioscolex marionis sp. n. Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 244-246 fig. 4.

Ophioscolex (Ophiolycus) nutrix sp. n. Southern Ocean, MORTENSEN Discovery Reports Cambridge 12 pp. 243-244 figs. 3a-d, pl. vii fig. 6.

Ophiosteira senouqui, MORTENSEN 124 p. 314.

Ophiostigma abnorme, MORTENSEN 124 p. 293.

Ophiothrix fragilis, DONS 54 p. 37 fig. 1.

Ophiozonella falklandica sp. n. Southern Ocean pp. 301-303 figs. 30a-c, 31a-b, *megaloplax* sp. n. New Zealand pp. 303-304 figs. 32a-b, MORTENSEN Discovery Reports Cambridge 12; *picta*, Id. p. 304.

Ophiura flexibilis var. *crassa* var. n. Antarctic Ocean pp. 333-334 figs. 46a-c; *O. serrata* sp. n. Antarctic Ocean pp. 334-335 figs. 47a-d, MORTENSEN Discovery Reports Cambridge 12; *meridionalis* p. 330 fig. 44, *rouchi* p. 332 pl. viii figs. 6-7, Id.—*O. sarsi*, HEDING 75 p. 18.

Ophiuroglypha lymani, MORTENSEN 124 p. 316 pl. viii fig. 3.

Ophiurolepis brevissima sp. n. Antarctic Ocean pp. 319-320 figs. 37a-b, 38, pl. viii figs. 8-13; *turgida* sp. n. Southern Ocean pp. 326-327 figs. 41a-c, MORTENSEN Discovery Reports Cambridge 12; *carinata* p. 317, *gelida* p. 318 fig. 36, *martensi* p. 321 fig. 39, *partita* p. 325 fig. 40, *wallini* p. 324, Id.

†*Silesiaster* gen. n. for type *S. longivertebralis* sp. n. Carboniferous Germany, SCHWARZBACH & ZIMMERMANN Cbl. Min. Geol. Paläont. Stuttgart 10 pp. 438-443 figs. A1-3, B1-4; *S. ?* sp., Id. p. 443 fig. B5.

CRINOIDEA.

†Crinoid stems embedded in fossil wood, WICKWIRE 180 p. 145 fig. 1.

†*Allagecrinus rowleyi* sp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10 pp. 284-285 pl. xlvii figs. 15-20, 23-24, 27-28.—*A. strimplei* sp. n. Carboniferous U.S.A., KIRK J. Wash. Acad. Sci. 26 pp. 163-165 figs. 1-10.

Annametra gen. n. for type *Cominia occidentalis* Clark 1915 Southern Ocean, CLARK Proc. U.S. Nat. Mus. 83 p. 247.

Antedon mediterranea, CHALAUX 21 p. 91 figs. 1-3.

†*Antedon bellilensis* sp. n. Cretaceous N. Africa, VALETTE Bull. Soc. géol. Fr. (5) 5 1935 pp. 374-375 fig. 3.

†*Aorocrinus formosus*, GOLDRING 66 p. 19 pl. vii figs. 7-8.

†*Arthracantha* cf. *ithacensis*, GOLDRING 66 p. 19 pl. vii fig. 11.

†*Balanocrinus subteroides*, KÜHN 95 p. 240 pl. xii fig. 32A.

Basilometra gen. n. for type *B. boschmai* sp. n. Dutch East Indies, CLARK Temminckia Leiden 1 pp. 304-307 pl. vii figs. 1-4.

Boleometra gen. n. for type *Antedon clio* Clark 1915 S.W. Japan, CLARK Proc. U.S. Nat. Mus. 83 p. 248.

†*Botryocrinus thomasi* sp. n. Devonian U.S.A., LAUDON J. Paleont. Menasha Wis. 10 p. 62 figs. 4-6.

†*Calceocrinus centervillensis* p. 271 pl. ii figs. 3-4, *C. ? incertus* p. 271 pl. ii figs. 5-8, spp. n. Silurian U.S.A., FOERSTE Ohio J. Sci. 36.

†*Calceolispongia hindei* Etheridge 1914, described as sponge, is founded on basal plates of *Dinoecrinus* aff. *cornutus*, GERTH 65.

†*Callimorphocrinus pristinus* pp. 287-288 pl. xlvii fig. 16-22, *puteatus* p. 288 pl. xlvii figs. 1-2, spp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10.

Caryometra gen. n. for type *Adelometra tenuipes* Clark 1908 Cuba, CLARK Proc. U.S. Nat. Mus. 83 p. 247.—*C. robusta* sp. n. Indian Ocean, CLARK Sci. Rep. John Murray Exped. 4 pp. 95-96 pl. i fig. 4.

Clarkometra elegans, CLARK 34 p. 310.

†*Coencystis moreyi* sp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10 pp. 289-291 pl. xlvii figs. 11-15.

Colobometra arabica sp. n. Red Sea, CLARK Sci. Rep. John Murray Exped. 4 p. 89 pl. i fig. 2.

Comantheria delicatula, CLARK 34 p. 297.

Compsometra nuttingi sp. n. West Indies, CLARK Proc. U.S. Nat. Mus. 83 pp. 246-247.—*C. parviflora*, CLARK 34 p. 316.

†*Cotylederma lineati*, KÜHN 95 p. 239 pl. xii fig. 12.

†*Cyathocrinus* with *Nebulosicus* subgen. n. for type *C. tellus* sp. n. Trias Italy, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 pp. 29-30 pl. vi fig. 10.

†*Cupressocrinus abbreviatus* var. *spinosa* var. n. Devonian Germany, SIEVERTS SitzBer. naturh. Ver. preuss. Rheinl. Westf. 1932-33 1934 pp. 100-101 fig. 4; *abbreviatus* fig. 1, *elongatus* figs. 2-3, Id.

†*Decadocrinus crassidactylus* p. 64 figs. 7-8, *pachydactylus* p. 64 fig. 9, *spinulifer* p. 65 figs. 10-12, spp. n. Devonian U.S.A., LAUDON J. Paleont. Menasha Wis. 10.

Decametra informis p. 309 pl. viii fig. 8, *laevipinna* p. 308 pl. viii fig. 7, CLARK 34.

†*Diamenocrinus stellatus*, MAILLIEUX 114 p. 41 pl. i fig. 1.

†*Dichostreblocrinus minutus* sp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10 p. 289 pl. xlvii figs. 27-32.

†*Dinocrinus cornutus* var. *hindei*?, GERTH 65.

†*Dolatocrinus springeri* sp. n. Devonian U.S.A., GOLDRING J. Paleont. Menasha Wis. 10 pp. 18-19 pl. vii figs. 3-5.

Dorometra andromacha sp. n. Dutch East Indies, CLARK Temminckia Leiden 1 pp. 316-317.

Eometra gen. n. for type *Psathyrometra antarctica* Clark 1915 Antarctic Ocean, CLARK Proc. U.S. Nat. Mus. 83 p. 248.

Euantedon polytes sp. n. Dutch East Indies, CLARK Temminckia Leiden 1 pp. 315-316 pl. vii fig. 5, pl. viii fig. 6.

Eudiocrinus gracilis p. 301, *pinnatus* p. 300, *venustus* p. 302, CLARK 34.

†*Eutaxocrinus* cf. *whiteavesi*, GOLDRING 66 p. 20 pl. vii fig. 9.—*E. gracilis*, LAUDON 102 p. 61 fig. 3.

Fariometra sewelli sp. n. Indian Ocean, CLARK Sci. Rep. John Murray Exped. 4 pp. 96-97 pl. i fig. 5.

†*Gilbertocrinus intersculptus* pp. 15-16 pl. vi figs. 1-6, *rarispinus* p. 17 pl. vi fig. 11, spp. n. Devonian U.S.A., GOLDRING J. Paleont. Menasha Wis. 10; cf. *alpenensis*, ID. p. 16 pl. vi figs. 7-10.

†*Halysiocrinus elephantinus* sp. n. Devonian U.S.A., LAUDON J. Paleont. Menasha Wis. 10 p. 66 figs. 14-15; *barrisi*, ID. p. 65 fig. 13.

Iconometra marginata, CLARK 34 p. 308.

†*Logocrinus geniculatus*, GOLDRING 66 p. 22 pl. vii fig. 13.

†*Megistocrinus depressus*, GOLDRING 66 p. 19.—*M. pernodus*, LAUDON 102 p. 61 figs. 1-2.

†*Melocrinus ornatus* sp. n. Devonian U.S.A., GOLDRING J. Paleont. Menasha

Wis. 10 p. 17 pl. vii fig. 1; *M. sp. n.*, ID. p. 17 pl. vii fig. 2.—*M. cf. heiroglyphicus*, MAILLIEUX 115 p. 14 pl. i fig. 1.

†*Mespilocrinus depressus* sp. n. Carboniferous Scotland, WRIGHT Geol. Mag. 73 pp. 409-410 figs. 36-37. 40, pl. x figs. 2 & 6; cf. *konincki* p. 407 figs. 33-35, 38-39, pl. x fig. 7, *M. sp.* p. 407 fig. 41, pl. x fig. 5.—*M. amalthei*, GREGORIO 67 p. 45 pl. xiv figs. 18-21.

†*Millerocrinus inaequalis*, COTTREAU 40 p. 289 fig.—*M. amalthei*, KÜHN 95 p. 239 pl. ix figs. 14, 16.

†*Nebulosicus* subgen. n. see *Cyathocrinus*.

†*Octocrinus* gen. n. for type *O. inconus* sp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10 pp. 291-292 pl. xlvii figs. 3-10.

Oligometra serripinna var. *macrobrachius* var. n. Dutch East Indies, CLARK Temminckia Leiden 1 p. 310 pl. ix figs. 10-11.

†*Pachylocrinus dunlopi* pp. 401-402 figs. 25-27, pl. viii fig. 2, *tielensis* pp. 399-400 figs. 22-24, pl. ix fig. 4, spp. n. Carboniferous Scotland, WRIGHT Geol. Mag. London 73.

†*Passalocrinus* gen. n. for type *P. triangularis* sp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10 pp. 292-293 pl. xlvii figs. 1-9.

†*Pentacrinus bajocensis*, CHAVANNE 24 p. 125 pl. xiii figs. 7-14.—*P. basaltiformis* p. 45 pl. xiv fig. 22, aff. *scalaris* p. 45 pl. xiv fig. 23, GREGORIO 67.—*P. jurensis* p. 113 pl. ix fig. 38, *pentagonalis opalinus* p. 113 pl. viii figs. 3-4, KÜHN 94.—*P. basaltiformis* p. 240 pl. ix fig. 15, pl. xii fig. 17, "*P.*" sp. p. 240 pl. xii fig. 36, KÜHN 95.

†*Pentacrinus (Holocrinus?) cisnerosi* sp. n. Trias Spain, SCHMIDT Abh. heidelberg. Akad. Wiss. 22 pp. 35-38 fig. 2, pl. iii fig. 16.

†*Perissocrinus* gen. n. for type *P. papillatus* sp. n. Devonian U.S.A., GOLDRING J. Paleont. Menasha Wis. 10 p. 21 fig. 1 *pars*, pl. vii fig. 6.

†*Poteriocrinus? dignatus*, GOLDRING 66 p. 22 pl. vii figs. 10, 12.

Repometra gen. n. for type *R. arabica* sp. n. Gulf of Aden, CLARK Sci. Rep. John Murray Exped. 4 pp. 93-94 pl. i figs. 3, 3a.

Retiometra gen. n. for type *R. alascana* sp. n., N. Pacific Ocean, CLARK Proc. U.S. Nat. Mus. 83 pp. 248-250.

Stenometra snelli sp. n. Dutch East Indies, CLARK Temminckia Leiden 1 pp. 313-314 pl. viii fig. 9.

†*Tribrachiocrinus caledonicus* sp. n. Carboniferous Scotland, WRIGHT Geol. Mag. 73 pp. 402-404 pl. x figs. 3, 8, 10-12.

†*Trophocrinus corpulentus* p. 287 pl. xvi figs. 23-26, *exsertus* pp. 285-287 pl. xlvii figs. 10-14, 21-22, 25-26, spp. n. Carboniferous U.S.A., PECK J. Paleont. Menasha Wis. 10.

Tropiometra magnifica sp. n. Gulf of Aden, CLARK Sci. Rep. John Murray Exped. 4 pp. 90-91 pl. i fig. 1.

†*Uintacrinus*, BRIGHTON 15 p. 169 figs. 1-6.

†*Ulocrinus doliolus* sp. n. Carboniferous Scotland, WRIGHT Geol. Mag. 73 pp. 404-407 figs. 28-32, pl. ix fig. 5.

†*Woodocrinus gravis* pp. 396-398 figs. 5-21, pl. viii fig. 1, pl. ix figs. 1-3, pl. x figs. 1 & 9, *liddesdalensis* pp. 387-394 figs. 1-2, pl. vii, pl. viii fig. 3, *whytei* pp. 394-395 pl. x fig. 4, spp. n. Carboniferous Scotland, WRIGHT Geol. Mag. London 73; cf. *expansus* p. 398, *macrodictylus* p. 386 figs. 3-4, Id.

MACHAERIDIA.

†*Lepidocoleus eifeliensis* sp. n. Devonian Germany, SIEVERTS Z. deuts. geol. Ges. Berlin 87 1935 pp. 685-687 pl. xxxv figs. 4a-d.

CYSTIDEA AND EDRIOASTEROIDEA.

†*Agelacrinites southworthi* sp. n. Ordovician U.S.A., BASSLER Smithson. misc. Coll. 95 6 p. 16 pl. iv fig. 12; *blairi* p. 16 pl. vii fig. 9, *hamiltonensis* p. 16 pl. i fig. 18, *hanoveri* p. 16 pl. vii fig. 10, *legrandensis* p. 16 pl. iv fig. 13, *rhenanus* p. 16 pl. i figs. 12-13, Id.

†*Astrocystites ottawaensis*, BASSLER 4 p. 23 pl. i figs. 15-16.

†*Carneyella foerstei* sp. n. pp. 8-9 pl. vi figs. 7-8, *nicklesi* sp. n. p. 7 pl. ii fig. 13, *ulrichi* sp. n. p. 8 pl. v figs. 5-6, Ordovician U.S.A., BASSLER Smithson.

misc. Coll. 95 6; *cinnantiensis* p. 7 pl. ii fig. 15, *faberi* p. 9, *C. ? platys* p. 7 pl. vii fig. 15, *C. vetusta* p. 7 pl. ii fig. 14, Id.

†*Caryocystites helmhackeri*, RÖPKE 150 p. 40 fig. 1.

†*Cinnantidiscus edenensis* sp. n. p. 6 pl. ii fig. 10, pl. iii fig. 11, *turgidus* sp. n. p. 6 pl. v fig. 12, Ordovician U.S.A. BASSLER Smithson. misc. Coll. 95 6; *carnensis* p. 5 pl. v fig. 4, *stellatus* p. 5 pl. ii figs. 11-12, Id.

†*Cyathocystis americanus* sp. n. Ordovician U.S.A., BASSLER Smithson. misc. Coll. 95 6 p. 23 pl. iv figs. 1-2; *plautinae*, Id. p. 23 pl. i figs. 8-9.

†*Cyathotheca suecica*, BASSLER 4 p. 25 pl. i fig. 23.

†*Cystaster ulrichi* sp. n. Ordovician U.S.A., BASSLER Smithson. misc. Coll. 95 6 pp. 4-5 pl. ii figs. 3-5; *granulatus*, Id. p. 4 pl. i fig. 14.

†*Dinocystis barroisi*, BASSLER 4 p. 22 pl. i figs. 2-3.

†*Discocystis laudoni* sp. n. Carboniferous U.S.A., BASSLER Smithson. misc. Coll. 95 6 p. 21 pl. iii figs. 7-8; *kaskaskiensis*, Id. p. 21 pl. i figs. 4-5, pl. iii figs. 4-6, pl. vii fig. 11.

†*Edrioaster bigsbyi*, BASSLER 4 p. 22 pl. i fig. 1.

†*Eucystis* sp., THORSLUND 169 pl. ii figs. 17-18.

†*Foerstediscus parvus* sp. n. p. 10 pl. ii figs. 6-7, *splendens* sp. n. p. 10 pl. vii fig. 13, Ordovician U.S.A., BASSLER Smithson. misc. Coll. 95 6.

†*Haplosphaeronis oblonga*, THORSLUND 169 pl. i figs. 13-14.

†*Hemicystites curtus* sp. n. pp. 12-13 pl. iv fig. 8, *germanus* sp. n. p. 13 pl. iv fig. 7, *paulianus* sp. n. p. 13 pl. iv fig. 9, *richmondensis* sp. n. pp. 13-14 pl. v figs. 5-7, Ordovician U.S.A.; *devonicus* sp. n. p. 14 pl. vii fig. 1 Devonian U.S.A.; *H. ? carbonarius* sp. n. p. 15 pl. iv figs. 10-11 Carboniferous U.S.A.; BASSLER Smithson. misc. Coll. 95 6; *H. billingsi* p. 12 pl. iii fig. 2, *bohemicus* p. 11 pl. vii figs. 3-4, *chapmani* p. 11 pl. iii fig. 9, *confertus* p. 11 pl. vii fig. 5, *latusculus* p. 11 pl. vii fig. 2, *multi-brachiatus* p. 11 pl. iv figs. 3-4, *parasiticus* p. 11 pl. iv figs. 5-6, *rectiradiatus* p. 14 pl. v fig. 10, *simplex* p. 11 pl. vii fig. 6, *youngi* p. 12 pl. iii fig. 1, Id.

†*Isorophus germanus* sp. n. p. 18 pl. vi figs. 3-4, *kentuckyensis* sp. n. pp. 18-19 pl. vi fig. 10, *shideleri* sp. n. p. 19 pl. vi fig. 9, *tennesseensis* sp. n. p. 17 pl. ii fig. 1, *trentonensis* sp. n. p. 17 pl. v fig. 1, Ordovician U.S.A., BASSLER Smithson. misc. Coll. 95 6; *austini* p. 17 pl. ii fig. 9, pl. vi figs. 1-2, *holbrookii* p. 18 pl. v figs. 8-9, *warrenensis* p. 19 pl. v figs. 2-3, pl. vi fig. 11, Id.

†*Isorophusella incondita*, BASSLER 4 p. 19 pl. vii fig. 12.

†*Lebetodiscus dicksoni* p. 9 pl. i fig. 11, *loriformis* p. 9 pl. iii fig. 10, BASSLER 4.

†*Lepidodiscus alpenensis* sp. n. Devonian U.S.A., BASSLER Smithson. misc. Coll. 95 6 p. 20 pl. iii fig. 3; *buttsi* p. 20 pl. vii fig. 8, *lebouri* p. 20 pl. i fig. 19, *milleri* p. 20 pl. vii fig. 7, *squamosus* p. 20 pl. i fig. 17, Id.

†*Placocystella* gen. n. for type *P. capensis* sp. n. Devonian S. Africa, RENNIE Ann. S. Afr. Mus. 31 pp. 269-274 pl. xxxvi figs. 3-9.

†*Placocystis africanus*, RENNIE 148 p. 273 pl. xxxvi fig. 1.

†*Stromatocystites pentangularis*, BASSLER 4 p. 3 pl. i figs. 6-7.

†*Thresherodiscus ramosus*, BASSLER 4 p. 15 pl. ii fig. 8.

†*Walcottidiscus magister* sp. n. Cambrian Brit. Columbia, BASSLER Smithson. misc. Coll. 95 6 pp. 2-3 pl. ii fig. 2.

†*Xenocystites* gen. n. for type *X. carteri* sp. n. Devonian U.S.A., BASSLER Smithson. misc. Coll. 95 6 pp. 3-4 pl. vii fig. 14.

BLASTOIDEA.

†*Acentrotremites ellipticus*, PHILLIPS 143 p. 360 12 figs.

†*Schizoblastus burlingtonensis* sp. n. pp. 280-281 pl. xlv figs. 9-11, *etheridgei* sp. n. pp. 275-277 pl. xlv figs. 17-20, *laudoni* sp. n. pp. 277-279 pl. xlv figs. 1-5, *moorei* sp. n. pp. 279-280 pl. xlv figs. 13-16, *sayi* var. *bellulus* var. n. pp. 271-272 pl. xlv figs. 1-8, var. *obesus* var. n. p. 272 pl. xlv figs. 6-16, var. *sayi* var. n. pp. 269-271 pl. xlv figs. 17-22, Carboniferous U.S.A., CLINE J. Paleont. Menasha Wis. 10; *Schizoblastus* discussion and diagnosis p. 263, *S. sayi* p. 266 with var. *potteri* p. 272 pl. xlv figs. 21-25 and var. *verrucosus* p. 274 pl. xlv fig. 12, Id.

VI. VERMES

ARRANGED BY

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CONTENTS

| | PAGE |
|---------------------------------------|------|
| TITLES (for all groups) | 2 |
| PLATYHELMINTHES, NEMERTEA, MESOZOA. | |
| SUBJECT INDEX | 66 |
| SYSTEMATIC | 76 |
| NEMATHELMINTHES. | |
| SUBJECT INDEX | 93 |
| SYSTEMATIC | 102 |
| CHAETOGNATHA, GASTROTRICHA, ROTIFERA. | |
| SUBJECT INDEX | 118 |
| SYSTEMATIC | 119 |
| ANNELIDA, GEPHYREA, CONODONTA. | |
| SUBJECT INDEX | 121 |
| SYSTEMATIC | 126 |

TITLES.

Publications of exclusively clinical, therapeutic and hygienic import are not included. These may be found in *Helminthological Abstracts*, *Tropical Diseases Bulletin* and *Tropical Veterinary Bulletin*.

1.—Abe, S. Some results on blood-examination for searching the existence of *Microfilaria malayi* in Japan. [In Japanese with English summary.] J. Med. Ass. Formosa 35 1936 pp. 689-696.

Abougaya, A. *vide* Zwirn, D.

2.—Ackert, J. E. *Physaloptera felidis* n. sp., a nematode of the cat. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 250-254 pl. xxxi.

3.—Ackert, J. E. and Freeman, A. E. Further studies in ascarid nutrition. J. Parasit. Urbana 22 1936 p. 531.

4.—Ackert, J. E. and Reid, W. M. The cysticeroid of the fowl tapeworm *Raillietina cesticillus*. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 97-100 2 figs.

5.—Ackert, J. E. and Reid, W. M. The house fly and fowl tapeworm transmission. J. Parasit. Urbana 22 1936 p. 543.

6.—Africa, C. M. and Garcia, E. Y. Embryonated eggs of *Ascaris lumbricoides* in the mesenteric tissue of man, with special reference to the possibility of auto-infestation. J. Philipp. Is. Med. Ass. Manila 16 1936 pp. 461-467.

7.—Africa, C. M., Garcia, E. Y. and De Leon, W. Intestinal Heterophyidiasis with cardiac involvement: a contribution to the etiology of heart failure. Philippine J. Publ. Health 2 1935 pp. 1-22 6 pls.

8.—Africa, C. M., Leon, W. de and Garcia, E. Y. Heterophyidiasis. II. Ova in sclerosed mitral valves with other chronic lesions in the myocardium. J. Philipp. Is. Med. Ass. Manila 15 1935 pp. 583-592.

9.—Africa, C. M., Leon, W. de and Garcia, E. Y. Heterophyidiasis. III.

Ova associated with a fatal haemorrhage in the right basal ganglia of the brain. J. Philipp. Is. Med. Ass. Manila 16 1936 pp. 22-26.

10.—Africa, C. M., Refuerzo, P. G. and Garcia, E. Y. Observations on the life cycle of *Gnathostoma spinigerum*. Philipp. J. Sci. Manila 59 1936 pp. 513-524 3 pls.

Africa, C. M. *vide etiam* Nolasco, J. O.

11.—Ahlstrom, E. H. The deep-water plankton of Lake Michigan, exclusive of the Crustacea. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 286-299 pl. xxxiv.

Aichelburg, U. *di vide* Di Aichelburg, U.

12.—Aiyar, R. G. and Subramaniam, M. K. Hermaphroditism in *Dasychone cingulata*, Grube. [With list of hermaphrodite Polychaetes.] Curr. Sci. Bangalore 5 1936 pp. 240-242 1 fig.

Aiyar, R. G. *vide etiam* Subramaniam, M. K.

13.—Akhtar, S. A. Notes on helminth parasites from Afghanistan. Rec. Ind. Mus. Calcutta 38 1936 pp. 373-375 4 figs.

Aldas, A. *vide* Dios, R. L.

14.—Alicata, J. E. Microfilarial infestation in the skin of a horse. North Amer. Veter. Chicago 17 i 1936 pp. 39-41 2 figs.

15.—Alicata, J. E. The amphipod, *Orchestia platensis*, an intermediate host for *Hymenolepis exigua*, a tapeworm of chickens in Hawaii. J. Parasit. Urbana 22 1936 pp. 515-516 1 fig.

16.—Allen, J. A. Pelztier-Parasiten. Deutsche Pelztierzüchter 10 1935 pp. 306-311.

17.—Allgén, C. A. Ueber einige freilebende Nematoden, insb. aus der litoralen Region des Lofoten-Archipels. Tromsø Mus. Aarsheft 52 iii 1933 pp. 1-14 5 figs.

18. — Allgén, C. Zur Kenntnis norwegischer Nematoden. iv. Das Männchen des *Thoracostomopsis barbatus* Ditlevsen. K. norske Vidensk. Selsk. Trondheim 8 14 (1935) 1936 pp. 44-46.

19. Allgén, C. Zur Kenntnis norwegischen Nematoden. v. Weitere neue oder wenig bekannte freilebende marine Nematoden aus der Strandzone bei Tarva. K. norske Vidensk. Selsk. Trondheim 8 14 1936 pp. 47-50.

20. — Allgén, C. A. Die Pelagonemen des Mittelmeeres. Festschrift f. Embrik Strand Riga 1 1936 pp. 266-271.

21. — Allgén, C. A. Das Weibchen des *Paroncholaimus parpapilliferus* Micoletzky. Festschrift f. Embrik Strand Riga 1 1936 pp. 272-273.

22. — Allgén, C. A. Die Odontophoren. Festschrift f. Embrik Strand Riga 2 1936 pp. 211-224.

23. — Allgén, C. Weitere Desmodoren. Festschrift f. Embrik Strand Riga 2 1936 pp. 224-227.

24. — Allgén, C. A. Das Genus *Allgéniella* Embrik Strand. Festschrift f. Embrik Strand Riga 2 1936 pp. 227-229.

Allison, L. N. *vide* Holl, F. J.

Almeida, J. Lins de *vide* Lins de Almeida, J.

Almeida, J. L. de *vide etiam* Freitas, J. F. T. de.

Alvaré, L. *vide* Kouri, P.

25. — Alvey, C. H. The morphology and development of the monogenetic Trematode *Sphyrnura oligorchis* (Alvey 1933) and the description of *Sphyrnura polyorchis* n. sp. Parasitology Cambridge 28 1936 pp. 229-253 pls. x, xi.

26. — Ambrosioni, P. Una forma enzootica nei caprioli da *Trichocephalus affinis*. Arch. Ital. Sc. Med. Colon. Rome 17 1936 pp. 321-325.

27. — Amundsen, H. and Økland, F. Dødelig enteritis hos duer, forårsaket av iktén *Echinoparyphium parvulum* (Dietz). Norsk. Veter. Tidsskr. Oslo 48 1936 pp. 25-27.

28. — Anderson, C. and Gobert, E. Sur la présence, en Tunisie, de *Schisto-*

soma bovis infection naturelle de *Bullinus contortus*. Arch. Inst. Pasteur Tunis 25 1936 pp. 55-57.

29. — Anderson, M. G. Gametogenesis in the primary generation of a digenetic Trematode, *Proterometra macrostoma* Horsfall 1933. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 271-297 pls. xliii-xlviii.

30. — Andrews, J. S. Note on the egg producing capacity of *Cooperia curticei*, a nematode parasitic in sheep. J. Parasit. Urbana 22 1936 pp. 222-223.

Anido, V. *vide* Basnuevo, J.

Anido, V. *vide etiam* Bolanos, J. M.

Anido, V. *vide etiam* Kouri, P.

31. — Annenkova, N. P. Hirudinea from the Lake Issy-kul. [In Russian.] Results Lake Issy-Kul Exped. 1 1930 pp. 49-50.

32. — Anon. Recent developments in the control of *Heterodera marioni*. Notes Mem. Imp. Bur. Agr. Parasit. St. Albans 11 1936 pp. 1-6.

33. — Antequeda, E. S. Algunas anoplocephalidos de los lanares determinados por primera vez en el país. Reunion 8 Soc. Argentina Patol. Reg. Norte 1936 ii pp. 1019-1021.

34. — Apablaza, H. Tres casos de parasitosis. Arch. Chilenos Morf. Santiago 1 1935 pp. 567-572 1 fig.

Appelmann, — *vide* Marbaix.

Arata, E. C. *vide* Battaglia, A.

35. — Archibald, R. G. and Marshall, A. A descriptive study of the cercaria of *Schistosoma mansoni* in the Sudan. J. Trop. Med. London 35 1932 pp. 257-259 1 pl.

Arenas, R. *vide* Kouri, P.

Arndt, C. H. *vide* Christie, J. R.

36. — Artigas, P. Systematica dos nematoideos dos arthropodos. Thesis de Dout. São Paulo 1929. [N.v.]

Asada, J. *vide* Yamada, S.

37. — Ascoli, E. W. Some experience of parasitic tracheo-bronchitis in the dog, due to *Ostlerus ostleri*. Veter. Rec. London 16 1936 pp. 14-16 1 fig.

Astolfi, J. S. *vide* Sanz Astolfi, J.

38.—Augener, H. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao und Aruba im Jahre 1930. Zool. Jahrb. Jena (Syst.) **67** 1936 pp. 337–352 1 fig.

39.—Augener, H. Hirudineen aus Deutsch-Südwestafrika. SitzBer. Ges. naturf. Fr. Berlin **1935** 1936 pp. 381–397 4 figs.

40.—Augustine, D. L., Field, M. E. and Drinker, C. K. Observations on living *Microfilaria immitis* in the capillary circulation of bats. Trans. Soc. trop. Med. Hyg. Lond. **30** 1936 pp. 231–232.

Augustine, D. L. *vide etiam* Theiler, H.

41.—Autrum, H. Hirudineen. Bronn's Klassen Leipzig **4** Abt. 3 Buch 4 Thl. 1 Lief. I 1936 pp. 1–96 60 figs.

Autrum, H. *vide etiam* Schleip, W.

42.—Awati, P. R. Proboscis of *Thalassema bombayensis* (Prashad & Awati). J. Univ. Bombay **4** 1936 pp. 96–104 8 figs.

43.—Awati, P. R. and Deshpande, D. S. The alimentary canal of *Thalassema bombayensis* (Prashad & Awati). J. Univ. Bombay **4** 1936 pp. 68–85 15 figs.

44.—Awati, P. R. and Pradhan, I. B. The anatomy of *Dendrostoma seignifer* Selenka & de Man. J. Univ. Bombay **4** 1936 pp. 114–131 11 figs.

45.—Azim, M. A. On a schistomatid cercaria from *Melania tuberculata* Müller 1774. J. Egypt. Med. Ass. Cairo **18** 1935 p. 174.

46.—Azim, M. A. On the life-history of *Lecithodendrium pyramidum* Looss, 1896, and its development from a xiphidiocercaria, *C. pyramidum* sp. nov. from *Melania tuberculata*. Ann. Trop. Med. Parasit. L'pool. **30** 1936 pp. 351–354 8 figs. pl. xi.

Azim, M. A. *vide etiam* Khalil, M.

47.—Babić, I. Über das Vorkommen von endoparasitischen Würmern bei Süßwasserfischen. Veter. Archiv Zagreb 1935 no. 8 pp. 355–367.

48.—Babudieri, B. Remarques sur la biologie des acanthocéphales; double enkystement des jeunes formes

d' *Echinorhynchus* (Note préliminaire). Ann. Parasitol. Paris **14** 1936 pp. 298–301.

49.—Bacardi, J. F. and Del Pino, A. P. *Dipylidium caninum*. Caso humano. Revista Parasitol. Havana **2** 1936 pp. 343–347.

Bacardi, J. F. *vide etiam* Kouri, P.

50.—Bachman, G. W. and Gonzalez, J. O. Immunization in rats against *Trichinella spiralis*. Proc. Soc. exp. Biol. **35** 1936 pp. 215–217.

51.—Bacigalupo, J. Sobre la presencia accidental de huevos de helmintos en las materias fecales humanas. Su significación clínica. Su diagnóstico. Revista Parasitol. Havana **2** 1936 pp. 267–276.

52.—Bacigalupo, J. Presencia de huevos de *Heterodera radiculicola* (*Oxyurus incognita*) en las materias fecales humanas. Semana Méd. Buenos Aires 1936 i pp. 412–414.

53.—Bacq, Z. M. Les poisons des Némertiens. Bull. Acad. Belg. Cl. Sci. (5) **22** 1936 pp. 1072–1079 3 figs.

54.—Baer, J. G. Un Trématode parasite de l'okapi (*Cotylophoron congolense* n. sp.). Rev. Zool. Bot. afr. Tervueren **28** 1936 pp. 310–316 6 figs.

55.—Baer, J. G. La schizogénese chez les Cestodes. Revue suisse Zool. Genève **43** 1936 pp. 525–520.

56.—Baer, J. C. Une nouvelle espèce d'oxyure, *Atractis morinae*, n. sp., chez une tortue africaine. Revista Parasitol. Havana **2** 1936 pp. 277–281.

Baer, J. G. *vide etiam* Joyeux, Ch.

57.—Bahl, K. N. On the origin and development of the pharyngeal gland-cells of earthworms. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 313.

58.—Bahl, K. N. *Pheretima* (The Indian earthworm). 2nd edit. Ind. Zool. Mem. on Indian animal types Lucknow **1** 1936 pp. x + 85.

59.—Bahrs, A. M. and Wulzen, R. Nutritional value for planarian worms of vitamin depleted mammalian tissues. Proc. Soc. exp. Biol. **33** 1936 pp. 528–532.

60.—Bailey, P. L. Further experiments on posterior regeneration and the nerve cord in the earthworm *Eisenia*. [Abstract.] *Anat. Rec. Philadelphia* **67** 1936 suppl. i 95.

61.—Bailey, P. L. Production of accessory tails in the earthworm by posterior bisection. [Abstract.] *Anat. Rec. Philadelphia* **67** 1936 suppl. i p. 96.

62.—Baker, A. D. Studies on *Heterakis gallinae* (Gmelin, 1790) Freeborn, 1923, a nematode parasite of domestic fowls. Part I. *Trans. Canad. Inst. Toronto* **20** 1935 pp. 179–215 5 figs.

63.—Baker, A. D. Studies on *Heterakis gallinae* (Gmelin, 1790) Freeborn, 1923, a nematode parasite of domestic fowls. Part II. *Trans. Canad. Inst. Toronto* **21** 1936 pp. 51–86 15 pls.

64.—Baker, D. D. and Hinman, E. H. Studies of the suprarenal glands of dogs. II. A study of the influence of parasites upon the weights of the suprarenal glands of dogs. *J. trop. Med. London* **39** 1936 pp. 117–119.

Baker, D. D. *vide etiam* Hinman, E. H.

65.—Ballo, A. C. Zur Blutmikrofilariose der Pferde in Ungarn. [In Hungarian.] Dissert. *Vet. Med. Budapest* 1933 10 pp. [n.v.]

66.—Bally, W. Bemesting von Koffietuinen, die door aaltjes besmet zijn. Voorloping verslag. *Arch. Koffie-cultuur Ned. Ind. Batavia* **6** 1932 p. 43. [n.v.]

67.—Balozet, L. Cercaires et meta-cercaires d'un *Brachylaemus*. *Bull. Soc. Path. exot.* **29** 1936 pp. 504–508 4 figs.

68.—Balozet, L. Sur un *Brachylaemus* de l'intestin du porc. *Bull. Acad. Vét. France Paris* **9** 1936 pp. 93–99.

Baltzer, F. *vide* Zurbuchen, K.

69.—Bandier, J. Histologische Untersuchungen über die Regeneration von Landplanarien. *Arch. Entw. Mech. Org. Berlin* **135** 1936 pp. 316–348 16 figs.

70.—Bangham, R. V. and Hunter, G. W. Studies on fish parasites of Lake Erie. III. *Microcotyle spini-*

cirrus MacCallum (1918) char. emend. and *M. eriensis* sp. nov. *Trans. Amer. micr. Soc. Menasha* **55** 1936 pp. 334–339 pl. xxxviii.

71.—Bangs, O. and Loveridge, A. Reports on the scientific results of an expedition to the south-western highlands of Tanganyika territory. III. Birds. *Bull. Mus. Comp. Zool. Harvard* **75** 1933 pp. 143–221. [With notes on parasites.]

Barba, R. *vide* Dios, R. L.

72.—Barletta, V. Sopra un caso di *Cysticercus cellulosae* sottocongiuntivale. *Bollettino Oculistica* **10** 1931 pp. 733–742.

73.—Bartlakowski, J. Ein Beitrag zur Biologie und Klinik der *Eustrongylus gigas*. *Zbl. Chirurg.* 1934 p. 61. [n.v.]

74.—Bartsch, P. Molluscan intermediate hosts of the Asiatic blood-fluke, *Schistosoma japonicum*, and species confused with them. *Smith. Misc. Coll.* **95** 5 1936 pp. 1–60 8 pls.

75.—Bartsch, P. A new intermediate host of the Asiatic blood-fluke, *Schistosoma japonicum*. *Proc. biol. Soc. Washington* **49** 1936 pp. 139–141.

Basarca, M. *vide* Tubangui, M. A.

76.—Baskin, B. L. Деякі Лані Ло Фавни. *Oligochaeta limicola* Басейна Лінця. [In Russian with German summary.] *Trav. Soc. Nat. Kharkow* **53** 1930 pp. 7–10.

77.—Baskin, B. Zum Bau der Geschlechtssysteme von *Chaetogaster crystallinus* Vejd. [In Russian with German summary.] *Trav. Soc. Nat. Kharkov* **55** 1930 pp. 5–6.

78.—Baskin, B. Zum Bau der Blutgefäßsystem von *Aeolosoma tenuidorsum* Baskin. [In Russian with German summary.] *Trav. Soc. Nat. Kharkov* **55** 1930 pp. 149–163 5 figs.

79.—Basnuevo, J. and Anido, V. La solución aceto-formo-azucarada en el enriquecimiento de huevos de parásitos en las heces fecales. *Medicina de Hoy* **1** 1936 pp. 49–50.

Basnuevo, J. G. *vide etiam* Bolanos, J. M.

Basnuevo, J. G. *vide etiam* Fonseca, R. C.

Basnuevo, J. *vide etiam* Kouri, P.

80.—Battaglia, A. and Arata, E. C. Anemia perniciosa por tricocéfalos trichiurus. Prensa Méd. Argentina 23 1936 pp. 1094-1101.

81.—Baylis, H. A. Some parasitic worms from the British Cameroons. Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 257-272 11 figs.

82.—Baylis, H. A. A new Ascarid from a bat. Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 360-365 4 figs.

83.—Baylis, H. A. A new species of *Notocotylus* [Trematoda] from the water-rail. Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 474-477 1 fig.

84.—Baylis, H. A. The nematode genus *Rondonia* Travassos. Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 606-610 2 figs.

85.—Baylis, H. A. Nematoda. I. (Ascaroidea and Strongyloidea). The Fauna of British India. London (Taylor and Francis) 1936 408 pp. 182 figs. 1 map.

86.—Baylis, H. A. On the nomenclature and synonymy of the nematode *Setaria labiato-papillosa*. Ann. Trop. Med. Parasit. Liverpool 30 1936 pp. 293-298.

87.—Beach, T. D. Experimental studies on human and primate species of *Strongyloides*. V. The free-living phase of the life cycle. Amer. J. Hyg. Baltimore 23 1936 pp. 243-277.

88.—Beams, H. W. and King, R. L. Survival of *Ascaris* eggs after centrifuging. Science, N.Y. 84 1936 p. 138.

89.—Beams, H. W. and King, R. L. Ultracentrifuging and the first cleavage plane in *Ascaris suum*. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 113.

Beatty, H. vide O'Connor, F. W.

90.—Beauchamp, P. de. Turbellariés et Bryozoaires. Mém. Mus. Hist. nat. Paris 4 1936 pp. 141-153 5 figs.

91.—Beauchamp, P. de. A propos d'*Euplanaria cretica* Meixner. Bull. Soc. zool. Fr. 61 1936 pp. 433-440 3 figs.

92.—Beauchamp, P. de. Turbellariés Tricladés. Bull. Mus. Hist. nat. Belg. 12 No. 2 1936 pp. 1-3.

93.—Beaudette, F. Microfilaria in a duck. J. Amer. Vet. Med. Ass. Chicago 89 1936 pp. 589-590.

94.—Beaudette, F. R. and Hudson, C. B. Parasitism and tuberculosis in a crow. J. Amer. Vet. Med. Ass. 89 1936 pp. 215-217.

Bebeschin, K. W. vide Smorodinzew, I. A.

Bebešin, K. vide Smorodincev, I.

95.—Bell, A. W. Three new species of *Fridericia* (Enchytraeidae) from California. Univ. Calif. Pub. Zool. 41 1936 pp. 145-164 8 figs. pls. x, xi.

96.—Benazzi, M. Influenza della regione cefalica sul movimento e sulla sensibilità delle Planarie tricladi. Rend. Acc. Lincei (6) 23 1936 pp. 152-155.

97.—Benazzi, M. Razze fisiologiche di *Euplanaria gonocephala* differenziate dalla diverso attitudine alla scissiparità. Rend. Acc. Lincei (6) 23 1936 pp. 361-365.

98.—Bennett, H. J. The life history of *Cotylophoron cotylophorum*, a Trematode from ruminants. Illinois Biol. Monog. 14 1936 pp. 1-119 9 pls.

99.—Bennett, H. J. and Tobie, J. E. New records of the prevalence and distribution of some Telorchiniæ from *Pseudaemys elegans* Wied. Proc. helminth. Soc. Washington 3 1936 pp. 62-63.

100.—Berberian, D. A. Some observations on the effect of digestive juices on scolices of *Echinococcus granulosus*. J. Helminth. London 14 1936 pp. 21-40 1 pl.

Berberian, D. A. vide etiam Turner, E. L.

Berghe, L. van den vide Van Den Berghe, L.

101.—Berkeley, E. Occurrence of *Saccocirrus* in Western Canada. Nature London 137 1936 p. 1075.

102.—Berkeley, E. Plankton of the Bermuda Oceanographic Expeditions. III. Notes on Polychaeta. Zoologica New York 21 1936 pp. 85-87.

103.—Berkeley, G. H. Root rot of raspberry. Canad. J. Res. Ottawa C. 14 1936 pp. 306-317.

104.—Berny, P. and Saint-Prix, M. La stéphanurose porcine en Guyane française. Bull. Soc. Path. Exot. Paris **28** 1935 pp. 828-829.

Berny, P. *vide etiam* Stévenel, L.

105.—Berrill, N. J. and Mees, D. Reorganization and regeneration in *Sabella*. I. Nature of gradient, summation and posterior reorganization. J. exp. Zool. Philadelphia **73** 1936 pp. 67-83 fig. 7.

106.—Berrill, N. J. and Mees, D. Reorganization and regeneration in *Sabella*. II. The influence of temperature. III. The influence of light. J. exp. Zool. Philadelphia **74** 1936 pp. 61-89 4 figs.

107.—Berthoumeyroux, M. Recherches sur le pouvoir réducteur des liquides du milieu intérieur de quelques invertébrés marins. Bull. Sta. biol. Arcachon **32** 1935 pp. 111-153.

108.—Bertolini, G. Sulla bilharziosi del bestiame in Italia. Arch. Ital. Sc. Med. Colon. Rome **17** 1936 pp. 311-319.

109.—Berz, A. Recherches sur la distribution des Protozoaires et des Nématodes dans le sol de la réserve d'Aletsch. Bull. Murith. Sion **53** 1936 pp. 141-228.

Besta, B. *vide* Mariani, G.

110.—Bhalerao, G. D. On two new Monostomes (Trematoda) from avian hosts in British India. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 311.

111.—Bhalerao, G. D. On the occurrence of *Stilesia vittata* (Cestoda) in ovines in India. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 409.

112.—Bhalerao, G. D. Worm diseases of poultry in India and their control. Agric. and Live Stock in India Delhi **6** 1936 pp. 48-53.

113.—Bhalerao, G. D. On some representatives of the Cestode genus *Avitellina* from India. J. Helminth. London **14** 1936 pp. 141-162 21 figs.

114.—Bhalerao, G. D. Studies on the Helminths of India. Trematoda I. J. Helminth. London **14** 1936 pp. 163-180 7 figs.

115.—Bhalerao, G. D. Studies on the helminths of India. Trematoda II. J. Helminth. London **14** 1936 pp. 181-206 5 figs.

116.—Bhalerao, G. D. Studies on the helminths of India. Trematoda III. J. Helminth. London **14** 1936 pp. 207-228 6 figs.

117.—Bhatia, M. L. The prestomial glands of *Hirudinaria granulosa* and their function. [Summary.] Proc. Indian Sci. Cong. Calcutta **18** 1931 p. 222.

118.—Bhatia, M. L. Some abnormalities in the Indian leech, *Hirudinaria granulosa*. Proc. Indian Sci. Cong. Calcutta **12** 1932 p. 326.

119.—Bhatia, M. L. A preliminary note on the nephridia and their funnels in the leech *Hirudinaria*. Proc. Indian Sci. Cong. Calcutta **22** 1935 p. 311.

120.—Bhatia, S. N. Parasitic cystitis in a goat. Ind. Vet. J. Madras **12** 1936 p. 340.

121.—Bindra, B. S. *Schistosoma japonicum* and the problem of schistosomiasis in India. Thesis Med. Univ. Edinburgh 1936. [n.v.]

122.—Bishop, A. S. Contribuciones al conocimiento de la fauna de Actopan, HGO. III. Nota acerca de la fauna de Rotíferos de los depositos de agua de Actopan y lugares vecinos. An. Inst. Biol. Mexico **7** 1936 pp. 269-270.

123.—Bissières, —. La strongylose cardio-pulmonaire du chien par *Haemostrongylus vasorum*. Thesis vet. Toulouse 1930 [n.v., summary in Rec. Med. Vet. Paris **110** 1934 p. 309].

124.—Blanc, G. and Desportes, C. La bilharziose bovine au Maroc. C.R. Soc. Biol. Paris **123** 1936 pp. 766-767.

125.—Bobin, G. Sur la poussée de crochets chez *Sabella pavonina* (Annélides polychètes). C.R. Soc. Biol. Paris **121** 1936 pp. 546-548 4 figs.

126.—Bock, H. Lichtrückeneinstellung und andere lokomotorische Lichtreaktionen bei *Planaria gonoccephala*. Zool. Jahrb. Jena (Allg. Zool.) **56** 1936 pp. 501-530 15 figs.

Boell, E. J. *vide* Huff, G. C.

Boer, — de *vide* De Boer.

127.—Bolanos, J. M., Kouri, P., Anido, V. and Basnuevo, J. E. El parasitismo intestinal y la clonorchiasis en los chinos retenidos en Tiscornia. Revista Parasitología Habana **2** 1936 pp. 39-49.

Bonacci, H. *vide* Dios, R. L.

128.—Bonnet, A. and Jullien, A. Sur deux nouveaux exemplaires d'*Eunice aphroditois* (Pallas) pêchés dans la Baie de Toulon. Bull. Soc. zool. Fr. 61 1936 pp. 447-450 pl. vii.

129.—Botteri, J. H. Die Serologie der Echinokokkenkrankheit. Zeitschr. Exper. Med. 77 1931 pp. 490-528.

130.—Bovien, P. Plantesygdomme i Denmark 1935. Tidsskrift Planteavl. 41 1936 pp. 533-568.

131.—Boyd, O. C. Severe damage to strawberries in Massachusetts from winter injury and dwarf. Plant. Dis. Rep. Washington 20 1936 p. 183.

132.—Bragg, J. H. Some observations on the staining of tapeworms. Proc. Okla. Acad. Sci. 14 1934 pp. 21-22.

133.—Brailsford, J. F. Hydatid disease in England. Brit. J. Radiology London 4 1931 pp. 440-450.

134.—Brand, T. v. Observations upon the glycogen relationships in *Ascaris*. J. Parasit. Urbana 22 1936 p. 531.

135.—Brandt, B. B. Parasites of certain North Carolina Rodentia. Ecol. Monogr. Durham N.C. 6 1936 pp. 491-532.

136.—Broch, H. Die Bedeutung der Drobah-Schwelle für die Bodenfauna der Garnelen-Felder. Avh. Nerske Vid. Akad. Oslo 1935 v 32 pp.

137.—Brooks, H. T. Trichinosis no longer a rare occurrence. Med. Record 143 1936 pp. 140-142.

Brooks, S. C. *vide* Nelson, C.

Brown, P. F. *vide* Galambos, R.

138.—Bruce, J. R. Faunistic notes and records. Rep. Mar. biol. Sta. Port Erin 48 1935 pp. 26-28.

139.—Brumpt, E. *Schistosoma bovis* et *Schistosoma Mansonii* ne sont pas transmis par *Planorbis* (*Indoplanorbis*) *exustus*. Observations biologiques concernant ce Planorbe. Ann. Parasit. Paris 14 1936 pp. 464-471.

140.—Brumpt, E. Action des hôtes définitifs sur l'évolution et sur la sélection des sexes de certains helminthes hébergés par eux. Experiences sur des schistosomes. Ann. Parasit. Paris 14 1936 pp. 541-551 2 figs.

141.—Brumpt, E. Contribution à l'étude de l'évolution des paramphistomides. *Paramphistomum cervi* et cercaire de *Planorbis exustus*. Ann. Parasit. Paris 14 1936 pp. 552-563 9 figs.

142.—Bruns, H. Die Ankylostomiasis im deutschen Steinkohlenbergbau, ein überwaundenes Problem. München. Med. Woch. 1933 i pp. 425-430.

Buchanan, J. C. R. *vide* Connell, W. K.

143.—Buchner, H. Studien über die Genetik des Generationswechsels bei Rädertieren. Z. indukt. Abstamm.-u. Vererb. Lehre 70 1935 pp. 489-490 1 fig.

144.—Buchner, H. Experimentelle Untersuchungen über den Generationswechsel der Rädertiere. Z. indukt. Abstamm.-u. Vererb. Lehre 72 1936 pp. 1-49 14 figs.

Bucy, P. C. *vide* Huff, G. C.

Buhrer, E. M. *vide* Corder, M. N.

Buhrer, E. M. *vide etiam* Steiner, G.

Bullock, F. D. *vide* Curtis, M. R.

145.—Büren, G. V. Der Gerzensee. Eine limnologische Studie. Mitt. naturf. Ges. Bern 1935 1936 pp. 29-94 3 figs. 2 pls.

146.—Burggraaf, H. Bijdrage tot de kennis der pancreas-distomatose bij het rund, veroorzaakt door *Eurytrema pancreaticum* (Janson, 1889) Looss 1907. Dissert. Utrecht 1933 61 pp. [Cf. Tijdschr. Diergeneesk. Utrecht 60 1933 p. 1277.]

147.—Burov, W. S. Die Oligochaeta Ost-Siberiens. Zur Systematik und Biologie der Gattung *Clitellio* aus dem Baikalsee. [In Russian, with German summary.] Bull. Inst. Sci. Biol. Géogr. Irkutsk 7 1936 pp. 17-29.

148.—Burt, D. R. R. A new species of Cestode, *Dilepis lepidocolpos*, from the little cormorant (*Phalacrocorax niger*). Spolia zeylan. Colombo (B) 19 1936 pp. 193-200 3 figs.

149.—Bush, F. A. Conodonts in Oklahoma sediments. Proc. Oklahoma Acad. Sci. 10 1930 p. 87.

- 150.—Byrd, E. E. Life history studies of Reniferinae (Trematoda, Digenea) parasitic in Reptilia of the New Orleans area. Trans. Amer. micr. Soc. Menasha **54** 1935 pp. 196–225 pls. xxxii–xxxvi.
- 151.—Byrd, E. E. A new Trematode parasite, *Renifer wardi* n. sp., from the watersnake, *Natrix rhombifera*, from Columbus, Mississippi. J. Parasit. Urbana **22** 1936 pp. 229–231 1 fig.
- 152.—Byrd, E. E. On the incidence of intestinal parasites in 537 individuals on the relief rolls in the city of Athens, Georgia, and vicinity. Amer. J. trop. Med. Baltimore **16** 1936 pp. 39–46.
- 153.—Byrd, E. E. Studies in parasitology. V. The intestinal parasites in 257 college freshmen. J. Parasit. Urbana **22** 1936 pp. 301–302.
- 154.—Byrd, E. E. A new Trematode parasite from the mud-turtle, *Kinosternon subrubrum hippocrepis* (Gray). J. Parasit. Urbana **22** 1936 pp. 413–415 3 figs.
- 155.—Bytinski-Salz, H. Un Policlado (*Stylochus pilidium* Lang) dannoso ai parchi ostricoli. Thalassia **2** 1935 pp. 1–24 3 pls. 3 figs.
- 156.—Caballero, E. Una nueva especie de Trematodo del intestino de *Dermophis mexicanus*. An. Inst. Biol. Mexico **6** 1935 pp. 185–188 2 figs.
- 157.—Caballero, E. Contribucion al conocimiento de los nematodos de las aves de Mexico. I. An. Inst. Biol. Mexico **6** 1935 pp. 285–289 4 figs.
- 158.—Caballero, E. Parasitos intestinales en los niños de Actopan, HGO. An. Inst. Biol. Mexico **7** 1936 pp. 373–384 8 figs.
- 159.—Caballero, E. Oxyurosis y tricocefalosis en Mexico. Revist. Parasitol. Havana **2** 1936 pp. 283–287.
- 160.—Caballero, E. and Sokoloff, D. A new Trematode (*Schizamphistomoides tabascensis* n. sp.) from the intestine of the fresh water turtle, *Dermatemys mawii* Gray. Trans. Amer. micr. Soc. Menasha **54** 1935 pp. 135–137.
- 161.—Caballero, E. and Sokoloff, D. Quinta contribucion al conocimiento de la parasitologia de *Rana montezumae*. An. Inst. Biol. Mexico **7** 1936 pp. 119–154 14 figs.
- 162.—Cable, R. M. Experimental studies on the Trematode, *Parorchis acanthus* Nicoll. J. Parasit. Urbana **22** 1936 p. 544.
- Cable, R. M. *vide etiam* Headlee, W. H.
- 163.—Callot, J. Trematodes de Sud Tunisien et en particulier du Nefzaoua. Ann. Parasitol. Paris **14** 1936 pp. 130–149 11 figs.
- 164.—Călugăreanu, D. Acțiunea luminei asupra Planariilor. Bul. Soc. Nat. România Bucuresti **4** 1933 pp. 18–20.
- 165.—Cameron, T. W. M. Parasites of animals and the public health in North America. Amer. J. Publ. Health **26** 1936 pp. 40–50.
- 166.—Cameron, T. W. M. Studies on the endoparasitic fauna of Trinidad mammals. II. Additional parasites from Trinidad deer. Canad. J. Res. Ottawa (D) **14** 1936 pp. 1–5 11 figs.
- 167.—Cameron, T. W. M. Studies on the endoparasitic fauna of Trinidad mammals. III. Some parasites of Trinidad carnivores. Canad. J. Res. Ottawa (D) **14** 1936 pp. 25–38 26 figs.
- 168.—Cameron, T. W. M. Studies on the Heterophyid Trematode, *Apophallus venustus* (Ransom 1920) in Canada. Part I. Morphology and taxonomy. Canad. J. Res. Ottawa (D) **14** 1936 pp. 59–69 3 figs. pl. i.
- 169.—Cameron, T. W. M. Studies on the endoparasitic fauna of Trinidad mammals. IV. Further parasites from Trinidad deer. Canad. J. Sci. Ottawa **14** (D) 1936 pp. 165–167 1 fig.
- 170.—Cameron, T. W. M. On the life history of *Apophallus venustus* with observations on the life history of *Parametorchis* in Canada. J. Parasit. Urbana **22** 1936 p. 542.
- 171.—Cameron, T. W. M. Parasites of importance in meat inspection in North America. J. Amer. Vet. Med. Ass. Chicago **88** 1936 pp. 282–288.
- 172.—Campbell, D. H. Active immunization of albino rats with protein fractions from *Taenia taeniaciformis* and its larval form *Cysticercus fuscicolaris*. Amer. J. Hyg. Baltimore **23** 1936 pp. 104–113.

173.—Campbell, D. H. An antigenic polysaccharide fraction of *Ascaris lumbricoides* (from hog). *J. Infect. Dis. Chicago* **59** 1936 pp. 266-280.

174.—Campbell, H. E., Webster, J. L. A. and Li, S. Y. Human sparganosis in the Foochow area. *Chinese Med. J.* 1936 suppl. pp. 423-433.

175.—Carlin-Nilson, B. Rotatorien aus Mexico. *K. fysioogr. Sällsk. Lund Förh.* **5** 1936 pp. 175-185 20 figs.

176.—Carrère, P. Sur le cycle évolutif d'un *Maritrema* (Trematodes). *C.R. Acad. Sci. Paris* **202** 1936 pp. 244-246.

177.—Cawston, F. G. The control of *Bilharzia* infection in the Union. *S. Afric. Med. J. Cape Town* **9** 1935 p. 519.

178.—Cawston, F. G. A note on the history of bilharziasis in South Africa. *S. Afric. Med. J. Cape Town* **10** 1936 p. 475.

179.—Cazalet, M. Recherches biomiques sur l'estuaire du Frémur (Limite des Côtes-du-Nord et de l'Ille-et-Vilaine). *Bull. Soc. sci. Bretagne* **12** 1935 pp. 205-237.

180.—Černosvitov, L. Monographie der tschechoslovakischen Lumbriciden. *Arch. přírodov. Vyzk. Čech.* **19** 1935 pp. 1-86 62 figs.

181.—Černosvitov, L. Oligochaeten aus Südamerika. Systematische Stellung der *Pristina flagellum* Leidy. *Zool. Anz. Leipzig* **113** 1936 pp. 75-84 19 figs.

182.—Černosvitov, L. Oligochètes des grottes artificielles du nord-est de la France. *Arch. Zool. exp. gén. Paris Notes et Revue* **78** 1936 pp. 1-7.

183.—Černosvitov, L. Oligochaetes cavernicoles (2^e serie). *Bull. Mus. Hist. nat. Belg.* **12** No. 21 1936 pp. 1-13 9 figs.

Chadwick, C. R. *vide* Mills, E. A.

184.—Chajutin, D. and Schuchat, I. Ueber Cysticercose des Menschen pathologisch-anatomisch betrachtet. [In Russian, with German summary.] *Med. Parasit. Moscow* **4** 1935 pp. 307-315.

185.—Chakravarty, G. K. A new nematode *Strongyluris bengalensis* n. sp. with a note on the genus. *Z. Parasitenk. Berlin* **8** 1936 pp. 542-545 2 figs.

186.—Chakravarty, G. K. *Dirofilaria indica* n. sp. from the heart of a dog. *Z. Parasitenk. Berlin* **9** 1936 pp. 57-60 2 figs.

187.—Chaloux, J. Sporocysts d'un *Brachylaemus* Dujardin chez *Helix aspersa* Müller. *Bull. Soc. sci. Bretagne* **12** 1935 pp. 53-57 4 figs.

188.—Chandler, A. C. A new genus and species of Subulurinae (Nematodes). *Trans. Amer. micr. Soc. Menasha* **54** 1935 pp. 33-35 pl. viii.

189.—Chandler, A. C. Studies on the nature of immunity to intestinal helminths. III. Renewal of growth and egg production in *Nippostrongylus* after transfer from immune to non-immune rats. *Amer. J. Hyg. Baltimore* **23** 1936 pp. 46-54.

190.—Chandler, A. C. Studies on the nature of immunity to intestinal helminths. IV. The inter-relations between parenteral and intestinal immunity in rats infected with *Nippostrongylus*. *Amer. J. Hyg. Baltimore* **24** 1936 pp. 129-144.

191.—Chandler, A. C. The genus *Schizotaenia* in porcupines. *J. Parasit. Urbana* **22** 1936 p. 513.

Chang, C. F. *vide* Winfield, G. F.

192.—Chatterji, R. C. On a new species of nematode *Amplicaecum cacopi* sp. nov., from *Cacopus systoma*. *Ann. Trop. Med. Parasit. L'pool.* **30** 1936 pp. 41-44 4 figs.

193.—Chatterji, R. C. The helminths parasitic in the fresh-water turtles of Rangoon. *Rec. Ind. Mus. Calcutta* **38** 1936 pp. 81-94 7 figs.

Chavanne, J. Darente de la *vide* Darente de la Chavanne, J.

194.—Chen, H. T. A study of the Haplorchinae (Looss 1899) Poche 1926 (Trematoda, Heterophyidae). *Parasitology Cambridge* **28** 1936 pp. 40-55 12 figs.

195.—Chen, H. T. Further notes on the life history of *Paragonimus* from rags. *Chinese Med. J. Shanghai* 1936 suppl. pp. 368-378.

- 196.—Chen, H. T. Parasitism in slaughter houses in Canton. Part I. Helminths of Kwangtung hogs. Lingnan Sci. Journ. Canton 15 1936 pp. 31-44 18 figs.
- 197.—Chen, H. T. *Rictularia tani* Hoeppli from rats in Canton (Nematoda: Rictulariidae). Lingnan Sci. J. Canton 15 1936 pp. 283-286 fig. 1.
- 198.—Chen, T. T. Sympathetic nervous system of an Annelid. Master's Essay Oberlin College Lorain, Ohio 1930. [n.v.]
- 199.—Chen, Y. On some new earthworms from Nanking, China. Sci. Rep. Nat. Centr. Univ. Nanking 1 1930 pp. 11-37 9 figs. [With Chinese summary.]
- 200.—Chen, Y. Taxonomy and faunal relationships of the aquatic Oligochaetes of China. Abstr. Pap. Sci. Conf. Nanking 1935 pp. 48-49.
- 201.—Chen, Y. On a small collection of earthworms from Hongkong. Bull. Fan Memorial Inst. Biol. Peiping 6 1935 pp. 33-56 4 figs.
- 202.—Child, C. M. and Rulon, O. Differential reduction of vital dyes in certain Oligochaetes. J. exp. Zool. Philadelphia 74 1936 pp. 427-448 15 figs.
- 203.—Chitwood, B. G. Some marine nematodes from North Carolina. Proc. helminth. Soc. Washington 3 1936 pp. 1-16 4 figs.
- 204.—Chitwood, B. G. Observations on the chemical nature of the cuticle of *Ascaris lumbricoides* var. *suus*. Proc. helminth. Soc. Washington 3 1936 pp. 39-49.
- 205.—Chitwood, B. G. Some marine nematodes of the superfamily Enoplidae. Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 208-213 pl. xxvi.
- 206.—Chitwood, B. G. The histology of nemie esophagi. VII. The esophagus of *Leidyneia appendiculatum* (Leidy 1850). J. Wash. Acad. Sci. 26 1936 pp. 414-419 4 figs.
- 207.—Chitwood, B. G. The value of esophageal structures in nemie classification. J. Parasit. Urbana 22 1936 p. 528.
- 208.—Chitwood, B. G. and Chitwood, M. B. The histology of nemie esophagi. V. The esophagi of *Rhabditis*, *Anguillina* and *Aphelenchus*. J. Wash. Acad. Sci. 26 1936 pp. 52-59 6 figs.
- 209.—Chitwood, B. G. and Chitwood, M. B. The histology of nemie esophagi. VI. The oesophagus of members of the Chromadorida. J. Wash. Acad. Sci. 26 1936 pp. 331-346 9 figs.
- Chitwood, M. B. *vide* Chitwood, B. G.
- 210.—Christensen, R. O. Studies on the morphology of the common fox lungworm, *Capillaria aërophila* (Creplin 1839). Trans. Amer. micr. Soc. Menasha 54 1935 pp. 145-154 pl. xxvii.
- 211.—Christiansen, M. De vigtigste smitsomme Sygdomme hos vildtet. [Continuation.] Maanedsskr. Dyrl. København 47 1936 pp. 509-517 fig. 20, pp. 570-582 figs. 25-28.
- 212.—Christie, J. R. Life history of *Agamermis decaudata*, a nematode parasite of grasshoppers and other insects. J. Agric. Res. Washington 52 1936 pp. 161-198.
- 213.—Christie, J. R. The development of root-knot nematode galls. Phytopathology Lancaster 26 1936 pp. 1-22.
- 214.—Christie, J. R. and Arndt, C. H. Feeding habits of the nematodes *Aphelenchulus parietinus* and *Aphelenchus avenae*. Phytopathology Lancaster Pa. 26 1936 pp. 698-701.
- 215.—Christie, J. R. and Crossman, L. Notes on the strawberry strains of the bud and leaf nematode, *Aphelenchoides fragariae*. Proc. helminth. Soc. Washington 3 1936 pp. 69-72 fig. 19.
- Christie, J. R. *vide etiam* Crossman, L.
- 216.—Chu, T. A review of the status of the reptilian nematodes of the genus *Rhabdias* with a redescription of *Rhabdias fuscovenosa* var. *catanensis* (Rizzo, 1902) new rank. J. Parasit. Urbana 22 1936 pp. 130-139 7 figs.
- 217.—Chu, T. Studies on the life history of *Rhabdias fuscovenosa* var. *catanensis* (Rizzo, 1902). J. Parasit. Urbana 22 1936 pp. 140-160 8 figs.
- 218.—Chu, T. C., Liu, B. C., Ling, C. Y. and Zee, G. F. A survey of intestinal parasites in the rural experimental health area at Kao-Chiao, Shanghai. Chinese Med. J. Peiping 50 1936 pp. 1243-1254.

219.—Chung, H.-L. Observations on the filariform larvae of *Strongyloides fülleborni* in different media as well as in tissue cultures. Z. Parasitenk. Berlin 9 1936 pp. 28-49 4 figs.

220.—Clapham, P. A. Further observations on occurrence and incidence of helminths in British part-ridges. J. Helminth. London 14 1936 pp. 61-68.

221.—Clapham, P. A. Preliminary observations on the infectivity of *Ascaris lumbricoides* to swine. J. Helminth. London 14 1936 pp. 229-232.

222.—Clapham, P. A. *Hymenolepis chysolampidis* n. sp., a parasite of *Chrysolampis mosquitus* of Brazil. J. Helminth. London 14 1936 pp. 131-134 5 figs.

223.—Clarke, C. H. D. Fluctuations in numbers of ruffed grouse *Bonasa umbellus* (Linne). Univ. Toronto Stud. Biol. 41 1936 pp. 1-118. [Helminths pp. 85-89.]

224.—Clarke, J. M. The beginnings of dependent life. New York State Mus. Bull. 121 [Education Dept. Bull. 428] 1908 pp. 146-196 13 pls.

Cleave, C. D. van vide Van Cleave, C. D.

Cleave, H. J. van vide Van Cleave, H. J.

225.—Coatney, G. R. Some notes of Cestodes from Nebraska. J. Parasit. Urbana 22 1936 p. 409.

226.—Coe, W. R. Plankton of the Bermuda Oceanographic Expeditions. VI. Bathypelagic Nemertean taken in the years 1929, 1930 and 1931. Zoologica New York 21 1936 pp. 97-113 1 fig. 10 pls.

227.—Collier, V. Studies on the cytoplasmic components in fertilization of *Ascaris suilla*. Quart. J. micr. Sci. London N.S. 78 1936 pp. 397-418 9 figs.

Collins, B. J. vide Hall, M. C.

228.—Colmenares, R. Conjunctivitis verminosa. Revist. Med. Veter. Bogota 6 1935 pp. 50-52.

Coninck, L. A. de vide De Coninck, L. A.

229.—Connell, W. K. and Buchanan, J. C. R. Guinea worm disease in Tanganyika. Trans. Soc. Trop. Med. Hyg. London 26 1932 p. 99.

230.—Corder, M. N., Buhner, E. M. and Thorne, G. A list of plants attacked by the sugar beet nematode (*Heterodera schachtii*). Plant. Dis. Rep. Washington 20 1936 pp. 38-47.

231.—Cordero, E. H. Revision de los tipos de hirudíneos brasileiros descriptos por Cesar Pinto en 1920. Ann. Acad. Bras. Sci. Rio 8 1936 pp. 221-231.

232.—Cordier, R. Sur la formation de la membrane de fécondation chez *Ascaris megaloccephala*. C.R. Soc. Biol. Paris 122 1936 pp. 106-107.

Cornet, — vide Houdemer.

233.—Cort, W. W. Professor Henry Baldwin Ward and the Journal of Parasitology. J. Parasitol. Urbana 19 1932 pp. 99-105 with portrait.

234.—Cort, W. W. Studies on schistosome dermatitis. I. Present status of the subject. Amer. J. Hyg. Baltimore 23 1936 pp. 349-371.

235.—Cort, W. W. Studies on Schistosome dermatitis. IV. Further information on distribution in Canada and the United States. Amer. J. Hyg. Baltimore 24 1936 pp. 318-333.

236.—Cort, W. W. and Talbot, S. B. Studies on schistosome dermatitis. III. Observations on the behavior of the dermatitis-producing schistosome cercariae. Amer. J. Hyg. Baltimore 23 1936 pp. 385-396.

237.—Courtney, W. D. An apparent natural transfer of the bulb or stem nematode from clover to the strawberry plant. Phytopathology Lancaster Pa. 26 1936 pp. 607-609.

238.—Couteaux, R. Les bactéroïdes des Lombriciens et leurs rapports avec la sarcolyse. C.R. Acad. Sci. Paris 203 1936 pp. 1180-1182.

239.—Coutelen, F. Certains oiseaux carnivores sont-ils susceptibles de servir d'hôtes définitifs à la forme adulte du *Ténia échinocoque*? (Contrôle expérimental.) C.R. Soc. Biol. Paris 121 1936 pp. 401-403.

240.—Coutelen, F. Les oiseaux domestiques peuvent-ils héberger spontanément des hydatides échinocoques et prendre place dans le cycle évolutif du *Ténia échinocoque*? (Contrôle expérimental.) C.R. Soc. Biol. Paris 121 1936 pp. 490-493.

241.—Coutelen, F. Contrôle expérimental de certaines hypothèses récentes relatives au cycle évolutif du ténia échinocoque et à la prophylaxie de l'échinocoque. Rev. Med. Hyg. Trop. **28** 1936 pp. 161-178.

Cowdery, K. *vide* Weimer, B. R.

242.—Cram, E. B. Species of *Capillaria* parasitic in the upper digestive tract of birds. U.S. Dept. Agric. Tech. Bull. Washington **516** 1936 27 pp. 12 figs.

243.—Cram, E. B. Biological and morphological observations on a species of *Strongyloides* (Nematoda) of chickens in Puerto Rico. Revista Parasitol. Havana **2** 1936 pp. 289-304.

244.—Croneis, C. and Scott, H. W. Scolecodonts and conodonts from fissure fillings in the Niagara of Illinois. [Abstract.] Bull. Geol. Soc. Amer. **44** 1933 p. 207.

Crosnier, —. *vide* Jame.

245.—Crossman, L. and Christie, J. R. A list of plants attacked by the leaf nematode (*Aphelenchoides fragariae*). Plant Dis. Rep. Washington **20** 1936 pp. 155-165.

Crossman, L. *vide etiam* Christie, J. R.

246.—Cruickshank, A. *Onchocerca volvulus* (Linn.), its occurrence in the southern Anglo-Egyptian Sudan and its significance in the etiology of epidemic blindness. Thesis Aberdeen Univ. 1934 61 pp. [N.v.]

247.—Cruz, W. O. Da medulla ossea na Ancylostomose. Mem. Inst. Oswaldo Cruz Rio de J. **27** 1933 pp. 423-453 17 pls. [English transl. pp. 454-470.]

248.—Cruz, W. O. Sobre a significação da eosinophilia na ancylostomose. Mem. Inst. Osw. Cruz Rio de J. **31** 1936 pp. 1-10.

249.—Culbertson, J. T. The cercaricidal action of normal serums. J. Parasit. Urbana **22** 1936 pp. 111-125.

250.—Culbertson, J. T. and Talbot, S. B. A new antagonistic property of normal serums: the cercaricidal action. Science N.Y. **82** 1935 pp. 525-526.

251.—Cumming, H. S. L'ankylostomiase aux Etats-Unis. Bull. Mem. Off. Intern. Hyg. Publ. Paris **28** 1936 pp. 1500-1508.

252.—Curtis, W. R., Dunning, W. F. and Bullock, F. D. Duration and extent of irritation versus genetic constitution in etiology of malignant tumours. Amer. J. Cancer **21** 1934 pp. 554-570.

253.—Curtis, M. R., Dunning, W. F. and Bullock, F. D. A study of the influence of the genetic constitution of the host on the growth of *Cysticercus* sarcoma 146 and the Jensen rat sarcoma. Amer. Nat. **70** 1936 pp. 45-46.

254.—Curtze, —. Intrauterine Leberegelinvasion bei einem Kalbe. Tierärztl. Rundsch. Friedenau **1932** p. 214.

255.—Dacqué, E. Wirbellose des Jura. Erster Teil. Leitfossilien Berlin **7** 1 1933 pp. 142-143.

Daengsvang, S. *vide* Prommas, C.

Dalton, H. C. *vide* Hunter, G. W.

256.—Damon, A. Internal parasites of the dog. Vet. Med. Chicago **30** 1935 pp. 217-220 1 fig.

Dang-Van-Ngu *vide* Galliard, H.

257.—Dareste de la Chavanne, J. Etude sur la faune du Bajoiren supérieure du Mont D'Or Lyonnais (Ciret) [Annelides.] Trav. Lab. Geol. Lyon **28** 9 1936 p. 120 pl. xiii.

258.—Darriba, A. R. Oncocercosis americana. Med. Paises Calid. Madrid **8** 1935 pp. 561-573.

Dasgupta, M. *vide* Ray, H.

259.—Dastur, J. F. A nematode disease of rice in the Central Provinces. Proc. Indian Acad. Sci. **4** 1936 pp. 108-121 9 figs. pl. ix.

260.—Datta, M. N. Scientific results of the Yale North India Expedition. Biological Report No. 20 Helminth parasites of fishes from North India, with special reference to Acanthocephalans. Rec. Ind. Mus. Calcutta **38** 1936 pp. 211-229 7 figs.

261.—Datta, S. C. A. The etiology of so-called "Calcutta sore" of cattle. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 407.

262.—Davey, D. G. On the incidence of abomasal parasites in the lambs of south-west Britain. J. Helminth. London **14** 1936 pp. 85-92.

263.—Davies, T. I. The anatomy of *Dilepis undula* (Schränk, 1788). Proc. Zool. Soc. London 1935 pp. 717-722.

264.—Davis, A. G. The London clay of Sheppey and the location of its fossils. Proc. Geol. Ass. London 47 1936 pp. 328-345. [Annelida at p. 339.]

265.—Davis, D. J. Report on the preparation of an histolytic ferment present in the bodies of cercariae. J. Parasit. Urbana 22 1936 pp. 108-110 2 figs.

266.—Davis, D. J. Pathological studies on the penetration of the cercaria of the Strigeid Trematode, *Diplostomum flexicaudum*. J. Parasit. Urbana 22 1936 pp. 329-337 6 figs.

267.—Davor, M. Parazitički nematodi u debelom crijeva naših konja. Veterin. Arhiv Zagreb 6 1936 pp. 43-68.

268.—Dawes, B. Sur une tendance probable dans l'évolution des Trématodes digénétiques. Ann. Parasitol. Paris 14 1936 pp. 177-182 6 figs.

269.—Dawes, B. On a collection of Paramphistomidae from Malaya, with revision of the genera *Paramphistomum*, Fischeoeder, 1901, and *Gastrothylax* Poirier, 1883. Parasitology Cambridge 28 1936 pp. 330-354 7 figs.

Day, L. H. *vide* Tufts, W. P.

270.—Dayal, J. On the morphology of a new Trematode of the genus *Haplorchis* from the intestine of *Pseudeutropius taakree*. Proc. Indian Sci. Cong. Calcutta 22 1935 p. 322.

271.—De Boer, —. Een bloedzuiger in het rectum. Geneesk. Tijdschr. Ned. Ind. 75 1935 p. 1580.

272.—De Coninck, L. A. *Metaracolaimoides oxystoma* n.g. n. sp. (Nematôda) en zijne afleiding van *Araeolaimoides* De Man 1893 door allometrie. Biol. Jaarboek Antwerp 3 1936 pp. 182-204 7 figs.

Dedeken, L. *vide* De Waele, A.

Dedié, K. *vide* Schoop, C.

273.—De Graaf, C. Een en ander over de cysticercosis bij het schaap. Tijdschr. Diergeneesk. Utrecht 63 1936 pp. 547-556.

274.—Dehorne, A. Analyse de quelques aspects des cellules nerveuses de *Nephthys* et de *Nereis*. C.R. Soc. Biol. Paris 121 1936 pp. 757-760 8 figs.

275.—Dehorne, A. Notes histologiques sur *Sigalion*, *Nephthys* et *Sabellaria*. Formations mésodermiques dans les différents tissus. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 679-700 25 figs.

276.—Dehorne, A. Remarques sur quelques aspects cytologiques des éléments nerveux de *Nereis diversicolor*. C.R. Soc. Biol. Paris 123 1936 pp. 795-798 7 figs.

277.—De Jesuz, Z. *Lymnaea philippinensis*, an intermediate host of *Fasciola hepatica* in the Philippines, with some observations on the bionomics of the parasite. Philipp. J. Sci. Manila 58 1935 pp. 299-315 pl. i.

278.—De Jesuz, Z. Observations on natural cases of kidney-worm infestation in swine with special reference to practical method of diagnosis. Philipp. J. Anim. Ind. 2 1935 pp. 49-65.

279.—De Langen, C. D. and Eerkens, J. W. Nephroses and ancylostomiasis. Trans. Soc. Trop. Med. Hyg. London 27 1933 pp. 195-198.

De Leon, W. *vide* Africa, C. M.

280.—De Lerma, B. L'attività endocrina negli Invertebrati. Arch. zool. Torino 23 suppl. 1936 pp. 83-136.

Del Frade, A. *vide* Kouri, P.

281.—Delphy, J. Sur un Cirratulien tératologique. Bull. Soc. zool. Fr. 61 1936 pp. 453-457 2 figs.

Del Pino, A. P. *vide* Bacardi, J. F.

282.—Demel, K. Etudes sur la faune benthique et sa répartition dans les eaux polonaises de la Baltique. Arch. Hydrobiol. Ichthyol. Suwalki 9 1935 pp. 238-333 2 pls.

De Mello, A. *vide* Mello, A. de.

De Mello, I. F. *vide* Froilano de Mello, I.

Dennis, E. W. *vide* Turner, E. L.

283.—Deronde, —. Le Dragonneau (*Gordius aquaticus*), Nematelminthe parasite des insectes et des myriapodes. Bull. Soc. Hist. nat. Doubs. 46 1936 pp. 43-48.

Deshpande, D. S. *vide* Awati, P. R.

Desportes, C. *vide* Blanc, C.

284. — Duvé, G. L'échinococcose expérimentale. Intern. Cong. Comp. Path. 3 Sect. Human Med. Athens 1 1936 pp. 1-23.

285. — Dew, H. R. Advances in our knowledge of hydatid diseases during the twentieth century. Brit. Med. J. London 1935 ii pp. 620-622.

286. — De Waele, A. Nieuwe bevin-
dungen over der levenscyclus der
Cestoden. Natuurwetenschap. Tijdschr.
16 1934 pp. 60-69.

287. — De Waele, A. Vergelijkende
studie van de migratie der cestoden-
larven: cysticercus, coenurus en
hydatide. Biol. Jaarb. Antwerp 2
1935 pp. 47-60 3 figs.

288. — De Waele, A. and Dedeken, L.
Le phenomene de l'évagination chez
Cysticercus bovis et la migration de
parasite chez l'homme. Mem. Mus.
Hist. nat. Belg. (2) 3 1936 pp. 369-373.

289. — Di Aichelburg, U. I fenomeni
immunitari nelle elmintiasi. Giorn.
Ital. Malat. Esot. Trop. 9 1936 pp. 67-
70, 73-77.

290. — Diamantis, A. Bilharziomes
ectopiques. Bilharziose expérimentale
et stage hépatique chez l'homme du
parasite bilharzien. J. Urol. Med.
Paris 39 1935 pp. 308-325.

291. — Dikmans, G. Two new lung-
worms, *Protostrongylus coburni* n. sp.,
and *Pneumostrongylus alpenae* n. sp.,
from the deer, *Odocoileus virginianus*,
in Michigan. Trans. Amer. micr. Soc.
Menasha 54 1935 pp. 138-144 pls. xxv,
xxvi.

292. — Dikmans, G. A note on
Dictyocaulus from domestic and wild
ruminants. J. Wash. Acad. Sci. 26
1936 pp. 298-303 1 fig.

293. — Dikmans, G. A method for
obtaining adults of *Stephanofilaria*
stilesi (Nematoda: Stephanofiliariidae).
Proc. helminth. Soc. Washington 3 1936
p. 64.

294. — Dikmans, G. The springbuck,
Antidorcas marsupialis, a new host of
the lungworm *Bronchonema magna*
Monnig, 1932. (Nematoda: Meta-
strongylidae). Proc. helminth. Soc.
Washington 3 1936 p. 64.

295. — Dios, R. L., Sommerville,
E. T. W. de, Bonacci, H., Aldao, A. and
Barba, R. Paludismo y parásitos

intestinales en el Territorio de Misiones.
Rev. Inst. Bact. Buenos Aires 6 1934
pp. 458-505.

296. — Dobberstein, J. Ueber Sek-
tionsbefunde bei den in zoologischen
Gärten gehaltenen Tieren. Berlin.
Tierärztl. Woch. 1936 pp. 389-392.

297. — Dobrovolsky, D. C. G. and
Dobrovolsky, M. P. Polyradiate tape-
worms from a dog. Trans. Amer. micr.
Soc. Menasha 54 1935 pp. 22-27 pls. v,
vi.

Dodero, — vide Houdemer.

298. — Dolgopol, V. B. and Neustaeder,
M. Meningo-encephalitis caused by
Cysticercus cellulosae. Arch. Neurology
33 1935 pp. 132-147.

299. — Dollfus, R. P. Amoenitates
helminthologicae. III. Le rejet du
genre *Ostium* H. S. Pratt 1903. Ann.
Parasitol. Paris 14 1936 p. 302.

300. — Dollfus, R. P. Sur un
acanthocéphale du genre *Mediorhynchus*
H. J. Van Cleave d'une outarde à
huppe noire *Choriotis arabs* (L.) du
Sahel mauritanien. Mem. Mus. Hist.
nat. Belg. (2) 3 1936 pp. 421-443
11 figs.

301. — Dollfus, R. P. Invertébrés
marins et Thalassoides. Faune de
France Paris 30 1936 pp. 509-538
figs. 541-568.

302. — Dollfus, R. P. Présence d'un
Pseudamphistoma chez la loutre à
Richelieu (Indre et Loire). Ann.
Parasit. Paris 14 1936 pp. 520-522
2 figs.

303. — Dominiak, W. Enten vertilgen
die Larven der Lungenwürmer und
Leberegel. Deutsche Landwirtsch.
Presse 60 1933 p. 40.

304. — Dorier, A. Sur le développe-
ment des pontes de *Gordius aquaticus*
Duj. en milieu humide. C.R. Soc. Biol.
Paris 123 1936 pp. 955-956.

Downing, T. O. vide Threlkeld, W. L.

305. — Drake, E. H., Hawkes, R. S.
and Warren, M. An epidemic of
trichinosis in Maine. J. Amer. Med.
Ass. Chicago 105 1935 pp. 1340-1343.

306. — Dreyfuss, A. Quelques cas
vécus de pratique médicale dans les
territoires du Sud-Algérien. Rev.
Méd. Hyg. Trop. Paris 1934 p. 192.

Drinker, C. K. vide Augustine, D. L.

307.—Dschunkovsky, E. Parasitologische Bemerkungen. Ein Verzeichnis der Zooparasiten unserer Haustiere. [In Serbian.] Glasnik Centr. hijijen. zavoda 17 1934 p. 109. [n.v.]

308.—Dubois, G. Nouveaux principes de classification des Trématodes du groupe des Strigeida. Rev. suisse Zool. Geneva 43 1936 pp. 507-515.

Dunning, W. F. *vide* Curtis, M. R.

309.—Dyal, S. Incidence of helminthic parasites in cattle in Lahore. Proc. Indian Sci. Congr. Calcutta 22 1935 p. 326.

310.—Eddy, M. W. and Gleim, D. L. A thermotropic gradient apparatus with some preliminary studies on planaria *Phagocata gracilis* Haldeman, newt *Triturus viridescens* Rafinesque and earthworm *Lumbricus terrestris* Linnaeus. Proc. Penn. Acad. Sci. 6 1932 pp. 27-32.

311.—Edgar, G. Fatal effect of heavy infestation with *Cooperia curticei* (Railliet, 1893) in goats. Austral. Vet. J. Sydney 12 1936 pp. 58-61.

312.—Edgar, W. H. Report on a case of epilepsy due to infection by the *Schistosomum japonicum*. J. Roy. Nav. Med. Serv. London 22 1936 pp. 150-153.

313.—Edmondson, W. T. Some Rotatoria from Arizona. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 301-306 1 fig.

314.—Edmondson, W. T. New Rotatoria from New England and New Brunswick. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 214-222 pls. xxvi, xxvii.

315.—Edmondson, W. T. Fixation of sessile Rotatoria. Science N.Y. N.S. 84 1936 p. 444.

316.—Edwards, E. E. Investigations on the nematode disease of potatoes caused by *Anguillulina dipsaci*. J. Helminth. London 14 1936 pp. 41-60.

Eerikens, J. W. *vide* De Langen, C. D.

317.—Eguchi, S. A new species of the Trematode genus *Allocreadium* parasitic in *Oncorhynchus macrostomus*. [In Japanese.] Third Cong. Japan. Parasit. Soc. 1931 p. 20.

318.—Eichler, W. Ameisen als Zwischenträger von Vogelbandwürmern. Ornith. Monatsb. Berlin 44 1936 pp. 173-175.

319.—Eisenbrandt, L. L. Precipitin reactions to helminth extracts. Proc. Soc. exp. Biol. 35 1936 pp. 322-325.

320.—Ekbaum, E. Notes on the genus *Cystidicola* in Canadian fishes. Canad. Field Nat. Ottawa 50 1936 pp. 8-11 10 figs.

321.—Engelen, J. C. Hirudiniasis. Geneesk. Tijdschr. Ned.-Ind. 75 1935 p. 989.

Enigk, K. *vide* Wetzel, R.

322.—Erdeš, D. Ueber die Helminthiasis bei den Schweinen. Jugoslavenski Vet. Glasnik Beograd 12 1932 p. 486.

Espia, M. F. *vide* Le Gac, P.

Fallis, A. M. *vide* La Rue, G. R.

323.—Fantham, H. B. and Porter, A. Some Entozoa of man as seen in Canada and South Africa. Canad. Med. Ass. J. 34 1936 pp. 414-421.

324.—Fantham, H. B. and Porter, A. The pathology of two Trematode infections of *Lymnaea natalensis*. J. Parasit. Urbana 22 1936 pp. 534-535.

325.—Farges, —. Sur quelques foyers de bilharzioses en Côte d'Ivoire. Ann. Méd. Pharm. Colon. 34 1936 pp. 384-387.

326.—Faria, A. and Silva, D. Garoupa vermelha de Abrolhos e S. Thomé, *Garoupa Bichada*, *Tetrarhynchus*. Revist. Dep Nac. Prod. Anim. Rio de Jan. 1 1934 pp. 5-22.

Farrell, C. C. *vide* Glaser, R. W.

327.—Faure, L. Un cas de ladrerie caprine. Ann. Parasit. Paris 14 1936 pp. 485-488.

328.—Faust, E. C. The rôle of aquatic molluscs in the spread of human Trematode infections. China J. Shanghai 16 1932 pp. 350-353.

329.—Faust, E. C. The use of the experimental method in the study of human parasitic infections. Scient. Month. 37 1933 pp. 139-146.

330.—Faust, E. C. Some newer aspects of Schistosome infection in the Western hemisphere. J. Trop. Med. London 38 1935 pp. 249-259.

331.—Faust, E. C. Experimental studies on human and primate species of *Strongyloides*. IV. The pathology of *Strongyloides* infection. Arch. Pathol. 19 1935 pp. 769-806.

332.—Faust, E. C. Strongyloides and strongyloidiasis. Revista Parasitol. Havana 2 1936 pp. 315-341.

333.—Faust, E. C. and Headlee, W. H. Intestinal parasite infections of the ambulatory white clinic population of New Orleans. Amer. J. trop. Med. Baltimore 16 1936 pp. 25-38.

334.—Faust, E. C. and Hoffman, W. A. Studies on schistosomiasis mansonii in Puerto Rico. III. Biological studies. i. The extra-mammalian phases of the life cycle. Puerto Rico J. Publ. Health San Juan 10 1934 pp. 1-97 2 figs. 5 pls.

335.—Faust, E. C. and Tang, C. C. Notes on new Aspidogastrid species, with a consideration of the physiology of the group. Parasitology Cambridge 28 1936 pp. 487-501 14 figs.

Faust, E. C. vide etiam Sayad, W. Y.

336.—Fauvel, P. Annélides Polychètes de l'Annam. Mem. Accad. Nuovi Lincei (3) 2 1935 pp. 279-354.

337.—Fauvel, P. Sur quelques Annélides Polychètes de l'Île de Pâques. Bull. Mus. Hist. nat. Paris (2) 8 1936 p. 257.

338.—Fauvel, P. Contribution à la faune des Annélides Polychètes du Maroc. Mém. Soc. Sci. nat. Maroc 43 1936 pp. 1-143 14 figs.

339.—Fauvel, P. Remarques sur les Néréidiens *Nereis succinea* Leuckart et *Nereis lamellosa* Ehlers. Bull. Soc. zool. Fr. 61 1936 pp. 307-314.

340.—Fauvel, P. Annélides Polychètes du Japon. Mem. Coll. Sci. Kyoto (B) 12 1936 pp. 41-92 1 fig.

341.—Feng, L. C. The development of *Microfilaria malayi* in *A. hyrcanus* var. *sinensis* Wied. Chinese Med. J. Shanghai 1936 suppl. i pp. 345-367.

342.—Ferguson, M. S. Experimental studies on *Neascus vancouveri*. [Abstract.] J. Parasit. Urbana 22 1936 pp. 544-545.

Fermoselli, J. vide Kouri, P.

343.—Ferreira, W. A. *Zygocotyle lunatum* (Diesing, 1835) (Trematoda)

parasito de *Gallus domesticus* L. no Brasil. Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 10 1934 p. 172.

Ferwerda, S. vide Tenhaeff, C.

344.—Feuerborn, H. J. Mitteilung über einen Einbürgerungsversuch mit *Lycastis ranauensis* im Skutari-See. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 255-262.

345.—Feyel, T. Recherches histologiques sur *Nectonema agile* Verr. Etude de la forme parasite. Arch. Anat. micr. Paris 32 1936 pp. 197-234 25 figs.

Field, M. E. vide Augustine, D. L.

346.—Filipjev, I. N. Über *Cryptonchus* Cobb 1913. Miscellanea nematologica III. Zool. Anz. Leipzig 114 1936 pp. 105-106.

347.—Filipjev, I. N. On the classification of the Tylenchinae. Proc. helminth. Soc. Washington 3 1936 pp. 80-82.

348.—Filipjev, I. N. Ueber freilebende und pflanzenparasitische Gattungen der Tylenchinen. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 537-550 17 figs.

349.—Finke, D. Zur Formbildung der Parapodien von *Nereis diversicolor* O. F. Müller. Zool. Jahrb. Jena Anat. 61 1936 pp. 239-242 16 figs.

350.—Fleming, K. M. G. The natural history of Barra, Outer Hebrides. Turbellaria and Nematomorpha. Proc. phys. Soc. Edinb. 22 1936 pp. 264-265.

351.—Fleming, K. M. G. The natural history of Barra, Outer Hebrides. Polychaeta. Proc. phys. Soc. Edinb. 22 1936 pp. 266-267.

352.—Florkin, M. Sur la "surcharge en urée" (Delauney) des hématies du Siponcle. Répartition de l'urée entre hématies et plasma dans les liquides coelomiques pourvus d'hématies. C.R. Soc. Biol. Paris 121 1936 pp. 158-160.

353.—Florkin, M. Taux des substances réductrices et fermentescibles dans les liquides organiques de l'Arénicole, du dasybranche et du siponcle. C.R. Soc. Biol. Paris 123 1936 pp. 1022-1024.

- 354.—Fonseca, R. C., Kouri P. and Basnuevo, J. G. Porcentaje y distribución geográfica del parasitismo intestinal en Cuba (Pinar del Rio, Guanajay, San Luis y Candelaria). *Revista Parasitol. Habana* 1 1935 p. 178.
- 355.—Fonseca, R. C., Kouri, P. and Basnuevo, J. G. Porcentaje y distribución geográfica del parasitismo intestinal en Cuba (Provincia de Pinar del Rio). *Rev. Parasitol. Habana* 1 1935 pp. 206–211.
- 356.—Fonseca, R. C., Kouri, P. and Basnuevo, J. G. Porcentaje y distribución geográfica del parasitismo intestinal en Cuba. *Revista Parasitologia Habana* 2 1936 pp. 69–74, 217–222.
- Fonseca, R. *vide etiam* Kouri, P.
- 357.—Foster, A. O. Parasitic worms of equines in Panama. *Proc. helminth. Soc. Washington* 3 1936 pp. 59–60.
- 358.—Foster, A. O. A quantitative study of the nematodes from a selected group of equines in Panama. *J. Parasit. Urbana* 22 1936 pp. 479–510.
- 359.—Foster, A. O. Parasites of equines in the Panama Canal zone. *J. Parasit. Urbana* 22 1936 p. 528.
- 360.—Foster, A. O. A relationship in equines between age of host and number of Strongylid parasites. *J. Parasit. Urbana* 22 1936 p. 532.
- 361.—Fox, D. L. Further studies of the carotinoids of two Pacific marine fishes and of a marine Annelid, *Thoracophelia* sp. *Proc. Nat. Acad. Sci. Washington* 22 1936 pp. 50–54.
- 362.—Fox, H. M. Metabolism of cold-blooded animals in different latitudes. *Nature London* 137 1936 pp. 903–904 1 fig. [*Phascolosoma*.]
- 363.—Franchini, G. Su di una microfilaria della rana (*Rana esculenta*). *Atti Acc. Nuovi Lincei Roma* 88 1935 pp. 39–40 1 pl.
- 364.—Frankenberg, G. v. Brutpflege bei Egel. *Mikrokosmos Stuttgart* 29 1936 pp. 57–59 5 figs.
- 365.—Fraser, A. H. H. and Robertson, D. The effect of salting pasture on the incidence of stomach worms in sheep. *J. Helminth. London* 14 1936 pp. 101–106.
- 366.—Fraser, A. H. H., Robertson, D. and Ritchie, J. E. The correlation between the worm-burden and live-weight increase of grazing sheep. *J. Helminth. London* 14 1936 pp. 99–100.
- Freeman, A. E. *vide* Ackert, J. E.
- Freeman, A. E. *vide etiam* Reid, W. M.
- 367.—Freitas, J. F. T. de and Almeida, J. L. de. Novo nematodes parasita de ave do Brasil: *Capillaria aramidessi* n. sp. *Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan.* 10 1933 pp. 169–170 pl. xli.
- 368.—Freitas, J. F. T. de and Almeida, J. L. de. Segunda contribuição ao conhecimento da fauna helminthologica da Argentina: *Heteroxynema Wernecki* n. sp. *Mem. Inst. Oswaldo Cruz Rio de Jan.* 31 1936 pp. 185–188 3 pls.
- 369.—Freitas, J. F. T. de and Almeida, J. L. de. O genero *Capillaria* Zeder, 1800 (Nematoda-Trichuroidea) e os capillarioses nas aves domesticas. *Revista Dep. Nac. Prod. Anim.* 2 1935 (1936) pp. 311–363 10 pls.
- 370.—Freitas, J. F. T. de and Lent, H. Sobre o macho de *Capillaria auritae* Trav., 1914, com uma nota a respeito da identidade dos generos *Capillaria* Zeder, 1800 e *Eucoleus* Duj., 1845. *Revista Med.-Cir. Brasil. Rio* 43 1935 pp. 109–111.
- 371.—Freitas, J. F. T. de and Lent, H. Sobre uma nova especie do genero *Trichostrongylus* Looss, 1905. *Revist. Med.-Cir. Brasil. Rio de Jan* 43 1935 pp. 180–181 1 fig.
- 372.—Freitas, J. F. T. de and Lent, H. Nota prévia sobre duas novas especies do genero *Capillaria* (Nematoda), e referencia a novos hospedadores de helminthos conhecidos. *Revist. Med.-Cir. Brasil. Rio de Jan.* 43 1935 pp. 301–303.
- 373.—Freitas, J. F. T. de and Lent, H. Quelques variations et anomalies bursaires observées chez *Viannia viannai* Trav., 1914 et *Viannia hamata* Trav., 1914. *Revist. Med.-Cir. Brasil Rio de Jan.* 43 1935 pp. 253–258 14 figs.

374.—Freitas, J. F. T. de and Lent, H. Estudo sobre o genero *Globocephalus* Molin, 1861 (Nematoda: Strongyloidea). Mem. Inst. Oswaldo Cruz Rio de Jan. 31 1936 pp. 69-79 2 pls.

375.—Freitas, J. F. T. de and Lent, H. Estudo sobre os Capillariinae parasitos de mamíferos (Nematoda: Trichuroidea). Mem. Inst. Osw. Cruz. Rio de J. 31 1936 pp. 85-160.

376.—Freitas, J. F. T. de and Lent, H. O genero *Monopetalonema* Diesing, 1861 (Nematoda: Filarioidea). Mem. Inst. Oswaldo Cruz Rio de Jan. 31 1936 pp. 747-757 3 pls.

Freitas, J. F. T. de vide etiam Lent, H.

377. — Friedrich, H. Nemertini. Grimpe u. Wagler, Die Tierwelt der Nord. u. Ostsee Leipzig Teil 4 (Lfg. 30) 1936 pp. 1-60 18 figs.

378.—Friedrich, H. Einige Bemerkungen zur Anatomie von *Tubulanus borealis* n. sp., einer neuen Paläonemertine aus der Nordsee. Zool. Anz. Leipzig 116 1936 pp. 101-108 5 figs.

379.—Friedrich, H. and Langeloh, H.-P. Untersuchungen zur Physiologie der Bewegung und des Hautmuskelschlauches bei *Halicryptus spinulosus* und *Priapulus caudatus*. Biol. Zbl. Leipzig 56 1936 pp. 249-260 4 figs.

380.—Froilano de Mello, I. An explanation to the occurrence of sporadic cases of urinary schistosomiasis in India. Proc. Indian Acad. Sci. 3 1936 pp. 107-114.

381. — Froissant, A. Contribution à l'étude de quelques trématodes ecto-parasites. Imprimerie de la Cour d'Appel Paris 1930 87 pp. 37 figs. [n.v.]

382.—Fuhrmann, O. Un singulier tenia d'oiseau: *Gynandrotaenia stammeri* nov. g. nov. sp. Ann. Parasitol. Paris 14 1936 pp. 261-271 11 figs.

383. — Fuhrmann, O. *Gynandrotaenia stammeri* nov. gen. nov. spec. Rev. suisse Zool. Geneva 43 1936 pp. 517-518.

384.—Fukui, T. and Morisita, T. Three new species of Acanthocephala from Japan. Zool. Mag. Tokyo 48 1936 pp. 759-764 4 figs.

385.—Fukui, T. and Ogata, T. Note brève sur un nouveau trématode *Tetrochetus hamadai* provenant du *Spheroides spadiceus*. Sci. Rep. Tokyo Bun. Daig. (B) 36 1935 pp. 149-154 1 fig.

386.—Fukui, T. and Ogata, T. Sur deux espèces nouvelles de Trématode provenant de l'*Ocadia sinensis*. Zool. Mag. Tokyo 48 1936 pp. 765-770 5 figs.

387.—Fukui, T. and Ogata, T. A new Trematode from *Ocadia sinensis*. Botany & Zool. Tokyo 4 1936 pp. 1707-1710.

388.—Fuliński, B. Charakterystyka fauny wirków (Turbellaria) w strefie przybrzeżnej małego morza. Arch. Tow. nauk. Lwow (3) 6 i 1933 pp. 1-27 3 figs.

389.—Gabański, J. and Kulmatycki, W. Some annotations about the habitat of *Polycelis cornuta* near Bydgoszcz. Pub. Reg. Comm. Prot. Nat. Poznań. 4 1933 pp. 122-133 2 figs.

Gae, P. B. vide Lele, S. H.

390.—Galambos, R. and Brown, P. F. Potentials developed in contractions of the body wall of *Lumbricus terrestris* [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 36.

391. — Galliard, H. Infestation expérimentale de *Mansonia indiana* avec les embryons de la Filaire de Bancroft au Tonkin. Ann. Parasit. Paris 14 1936 pp. 495-496.

392.—Galliard, H. Procédé de recherche des microfilaires de *Wuchereria*, *F. bancrofti* chez les moustiques desséchés. Ann. Parasit. Paris 14 1936 pp. 519, 520.

393. — Galliard, H. Sur un cas mortel d'anguillulose observé à Hanoi. Bull. Soc. Méd.-Chir. Indochine 14 1936 pp. 335-339.

394.—Galliard, H. La filariose à *Wuchereria bancrofti* dans la région de Hanoi (Tonkin). Bull. Soc. Méd.-Chir. Indochine 14 1936 pp. 439-441.

395.—Galliard, H. Un nouveau cas de distomatose pancréatique à *Clonorchis sinensis*. Bull. Soc. Méd.-Chir. Indochine 14 1936 pp. 442-443.

396.—Galliard, H., Phen-Huy-Quat and Dang-Van-Ngu. Le troisième cas de distomatose pancréatique à *Clonorchis sinensis* observé au Tonkin. Bull. Soc. Méd.-Chin. Indochine 14 1936 pp. 379-383.

397.—Gallien, L. Observations sur l'essaimage de *Nereis* (*Eunereis*) *longissima* Johnston sur la cote boulonnaise. Bull. Soc. zool. Fr. 61 1936 pp. 407-411 2 figs.

398.—Garbarini, P. Rythmes de croissance des oocytes et d'incubation des larves chez *Spirorbis borealis* Daudin. C.R. Soc. Biol. Paris 122 1936 pp. 157-158.

399.—Garbarini, P. Le choix du support pour les larves de *Spirorbis borealis* Daudin. C.R. Soc. Biol. Paris 122 1936 pp. 158-160.

Garcia, E. Y. *vide* Africa, C. M.

400.—Gates, D. W. A preliminary survey of the cestodes and nematodes in parts of New York State. N.Y. State Vet. Col. Rept. 1931-32 1933 pp. 59-60. [n.v.]

401.—Gates, G. E. On some earthworms from the Cameron Highlands, Pahang. Bull. Raffles Mus. Singapore 12 1936 pp. 87-117 10 figs.

402.—Gates, G. E. The earthworms of Burma. V. Rec. Ind. Mus. Calcutta 38 1936 pp. 377-468 6 figs.

Gates, G. E. *vide etiam* Kyaw, M. H.

Gavrilov, W. *vide* Rodhain, J.

403.—Gentile, G. Recherches expérimentales sur le *Taenia echinococcus*. Boll. Sez. Ital. Soc. Intern. Microbiol. 8 1936 pp. 106-111.

Gibson, G. W. *vide* Hodson, W. E. H.

404.—Giglioli, G. A contribution to the study of the etiology of the disease syndrome in *Wuchereria bancrofti* infection. Trans. Soc. Trop. Med. Hyg. London 26 1933 pp. 379-382.

405.—Gilbert, C. M. A comparative study of the three new American species of the genus *Phaenocora* with especial reference to their reproductive organs and their relationships with the other described forms of the genus. Acta zool. Stockholm 16 1935 pp. 283-386 5 pls.

406.—Giles, F. H. The "Toa Songkraut." J. Siam Soc. 10 1935 pp. 62-63.

407.—Gilyard, R. T. The common palisade worm; *Strongylus vulgaris*. Vet. Med. Chicago 30 1935 pp. 254-255.

408.—Ginquito Mira, M. Sulla presenza delle microfilarie di *Onchocerca coecutiens* Brumpt nel nervo ottico. Riforma Med. 50 1934 pp. 858, 861.

409.—Giordano, M. Uno sguardo alle atterali condizioni sanitarie dell'Eritrea. Revist. Parasitol. Habana 2 1936 pp. 355-366.

410.—Giovannola, A. Some observations on the emission of cercariae of *Schistosoma mansoni* (Trematoda: Schistosomatidae) from *Australorbis glabratus*. Proc. helminth. Soc. Washington 3 1936 pp. 60-61.

411.—Giovannola, A. Energy and food reserves in the development of nematodes. J. Parasit. Urbana 22 1936 pp. 207-218 8 figs.

412.—Giovannola, A. Unisexual infection with *Schistosoma mansoni*. J. Parasit. Urbana 22 1936 pp. 289-290 1 fig.

413.—Giovannola, A. Inversion in the periodicity of emission of cercariae from their snail hosts by reversal of light and darkness. J. Parasit. Urbana 22 1936 pp. 292-295 3 figs.

Giraud, — *vide* Jame.

414.—Giroud, A. and Ratsimamanga, R. La vitamine C chez les invertébrés. C.R. Soc. Biol. Paris 120 1935 pp. 763-675.

415.—Glaser, R. W. and Farrell, C. C. Field experiments with the Japanese beetle and its nematode parasite. J. New York Entom. Soc. 43 1935 pp. 345-371.

Gleim, D. L. *vide* Eddy, M. W.

Gobert, E. *vide* Anderson, C.

416.—Godfrey, G. H. Herbaceous ornamentals heavily infested by *Heterodera marioni* (Cornu). Plant Dis. Report. Washington 19 1935 p. 274.

417.—Godfrey, G. H. The demonstration of plant-parasitic nematodes in host tissues. Phytopathology Lancaster Pa. 25 1935 pp. 1026-1030.

- 418.—Godfrey, G. H. The pine-apple root system as affected by the root-knot nematode. *Phytopathology* Lancaster Pa. **26** 1936 pp. 408-428.
- 419.—Godfrey, G. H. and Scott, C. E. New economic hosts of the stem and bulb nematode. *Phytopathology* Lancaster Pa. **24** 1934 p. 1147.
- 420.—Godfrey, G. H. and Scott, C. E. New economic hosts of the stem and bulb infesting nematode. *Phytopathology* Lancaster Pa. **25** 1935 pp. 1003-1010 2 figs.
- 421.—Goffart, H. *Heterodera schachtii* Schmidt on *Galeopsis tetrahit* L. and on cacti. *Z. Parasitenk.* Berlin **8** 1936 pp. 528-532 2 figs.
- 422.—Gogate, B. S. On Trematode parasites from *Ptyas korros* (Schlegel 1837) and *P. mucosus* (Linnaeus 1758) from Rangoon. *Rec. Ind. Mus. Calcutta* **37** 1935 pp. 455-458 1 fig.
- Gonzalez, J. O. *vide* Bachman, G. W.
- Gonzalez, J. R. A. *vide* Martorelli, R. A.
- 423.—Goodey, P. A. A new Dorylaimid nematode *Xiphinema radiculicola* n. sp. *J. Helminth.* London **14** 1936 pp. 69-72 4 figs.
- 424.—Goodey, T. Some applied biological aspects of problems relating to plant-parasitic nematodes. *Ann. Appl. Biol. Cambridge* **23** 1936 pp. 203-230.
- 425.—Goodey, T. On *Anguillulina oryzae* (v. Breda de Haan, 1902) Goodey, 1932, a nematode parasite of the roots of rice, *Oryza sativa* L. *J. Helminth.* London **14** 1936 pp. 107-112 5 figs.
- 426.—Gordon, H. M. Some field observations on various diseases of sheep. *Austral. Veter. J. Sydney* **12** 1936 pp. 28-31.
- Gordon, H. M. *vide etiam* Ross, I. C.
- 427.—Goto, S. and Ishii, N. On a new cestode species, *Amphilina japonica*. *Jap. J. Exp. Med. Tokyo* **14** 1936 pp. 81-83.
- 428.—Gouge, R. E. Cysticercosis in deer. *Veter. Med. Chicago* **31** 1936 p. 259.
- 429.—Gower, C. New sporocyst of *Leucochloridium* from Louisiana. *J. Parasit. Urbana* **22** 1936 pp. 375-378 2 figs.
- 430.—Goyanes, J. Hallazgo de *Trichosomoides crassicauda* Bellingham 1840, en las ratas de Madrid. *Med. Paises Calid. Madrid* **9** 1936 pp. 305-307.
- 431.—Graaf, C. de. Een en ander oner de cysticercosis bij het schaaap. *Tijdschr. Diergeneesk. Utrecht* **63** 1936 pp. 547-556.
- Graaf, C. de *vide etiam* De Graaf, C.
- 432.—Graham, G. L. The fecundity of single *Strongyloides ratti* parasites. *J. Parasit. Urbana* **22** 1936 p. 529.
- 433.—Graham, G. L. Studies on *Strongyloides*. I. *S. ratti* in parasitic series, each generation in the rat established with a single homogonic larva. *Amer. J. Hyg. Baltimore* **24** 1936 pp. 71-87.
- Graham, R. *vide* Torrey, J. P.
- 434.—Grassé, P. P. Parasites et parasitisme. Collection Armand Colin: Section de Biologie no. 176 Paris 1935 224 pp. [N.v.]
- 435.—Greenberg, L. D. and Schmidt, C. L. A. Studies on the properties of a growth-promoting factor for *Planaria maculata*. *J. exp. Zool. Philadelphia* **73** 1936 pp. 375-392 1 fig.
- 436.—Griepenburger - Schee, W. Kluterthöhle, Bismarck- und Rentropshöhle bei Milspe und ihre Tierwelt. *Abh. Westfäl. Provinzial-Mus. Münster i. W.* **6** 5 1935 pp. 1-56 4 figs.
- 437.—Griffiths, H. J. On the fourth stage larva of *Chabertia ovina*. *Canad. J. Sci. Ottawa* **14** (D) 1936 pp. 168-171 5 figs.
- 438.—Guberlet, J. E. Two new ectoparasitic Trematodes from the sting ray, *Myliobatus californicus*. *Amer. Midl. Nat. Notre Dame* **17** 1936 pp. 954-964 12 figs.
- Guberlet, J. E. *vide etiam* Hart, J. F.
- Guberlet, J. E. *vide etiam* Lloyd, L. C.
- 439.—Guenther, D. F. Wurmtoxine und ihre Wirkung im tierischen Organismus. Berlin. Tierärztl. Woch. **1936** pp. 616-618.

440.—Gundy, C. O. Van. *Hymenolepis anthocephalus*, a new tapeworm from the mole shrew, *Blarina brevicauda* Say. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 240–244 pl. xxxix.

441.—Gunnell, F. H. Gonodonts in relation to petroleum. Amer. Midl. Nat. Notre Dame 13 1932 pp. 324–325.

Gurvitsh, G. *vide* Kirjanova, E.

442.—Hall, M. C. Parasitology in relation to public health. Virginia Med. Month. 61 1935 pp. 588–594.

443.—Hall, M. C. The eradication of parasites vs. the adjustment to parasitism. North Amer. Veter. Chicago 17 1936 iii pp. 17–19.

444.—Hall, M. C. Control of animal parasites. North Amer. Vet. Chicago 1936 162 pp.

445.—Hall, M. C. Problems of parasitism in Hawaii. Revista Parasitol. Havana 2 1936 pp. 367–383.

446.—Hall, M. C. and Collins, B. J. Studies on trichinosis. I. The incidence of trichinosis as indicated by post-mortem examination of 300 diaphragms. J. Parasit. Urbana 22 1936 p. 532.

447.—Hall, M. C. and Collins, B. J. Studies on trichinosis. II. Some correlations and implications in connection with the incidence of trichinae found in 300 diaphragms. J. Parasit. Urbana 22 1936 p. 533.

448.—Hanifuh, A. Over Hirudiniasis. Geneesk. Tijdschr. Ned.-Ind. 75 1935 p. 1987.

Hansen, H. N. *vide* Smith, R. E.

449.—Harant, H. and Vernières, P. Hirudinea. Mém. Mus. Hist. nat. Paris 4 1936 pp. 219–226 5 figs.

450.—Harega, N. Nota asupra conținutului stomacal al unor pești marini și limnici din regiunea Jibrieni și Volcioi. [Notiz über den Mageninhalt einiger mariner und limnischer Fische aus der Gegend von Jibrieni und Volcioi (Südbessarabien).] Bull. Mus. nat. Kichineff. 6 1935 pp. 38–41.

451.—Harkema, R. The parasites of some North Carolina rodents. Ecol. Monogr. Durham N.C. 6 1936 pp. 153–232.

452.—Harris, R. W. Occurrence and significance of certain micro-fauna in the Ordovician of Oklahoma and elsewhere. Proc. Okl. Acad. Sci. 12 1932 pp. 56–59 pls. xi–xiii.

453.—Hart, J. F. Cestoda from fishes of Puget Sound. II. Tetra rhynchoidea. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 369–387 pls. xlv–xlvii.

454.—Hart, J. F. Cestoda from fishes of Puget Sound. III. Phyllobothrioidea. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 488–496 pl. lxii.

455.—Hart, J. F. and Guberlet, J. E. Cestoda from fishes of Puget Sound. I. Spathebothrioidea, a new superfamily. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 199–207 pls. xxiv, xxv.

456.—Hartman, O. Nomenclatorial changes involving California polychaete worms. J. Wash. Acad. Sci. 26 1936 pp. 31–32.

457.—Hartman, O. New species of Spionidae (Annelida Polychaeta) from the coast of California. Univ. Calif. Pub. Zool. 41 1936 pp. 45–52 22 figs.

458.—Hartman, O. New species of Polychaetous Annelids of the family Nereidae from California. Proc. U.S. nat. mus. 83 1936 pp. 467–480 figs. 46–53.

459.—Hartman, O. A review of the Phyllodocidae (Annelida Polychaeta) of the coast of California with descriptions of nine new species. Univ. Calif. Pub. Zool. 41 1936 pp. 117–132 51 figs.

460.—Hartmann, M. and Huth, W. Untersuchungen über Geschlechtsbestimmung und Geschlechts-umwandlung von *Ophryotrocha puerilis*. Zool. Jahrb. Jena Allg. Zool. 56 1936 pp. 389–439 17 figs.

461.—Harwood, P. D. Notes on Tennessee Helminths. III. Two Trematodes from the kingfisher. J. Tenn. Acad. Sci. 11 1936 pp. 251–256.

462.—Hatai, S. and Ohfuchi, S. Description of one new species of the genus *Pheretima*. Science Rep. Tôhoku Imp. Univ. Sendai Japan 10 1936 pp. 767–772 10 figs.

463.—**Hau, A. K.** Der Wundverschluss der Planarien, ein fermentativer Gerinnungsprozess. Arch. Entw. Mech. Org. Berlin **134** 1936 pp. 751–762 6 figs.

464.—**Hauer, J.** Zur Rotatorienfauna Deutschlands (V). Zool. Anz. Leipzig **113** 1936 pp. 154–157 3 figs.

465.—**Hauer, J.** Zur Rotatorienfauna Deutschlands (VI). Zool. Anz. Leipzig **115** 1936 pp. 334–336 1 fig.

466.—**Hauer, J.** Neue Rotatorienarten aus Indien. Zool. Anz. Leipzig **116** 1936 pp. 77–80 8 figs.

467.—**Hauer, J.** Rädertiere aus dem Naturschutzgebiet Weingartener Moor. Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i. B. **1** 1936 pp. 129–152 2 pls.

Hawkes, R. S. vide Drake, E. H.

468.—**Headlee, W. H. and Cable, R. M.** Studies of intestinal parasites of students of Berea College, Kentucky. J. Parasit. Urbana **22** 1936 p. 530.

Headlee, W. H. vide etiam Faust, E. C.

469.—**Heathman, L. S.** Laboratory diagnosis in trichinosis. Amer. J. Hyg. Baltimore **23** 1936 pp. 397–409.

Hedden, R. S. vide Weimer, B. R.

470.—**Hedrick, L. R.** The life history and morphology of *Spiroxya contortus* (Rudolphi); Nematoda: Spiruridae. Trans. Amer. micr. Soc. Menasha **54** 1935 pp. 307–335 pls. xlix, l.

Hefley, H. M. vide Trowbridge, A. H.

471.—**Heinze, K.** Die bisher aus der Mark Brandenburg sicher behauten Gordiiden. Märk. Tierw. Berlin **2** 1936 pp. 25–31.

472.—**Heinze, K.** Ein neuer Acanthocephale aus der Polarmöwe. Zool. Anz. Leipzig **115** 1936 pp. 139–142 3 figs.

473.—**Hellesnes, P.** Rensnryltene. Norsk. Veterin. Tidsskr. **47** 1935 pp. 117–137, 194–204.

474.—**Hennig, E.** Wesen und Wege der Paläontologie Berlin 1932 512 pp. 198 figs. [Vermes pp. 150–155.]

475.—**Herbst, C.** Untersuchungen zur Bestimmung des Geschlechts. V. Mitteilung. Die Notwendigkeit des

Magnesiums für die Lebenserhaltung und Weiterentwicklung der *Bonellia*-Larven und seine Bedeutung für die geschlechtliche Differenzierung derselben. Arch. Entw. Mech. Org. Berlin **134** 1936 pp. 313–330.

476.—**Herbst, C.** Untersuchungen zur Bestimmung des Geschlechtes. VI. Mitteilung. Neue Gedanken zur Geschlechtsbestimmung bei Tieren. Arch. Entw. Mech. Org. Berlin **135** 1936 pp. 178–201 9 figs.

477.—**Herter, K.** Hirudinea. Grimpe u. Wagler, Die Tierwelt der Nord. u. Ostsee Lfg. **29** (Teil 6 C2) Leipzig 1936. pp. 45–106 36 figs.

478.—**Herter, K.** Hirudineen (contd.) Bronns Klassen u. Ordnungen des Tierreichs Bd. **4** Abt. **3** Buch **4** Teil **2** Lfg. **2** Leipzig 1936 pp. 129–319 figs. 94–202.

Herter, K. vide etiam Schleip, W.

479.—**Hewitt, R.** The culture of a free-living nematode (genus *Rhabditis*) and its use as classroom material. Science N.Y. N.S. **84** 1936 p. 92.

480.—**Hilmy, I. S.** Parasites from Liberia and French Guinea. Part III. Cestodes from Liberia. Egypt. Univ. Fac. Med. Publ. no. **9** 1936 72 pp. 10 pls.

481.—**Hinman, E. H.** Attempted reversal of filarial periodicity in *Dirofilaria immitis*. Proc. Soc. exp. Biol. **33** 1936 pp. 524–527 2 figs.

482.—**Hinman, E. H. and Baker, D. D.** Helminthological survey of 1,315 dogs from New Orleans with special reference to age resistance. J. Trop. Med. London **39** 1936 pp. 101–104.

Hinman, E. H. vide etiam Baker, D. D.

483.—**Hiraiwa, Y. K. and Kawamura, T.** Relation between maturation division and cleavage in artificially activated eggs of *Urechis unicinctus* (Von Drasche). Biol. Bull. Woods Hole **70** 1936 pp. 344–351 4 figs.

484.—**Hiraiwa, Y. K. and Kawamura, T.** Studies on the artificial parthenogenesis of *Urechis unicinctus* (Von Drasche). J. Sci. Hiroshima Univ. Zool. **4** 1935 pp. 35–67 3 pls.

485.—Hodson, W. E. H. Stem eelworm in potato. *Estate Mag.* **34** 1934 pp. 275–276.

486.—Hodson, W. E. H. and Gibson, G. W. On *Aphelenchoides hodsoni* Goodey, attacking narcissus. *J. Helminth.* London **14** 1936 pp. 93–98 3 figs.

487.—Hoepli, R. Action of *Ascaris lumbricoides* substance on the growth of fibroblasts in vitro. *Acta Pathol. Microb. Scand.* **12** 1935 pp. 281–289 3 figs.

Hoepli, R. J. C. *vide etiam* Hu, C. H.

488.—Hoff, F. and Sauerstein, H. Über Bothriocephalus-Anämie. *Klin. Woch.* **15** 1936 pp. 131–135.

489.—Hoffman, W. A. An abnormal ovary in *Fasciola hepatica* (Trematoda: Fasciolidae). *Proc. helminth. Soc. Washington* **3** 1936 p. 62 fig. 17.

490.—Hoffman, W. A. and Janer, J. L. Miracidial twinning in *Schistosoma mansoni* (Trematoda: Schistosomatidae). *Proc. helminth. Soc. Washington* **3** 1936 p. 62.

Hoffman, W. A. *vide etiam* Faust, E. C.

491.—Holl, F. J. and Aillison, L. N. A new Trematode *Dasymetra nicolli* from a snake. *Trans. Amer. micr. Soc. Menasha* **54** 1935 pp. 226–228 pl. xxxvii.

492.—Holly, M. Zur Nomenklatur der Polychaeten-Gattung *Pomato-ceropsis* Holly. *Zool. Anz. Leipzig* **114** 1936 p. 223.

493.—Homann, W. Zur Frage nach den Einfluss des Bauchmarkes auf die Regeneration des Vorderendes bei *Lumbricus*. *Z. wiss. Zool. Leipzig* **148** 1936 pp. 67–88 19 figs.

494.—Honjo, I. Zum nervösen Mechanismus der Gehbewegungen beim Blutegel. *Annot. zool. jap.* **15** 1936 pp. 378–381.

495.—Horsfall, M. W. Notes on the spread, in one year, of helminths from infected to uninfected poultry yards. *Proc. helminth. Soc. Washington* **3** 1936 p. 66.

Horsfall, M. W. *vide etiam* Jones, M. F.

496.—Houdemer, Doderer and Cornet. Les sparganoses animales oculistes en Indo-Chine et la sparganose. *Ann. Oculistique* **171** 1934 pp. 311–338.

497.—Howell, C. D. Responses to light in the earthworm, *Pheretima* sp. [Abstract.] *Anat. Rec. Philadelphia* **67** 1936 suppl. i p. 53.

498.—Hrabe, S. *Trichodrilus Strandii* n. sp., ein neuer Vertreter der Höhlen-Lumbriculiden. *Festschrift f. Embrik Strand Riga* **1** 1936 pp. 404–407 4 figs.

499.—Hsü, H. F. Check list of parasitic helminths of animals and man in China. *Chinese Med. J. Shanghai* 1936 suppl. pp. 457–473.

500.—Hsü, H. F. Studien zur Systematik und Entwicklungsgeschichte der Gattung *Leucochloridium* Carus. II. Über zwei *Leucochloridium*-Arten der Kurischen Nehrung sowie über Fütterungsversuche mit grünen Sporocysten dieser Gattung. *Z. Parasitenk. Berlin* **8** 1936 pp. 714–728 13 figs.

501.—Hu, C. H. and Hoepli, R. J. C. The migration route of *Spirocerca sanguinolenta* in experimentally infected dogs. *Chinese Med. J. Shanghai* 1936 suppl. pp. 293–311 7 pls.

Hudson, C. B. *vide* Beaudette, F. R.

502.—Huff, G. C. Experimental studies of factors influencing the development of the eggs of pig ascarid (*Ascaris suum* Goetze). *J. Parasit. Urbana* **22** 1936 pp. 455–463 2 figs.

503.—Huff, G. C. and Boell, E. J. Effect of ultra centrifuging on oxygen consumption of the eggs of *Ascaris suum* Goetze. *Proc. Soc. exp. Biol.* **34** 1936 pp. 626–628.

504.—Huff, G. C. and Bucy, P. C. An abnormal *Cysticercus cellulosae* from a human brain. *J. Parasit. Urbana* **22** 1936 pp. 110 1 fig.

Hulse, C. R. *vide* O'Connor, F. W.

505.—Humphrey, H. B. and Wood, J. I. Diseases of plants in the United States in 1933. *Plant Dis. Rep. Suppl. No.* **86** 1935 107 pp.

506.—Humphries, C. F. An investigation of the profundal and sublittoral fauna of Windermere. *J. Animal Ecol.* **5** 1936 pp. 29–52.

507.—Hungerford, T. G. Worms in poultry. Agric. Gaz. N.S. Wales Sydney 47 1936 p. 226.

508.—Hunnicut, T. N. An anemia associated with a fish tapeworm (*Diphyllbothrium latum*) infestation. J. Amer. Med. Ass. Chicago 104 1935 pp. 1984-1986.

509.—Hunninen, A. V. An experimental study of internal autoinfection with *Hymenolysis fraterna* in white mice. J. Parasit. Urbana 22 1936 pp. 84-87 1 fig.

Hunninen, A. V. *vide etiam* Hunter, G. W.

510.—Hunter, G. W. Penetration of the common sunfish by the Holostome cercaria, *C. multicellulata*. J. Parasit. Urbana 22 1936 p. 542.

511.—Hunter, G. W. and Dalton, H. C. Studies on *Clinostomum*. V. The cyst of the yellow grub of fish (*C. marginatum*). [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 87.

512.—Hunter, G. W. and Hunninen, A. V. Studies on the plerocercoid larva of the bass tapeworm, *Proteocephalus ambloplitis* (Leidy), in the small-mouthed bass. Ann. Rept. N.Y. State Conserv. Dept. Albany 23 1933 suppl. viii 1934 pp. 255-261 3 figs.

513.—Hunter, G. W. and Hunter, W. S. Studies on fish and bird parasites. Ann. Rept. N.Y. State Conserv. Dept. Albany 23 1933 suppl. viii 1934 pp. 245-254 4 figs.

514.—Hunter, G. W. and Hunter, W. S. Further studies on fish and bird parasites. Ann. Rept. N.Y. State Conserv. Dept. Albany 24 1934 ix 1935 pp. 267-283 3 pls.

515.—Hunter, G. W. and Hunter, W. S. Studies in host reactions to larval parasites. I. Effect on weight. [Abstract.] Anat. Rec. Philadelphia 67 1935 suppl. i p. 129.

Hunter, G. W. *vide etiam* Bangham, R. V.

Hunter, W. S. *vide* Hunter, G. W.

Huth, W. *vide* Hartmann, M.

516.—Hyman, L. H. Studies on the morphology, taxonomy, and distribution of North American Triclad

Turbellaria. VI. A new Dendrocoelid from Montana, *Dendrocoelopsis vaginatus* n. sp. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 338-344 pl. li.

517.—Hyman, L. H. Studies on the Rhabdocoela of North America. I. On *Macrostomum tubum* (Von Graff) 1882. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 14-20 pl. iii.

518.—Hyman, L. H. Copulation in the acœlous Turbellarian *Amphiscolops langerhansii*. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 128.

519.—Hyman, L. H. Some cave Planarians of the United States. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 129.

520.—Ibscher, K. Bemerkenswerte Fleischbeschäufelungen. Echinokokken beim Pferde. Zeitschr. Fleisch. Milchhyg. Berlin 45 1935 pp. 187-188.

521.—Ide, K. On a new second intermediate host of *Clonorchis sinensis*, wakasagi (*Hypomedus olidus* (Pallas)) Kitasato Arch. Exper. Med. Tokyo 13 1936 pp. 40-44 1 fig.

522.—Ide, K. Significance of *Hemibarbus barbus* (Temminck and Schlegel) as the second intermediate host of *Clonorchis sinensis*. Kitasato Arch. Exper. Med. Tokyo 13 1936 pp. 45-47 1 fig.

523.—Iglesias, A. S. El parasitismo intestinal en la población escolar de San Ramón y algunas sugerencias de orden profiláctico. Rev. Méd. Peruana 8 1936 pp. 306-316 15 figs.

524.—Ikeda, K. and Makino, S. Studies on the sex and chromosomes of the oriental human blood fluke, *Schistosomum japonicum* Katsurada. J. Fac. Sci. Hokkaido Univ. Zool. 5 1936 pp. 57-71 16 figs.

Imaizami, H. *vide* Morioka, K.

525.—Ingles, L. G. Notes on the development of a Heterophyid Trematode. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 19-21 pl. iv.

526.—Ingles, L. G. Worm parasites of California Amphibia. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 73-92 pls. xvi-xviii.

527.—Inoue, T. Periodicity of the larvae of *Dirofilaria immitis*. Keio Ig. 15 1935 pp. 1423-1432. [Abstract in Japan. J. Zool. 7 1936 p. (10).]

528.—Ionescu, M. A. Cateva animale rare din fauna României. Bul. Soc. Nat. România București 3 1933 pp. 3-7 3 figs. [*Rhynchodemus terrestris* p. 5.]

529.—Ionescu, M. A. *Geocentrophora sphyrocephala* de Man, in frunzarul de fag dela Sinaia. Bul. Soc. Nat. România București 6 1934 pp. 7-10 1 fig.

530.—Ishii, N. Some new ectoparasitic Trematodes of marine fishes. Zool. Mag. Tokyo 48 1936 pp. 781-790 12 figs.

Ishii, N. *vide etiam* Goto, S.

Ishikawa, H. *vide* Okuda, S.

531.—Ito, T. Zytologische Untersuchungen über die Ganglienzellen des japanischen medizinischen Blutegels, *Hirudo nipponica*, mit besonderer Berücksichtigung auf die "dunkle Ganglienzelle." Folia anat. japon. 14 1936 pp. 111-170 34 figs. pls. ix, x.

532.—Ito, T. Zur Zytologie der Gliazellen in der Bauchganglionkette des japanischen medizinischen Blutegels, *Hirudo nipponica*. Folia anat. japon. 14 1936 pp. 389-411 pls. xii-xx.

533.—Iwata, S. *Diphyllbothrium mansonoides* Mueller is the synonym of *D. erinacei* (Rudolphi). Zool. Mag. Tokyo 48 1936 pp. 665-668 pl. xxiii.

534.—Iyengar, M. O. T. Entry of *Filaria* larvae into the body cavity of the mosquito. Parasitology Cambridge 28 1936 pp. 190-194 3 figs. pl. vi.

Iyer, P. V. S. *vide* Menon, K. P.

535.—Jackson, R. B. Some observations on the occurrence of filarial infection in mosquito and man in the colony of Hong Kong. Chinese Med. J. Shanghai 50 1936 pp. 1767-1772.

536.—Jägersten, G. Studien über den histologischen Bau der männlichen Geschlechtsorgane und die Ausbildung des Spermiums bei *Myzostomum*. Zool. Bidr. Uppsala 15 1934 pp. 1-22 2 pls.

537.—Jame, Giraud and Crosnier. Un cas de polyparasitisme d'origine exotique. Bull. Soc. Path. Exot. Paris 29 1936 pp. 49-55.

Janer, J. L. *vide* Hoffman, W. A.

538.—Janicki, M. J. Ein seltener Fall des Auftretens von *Diectophyme renale* (Goeze 1782) mit Berücksichtigung der Veränderungen, welche dieser Parasit in den Organen der Leibeshöhle vom Hunde hervorrief. Folia morphol. Warsaw 6 1936 pp. 280-299 1 fig. 2 pls.

539.—Jarrett, V. H. C. Further notes on the catching of "Pumpun." Malayan Nat. Singapore 2 1928 pp. 43-44.

540.—Jastrzebski, T. La ladrerie du cerveau chez le chien. [In Polish.] Wiadom. Weteryn. Wawsaw 7 1928 pp. 399-403 2 figs.

541.—Jellison, W. L. The occurrence of the cestode *Moniezia benedeni* (Anoplocephalidae) in the American moose. Proc. helminth. Soc. Washington 3 1936 p. 16.

542.—Jerstad, A. C. The gizzard worm, *Amidostomum anseris*, of geese in Western Washington. J. Amer. Vet. Med. Ass. 89 1936 pp. 318-320.

543.—Jeschikov, J. Metamorphose, Cryptometabolie und direkte Entwicklung. Zool. Anz. Leipzig 114 1936 pp. 141-152. [*Lineus* p. 146.]

Jesus, Z. de *vide* De Jesus, Z.

544.—Johnson, L. R. Observations on the occurrence of *Anguillulina dipsaci* (Kühn, 1858) on rhubarb in Yorkshire. J. Helminth. London 14 1936 pp. 77-84 3 figs.

545.—Johnson, L. R. A note on the occurrence of *Anguillulina dipsaci* (Kühn, 1858) on certain weeds, including a new host record. J. Helminth. London 14 1936 pp. 233-235.

546.—Johnson, L. R. and Thompson, H. W. *Heterodera schachtii* on tomatoes in Yorkshire. J. Min. Agric. London 43 1936 p. 48.

Johnson, V. M. *vide* Sayad, W. Y.

547.—Johnston, T. H. Remarks on the cestode genus *Porotaenia*. Trans. roy. Soc. S. Australia 59 1935 pp. 164-167.

548.—Johri, L. N. On a new Cestode from the intestine of Lucknow pigeons. Proc. Indian Sci. Congr. 17 1930 p. 362.

549.—Jones, M. F. *Metroliaesthes lucida*, a cestode of galliform birds, in anthropod and avian hosts, Proc. helminth. Soc. Washington 3 1936 pp. 26–30 fig. 10.

550.—Jones, M. F. A new species of cestode, *Davainea meleagridis* (Davaineidae) from the turkey, with a key to the species of *Davainea* from galliform birds. Proc. helminth. Soc. Washington 3 1936 pp. 49–52 fig. 15.

551.—Jones, M. F. and Horsfall, M. W. The life history of a poultry cestode. Science N.Y. N.S. 83 1936 pp. 303–304.

552.—Joyeux, C. Notions sur les Trematodes sanguicoles. Biol. Méd. Paris 20 1930 x pp. 1–16.

553.—Joyeux, C. Recherches helminthologiques dans la région de Marseille. Revista Parasitol. Havana 2 1936 pp. 413–419.

554.—Joyeux, Ch. and Baer, J.-G. Notices helminthologiques. Bull. Soc. zool. Fr. 60 1936 pp. 482–501 4 figs.

555.—Joyeux, Ch. and Baer, J.-G. Quelques helminthes nouveaux et peu connus de la Musaraigne, *Crocidura russula* Herm. (Première partie, Trématodes et Cestodes). Rev. suisse Zool. Genève 43 1936 pp. 25–50 16 figs.

556.—Joyeux, Ch. and Baer, J.-G. Cestodes. Faune de France Paris 30 1936 613 pp. 569 figs.

557.—Joyeux, C. and Baer, J.-G. Recherches biologiques sur la Ligule intestinale; réinfestation parasitaire. C.R. Soc. Biol. Paris 121 1936 pp. 67–68.

558.—Joyeux, C. and Baer, J. Helminthes des rats de Madagascar. Contribution à l'étude de *Davainea madagascariensis* (Dav., 1869). Bull. Soc. Path. Exot. Paris 29 1936 pp. 611–619.

559.—Joyeux, C., Baer, J. and Martin, R. Sur quelques cestodes de la Somalie-Nord. Bull. Soc. Path. Exot. Paris 29 1936 pp. 82–95 9 figs.

560.—Joyeux, C. and Timon-David, J. Cestodes d'oiseaux de la région marseillaise. Ann. Fac. Sci. Marseille (2) 9 1936 pp. 65–77.

Joyeux, C. *vide etiam* Zwirn, D.

Jullien, A. *vide* Bonnet, A.

561.—Jutting, T. v. B. Sur un cas de symbiose entre un mollusque et une triclade terricole. J. Conchyliol. Paris 76 1932 pp. 262–266.

562.—Kahl, W. Kerbschnittversuche an postpharyngealen Schwanzteilen von *Planaria gonocephala*. Z. wiss. Zool. Leipzig 147 1936 pp. 357–394 16 figs.

563.—Kahl, W. Beitrag zur Kenntnis des Nematoden *Contracaecum clavatum* Rud. Z. Parasitenk. Berlin 8 1936 pp. 509–520 10 figs.

564.—Kahl, W. Befall der Lunge mit dem Fadenwurm *Otostrongylus circumlitus* als Todesursache bei Seehunden. Zool. Garten Leipzig (N.F.) 8 1936 pp. 295–297 3 figs.

565.—Kalwaryjski, B. E. Ueber Jodaufspeicherung und Jodbindung durch die Muskeltrichinen. Zbl. Bakt. Jena (Orig.) 108 1928 pp. 186–192 1 pl.

566.—Kalwaryjski, B. E. Studien über die Trichinen. II. Ueber Jodsilberimprägation der Muskeltrichinen. Zbl. Bakt. Jena (Originale) 137 1936 pp. 303–312 4 figs.

567.—Kamada, T. Distribution of water osmotically absorbed into the egg cell. Zool. Mag. Tokyo 48 1936 pp. 153–155.

568.—Kan, H. C. Intracutaneous test with *Schistosoma japonicum* antigen. (Preliminary report.) Chinese Med. J. Shanghai 1936 suppl. pp. 387–393.

569.—Kan, H. C. and Kung, J. C. Incidence of Schistosomiasis japonica in an endemic area in Chekiang. Chinese Med. J. Shanghai 1936 suppl. pp. 449–456 3 figs.

570.—Karaman, S. Die Fauna der unterirdischen Gewässer Jugoslaviens. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 46–73 5 figs.

571.—Kataoka, N. and Momma, K. Helminthes from the salmonoid fish, *Plecoglossus altivelis* T. & S. Bull. Jap. Soc. Scient. Fisheries 3 1934 pp. 59–64 2 figs.

572.—Kataoka, N. and Momma, K. A preliminary note on the life-history of *Proteocephalus neglectus*, with special reference to its intermediate host. Bull. Jap. Soc. Scient. Fisheries 3 1934 pp. 125–126 5 figs.

573.—Kato, H. A new Polyclad Turbellarian, *Cryptocelis amakusaensis*, from Southern Japan. Jap. J. Zool. Tokyo 7 1936 pp. 17–20 pl. i 3 figs.

574.—Kato, H. Notes on *Paraplanocera*. Jap. J. Zool. Tokyo 7 2 text-figs. pp. 21–31 5 figs.

575.—Kato, K. *Discoplana takewakii* sp. nov., a Polyclad parasitic in the genital bursa of the Ophiurian. Annot. zool. jap. 15 1935 pp. 149–156 2 text-figs. pl. x.

576.—Katsudara, F. Beiträge zur Kenntnis der Biologie und der pathogenen Bedeutung der Trematoden. Zool. Mag. Tokyo 48 1936 pp. 685–691.

577.—Kauzal, G. Further studies on the pathogenic importance of *Chabertia ovina*. Austral. Vet. J. Sydney 12 1936 pp. 107–110.

578.—Kawai, T. On the resistance of infective (filariform) larvae of *Strongyloides stercoralis* against chemicals. [In Japanese, with English summary.] Taiwan Igak. Zasshi 34 1935 pp. 2051–2060.

579.—Kawai, T. and Yumoto, Y. On the distribution of the encysted cercariae of *Clonorchis sinensis* (Cobbold) in the second intermediate host, *Pseudorasbora parva* (Temminck & Schlegel) and the rate of their infections to the mammalian hosts. Taiwan Igakk. Zasshi 35 1935 pp. 880–887. [In Japanese, with English summary.]

Kawamura, T. *vide* Hiraiwa, Y. K.

580.—Kawana, H. Study on *Clonorchis sinensis* in the District of Shanghai. III. Dogs, cats, and rats as reservoir hosts of *Clonorchis*. J. Shanghai Sci. Inst. (4) 2 1936 pp. 75–84.

Kawana, H. *vide etiam* Komiya, Y.

581.—Keller, A. E. and Leathers, W. S. The incidence and distribution of *Ascaris lumbricoides*, *Trichuris trichiura*, *Hymenolepis nana* and *Hymenolepis diminuta* in thirty-six counties in Kentucky. Amer. J. Hyg. Baltimore 23 1936 pp. 216–230.

Keller, A. E. *vide etiam* Leathers, W. S.

582.—Keller, —. Untersuchungen über die Lebensfähigkeit und Invasions-tüchtigkeit der Rinderfinne bei -1° zu -1.5° C. Z. Fleisch. Milchhyg. Berlin 46 1936 pp. 189–191.

583.—Kenk, R. Die Höhlentrikladen Sloveniens. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 87–91.

584.—Kenk, R. Eine neue Höhlentriklade, *Fonticola opisthogona* n. sp. Zool. Anz. Leipzig 113 1936 pp. 305–314 3 figs.

585.—Kenk, R. Bemerkung zur Trikladenfauna Turkestans. Zool. Anz. Leipzig 115 1936 pp. 76–80 1 fig.

586.—Kerr, K. B. Studies on acquired immunity to the dog hookworm, *Ancylostoma caninum*. Amer. J. Hyg. Baltimore 24 1936 pp. 381–406 pls. i–iv.

587.—Khalil, M. Intermediate host of *Heterophyes*. Ann. Rept. Research Inst. Cairo for 1933. [N.v. *vide* Nature London 136 1935 p. 431.]

588.—Khalil, M. *Heterophyes heterophyes*. J. Egypt. Med. Ass. Cairo 19 1936 p. 183.

589.—Khalil, M. and Azim, M. A. The introduction of *Schistosoma* infection through irrigation schemes in the Asswan area, Egypt. J. Egypt. Med. Ass. Cairo 18 1935 pp. 371–377 2 figs.

590.—Khalil, M. and Azim, M. A. An epidemic-like increase of mortality due to intestinal schistosomiasis in an Egyptian village. J. Egypt. Med. Ass. Cairo 10 1936 pp. 475–495 2 figs.

King, R. L. *vide* Beams, H. W.

591.—Kirjanova, E. S. The nematodes of cultivated plants in the western region of Russia. [In Russian, with English summary.] Mag. Parasitologie U.R.S.S. 5 1935 pp. 253–299.

592.—Kirjanova, E. S. Zur Frage über die vertikale und horizontale Verteilung der Fauna der Wirbellosen in den Erdschichten der Umgegend von Tashkent. [In Russian, with German summary.] Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 309–352 2 pls.

593.—Kirjanova, E. and Gurvitsh, G. The fauna of Nematodes of Orenburg's steppe, near the village Saverovka with prognostics of its potential influence on the yield in the case of cultivation. [In Russian.] Summary Sci. Res. Work Inst. Plant Protect. Leningrad 1035 [1936] pp. 85-88.

594.—Koba, K. Studies on the Japanese Potamonidae (1): Notes on *Potamon rathbuni* De Man as a second intermediate host of *Paragonimus westermani* (Kerbert) in Formosa. Trans. nat. Hist. Soc. Formosa 26 1936 pp. 164-174 pl. ii.

595.—Kobayashi, S. The spectral properties of haemoglobin in the earthworms *Pheretima communissima* (Goto & Hatai) and *Pheretima hilgendorfi* (Michaelsen). Science Rep. Tôhoku Imp. Univ. Sendai (4) 10 1936 pp. 733-752 4 figs.

596.—Kobayashi, S. Distribution and some external characteristics of *Pheretima carnosus* (Goto et Hatai) from Korea. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 115-138 3 figs.

597.—Kobayashi, S. Earthworms from Kôryô, Korea. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 139-184 15 figs.

Kobayashi, S. *vide etiam* Nomura, S.

598.—Koford, C. A. and Williams, O. L. The nematode *Thelazia californiensis* as a parasite of the eye of man in California. Arch. Ophthalm. 13 1935 pp. 176-180 5 figs.

599.—Koidzumi, M. and Yamada, K. On a rare case of *Plerocercus* parasitic in a monkey. Keio Ig. 15 1935 pp. 941-945. [Abstract in Japan J. Zool. 7 1936 p. (9).]

600.—Komárek, J. Luminescence of Carpathian worms and its causes. Bull. int. Acad. Prague 35 1934 pp. 63-64.

601.—Komárek, J. Luminescence karpatské deštovky a její příčiny. Rozpr. české Akad. Praha 44 10 1935 pp. 1-10 4 figs.

602.—Komiya, Y. Study on *Clonorchis sinensis* in the District of Shanghai. 2. On the habit of eating fresh-water fish. J. Shanghai Sci. Inst. (4) 2 1936 pp. 61-73.

603.—Komiya, Y. and Kawana, H. Study on *Clonorchis sinensis* in the District of Shanghai. 4. The second intermediate hosts of *Clonorchis*. J. Shanghai Sci. Inst. (4) 2 1936 pp. 155-167 3 pls.

604.—Komiya, Y., Kawana, H. and Tao, C. S. On the prevalence of helminthiasis among the Japanese and Chinese in the District of Shanghai. I. J. Shanghai Sci. Inst. (4) 2 1936 pp. 85-94.

605.—Komiya, Y., Kawana, H. and Tao, C. S. On the prevalence of helminthiasis among the Japanese and Chinese in the District of Shanghai. II. J. Shanghai Sci. Inst. (4) 2 1936 pp. 95-107.

606.—Komiya, Y., Kawana, H. and Tao, C. S. On the prevalence of helminthiasis among the Japanese and Chinese in the District of Shanghai. III. J. Shanghai Sci. Inst. (4) 2 1936 pp. 117-138.

607.—Komiya, Y., Kawana, H. and Tao, C. S. On the prevalence of helminthiasis among the Japanese and Chinese in the District of Shanghai. IV. Results of examination of Helminth ova among the Japanese students of the Girls High School, Commercial School and Tung Wen College. J. Shanghai Sci. Inst. (4) 2 1936 pp. 139-154.

608.—Kondô, M. A list of naidiform Oligochaeta from the waterworks plant of the city of Osaka. Annot. zool. jap. 15 1936 pp. 382-393 pls. xxiii, xxiv.

Koo, C. *vide* Morioka, K.

609.—Kopenhauer, M. E. Water absorbing properties of Oligochaete tissues. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 55.

610.—Korkhaus, R. Bemerkungen zur Biologie der Metastrongyliden und zur Diagnostik des Lungenwurmbefalles. Eine Entgegnung an E. Lührs. Arch. Wiss. Prakt. Tierheilk. Berlin 66 1933 pp. 439-442.

611.—Korkhaus, R. Zur Kenntnis der Vogelparasiten. Untersuchungen über den Befall von Zugkrähen, insbesondere über die im Krähenkot ausgeschiedenen Parasiteneier. Tierärztl. Rdsch. 41 1935 pp. 17-21, 38-40 12 figs. 1 pl.

612.—Koropov, V. Étude expérimentale de l'influence exercée par les produits des helminthes sur le système cardiovasculaire. [In Russian, with French summary.] Med. Parasitology Moscow 4 1935 pp. 281-287.

613.—Korscheit, E. Vergleichende Entwicklungsgeschichte der Tiere. Jena 1 1936 536 pp. 580 figs.

614.—Kouri, P., Anido, V., Fermo-selle, J., Basnuevo, T. and Sotolongo, F. Leberegelkrankheit. Bol. mens. Clin. Asoc. Damas La Cavadonga 2 1935 pp. 175-191.

615.—Kouri, P., Basnuevo, J. G., Alvaré, L. and Lescano, O. Técnica para el estudio de la anatomía de la *Fasciola hepatica*. Rev. Parasit. Clin. Lab. Habana 1 1935 pp. 191-195 3 figs.

616.—Kouri, P., Basnuevo, J. G., Alvaré, L. and Lescano, O. Clonorchiasis y cancer. Revista Parasitología Habana 2 1936 pp. 141-148.

617.—Kouri, P., Basnuevo, J., Alvaré, L., Lescano, D. and Simon, R. Nota previa sobre la génesis del huevo de *Fasciola hepatica*. Revista Parasitología Habana 2 1936 pp. 173-174.

618.—Kouri, P., Basnuevo, J. G. and Arenas, R. Contribución al conocimiento del ciclo evolutivo del *Strongyloides stercoralis* (Nota previa). Rev. Parasit. Clin. Lab. Habana 2 1936 pp. 1-6 13 pls.

619.—Kouri, P., Basnuevo, J. G., Bacardi, J., F. and Sotolongo, F. Contribución al conocimiento del ciclo evolutivo del *Strongyloides stercoralis* (III). Revista Parasitol. Habana 2 1936 pp. 517-520.

620.—Kouri, P. and Del Frade, A. La clonorchiasis en la ciudad del la Habana. Rev. Parasit. Clin. Lab. Habana 1 1935 pp. 37-52 4 figs.

621.—Kouri, P., Fonseca, R. and Basnuevo, J. G. Porcentaje y distribución geográfica del parasitismo intestinal de Cuba. Provincia de la Habana. Medicina de Hoy 1 1936 pp. 32-36.

622.—Kouri, P., Silveiro, R. and Anido, H. Ein neuer einheimischer Fall von Fasciolaleiden der Lehr beim Menschen in Cuba. Bol. mens. Clin. Asoc. Damas La Cavadonga 2 1935 pp. 202-211.

623.—Kouri, P. and Valverde, A. Nuevo caso cubano de Fasciolosis hepática humana. Rev. Parasit. Clin. Lab. Habana 1 1935 pp. 1-15.

624.—Kouri, P. and Valverde, A. Nuevo caso cubano de fasciolosis hepática humana. Med. Países Cálid. Madrid 8 1935 pp. 457-468.

Kouri, P. *vide etiam* Bolanos, J. M.

Kouri, P. *vide etiam* Fonseca, R. C.

625.—Kožmiński, Z. Über die Eigentümlichkeiten des Zooplanktons des Ohridsees. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 245-254.

626.—Kranefeld, F. C. Stephano-filariasis. VI. Enkele bijzonderheden betreffende het lijden. Ned.-Ind. Blad. Diergeneesk. 47 1935 pp. 183-186.

627.—Krasnodębski, F. Untersuchungen über die Nahrung des Oligochaeten *Chaetogaster limnaei* K. E. v. Baer. Zool. Polon. Lwow 1 1936 pp. 199-208.

628.—Kreis, H. Beiträge zur Kenntnis parasitischen Nematoden. I. Ein neuer parasitischer Nematode aus der Hirschziegenantilope, *Antelope cervicapra* Lin. *Trichuris cervicaprae* n. sp. Verh. naturf. Ges. Basel 46 1935 pp. 59-65 2 figs.

629.—Kreis, H. A. Süßwasser-Nematoden aus der Umgebung von Madras (Indien). Rev. suisse Zool. Genève 43 1936 pp. 641-645 2 figs.

630.—Kreis, H. A. Beiträge zur Kenntnis parasitischer Nematoden. III. *Contortospiculum filiformis* n. sp. ein neuer paraistischer Nematode aus dem Nandu, *Rhea americana*. Rev. suisse Zool. Genève 43 1936 pp. 647-652 1 fig.

631.—Kreutz, H. J. Studien an einheimischen Lumbriciden. Z. Morph. Ökol. Tiere Berlin 30 1936 pp. 786-810 15 figs.

632.—Krishnan, G. The development of *Diopatra variabilis* (Southern). Z. wiss. Zool. Leipzig 147 1936 pp. 513-525 12 figs.

633.—Kristensen, M. H. Noen bemerkninger om *Syngamus trachea*. Norsk. Veterin. Tidsskr. 46 1934 pp. 193-196.

- 634.—Krüger, F. Untersuchungen zur Kenntnis des aeroben und anaeroben Stoffwechsels des Schweinespulwurmes (*Ascaris suilla*). Zool. Jahrb. Jena Allg. Zool.) 57 1936 pp. 1–56 4 figs.
- 635.—Krull, W. H. Some observations on the life history of *Brachylaemus virginiano* (Dickerson) Krull, N. 1934. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 118–134 pl. xxiv.
- 636.—Krull, W. H. Studies on the life history of *Telorchis robustus* (Trematoda: Plagiorchiidae). Proc. helminth. Soc. Washington 3 1936 pp. 54–56 fig. 16.
- 637.—Krull, W. H. New terrestrial and aquatic intermediate hosts for *Brachylaemus virginiana* (Dickerson) Krull (Trematoda: Brachylaemidae). Proc. helminth. Soc. Washington 3 1936 pp. 56–58.
- 638.—Krull, W. H. Additional second intermediate hosts for *Gorgoderia implicava* Looss, 1899 (Trematoda: Gorgoderidae). Proc. helminth. Soc. Washington 3 1936 p. 58.
- 639.—Kuhn, O. Die Fauna des Amaltheentons (Lias δ) in Franken. N. Jahrb. Min. Geol. Paläont. Stuttgart 75 1936 p. 231 pls. viii–xiii. [Vermes pp. 242–243.]
- Kulmatycki, W. *vide* Gabański, J.
- Kung, J. C. *vide* Kan, H. C.
- 640.—Kuppasamy, A. R. Leucocytozoa and microfilariæ of fowls and *Haemoproteus columbae* of pigeons in Province Wellesley. Ind. Veter. J. 13 1936 pp. 25–35.
- 641.—Kyaw, M. H. and Gates, G. E. On a species of *Eutyphoeus* from Calcutta. Rec. Ind. Mus. Calcutta 38 1936 pp. 513–517.
- 642.—Lal, M. B. A review of the genus *Paramonostomum*, Lühe; with descriptions of two new species and remarks on the genera of the subfamily Notocotylinæ. Proc. Indian Acad. Sci. 3 1936 pp. 25–34 3 figs.
- 643.—Lal, M. B. A new species of the genus *Parorchis* from *Totanus hypoleucos*, with certain remarks on the family Echinostomidae. Proc. Indian Acad. Sci. 4 1936 pp. 27–35 figs.
- 644.—Lal, M. B. A new genus of Trematodes of the sub-family Typhlocoelinae from the shoveller duck *Spatula clypeata*. Proc. Indian Acad. Sci. 4 1936 pp. 45–51 3 figs.
- 645.—Lal, M. B. A new species of the genus *Levinseniella* from the Jack snipe *Gallinago gallinula*. Proc. Indian Acad. Sci. 4 1936 pp. 92–96 2 figs.
- Lal, M. B. *vide etiam* Thapar, G. S.
- 646.—Lamson, P. D. and Ward, C. B. Earth worms as test objects for determining the value of drugs to be used in human intestinal helminth infestations. Science N.Y. N.S. 84 1936 pp. 293–294.
- Landa, D. M. *vide* Schulz, R. E.
- 647.—Lane, C. The carriage of Schistosomes from man to man, with special attention to the molluscs which are their larval hosts in different parts of the earth. Trop. Dis. Bull. London 33 1936 pp. 1–15.
- 648.—Lang, K. Rotatorien aus Siberien. K. fysiogr. Sällsk. Lund Förh. 5 1936 pp. 82–86 8 figs.
- 649.—Langeloh, H. P. Sinnesphysiologische Untersuchungen an Priapuliden (*Priapulus caudatus* und *Halicryptus spinulosus*). Biol. Zbl. Leipzig 56 1936 pp. 260–268 5 figs.
- Langeloh, H. P. *vide etiam* Friedrich, H.
- Langen, C. D. *vide* De Langen, C. D.
- 650.—Lardelli, A. Recherches sur la fréquence des helminthes et des protozoaires intestinaux chez les enfants des écoles de Lausanne. Gesundheit und Wohlfahrt 14 1934 pp. 65–94.
- 651.—La Rue, G. R. Schistosome dermatitis. Michigan Publ. Health 23 1935 pp. 87–90.
- 652.—La Rue, G. R. and Fallis, A. M. Morphological study of *Alaria canis* n. sp. (Trematoda: Alariidae), a Trematode parasite of the dog. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 340–351 pls. xxxix–xli.
- 653.—Lavier, G. †R. Moniez (1852–1936). Ann. Parasit. Paris 14 1936 p. 183.

654.—Leathers, W. S., Keller, A. E. and Wyman, B. F. A state-wide investigation of hookworm in South Carolina. Amer. J. Hyg. Baltimore 23 1936 pp. 600-614.

Leathers, W. S. *vide etiam* Keller, A. E.

655.—Lebedenko, W. W. Der Nierenechinokokk. [In Russian.] Act. Univ. voroneg. 2 1925 pp. 67-84.

656.—Le Gac, P., Espian, M. and Rarivonson, A. A propos d'un cas de bilharziose vésicale autochtone. Bull. Soc. Path. Exot. Paris 29 1936 pp. 431-432.

657.—Leiper, J. W. G. The occurrence of *Molineus patens* (Dujardin, 1845) in English stoats and weasels. J. Helminth. London 14 1936 pp. 119-126 4 figs.

658.—Leiper, R. T. La production expérimentale des bilharzioses égyptiennes. Bull. Inst. Égypt. Cairo 10 1916 pp. 217-227.

659.—Leiper, R. T. Thelaziasis in man: a summary of recent reports on "circumocular filariasis" in Chinese literature, with a note on the zoological position of the parasite. Brit. J. Ophthalm. London 1 1917 pp. 546-549.

660.—Leiper, R. T. [Helminth parasites in the living okapi.] Proc. Zool. Soc. London 1935 pp. 947-948.

661.—Leiper, R. T. Helminth parasites obtained from the okapi at post-mortem. Proc. Zool. Soc. London 1935 iv p. 949.

662.—Leiper, R. T. Crustacea as helminth intermediaries. Proc. R. Soc. Med. London 29 1936 pp. 1073-1074.

663.—Leiper, R. T. Some experiments and observations on the longevity of *Diphyllobothrium* infections. J. Helminth. London 14 1936 pp. 127-130.

664.—Lele, S. H. and Gae, P. B. Common Sagittae of the Bombay harbour. J. Univ. Bombay 4 1936 pp. 105-113 1 pl. 3 figs.

665.—Lender, Th. Sur *Polycelia* [sc. *Polycelis*] *nigra* (Ehrbg.) et *Polycelis tenuis* (Ijima) Turbellariés, Tricladés. Arch. Zool. exp. gén. Paris (Notes et Revue) 78 1936 pp. 49-56 4 figs.

666.—Lent, H. and Freitas, J. F. T. de. Contribuição ao conhecimento da fauna helminthologica do Argentina. *Graphidioides Mazzai* n. sp., parasito de *Galea leucoblephara* (Burm.). Revist. Med.-Cir. Brasil Rio de Jan. 43 1935 pp. 225-227 1 pl.

667.—Lent, H. and Freitas, J. F. T. de. Noções de tecnica helmintologica. Hospital Rio de Janeiro 7 ii no. 7 1935 24 pp.

668.—Lent, H. and Freitas, J. F. T. de. Novo parasito de *Agouti paca* (L.) (Nematoda: Strongyloidea). Mem. Inst. Osw. Cruz Rio de J. 31 1936 pp. 357-359 2 pls.

Lent, H. *vide etiam* Freitas, J. F. T.

Leon, W. de *vide* Africa, C. M.

669.—Leonard, L. B. Nerve cells in *Phaeritima* [? sc. *Pheretima*] *indica*. J. Alabama Acad. Sci. 4 1933 pp. 24-25.

Lerma, B. de *vide* De Lerma, B.

670.—Leroux, P. L. A new Trichostrongylid (*Minutostrongylus taurotragi* g. et sp. n.) of the sub-family Heligmosominae from an African antelope. J. Helminth. London 14 1936 pp. 73-76 5 figs.

671.—Leroux, P. L. On *Schwartziella*, a new nematode genus for *Cooperia nodulosa* Schwartz, 1928. J. Helminth. London 14 1936 pp. 113-118.

Lescano, O. *vide* Kouri, P.

672.—Levine, P. P. A new method for embryonating nematode eggs in fecal discharges. J. Parasit. Urbana 22 1936 p. 291.

673.—Lewis, F. J. The Trematode genus *Phyllodistomum* Braun. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 103-117 pls. xviii-xxiii.

Li, S. Y. *vide* Campbell, H. E.

674.—Liddo, S. Osservazioni parasitologiche nella regione pugliese. Arch. Ital. Sc. Med. Colon. Rome 15 1934 pp. 298-300.

675.—Lima, C. F. Peste de adelgaçar. Gastro-enterite verminosa dos bovinos. O Campo Rio de Jan. 2 1931 p. 146.

676.—Lindauer, R. Die Trichinose in Asch. Prag. tierärztl. Arch. 14 1934 pp. 149-156 2 pls.

677. — Lindberg, K. Un ver de Médecine siégeant au voile du palais. Bull. Soc. Path. Exot. Paris 28 1935 pp. 438-441.

678. — Lindberg, K. Remarques sur l'épidémiologie de la draconculose dans l'Inde britannique. Un plaidoyer en faveur de recherches. Bull. Soc. Path. Exot. Paris 28 1935 pp. 866-875.

679. — Lindberg, K. Draconculose en Iran. Arch. Schiffs Trop.-Hyg. Leipzig 40 1936 pp. 330-342.

Ling, C. Y. vide Chu, T. C.

680. — Lins, M. and Wanderley, F. Geografia medica da esquistosomose em Pernambuco. Revist. Med. Pernambuco 5 1935 pp. 43-92.

681. — Lins de Almeida, J. Sobre as especies do genero *Holocercus* Baylis and Daubney, 1925. (Nematoda: Pseudaliidae.) Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 10 1933 pp. 153-160 pls. xxxviii-xl.

682. — Lins de Almeida, J. Da frequencia de alguns nematodeos parasitas de *Gallus domesticus* L. no Rio de Janeiro. Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 10 1933 p. 171.

683. — Lins de Almeida, J. *Passaturus ambiguus* (Rud., 1819) (Nematoda, Oxyuridae), sua ocorrencia em *Lepus (Oryctolagus) cuniculus dom.* L. no Brasil. Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 10 1934 pp. 173-174.

684. — Lins de Almeida, J. Nematodeos e trematodeos parasitos de *Gallus domesticus* L. no Brasil. O Campo Rio de Jan. 5 1934 vi p. 29.

685. — Lins de Almeida, J. Sobre alguns helminthos ainda não observados no Brasil. Revista Dep. Nac. Prod. Anim. Rio de Jan. 2 1935 (1936) pp. 415-416.

Lins de Almeida, J. vide etiam Pinto, C.

Lins de Almeida, J. vide etiam Freitas, J. F. T. de.

Liu, B. C. vide Chu, T. C.

Libre M. H. vide Martorelli, R. A.

686. — Lloyd, L. C. and Guberlet, J. E. *Syncoelium filiferum* (Sars) from the Pacific salmon. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 44-48 pl. x.

687. — Lönnberg, E. Borstigel, *Acanthobdella*, funnen i Sverige, en intressant nyhet i vår fauna. Fauna och Flora Uppsala 1936 pp. 249-254.

López, C. P. vide Mazza, S.

Lopez, M. C. vide Nunez, J. O.

688. — López-Neyra, C. R. Sobre algunos géneros de Dilepididae. Rev. Acad. Madrid 32 1935 pp. 517-522.

689. — López-Neyra, C. R. *Fernandezzia goizuetai* nov. gen. nov. sp. parasito intestinal del zorral y revisión de los Ophrycotylinae. Rev. Acad. Madrid 33 1936 pp. 5-18 1 pl.

690. — Loukine, E. I. Remarques biologiques sur les Hirudinees du bassin du Donetz. [In Russian.] Trav. Soc. Nat. Kharkov 52 1929 pp. 33-76 1 fig.

Loveridge, A. vide Bangs, O.

Low, G. C. vide Walters, A. H.

691. — Lucker, J. T. Comparative morphology and development of infective larvae of some horse strongyles. Proc. helminth. Soc. Washington 3 1936 pp. 22-25 fig. 9.

692. — Lucker, J. T. Preparasitic moults in *Nippostrongylus muris*, with remarks on the structure of the cuticle of Trichostrongyles. Parasitology Cambridge 28 1936 pp. 161-171 13 figs.

693. — Lucker, J. T. Extent of vertical migration of horse strongyle larvae in soils of different types. J. Agric. Res. Washington 52 1936 pp. 353-361.

694. — Lührs, E. Die wirtschaftliche Bedeutung des Spulwurmbefalls der Schweine. Deutsche Tierärztl. Woch. 43 1935 pp. 691-693.

695. — Luney, F. W. *Hymenolepis diminuta* (rat tapeworm) in man, with the report of a case. Canad. Med. Ass. J. Ottawa 30 1934 pp. 385-386.

696. — Lutta, A. Die Fauna der parthenogenetischen Trematodengenerationen in den Süßwassermollusken Peterhofs [In Russian.] Trav. Soc. Nat. Leningrad (Sect. Zool.) 63 1934 pp. 261-309 7 pls. (German summ. p. 310.)

- 697.—Luttermoser, G. W. A helminthological survey of Baltimore house rats (*Rattus norvegicus*). Amer. J. Hyg. Baltimore **24** 1936 pp. 350-360 1 fig.
- 698.—Luttermoser, G. W. Experimental infestation of rats and mice with *Capillaria hepatica*. J. Parasit. Urbana **22** 1936 pp. 536-537.
- 699.—Lynch, J. E. *Phyllodistomum singulare* n. sp., a trematode from the urinary bladder of *Dicamptodon ensatus* (Eschscholtz), with notes on related species. J. Parasit. Urbana **22** 1936 pp. 42-47 1 pl.
- 700.—Lynch, J. E. New species of *Neoechinorhynchus* from the Western sucker, *Catostomus macrocheilus* Girard. Trans. Amer. micr. Soc. Menasha **55** 1936 pp. 21-43 pls. iv-ix.
- 701.—Lysaght, A. M. A note on the adult female of *Anguillulina aptini* (Sharga). A nematode parasitising *Aptinotrips rufus* Gmelin. Parasitology Cambridge **28** 1936 pp. 290-292 1 fig.
- 702.—McCoy, O. R. Filarial parasites of the monkeys of Panama. Amer. J. trop. Med. Baltimore **16** 1936 pp. 383-404.
- 703.—McCoy, O. R. The development of Trichinae in abnormal environments. J. Parasit. Urbana **22** 1936 pp. 54-59.
- 704.—McFarlane, S. H. A study of the endoparasitic Trematodes from marine fishes of Departure Bay, B.C. J. biol. Board Canada **2** 1936 pp. 335-347 3 pls.
- 705.—MacGinitie, G. E. The fertilization of eggs and the rearing of the larvae of *Urechis caupo* within the blood cavity of the adult animal. J. Exp. Zool. Philadelphia **71** 1935 pp. 483-487.
- 706.—Machado, A. Do modo simples de observar o funcionamento dos nefrideos nos vermes anelados. An. Fac. Sciênc. Porto **16** 1930 pp. 76-77.
- 707.—Machattie, C. A preliminary note on the life history of *Schistosoma turkestanicum* Skrjabin, 1913. Trans. Soc. trop. Med. Hyg. Lond. **30** 1936 pp. 115-124 4 pls.
- 708.—Machattie, C. A preliminary note of the life history of *Schistosoma turkestanicum* Skrjabin, 1913. Vet. J. London **92** 1936 pp. 291-299.
- Machattie, C. vide etiam Mills, E. A.
- 709.—McIntosh, A. A new hookworm, *Monodontus floridanus* n. sp., from a cotton rat, *Sigmodon hispidus*. Trans. Amer. micr. Soc. Menasha **54** 1935 pp. 28-32 pl. vii.
- 710.—McIntosh, A. A new trematode *Laterotrema americana*, n. sp. (Stomylotrematidae), from song birds. Proc. Helminth. Soc. Washington **3** 1936 pp. 34-35 fig. 13.
- 711.—McIntosh, A. A new trematode, *Gyrabascus echinus*, n. sp., from the yellow-breasted chat. Proc. Helminth. Soc. Washington **3** 1936 pp. 35-36 fig. 14.
- 712.—McIntosh, A. The occurrence of *Euryhelminis squamula* (Rudolphi, 1810) in the United States. J. Parasit. Urbana **22** 1936 p. 536.
- 713.—Mackin, J. G. Studies on the morphology and life history of nematodes in the genus *Spironoura*. Illinois Biol. Monog. **14** iii 1936 pp. 1-64 2 figs. 5 pls.
- 714.—McLeod, J. A. Further notes on cercarial dermatitis. Trans. roy. Soc. Canada (3) **30** 5 1936 pp. 39-48 2 pls.
- 715.—McMullen, D. B. A note on the life cycle of *Mosesia chordeilosia* n. sp. (Lecithodendriidae). J. Parasit. Urbana **22** 1936 pp. 295-298 7 figs.
- 716.—McMullen, D. B. The amphipod *Orchestia platensis* an intermediate host for *Hymenolepis exigua*, a tapeworm of chickens in Hawaii. J. Parasit. Urbana **22** 1936 pp. 515-516.
- 717.—McMullen, D. B. A note on the staining of the excretory system of Trematodes. Trans. Amer. micr. Soc. Menasha **55** 1936 pp. 513-515 pl. lxvi.
- 718.—McMullen, D. B. and Roudabush, R. L. A new species of trematode, *Cercorchis cryptobranchi* from *Cryptobranchus alleganiensis*. J. Parasit. Urbana **22** 1936 pp. 516-517 1 fig.
- 719.—Macy, R. W. A new bat trematode, *Lecithodendrium breckenridgei*, with a key to the species of the genus. Zbl. Bakt. Jena (i) **136** 1936 pp. 236-237 1 fig.

720.—Macy, R. W. A new genus and species of Trematode from the little brown bat and a key to the genera of Pleurogenetinae. Proc. U.S. Nat. Mus. **83** 1936 pp. 321-324 fig. 25.

721.—Macy, R. W. Three new Trematodes in Minnesota bats with a key to the genus *Prosthodendrium*. Trans. Amer. micr. Soc. Menasha **55** 1936 pp. 352-359 pl. xlii.

722.—Mailleux, E. La faune et l'âge des Quartzophyllades siegeniens de Longlier. Mem. Mus. Hist. nat. Belg. **73** 1936 141 pp. 3 pls. [Serpulidae at pp. 42-43.]

Makino, S. *vide* Ikeda, K.

Malewitz, H. *vide* Woodhead, A. E.

723.—Maloeuf, N. S. R. The "metabolic gradient" in the adult earthworm. Biol. Zbl. Leipzig **56** 1936 pp. 429-436 3 figs.

Manson-Bahr, P. H. *vide* Walters, A. H.

724.—Manter, H. W. Some trematodes of Cenote fish from Yucatan. Publ. Carnegie Inst. Washington **457** 1936 pp. 33-38.

725.—Manter, H. W. A note on the geographical distribution of the genus *Haplospianchus* (Trematoda). J. Parasit. Urbana **22** 1936 p. 545.

726.—Maplestone, P. A. and Mukerji, P. K. An improved technique for the isolation of *Ascaris* eggs from soil. Ind. J. Med. Res. **23** 1936 pp. 667-672.

727.—Maplestone, P. A. and Riddle, J. S. Infection with *Bertiella studeri*. Ind. Med. Gaz. Calcutta **71** 1936 p. 81.

728.—Marbaix, — and Appelmann. Mésatites tachetées d'origine filarienne. Ann. Soc. Belg. Méd. Trop. Brussels **16** 1936 pp. 333-341.

729.—Marchese, S. D. Su alcuni caratteri di fissabilità dei granuli fenolici nei vitellogeni dei Platelmini. Boll. Zool. Torino **7** 1936 pp. 95-98.

730.—Mariani, G. and Besta, B. La blatta orientale serbatoio di protozoi ed elminti. Arch. Ital. Sc. Med. Colon. Rome **10** 1936 pp. 177-184.

731.—Markewitsch, A. P. Les maladies parasitaires des poissons de la province de Leningrad. [In Russian.] Leningrad 1934 100 pp. [n.v.]

732.—Markowski, S. Einfluss der Milieueränderungen auf die Entwicklung der Eier von *Bothriocephalus scorpii* (Müller, 1776). Bull. int. Acad. Cracovie B II 1935 pp. 49-58.

733.—Markowski, S. Die parasitische Würmer von *Gobius minutus* Pall. des polnischen Balticums. Bull. int. Acad. Cracovie B II 1935 pp. 251-260 pl. x.

734.—Markowski, S. Über die Trematodenfauna der baltischen Mollusken aus der Umgebung der Halbinsel Hel. Bull. Acad. Polon. Sc. Nat. Cracow 1936 pp. 285-318 pls. xiii-xv.

735.—Marotel, G. Un nouveau parasite, une nouvelle maladie: la distomose intestinale porcine. Rev. Vétér. Toulouse **88** 1936 pp. 130-133 2 figs.

736.—Marotel, —. Un nouveau parasite, une nouvelle maladie: la distomose intestinale porcine. Bull. Acad. Méd. Paris **115** 1936 440-442.

737.—Marsh, E. B. An interesting case of cysticercosis. J. R. Army Med. Corps. London **62** 1934 pp. 294-296.

738.—Marsh, H. Observations based on weekly parasite egg counts on feces of lambs and yearling sheep. J. Parasit. Urbana **22** 1936 pp. 379-385 2 figs.

Marshall, A. *vide* Archibald, R. G.

739.—Martin, L. D. Consideraciones sobre varios casos de triquinosis. Med. Países Calid. Madrid **9** 1936 pp. 75-86.

Martin, R. *vide* Joyeux, C.

740.—Martorelli, R. A., Llibre, M. H. and Gonzalez, J. R. A. Valor del examen parasitológico de las heces fecales frente al parasitismo intestinal verminoso revelado por la autopsia. Revista parasitol. Havana **2** 1936 pp. 461-467.

741.—Martorelli, R. A., Llibre, M. and Gonzalez, J. R. A. Parasitismo intestinal del perro en la ciudad de la Habana y Marianas. Reporte de 200 exámenes de heces fecales. Revista Parasitol. Havana **2** 1936 pp. 469-470.

742.—Maschke, K. Die Höhlenfauna des Glatzer Schneeberges. 5. Die Metazoenfauna der Bergwerke bei

Mährisch-Ultstadt. in Pax, Beitr. Biol. Glatzer Schneeberges Hft. 2 Breslau 1936 pp. 175-191 1 fig.

Maschke, K. *vide etiam* Pax, F.

Masiluñgan, V. A. *vide* Tubangui, M. A.

743.—Massia, G. and Roman, E. Tumeurs à *Capillaria* dans l'estomac de Surmulots lyonnais. Ann. Parasitol. Paris 14 1936 pp. 332-348 3 pls. 8 figs.

744.—Mathias, P. Sur le cycle évolutif d'un Trématode digénétique, *Allocreadium angusticolle* (Hausmann). C.R. Soc. Biol. Paris 122 1936 pp. 1175-1176.

745.—Matoff, K. Die experimentelle Muskeltrichinellose beim Hunde und bei der Katze. Tierärztl. Rundschau Wittenberg 42 1936 pp. 86-91, 106-110.

746.—Matoff, K. Bei Tauben auf enteralem Wege erzeugte Muskeltrichinellose. Tierärztl. Rundschau Wittenberg 42 1936 pp. 401-404.

747.—Matoff, K. Einige Fragen aus der Biologie der Schweinelungenwürmer *Metastrongylus elongatus* und *Choeroststrongylus pudendotectus*. Tierärztl. Rundschau 42 1936 pp. 597-600, 617-620.

748.—Matoff, K. Beobachtungen über die larvale Entwicklung von *Strongyloides papillosus* (Wedl, 1850) und Infektionsversuche mit filariformen Larven. Z. Parasitenkunde Berlin 8 1936 pp. 474-491 8 figs.

749.—Matsuura, T. Ein Fall von *Cysticercus cellulosae hominis*. [In Japanese, with German summary.] J. Orient. Med. Dairen 23 1935 pp. 627-629 1 pl.

750.—Mattes, O. Der Entwicklungsgang des Lanzettegels *Dicrocoelium lanceatum*. Z. Parasitenk. Berlin 8 1936 pp. 371-430 15 figs.

751.—Mattes, O. Zur Frage der Wirtsauffindung der Parasiten auf Grund experimenteller Untersuchungen an Leberegelmiracidien. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 183-186.

752.—Mazza, S. and López, C. P. Frecuencia e intensidad de infecciones verminosas en apéndices extirpados quirúrgicamente en Tucumán. Re-

union Octava Soc. Argentina Patol. Reg. Norte Buenos Aires 1936 ii pp. 701-702.

753.—Meckstroth, G. A. Observations on strawberry dwarf in North Carolina. Plant Diseases Rep. Washington 20 1936 pp. 19-22.

Mees, D. *vide* Berrill, N. J.

754.—Meewis, H. Éléments ré-générateurs dans le bourgeonnement pygidial et dans la zone de seissiparité chez *Chaetogaster diaphanus* Gruith. Ann. Soc. Zool. Belg. Brussels 65 1934 pp. 9-39 20 figs.

755.—Mehra, H. R. A new species of the genus *Harmotrema* Nicoll, 1914, with a discussion on the systematic position of the genus and the classification of the family Harmostomidae Odhner, 1912. Proc. Nat. Acad. Sc. India Allahabad 6 1936 pp. 217-240 2 figs.

756.—Mello, A. de. Da ocorrência de *Echinostoma revolutum* (Froelich, 1802) (Trematoda) em *Gallus domesticus* L. no Brasil. Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 10 1934 p. 172.

Mello, J. F. de *vide* Froilano de Mello, J.

757.—Menon, K. P. and Seetharama Iyer, P. V. The viability of the "infective" forms of the larvae of *Wuchereria bancrofti* when freed from the mosquito host. J. Trop. Med. London 39 1936 p. 215.

758.—Menon, K. P. and Seetharama Iyer, P. V. The viability of the "infective" forms of the larvae of *Wuchereria bancrofti* when freed from the mosquito host. Ind. J. Med. Res. 23 1936 pp. 881-883.

Mercier, H. *vide* Robin, C.

759.—Merker, E. Die Temperaturabhängigkeit und das Nichtgelten des photochemischen Aktinometersatzes bei der tödlichen Wirkung kurzwelligigen Lichtes auf feuchthäutige Tiere. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 62-82.

Metelkin, A. I. *vide* Skrjabin, K. I.

760.—Meschkat, A. Untersuchungen über den Aufbau der Kabeljaunahrung im Bereich der Vestmannainseln. Rapp. Cons. Explor Mer Copenh. 99 1936 No. 3 pp. 1-19.

761.—Metivier, H. V. M. Some worm parasites of stock in St. Lucia. *Trop. Agric.* **13** 1936 p. 8.

762.—Meyer, A. Die plasmodiale Entwicklung und Formbildung des Riesenkratzers (*Macracanthorhynchus hirudinaceus* [Pallas].) *Zool. Jahrb. Jena (Anat.)* **62** 1936 pp. 111–172 pls. ii–iv 10 figs.

763.—Meyer, A. Dynamese des colomatischen Wimperfeldes von *Nephthys hombergii*. *Biol. Zbl. Leipzig* **56** 1936 pp. 532–548 7 figs.

764.—Michaelsen, W. Earthworms from south-western Australia. *J. Roy. Soc. W. Aust.* **21** 1935 pp. 39–43 1 fig.

765.—Michaelsen, W. Oligochäten aus Chile und von der Osterinsel. *Zool. Anz. Leipzig* **113** 1936 pp. 193–200 6 figs.

766.—Michaelsen, W. African and American Oligochaeta in the American Museum of Natural History. *Amer. Mus. Nov.* **843** 1936 23 pp. 12 figs.

767.—Michaelsen, W. Oligochäten von Belgisch-Kongo. II. *Rev. Zool. Bot. afr. Tervueren* **28** 1936 pp. 213–225 figs. 33–40.

768.—Michaelsen, W. *Branchiura sowerbyi* Beddard and its synonymy. *Rec. Ind. Mus. Calcutta* **38** 1936 pp. 95–96 1 fig.

769.—Michaelsen, W. Zwei neue opisthopore Oligochaeten. *Festschrift f. Embrik Strand Riga* **1** 1936 pp. 31–36 3 figs.

770.—Michaelsen, W. Oligochäten von Belgisch-Kongo. III. *Rev. Zool. Bot. afr. Tervueren* **29** 1936 pp. 37–72 pl. iii.

771.—Michail, D. La cysticerose oculaire en Roumanie. *Ann. Oculist.* **172** 1935 pp. 385–402.

772.—Michajlow, W. and Wierzbicka, M. Sur quelques Copépodes constituant les premiers hôtes intermédiaires de *Diphyllobothrium latum* (L.). *Arch. Hydrobiol. Ichthyol. Suwalki* **9** 1935 pp. 93–98.

773.—Middleton, A. D. Factors controlling the population of the partridge (*Perdix perdix*) in Great Britain. *Proc. Zool. Soc. London* 1935 iv pp. 795–815.

774.—Miller, E. L. Studies on North American Cercariae. *Univ. Illinois Bull.* **33** no. 35 (Illinois Biol. Monog. **14** ii) 1936 125 pp. 8 pls.

775.—Miller, F. S. Some effects of strychnine on reconstitution in *Euplania dorocephala*. [Abstract.] *Anat. Rec. Philadelphia* **67** 1936 suppl. i p. 56.

776.—Miller, J. A. Studies in the biology of the leech. IV. An explanation of certain phases of leech behavior. *Ohio J. Sci.* **36** 1936 pp. 343–348 3 figs.

777.—Miller, J. A. Studies on heteroplastic transplantation in Triclad. [Abstract.] *Anat. Rec. Philadelphia* **67** 1936 suppl. i p. 56.

778.—Miller, J. H. Cereal diseases in Northern Georgia. *Plant. Dis. Report Washington* **19** 1935 pp. 221–224.

779.—Miller, M. J. *Bunoderina eucaliae* gen. et sp. nov., a new papillose Allocreadiidae from the stickleback. *Canad. J. Res. Ottawa* **14** (D) 1936 pp. 11–14 2 figs.

780.—Miller, P. R. Diseases of cabbage and beans in Copiah County, Mississippi. *Plant Dis. Rep. Washington* **20** 1936 pp. 190–193.

781.—Mills, E. A., Machattie, C. and Chadwick, C. R. *Schistosoma haematobium* and its life cycle in Iraq. *Trans. Soc. trop. Med. Hyg. Lond.* **30** 1936 pp. 317–334 2 pls.

782.—Minouchi, O. Cytologische Studien über das Ei von *Polystomum integerrimum* von der Eiablage bis zu den frühesten Furchungsstudien. *Zeitschr. Zellforschung Mikr. Anat.* **24** 1936 pp. 83–127.

Mira, M. G. *vide* Ginquinto Mira, M.

783.—Mirza, M. B. *Subulura hindi* n. sp. A new nematode parasite of *Sciurus palmarum*. *Proc. Indian Acad. Sci.* **3** 1936 pp. 125–127 1 fig.

784.—Mirza, M. B. A new species of the nematode genus *Dermatoxys* from *Lepus ruficaudatus*. *Proc. Indian Acad. Sci. (B)* **3** 1936 pp. 234–237 3 figs.

785.—Mirza, M. B. and Narayan, S. S. *Strongyloides akbari* n. sp. A new nematode parasite from *Crocidura coerulea*, with a note on some species of the genus *Strongyloides*. Proc. Indian Acad. Sci. (B) 2 6 1935 pp. 503-507 2 figs.

Miyada, I. *vide* Yamada, S.

786.—Mizelle, J. D. New species of Trematodes from the gills of Illinois fishes. Amer. Midl. Nat. Notre Dame 17 1936 pp. 785-806.

Momma, K. *vide* Kataoka, N.

787.—Monfort, R. Le parasitisme intestinal chez les indigènes sédentaires de Beni Ounif (Sud Oranais). Arch. Inst. Pasteur Alger 14 1936 pp. 62-65.

788.—Mönnig, H. O. The *Ascaris* worm of pigs. Farming in South Africa 11 1936 p. 37.

789.—Monro, C. C. A. Polychaete worms. II. "Discovery" Reports Cambridge 12 1936 pp. 59-198 34 figs.

790.—Monro, C. C. A. Notes on some Polychaeta from the Congo coast. Rev. Zool. Bot. afr. Tervueren 28 1936 pp. 245-248 6 figs.

791.—Monro, C. C. A. On the Heteronereid of *Platynereis pulchella* Gravier, a Polychaete belonging to the family Nereidae. A preliminary note. Ann. Mag. Nat. Hist. London (10) 13 1936 pp. 380-384 3 figs.

792.—Moore, E. S. and Smith, A. J. Pests and diseases in tobacco seedbeds. Farming in S. Africa 11 1936 pp. 135-138.

793.—Moore, J. P. Report on Hirudinea. Mem. Connecticut Acad. Arts Sci. 10 1936 pp. 191-192.

794.—Moore, J. P. Hirudinea from Yucatan. Pub. Carnegie Inst. Washington 457 1936 pp. 41-43.

795.—Moore, J. P. The leeches of Lake Nipissing. Canad. Field Nat. 50 1936 p. 112.

796.—Moorthy, V. N. and Sweet, W. C. A peculiar type of Guinea-worm embryo. Ind. J. Med. Res. Calcutta 24 1936 pp. 531-534 1 fig. pls. xxi, xxii.

797.—Moorthy, V. H. and Sweet, W. C. A note on the experimental infection of dogs with dracontiasis. Ind. Med. Gaz. Calcutta 71 1936 pp. 437-442.

798.—Morales-Menoud, E. Un caso de *Taenia solium* en el Uruguay. Arch. Uruguay Med. 8 1936 pp. 125-126.

799.—Morel, R. Contribution à l'étude des habronemoses. Thesis Veter. Paris 1934 67 pp., Reg. Rev. Veter. Militaire 17 1934 no. 2 p. 254. [n.v.]

Morgan, D. O. *vide* Newbigin, H. F.

800.—Morgan, M. T. L'ankylostomiase en Grande-Bretagne. Bull. Mem. Off. Intern. Hyg. Publ. Paris 28 1936 pp. 1516-1517.

801.—Morioka, K., Imaizumi, H. and Koo, C. On the results of faecal examinations for intestinal parasites harboured by students of the Government Medical College at Taihoku. J. Med. Ass. Formosa 35 1936 pp. 1502-1517.

Morisita, T. *vide* Fukui, T.

802.—Moriya, C. Notes on the germicidal properties of the soil nematode, *Rhabditis pellio* Schneider. Proc. Imp. Acad. Tokyo 12 1936 pp. 195-197 1 fig.

803.—Moros, F. A. Datos para el estudio paleontológico del Flysch de la Costa Cantábrica y de algunos otros puntos de España. Bol. Inst. Geol. Esp. 53 1933 pp. 1-65 19 pls. [Arenicola ? p. 26 fig. 34.]

Morrill, C. C. *vide* Whitlock, J. H.

804.—Morrison, W. K. Pig and pork: cysticercosis (*Taenia solium*). J.R. Army Med. Corps 66 1936 pp. 32-35.

805.—Moszyński, A. Skaposzczety (Oligochaeta) Pomorza. Prace Kom. mat.-przycz. pozn. Tow. Przyj. Nauk. (B) 7 1 1934 pp. 1-18. [French summary p. 17.]

806.—Moszyński, A. Les Oligochètes (Oligochaeta) de la Pomerania Polonaise. Bull. Soc. Amis Sci. Poznań (B) 6 1934 pp. 32-33.

807.—Moszyński, A. Quelques données sur la repartition quantitative des Oligochètes dans le groupe des lacs Wigry. Arch. Hydrobiol. Ichthyol. Suwalki 9 1935 pp. 79-91. [French summary p. 91.]

808.—Mueller, J. F. Studies on North American Gyrodactyloidea. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 55-72 pls. xii-xv.

809.—Mueller, J. F. Comparative studies of certain species of *Diphyllbothrium*. J. Parasit. Urbana 22 1936 pp. 471-478 21 figs.

810.—Mueller, J. F. New Gyrodactylid Trematodes from North American fishes. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 457-464 pls. lvi, lvii.

811.—Mueller, J. F. The life history of *Diphyllbothrium mansonoides*. J. Parasit. Urbana 22 1936 p. 543.

812.—Mueller, J. F. Some peculiarities in the occurrence of Gyrodactylid Trematodes on North American fishes. J. Parasit. Urbana 22 1936 p. 545.

813.—Mufel, P. Helminthic infestations in children in the first year of life. [In Russian.] Med. Parasit. Moscow 4 1935 p. 329.

814.—Mühlens, P. Ein Fall von *Onchocerca volvulus* bei einem Deutschen aus Kamerun. Arch. Schiffs Tropenhyg. Leipzig 40 1936 pp. 28-32 8 figs.

Mukerji, P. K. vide Maplestone, P. A.

Müller, F. R. vide Wetzel, R.

815.—Müller, G. Ueber die Schuppen der *Fasciola hepatica*. Inaug. Dissert. 1930 [n.v. cf. Deutsch. Tierärztl. Woch. 1931 p. 441].

816.—Münchberg, P. Die erneute Verwendung des medizinischen Blutegels (*Hirudo medicinalis* L.) in der Heilkunde der Gegenwart, die sich aus ihr ergebenden Gefahren für die natürlichen Egelbestände und Anregungen zu ihrer Beseitigung. Zool. Anz. Leipzig 116 1936 pp. 268-272.

817.—Myers, F. J. Psammolittoral Rotifers of Lenape and Union Lakes, New Jersey. Amer. Mus. Nov. N.Y. 830 1936 22 pp. 26 figs.

818.—Myers, F. J. Rotifers from the Laurentides National Park with descriptions of two new species. Canad. Field Nat. Ottawa 50 1936 pp. 82-84.

819.—Myers, F. J. Mounting Rotifers in pure glycerin. J. Quekett micr. Club (3) 1 1936 pp. 200-208 7 figs.

820.—Myers, F. J. Three new brackish water and one new marine species of Rotatoria. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 428-432 pl. liii.

821.—Nagahana, M. *Paragonimus westermanii* in a lion. J. Chosen Med. Assoc. 25 1935 p. 53.

822.—Nagaty, H. F. *Parlitomosa zakii* (Filariinae) a new genus and species and its *Microfilaria* from *Leontocebus rosalia*. J. Egypt. Med. Ass. Cairo 18 1935 pp. 483-496 4 figs.

Nagórski, F. vide Stefański, W.

Nakamoto, T. vide Tsunoda, T.

823.—Nakata, K. On the development of the embryos of *Ascaris lumbricoides* in the egg shell. [In Japanese, with English.] J. Chosen Med. Ass. 26 1936 pp. 509-520.

Narayan, S. S. vide Mirza, M. B.

824.—Nath, V. and Raina, J. L. The Golgi elements in the spermatozoon of *Ascaris*. Proc. Indian Sci. Congr. 16 1929 p. 197.

825.—Navarini, E. P. Parasitologia de los apéndices. Act. Trab. 5. Congr. nac. Med. Argentina Rosario 3 1934 898-906 7 figs.

826.—Nawaschin, S. Über die Chromatindiminution bei *Ascaris megalocephala*. Biol. J. Moscou 5 1936 pp. 223-236 10 figs. (German summ. p. 236.)

827.—Nelson, C. and Brooks, S. C. Effects of infra-red light on subsequent cleavage of the eggs of *Urechis caupo*. J. Exp. Biol. London 12 1935 pp. 212-216.

828.—Neuhaus, W. Untersuchungen über Bau und Entwicklung der Lanzettegel-Cercarie (*Cercaria vitrina*) und Klarstellung des Infektionsvorganges beim Endwirt. Z. Parasitenk. Berlin 8 1936 pp. 430-473 23 figs.

Neustaedter, M. vide Dolgopol, V. B.

829.—Neveu-Lemaire, M. Traité d'helminthologie médicale et vétérinaire. Paris 1936 xxiii + 1514 pp. 787 figs.

830.—Newbigin, H. F. and Morgan, D. O. The effect of certain dressings on worm-infected poultry runs. Scot. J. Agric. 19 1936 pp. 162-166.

831.—Niño, F. L. Triquinosis experimental en la rata. Bol. Inst. Clin. Quir. Buenos Aires 11 1935 pp. 336-350 3 pls. 21 figs.

832.—Niwa, H. Notes on the behavior of a Japanese earthworm, *Eisenia foetida* (Savigny). Zool. Mag. Tokyo 48 1936 pp. 741-745 3 figs.

833.—Noble, A. E. New avian trematodes of the genus *Neodiplostomum*. J. Parasit. Urbana 22 1936 pp. 247-254 1 pl.

Nobrega, P. *vide* Reis, J.

834.—Nolasco, J. O. and Africa, C. M. A fatal case of paralytic ileus associated with severe *Strongyloides* infestation suggesting internal autoinfection. J. Philipp. Is. Med. Ass. Manila 16 1936 pp. 275-283.

835.—Nolte, W. Annelidenlarven. in Brandt, Nordisches Plankton Kiel Lfg. 23 1936 169 pp. 104 figs.

836.—Nomura, S. and Kobayashi, S. The hydrogen-ion concentration of the soil of the habitat of earthworms. Zool. Mag. Tokyo 48 1936 pp. 885-893.

837.—Northcott, C. S. A rare parasite. J. R. A. vet. Corps 5 1933 p. 30.

838.—Nouvel, H. *Dicyema Schulzianum* (Ed. van Ben.). Description et étude sytologique. Bull. Inst. océanogr. Monaco 664 1935 pp. 1-11 9 figs.

839.—Nouvel, H. Notes sur la faune marine de la région de Roscoff. Trav. Sta. biol. Roscoff 13 1935 pp. 216-218.

840.—Novikoff, A. B. Transplantation of the polar lobe in *Sabellaria vulgaris*. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 57.

841.—Nunez, T. O. and Lopez, M. C. Recherches sur l'intradermo-réaction appliquée au diagnostic de l'échinococeuse. Ann. Méd. Paris 33 1933 pp. 16-24.

842.—Nybelin, O. *Bunocotyle cingulata* Odhner, ein halophiler Trematode des Flussbarsches und Kaulbarsches der Ostsee. Ark. Zool. Stockholm 28 B 10 1936 pp. 1-6 1 fig.

843.—O'Connor, F. W. Microfilariae in the blood of the ground dove of St. Croix, Virgin Islands. Trans. Soc. trop. Med. London 30 1936 p. 6.

844.—O'Connor, F. W. Tracings of the movements of sheathed embryos of *Wuchereria bancrofti* in heparinized

blood on microscope slides at room temperature, St. Croix, Virgin Islands, U.S.A., 13th January, 1936. Trans. Soc. Trop. Med. London 30 1936 p. 6.

845.—O'Connor, F. W. and Beatty, H. The early migrations of *Wuchereria bancrofti* in *Culex fatigans*. Trans. Soc. trop. Med. Hyg. Lond. 30 1936 pp. 125-127 1 pl.

846.—O'Connor, F. W. and Hulse, C. R. Studies in Filariasis. I. In Puerto Rico. Puerto Rico J. Publ. Health San Juan 11 1935 pp. 167-272 26 figs.

847.—Odlang, T. O. Notes on the development of *Gorgodera amplicava* in the final host. J. Parasit. Urbana 22 1936 p. 535.

Ogata, T. *vide* Fukui, T.

848.—Ogura, K. Studies on the *Hymenolepis nana* in Korea. [In Japanese, with English summary.] J. Chosen Med. Ass. 26 1936 pp. 649-668.

849.—Ohashi, M. A patho-histological research on the eyes of dogs having *Dirofilaria immitis*. Trans. Soc. Path. Jap. Tokio 26 1936 pp. 694-695.

Ohfuchi, S. *vide* Hatai, S.

850.—Okabe, K. Zur Entwicklungsgeschichte von *Exorchis oviformis* Kobayashi. [In Japanese, with German summary.] Fukuoka Acta Med. 29 1936 pp. 211-221 9 figs.

Økland, F. *vide* Amundsen, H.

851.—Okuda, S. Some lacustrine Polychaetes with a list of brackish-water Polychaetes found in Japan. Annot. zool. jap. 15 1935 pp. 240-246 7 figs.

852.—Okuda, S. Description of a new sedentary Polychaete, *Thoracophelia ezoensis* n. sp. Proc. Imp. Acad. Tokyo 12 1936 pp. 201-202 2 figs.

853.—Okuda, S. Description of two polychaetous annelids found in the burrows of an apodous holothurian. Annot. zool. jap. 15 1936 pp. 410-415 4 figs.

854.—Okuda, S. Japanese commensal Polynoids. Annot. zool. jap. 15 1936 pp. 561-571 7 figs.

855.—Okuda, S. Polychaetous annelids from the Northern Kurile Islands. Bull. Biogeograph. Soc. Tokyo 6 iv 1935 pp. 1-3.

856.—Okuda, S. Polychaetous annelids from Toyama Bay and its adjacent waters, i. Polychaeta Seden-taria. Bull. Biogeogr. Soc. Tokyo 6 xiv 1936 pp. 147-157 8 figs.

857.—Okuda, S. and Ishikawa, H. Polychaete worms used as baits in Japan. [In Japanese.] Botany and Zool. Tokyo 4 1936 pp. 1698-1706 12 figs.

858.—Okulitch, V. J. *Streptindytes chaetetiae* a new species of parasitic Annelid found on *Chaetetes radians* [coral]. Amer. Midl. Nat. Notre Dame 17 1936 pp. 983-984 2 figs.

859.—Olson, H. W. Earthworms of Missouri. Ohio J. Sci. Columbus 36 1936 pp. 102-113.

Onohara, K. *vide* Yoshida, S.

860.—Öpik, A. Beiträge zur Kenntnis der Kukruse-Stufe in Eesti. II-IV. Acta Univ. Tartu Dorpat 12 1927 pp. 1-35 6 pls., 13 1928 pp. 1-42 4 pls., 19 1931 pp. 1-34 6 pls.

861.—Orosz, D. *Capillaria*, quisti-onibus anatomicis et criticis. [In Czech.] Denkschr. Akad. Wiss. 19 1931 pp. 189-338 15 pls. [n.v.]

862.—Orosz, D. *Capillaria*-Arten des Hausgeflügels. Thesis Budapest 1931. [n.v.]

863.—Orosz, D. *Capillaria*-fajok házi madarainkban. Közlem. Összeh. Kórtan Köreből 25 1932 pp. 29-54. [n.v.]

864.—Ortlepp, R. J. The sheep hookworm. Its appearance, life cycle, control and remedial measures. Farming in South Africa 10 1935 pp. 10-11.

865.—Osterholm, B. Två parasits-jukdomar hos fisk. Finsk Vet.-skr. 1935 pp. 89-91. [n.v.]

866.—Ots, H. Liver-fluke in sheep and cattle in Estonia. [In Estonian.] Eesti Loomaärstlik Ringvade 12 1936 pp. 40-56.

867.—Otto, G. F. Human infestation with the dwarf tapeworm (*Hymenolepis nana*) in the Southern United States. Amer. J. Hyg. Baltimore 23 1936 pp. 25-32.

868.—Otto, G. F. Localized centers of hookworm disease in Kentucky and North Carolina. Amer. J. Hyg. Baltimore 23 1936 pp. 157-168.

869.—Oxspring, G. E. Equine debility due to *Trichostrongylus axei*. Veter. Rec. London 16 1936 pp. 87-88.

870.—Oxspring, G. E. Parasitic gastritis in horses. J. Roy. Army Veter. Corps Aldershot 7 1936 pp. 100-101.

Oye, E. L. *van vide* Van Oye, E. L.

871.—Ozaki, Y. Studies on the frog-trematode, *Diplorchis*. II. Morphology and behavior of the swimming larva. J. Sci. Hiroshima Univ. Zool. 4 1935 pp. 23-34 6 text-figs., 2 pls.

872.—Ozaki, Y. Two new Trematodes from tortoise *Geomyda spengleri* (Gmelin). J. Sci. Hiroshima Univ. Zool. 4 1936 pp. 81-90 7 figs.

873.—Ozaki, Y. Two new genera of the Trematode family Allocreadiidae. Zool. Mag. Tokyo 48 1936 pp. 513-518 pl. xvi.

874.—Ozaki, Y. *Flagellotrema convolutum* n.g., n. sp., a new Trematode of the family Gyliacnidae. Zool. Mag. Tokyo 48 1936 pp. 951-953 1 fig.

875.—Packard, C. E. Observations on the Gastrotricha indigenous to New Hampshire. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 422-427 1 fig.

876.—Palais, M. Recherches sur les parasites de souris à Marseille. Marseille Méd. 73 1936 pp. 763-765.

877.—Palombi, A. Policladi liberi e commensali raccolti sulle coste del Sud Africa; della Florida e del golfo di Napoli. Arch. zool. Torino 23 1936 pp. 1-45 27 figs. 1 pl.

878.—Pande, P. G. The etiology of hump sore in cattle: a preliminary report. Ind. J. Veter. Sc. 5 1935 pp. 332-342.

879.—Pardina, J. N. Parasitosis intestinal infantil en Córdoba. Actas Trab. 5. Congr. nac. Med. Argentina Rosario 3 1934 pp. 921-928.

880.—Pardina, J. N. Parasitosis intestinal infantil. Prensa Méd. Argent. Buenos Aires 22 1935 pp. 1050-1062.

881.—Park, J. T. New Trematodes from birds, *Plagiorchis noblei* sp. nov. (Plagiorchidae) and *Galactosomum humbargari* sp. nov. (Heterophyidae). Trans. Amer. micr. Soc. Menasha 55 1936 pp. 360–365 pls. xliii–xliv.

882.—Park, J. T. Two new Trematodes, *Sterrhurus magnitestis* and *Tubulovesicula californica* (Hemiuridae) from littoral fishes of Dillon's Beach, California. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 477–482 pl. lx.

883.—Park, P. J. The miracidium of *Neodiplostomum lucidum* La Rue and Bosma. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 49–54 pl. xi.

884.—Parnell, I. W. Fish parasites and their importance. Trans. Amer. Fish Soc. 74 1934 pp. 390–400.

885.—Parnell, I. W. Studies on the bionomics and control of the bursate nematodes of horses and sheep. II. Technique. Canad. J. Res. Ottawa 14 D 1936 pp. 71–81.

886.—Parnell, I. W. Studies on the bionomics and control of the bursate nematodes of horses and sheep. III. Further observations on the toxicity of urine and some related substances for sclerostome larvae in feces. Canad. J. Sci. Ottawa 14 D 1936 pp. 172–180 5 figs.

887.—Parnell, I. W. Notes on the survival of the eggs and free-living larvae of sclerostomes on pasture. Scient. Agric. Ottawa 16 1936 pp. 391–397.

Pasco, A. M. *vide* Tubangui, M. A.

888.—Pashitnowa, Z. A. Materialien zur Erforschung der Mikrofauna der Reisfelder und die Biologie der *Anopheles*-larve auf den Reisfeldern. Acta Univ. Asiae Med. Tashkent (Sa Zool.) 18 1935 pp. 1–56. [German summary p. 57.]

889.—Passey, R. D. Recent research on cancer. Nature London 137 1936 p. 662.

890.—Paterno, A. Le alterazioni del tessuto epatico limitrofo alle cisti di echinococco. Gazz. Intern. Med. Chirurg. 45 1935 pp. 417–418.

891.—Paterson, A. S. Pulmonary abscess caused by *Ascaris lumbricoides*. J. R. Nav. Med. Serv. London 17 1931 pp. 211–212.

892.—Patterson, E. E. Another specimen of *Diectophyme renale*. J. Amer. Vet. Med. Ass. Chicago 88 1936 p. 184.

893.—Paul, A. A. Studies on North American Polystomes. J. Parasit. Urbana 22 1936 p. 535.

Pavlova, P. I. *vide* Smorodincev, I. A.

Pavlova, P. I. *vide etiam* Smorodintzer, I. A.

894.—Pawloff, P. Über die Darmhelminthen der Hühner in Bulgarien. Veter. Sbir. Sofia 39 no. 4 1935 pp. 130–133.

895.—Pawłowski, L. K. Über die sogenannten Varietäten des Egels *Haemopsis sanguisuga* (Linn.). Ann. Mus. Zool. Polon. Warsaw 11 1936 pp. 161–169 pl. xxvi.

896.—Pawłowski, L. K. Über den Bau des Verdauungskansals des Egels, *Theromyzon tessellata* (O. F. Müll.). Folia Morphol. Warsaw 6 1936 pp. 87–91 2 figs.

897.—Pawłowski, L. K. Zur Ökologie der Hirudineenfauna der Wigryseen. Arch. Hydrobiol. Ichthyol. Suwalki 10 1936 pp. 1–47 pls. i, ii.

898.—Pawłowski, L. K. Über die wahre systematische Stellung des Egels *Glossosiphonia octoserialis* Stschegolew, 1922. Ann. Mus. zool. polon. 11 1936 pp. 339–345 fig. 1.

899.—Pawłowski, L. K. Über die äussere Morphologie und systematische Stellung des Egels *Blanchardia bykowski* (Gedroyć), nebst Bemerkungen über einige Arten der Gattung *Herpobdella* Blainv. Ann. Mus. zool. polon. 11 1936 pp. 347–358 6 figs.

900.—Pawłowski, L. K. Über zwei Hirudineenarten: *Placobdella roszkowski* Oka und *Helobdella scutifera* R. Blanchard. Ann. Mus. zool. polon. 11 1936 pp. 359–369 1 fig.

901.—Pawłowski, L. K. Kurze Notiz über die Hirudineen des Ohrhid-Sees. Ann. Mus. zool. polon. 11 1936 pp. 371–378 3 figs.

902.—Pax, F. und Maschke, K. Die Tierwelt des Quells. I. Die Metazoenfauna der Ukratopegen. Pax, Beitr. Biol. Glatzer Schneeberges Breslau Hft. 2 1936 pp. 135–171 10 figs.

903.—Peacock, A. H. and Voegtlin, W. L. Sporadic occurrence of bilharziasis in Washington. Northwest Med. **34** 1935 pp. 174-176.

904.—Pearse, A. S. Parasites from Yucatan. Pub. Carnegie Instn. Washington **457** 1936 pp. 45-59 21 figs.

905.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill **52** 1936 pp. 174-222 pls. xv, xvi.

Penfold, H. B. *vide* Penfold, W. J.

906.—Penfold, W. J. and Penfold, H. B. The diagnosis of *Taenia saginata* infestation. Med. J. Australia Sydney **23** i 1936 pp. 317-321.

907.—Penfold, W. J., Penfold, H. B. and Phillips, M. A survey of the incidence of *Taenia saginata* infestation in the population of the State of Victoria from January 1934 to July 1935. Med. J. Australia Sydney **23** i 1936 pp. 283-285.

908.—Penfold, W. J., Penfold, H. B. and Phillips, M. Acquired active immunity in the ox to *Cysticercus bovis*. Med. J. Austral. Sydney **23** i 1936 pp. 417-423.

909.—Penfold, W. J., Penfold, H. B. and Phillips, M. Ridding pasture of *Taenia saginata* ova by grazing cattle or sheep. J. Helminth. London **14** 1936 pp. 135-140.

910.—Pennak, R. W. A preliminary note on the ecology of the psammon of some Wisconsin lakes. [Abstract.] Anat. Rec. Philadelphia **67** 1936 suppl. i p. 126.

911.—Pennypacker, M. I. The chromosomes in the maturation of the germ cells of the frog lung fluke, *Pneumonoecus medioplexus*. Arch. Biol. Liège **47** 1936 pp. 309-317 pl. ix.

912.—Pereira, C. Observações sobre as condições helmintológicas do Nordeste. Bolet. Biol. S. Paulo N.S. **1** 1933 pp. 33-53.

913.—Pereira, C. Os Oxyurata parasitos de Lacertilia do Nordeste Brasileiro. Arch. Inst. Biol. São Paulo **6** 1935 pp. 5-27 48 figs.

914.—Pereira, C. Ascaridata e Spirurata parasitos de peixos do Nordeste Brasileiro. Arch. Inst. Biol. São Paulo **6** 1935 pp. 53-62 25 figs.

915.—Pereira, C. Metodo pratico para cultura e isolamento das larvas de nematoides monoxenos de penetração ativa. Bol. biol. S. Paulo **2** 1935 pp. 82-83.

Pereira, C. *vide etiam* Vaz, Z.

916.—Perez, C. Une ancienne observation relative au *Nectonema*. Bull. Soc. zool. Fr. **60** 1936 pp. 467-468.

917.—Pérez, C. Atrophie des glandes genitales de la Turritelle sous l'influence du parasitisme par les sporocystes d'un Trematode. Mem. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 539-547 9 figs.

918.—Pesson, P. Notes de faunistique armoricaine (2^e note). Bull. Soc. sci. Bretagne **12** 1935 pp. 190-197 1 fig.

919.—Pesson, P. Notes de faunistique Armoricaine (3^e note). Bull. Soc. sci. Bretagne **13** 1936 pp. 83-89.

920.—Peters, B. G. *Paronchocerca ciconiarum* n. g., n. sp., from the saddle-billed stork in West Africa. J. Helminth. London **14** 1936 pp. 1-10 7 figs.

921.—Peters, B. G. Some recent developments in helminthology. Proc. R. Soc. Med. London **29** 1936 pp. 44-54.

Phen-Huy-Quat *vide* Galliard, H.

922.—Phillips, H. M. A cytological study of *Macrostomum tubo* von Graff. Zool. Anz. Leipzig **114** 1936 pp. 322-330 25 figs.

Phillips, M. *vide* Penfold, W. J.

923.—Piéri, J. and Bouet. Ictère par anguillulose rebelle. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 513-516.

Pino, A. P. del *vide* Bacardi, J. F.

924.—Pintner, T. Über die Gewebe der Cestoden. Anz. Akad. Wiss. Wien **72** 1935 pp. 6-10.

925.—Pinto, C. Variações morfológicas observadas no *Eurytrema fastosum* (Kossack, 1910). Trematoda, Dicrocoelidae. O Campo Rio de Janeiro 1935 pp. 50-52 10 figs.

926.—Pinto, C. Contribuição as estudo do *Stephanurus dentatus* Diesing, 1839, agente etiologico da estefanurose dos suínos. Strongylata, Stephanuridae. O Campo Rio de Janeiro 1935 pp. 27-30 3 figs.

927.—Pinto, C. *Viannella Travassosi* n. sp. de Trichostrongylideo parasita de Preá (*Cavia aperea*) do Brasil. O Campo Rio de Janeiro 1935 p. 39.

928.—Pinto, C. Contribuição ao estudo da *Taenia taeniaeformis* (Batsch, 1786), parasito dos gatos do Brasil. O Campo Rio de Janeiro 1936 pp. 26–29 6 figs.

929.—Pinto, C. Physalopteroze dos gatos do Brasil por *Physaloptera praeputialis* Von Linstow, 1889. Nematoda, Physalopteridae. O Campo Rio de Janeiro 1936 pp. 45–47 4 figs.

930.—Pinto, C. and Lins de Almeida, J. Sinopse dos helmintos dos animais domesticos do Brasil. O Campo Rio de Janeiro 6 1935 viii pp. 54–63 10 figs.

931.—Pinto, C. and Proença, C. Etiologia dos aneurismas helminticos e strongylose equina. O Campo Rio de Janeiro 1936 pp. 53–56 7 figs.

Pinto, C. *vide etiam* Torres, C. M.

932.—Plakidas, A. G. Nematodes on alligator weed. Plant Dis. Rep. Washington 20 1936 p. 22.

933.—Plotnikov, N. On the spread of the plerocercoids of *Diphyllbothrium latum* in fishes of the rivers Irtysh and Tobol. [In Russian.] Med. Parasit. Moscow 4 1935 p. 330.

934.—Plotnikov, N. and Zertschani-nov, L. On the Trematode fauna of the liver in man and domestic Carnivora in Tobolsk. [In Russian.] Med. Parasit. Moscow 4 1935 p. 330.

935.—Podiapolska, —. L'anquilostomiase en U.R.S.S. Bull. Mem. Off. Intern. Hyg. Publ. Paris 28 1936 pp. 1521–1524.

936.—Poggi, I. Su di un caso d'infestazione intestinale parassitaria associata e multipla. Arch. Ital. Sc. Med. Colon. Rome 13 1932 pp. 474–483.

937.—Poisson, H. Note sur la filariose des Toho malgaches. Bull. Soc. Path. Exot. Paris 29 1936 p. 343.

938.—Pomerat, C. M. and Zarrow, M. X. The effect of temperature on the respiration of the earthworm. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 270–272 1 fig.

939.—Pool, G. *Eiseniella tetraedra* (Sav.). Ein Beitrag zur vergleichenden

Anatomie und Systematik der Lumbriciden. Vjschr. naturf. Ges. Zurich 81 1936 pp. 199–216.

Popov, P. P. *vide* Skrjabin, K. I.

940.—Porter, A. Remarks on intestinal parasites in Montreal, and relation of *Entamoeba histolytica* to colitis. Canad. Med. Ass. J. 30 1934 pp. 134–136.

Porter A. *vide etiam* Fantham, H. B.

941.—Porter, D. A. The ingestion of the inflammatory exudate by swine lungworms. J. Parasit. Urbana 22 1936 pp. 411–412 1 fig.

942.—Posselt, A. Über die Natur des *Echinococcus alveolaris* und seine Beziehung zum *Echinococcus hidatidosus*. Intern. Cong. Comp. Path. 3 Sect. Human Med. Athens 1936 pp. 27–52.

Pradhan, L. B. *vide* Awati, P. R.

943.—Prashad, B. On the Sipunculoidea from Indian waters in the Indian Museum, Calcutta. Rec. Ind. Mus. Calcutta 38 1936 pp. 231–238 pl. ix.

944.—Pratt H. S. A manual of the common invertebrate animals, exclusive of insects. Philadelphia (Blakiston) 1935 xviii + 854 pp. 974 figs.

945.—Price, E. W. A new heterophyid trematode of the genus *Ascoctyle* (Centrocestinae). Proc. helminth. Soc. Washington 3 1936 pp. 31–32 fig. 11.

946.—Price, E. W. Redescriptions of the type species of the trematode genera *Lechriorchis* Stafford and *Zeugorchis* Stafford (Plagiorchiidae). Proc. helminth. Soc. Washington 3 1936 pp. 32–34 fig. 12.

947.—Price, E. W. Two new trematodes from African reptiles. Proc. helminth. Soc. Washington 3 1936 pp. 67–68 fig. 18.

Proença, C. *vide* Pinto, C.

948.—Prommas, C. and Daengsvang, S. Further report of a study on the life cycle of *Gnathostoma spinigerum*. J. Parasit. Urbana 22 1936 pp. 180–186 3 figs.

949.—Pruis, G. W. A. Over ascaris intoxicatie. Geneeskund. Tijdschr. Ned. Indie 73 1933 pp. 685–690.

950.—Pulgram, F. Ueber einem Fall von Cysticercosis cerebri et cordis. Wien. Klin. Woch. 41 1928 p. 1088.

951.—Purachov, K. G. Хотатки про мікрофавну околиць м. харкова. Trav. Soc. Nat. Kharkov 53 1930 pp. 91-92 3 figs.

952.—Pyefinch, K. A. Habitat of *Procerodes (Gunda) ulvae*. Nature London 137 1936 p. 32.

953.—Quiñones, J. F. Contribución al estudio de las hiperclorhidrias. Observacione respecto a las hiperclorhidrias provocadas por el tricocefalo dispar. Crón. Med.-Quir. Habana 61. 1935 pp. 183-185.

954.—Rafael Risquez, J. Parasitismo por *Ascaris lumbricoides* verificado en Caracas (en 25,000 análisis). Gac. Méd. Caracas 42 1935 p. 347.

Raina, J. L. vide Nath, V.

955.—Ramsay, G. W. A study on schistosomiasis and certain other helminthic infections in Northern Nigeria. IV. The influence of age on the excretion of eggs of *Bilharzia* spp. and of *Hymenolepis nana*. West African Med. J. 8 iii 1935 pp. 2-7.

956.—Rao, S. S. Filariasis in Patnagarh (Orissa Feudatory State). Ind. J. Med. Res. Calcutta 23 1936 pp. 871-879.

957.—Raphaël, C. Sur la localisation de l'hémoglobine et de ses dérivés chez quelques Aphroditiens. C.R. Acad. Sci. Paris 202 1936 pp. 588-590.

Raphaël, C. vide etiam Roche, J.

Rarivoson, A. vide Le Gac, P.

Ratsimamanga, R. vide Giroud, A.

958.—Ray, H. and Dasgupta, M. *Microfilaria columbae* n. sp. du sang d'un pigeon indien *Columba intermedia*. Ann. Parasitol. Paris 14 1936 pp. 256-260 pls. vi, vii.

959.—Ray, P. N. Some observations on filariasis and its complications. Calcutta Med. J. 31 1936 pp. 121-131.

Rector, L. E. vide Tsuchiya, H.

960.—Rees, F. G. Two new species of *Tachygonetria* from the Indian tortoise, *Testudo horsfieldi* Gray. Proc. Zool. Soc. London 1935 iii pp. 499-603.

961.—Rees, W. J. Note on the ubiquitous cercaria from *Littorina rudis*,

L. obtusata and *L. littorea*. J. Mar. biol. Ass. Plymouth N.S. 20 1936 pp. 621-624 fig. 1.

Refuerzo, P. G. vide Africa, C. M.

962.—Reid, W. M. and Freeman, A. E. A new fluke *Prosthogonimus folliculus* n. sp. (Trematoda) from the American bittern. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 366-368.

Reid, W. M. vide etiam Ackert, J. E.

963.—Reis, J. and Nobrega, P. Tratado de doenças das aves. Trabalho Inst. Biol. São Paulo 1936 pp. 1-469 360 figs. 4 pls. [Vermes at pp. 312-352.]

964.—Remane, A. Gastrotricha. Kinorhyncha (s. Echinodera). Bronns Klassen u. Ordnungen des Tierreichs Leipzig 1936. Band 4 Abt. 2 Buch 1 Teil 2 Lfg. 2 pp. 161-385 figs. 154-297.

965.—Remley, L. W. Morphology and life history studies of *Microcotyle spinicirrus*, a monogenetic Trematode from the gills of *Aplodinotus grunniens*. J. Parasit. Urbana 22 1936 p. 535.

966.—Reynolds, B. D. A new host for *Leucochloridium dryobatae*. J. Parasit. Urbana 22 1936 pp. 409-410.

967.—Reynolds, B. D. Adolescaria from *Agriolimax agrestis*. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 77.

968.—Rho, G. Caso triplo di *Bothriocephalus latus* nel cane. Profilassi Milan 7 1934 pp. 106-108.

Riddle, J. S. vide Maplestone, P. A.

969.—Rioja, E. Anélidos Poliquetos procedentes de las campañas del Instituto Español de Oceanografía. Trab. Inst. esp. Oceanogr. Madrid 13 1935 pp. 1-44 57 figs.

Risquez, J. R. vide Raphael Risquez, J.

Ritchie, J. E. vide Fraser, A. H. H.

970.—Ritchie, L. S. The specific validity of the human and pig *Ascaris*, based on a comparative study of spermatogenesis and oogenesis. J. Parasit. Urbana 22 1936 p. 536.

- 971.—Roberts, F. H. S. A survey of the helminth parasites of the domestic fowl and pigeon in Queensland. Dep. Agric. Queensland Pamph. 3 1932 6 pp. [n.v.]
- 972.—Roberts, F. H. S. Helminth parasites of domesticated animals in Queensland. Further records of occurrence. Queensland Agric. J. Brisbane 44 1935 pp. 299–300.
- 973.—Roberts, F. H. S. The occurrence of *Capillaria* sp. in a calf. Austral. Veter. J. Sydney 11 1936 p. 229.
- 974.—Roberts, F. H. S. The distribution of gastro-intestinal parasites of sheep in Queensland. Queensl. Agric. J. 46 1936 pp. 30–37.
- 975.—Roberts, F. H. S. Studies on the biology and control of the large roundworm of fowls, *Ascaridia galli* (Schränk 1788) Freeborn 1923. Queensl. Agric. J. 46 1936 pp. 38–50, 173–191.
- 976.—Roberts, F. H. S. Studies on the biology and control of the large roundworm of fowls, *Ascaridia galli* (Sebrank 1788) Freeborn 1923 Part V. Queensl. Agric. J. Brisbane 46 1936 pp. 586–601.
- 977.—Robertson, D. The control of the lesser stomach worm in sheep. Scot. J. Agric. 19 1936 pp. 359–363.
- Robertson, D. *vide etiam* Fraser, A. H. H.
- 978.—Robertson, J. D. The function of the calciferous glands of earthworms. J. Exp. Biol. Cambridge 13 1936 pp. 279–297 2 pls. 3 figs.
- 979.—Robertson, R. C. The transmission in China of helminths by vegetables. Chinese Med. J. Shanghai 1936 suppl. pp. 418–422.
- 980.—Robin, C., Sicé, A. and Mercier, H. Parasitisme associé: ankylostomose et onchocercose. Marseille Med. 73 1936 pp. 140–144.
- 981.—Robson, G. C. Vermes. in Regan. C.T. Natural History London 1936 pp. 35–39 & 64 4 figs.
- 982.—Roche, J. and Raphaël, C. Sur l'erythrocrurine (hémoglobine) du système nerveux de l'Aphrodite. C.R. Soc. Biol. Paris 121 10 1936 pp. 1024–1026 1 fig.
- 983.—Rodewald, L. Contribuțiuni la cunoașterea faunei Rotatoriilor (Rotiferelor) din turbăriile Bucovinei muntoase. Bulet. Fac. Științe Cernăuți 8 1934 pp. 81–89 3 figs.
- 984.—Rodewald, L. Fauna Rotiferelor din Bucovina. Sistematica, biologia și răspândirea lor geografică. Bulet. Fac. Științe Cernăuți 8 1934 pp. 187–266 21 figs. 1 map.
- 985.—Rodewald, L. Les Rotifères de Bessarabie. I. La faune des Rotifères de printemps aux environs de Chișinău. Bull. Mus. nat. Kichineff 6 1935 pp. 18–37 11 figs.
- 986.—Rodhain, J. Contribution à l'étude de la localisation ganglionnaire des microfilaria de *Onchocerca volvulus*. Ann. Soc. Belge Méd. Trop. 16 1936 pp. 253–271.
- 987.—Rodhain, J. and Gavrilov, W. Un cas de localisation profonde de microfilaria *volvulus*. Ann. Soc. Belge Méd. Trop. Brussels 15 1935 pp. 551–560.
- 988.—Rogers, C. G. Observations on the enteric nerve plexus of the earthworm, *Lumbricus terrestris*. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 73.
- Roman, E. *vide* Massia, G.
- 989.—Ross, I. C. A note on the development of *Echinococcus granulosus*. J. Counc. Sc. Indust. Res. Melbourne 9 1936 pp. 67–68.
- 990.—Ross, I. C. and Gordon, H. M. The internal parasites and parasitic diseases of sheep. Their treatment and control. Sydney 1936 238 pp.
- 991.—Roth, H. Über das Vorkommen pränataler Trichinenübertragung bei künstlich infizierten Meerschweinchen. Zbl. Bakt. Jena (Originale) 136 1936 pp. 278–284.
- 992.—Roth, H. Untersuchungen über die Häufigkeit des Vorkommens von Eingeweidewürmern, speziell von *Trichuris trichiura*, bei Patienten der Kopenhagener Universitäts-Kinderklinik. Acta Paediat. 19 1936 pp. 104–122.
- 993.—Rothschild, M. The process of encystment of a cercaria parasitic in *Lymnaea tenera euphratica*. Parasitology Cambridge 28 1936 pp. 56–62 8 figs.

994.—Rothschild, M. Preliminary note on the Trematode parasites of *Peringia ulvae* (Pennant 1777). Novit. zool. Tring **38** 1936 pp. 268–269.

995.—Rothschild, M. Gigantism and variation in *Peringia ulvae* Pennant 1777, caused by infection with larval Trematodes. J. Mar. biol. Ass. Plymouth N.S. **20** 1936 pp. 537–546 2 figs.

996.—Rothschild, M. A note on the variation of certain cercariae (Trematoda). Novit. Zool. Tring **40** 1936 pp. 170–175 7 figs.

997.—Rothschild, M. Rearing animals in captivity for the study of Trematode life histories. I. *Larus ridibundus* L., the black-headed gull. J. Mar. Biol. Ass. Plymouth **21** 1936 pp. 143–148.

998.—Roudabush, R. L. Arthropod and helminth parasites of the American bison (*Bison bison*). J. Parasit. Urbana **22** 1936 pp. 517–518.

Roudabush, R. L. *vide etiam* McMullen, D. B.

999.—Rousseau, L. Stéphanurose porcine en Guyane française. Bull. Soc. Path. Exot. Paris **29** 1936 pp. 46–47.

1000.—Roux, P. La sangsue médicinale (*Hirudo medicinalis*) est-elle nuisible aux poissons? Bull. Soc. sci. Bretagne **12** 1935 pp. 172–176 1 fig.

1001.—Rubino, M. C. and Calzada, V. Contribución al estudio de la helmintosis gastro-intestinal de los ovinos del Uruguay. Bol. Polic. Sanit. Anim. Monte Video **17** 1933 pp. 716–745. [N.v.]

1002.—Rukavina, W. Lebererkrankungen beim Menschen. [In Serbian with German summary.] Lječnički Vjesnik **1935** viii p. 326. [N.v.]

1003.—Rulon, O. Experimental asymmetries of the head of *Euplanaria dorotocephala*. Physiol. Zool. **9** 1936 pp. 278–292 12 figs.

Rulon, O. *vide etiam* Child, C. M.

1004.—Russell, A. J. H. Sur l'anquilostomiase dans l'Inde Britannique. Bull. Mem. Off. Intern. Hyg. Publ. Paris **28** 1936 pp. 1511–1512.

1005.—Russell, F. S. A review of some aspects of zooplankton research. Rapp. Cons. Explor. Mer. Copenh. **95** 1936 pp. 3–30 9 figs.

1006.—Russell, F. S. The importance of certain plankton animals as indicators of water movements in the western end of the English Channel. Rapp. Cons. Explor. Mer. Copenh. **100** Pt. 3 1936 pp. 7–10 3 figs.

1007.—Ruszkowski, J. S. Obituary. C. Janicki (1876–1932). Ann. Parasitol. Paris **11** 1933 pp. 144–145.

1008.—Rylov, W. M. Zur Kenntniss des Zooplanktons des Issyk-kul-Sees. [In Russian.] Results Lake Issy-Kul Exped. **1** 1930 pp. 111–135. [German summ. p. 136.]

1009.—Ryo, S. A survey of the distribution of helminthic and protozoan parasites among 10,293 inhabitants of Fushun. [In Japanese.] J. Orient. Med. Dairen **24** 1936 pp. 1145–1152. [English p. 81.]

1010.—Rzoska, J. Ein Beitrag zur Oekologie der Litoralfauna (Oligochaeta). Verh. int. Verein. Limnol. Beograd **7** 1935 pp. 507–512.

1011.—Rzoska, J. Oekologische Untersuchungen über die Verbreitung der Litoralfauna zweier polnischer Seen. [Oligochaeta and Hirudinea.] Prace Kom. mat.-prz. pozn. Tow. Przyj. Nank. (B) **7** 1935 pp. 247–398. [German summary pp. 388–398.]

1012.—Sabadini, L. Les kystes hydatiques de la rate. Paris (Masson et Cie.) 1936 200 pp. 82 figs.

1013.—Sachwatkin, V. Zur Fauna parasitischer Würmer der sibirischen Fische. [In Russian with German summary.] Scient. Mem. M. Gorki St. Univ. Perm **2** 1936 pp. 65–82 1 pl.

Saint-Prix, M. *vide* Berny, P.

1014.—Sandground, J. H. *Spirura michiganensis* n. sp. and *Rictularia halli* n. sp. Two new parasitic nematodes from *Eutomias striatus lysteri* (Richardson). Trans. Amer. micr. Soc. Menasha **54** 1935 pp. 155–166 pl. xxviii.

1015.—Sandground, J. H. *Pseudofilaria*, a new name for *Protofilaria* Sandground 1935 (Nematoda, Filariidae). Rev. Zool. Bot. afr. Tervueren **28** 1936 p. 164.

1016.—Sandground, J. H. On the species of *Moniezia* (Cestoda: Anoplocephalidae) harboured by the hippopotamus. *Proc. helminth. Soc. Washington* 3 1936 pp. 52–53.

1017.—Sandground, J. H. On the potential longevity of various helminths, with a record for a species of *Trichostrongylus* in man. *J. Parasit. Urbana* 22 1936 pp. 464–470.

1018.—Sandground, J. H. Scientific results of an expedition to rain forest regions in Eastern Africa. VI. Nematoda. *Bull. Mus. Comp. Zool. Harvard* 79 1936 pp. 341–366 22 figs.

1019.—Sandground, J. H. *Elaeophora poelli* Railliet and Henry, 1912, in African buffalo and its taxonomic affinities. *J. Parasit. Urbana* 22 1936 p. 528.

1020.—Sandground, J. H. A cerebral *Coenurus* from *Cercopithecus nictitans*. *J. Parasit. Urbana* 22 1936 p. 533.

1021.—Sandground, J. H. On the occurrence of a species of *Loa* in monkeys in the Belgian Congo. *Ann. Soc. Belge Méd. Trop. Brussels* 16 1936 pp. 273–278.

1022.—Sanz Astolfi, J. La filariosis en el Norte de Marruecos. *Med. Países Calid. Madrid* 9 1936 pp. 16–25 3 figs.

1023.—Sarles, M. P. and Taliaferro, W. H. The local points of defense and the passive transfer of acquired immunity to *Nippostrongylus muris* in rats. *J. Infect. Dis. Chicago* 59 1936 pp. 207–220 3 figs.

1024.—Sarhou, C. Contribution à l'étude de la metastrongylose bovine. Thesis Toulouse 1931. [n.v.]

1025.—Sassuchin, D., Tiflov, V. and Schulz, R. E. Endo- and ecto-parasites of *Rhombomys opimus* Licht. III. [In Russian.] *Rev. Microbiol. Saratow* 13 1934 pp. 335–338.

1026.—Sato, C. Infection experiments with *Ascaridia perspicillum* in mice. *Keio Ig.* 15 1935 pp. 391–395. [Abstract in Japan. *J. Zool.* 7 1936 p. (9).]

1027.—Sato, H. The Gephyrea of the South Sea Islands. [In Japanese.] *Botany & Zool. Tokyo* 4 1936 pp. 77–82.

1028.—Satta, E. Identificazione de un focolaio di Bilbarziosi intestinale

nella Colonia Eritrea. *Acta pont. Acad. Sci. Novi Lincae* 88 Suppl. 1934–35 p. 297.

1029.—Satta, E. Identificazione del primo focolaio di Bilbarziosi intestinale de *Schistosoma mansoni* della Colonia Eritrea. *Arch. Ital. Sc. Med. Colon. Rome* 17 1936 pp. 193–205 5 figs.

Sauerstein, H. *vide* Hoff, F.

1030.—Saunders, C. Studies of *Heterakis gallinae* (Gmelin, 1790) Freeborn 1923, a nematode parasite of domestic fowls. *Trans. Canad. Inst. Toronto* 20 1935 pp. 179–215 5 figs.

1031.—Sayad, W. Y., Johnson, V. M. and Faust, E. C. Human parasitization with *Gordius robustus*. *J. Amer. Med. Ass. Chicago* 106 1936 pp. 461–462.

1032.—Sayles, L. P. Regeneration in the Polychaete *Clymenella torquata* III. Effect of level of cut on type of new structures in anterior regeneration. *Biol. Bull. Woods Hole* 70 1936 pp. 441–459 30 figs.

1033.—Scaduto, P. Alcuni animali da cortile ed i passerii quali vettori della diffusione a distanza delle uova d'*Ankylostoma duodenalis*. *Reunion Soc. Argentina Patol. Reg. Norte Buenos Aires* 8 ii 1936 pp. 805–810.

1034.—Scaffo de Casas, G. Tenia (*Dipylidium caninum*) en un lactante de 3 meses. *Arch. Pediat. Uruguay* 3 1932 pp. 395–396.

1035.—Scharrer, B. Über “Drüsen-Nervenzellen” im Gehirn von *Nereis virens* Sars. *Zool. Anz. Leipzig* 113 1936 pp. 299–302 4 figs.

1036.—Scheepe, F. L. De verspreiding der Filariasis in Indragiri. *Geneesk. Tijdschr. Ned. Ind.* 75 1935 p. 1197.

1037.—Scheer, D. *Gammarus pulex* und *Carinogammarus roeselii* als Zwischenwirte von *Polymorphus minutus* (Acanth.). *Z. Parasitenk. Berlin* 7 1934 pp. 268–272 2 figs.

1038.—Schewtschenko, N. N. Polaritätsumkehr bei der Unterdrückung der dominierenden Regionen bei *Planaria*. *Zool. Anz. Leipzig* 115 1936 pp. 232–244 13 figs.

Schichobalowa, N. *vide* Schulz, R. E.

1039.—Schick, E. Zur multiplen Zystizerkose des Menschen. Münchener Med. Woch. **83** 1936 pp. 694–696.

Schikhobalova, N. P. *vide* Skrjabin, K. J.

1040.—Schleip, W., Herter, K., Autrum, H. Hirudineen. II. Bronn's Klassen Leipzig **4** Abt. 3 Buch 4 Teil 2 Lief. 1 1936 pp. 1–128 93 figs.

Schmassmann, W. *vide* Suchlandt, O.

1041.—Schmid, F. Beitrag zur Technik der Kotuntersuchung imbesonderes zur Untersuchung von Hühnerkot. Tierärztl. Rundschau Friedenau **40** 1934 pp. 467–469.

1042.—Schmid, F. Zur Frage der Immunität bei parasitären Krankheiten und ihrer Bedeutung für die Bekämpfung. Zeitschr. Infektionskr. Haustiere Berlin **49** 1936 pp. 177–207.

1043.—Schmid, —. Die Biologie einiger Eingeweidewürmer des Menschen und der Haustiere und ihre Bedeutung für die Bekämpfung. Ber. oberhess. Ges. Giessen N.F. **16** 1935 pp. 195–197.

Schmidt, C. L. A. *vide* Greenberg, L. D.

1044.—Schmidt, G. A. Gesetzmässigkeiten des Wechsels der Embryonalanpassungen. Biol. Zhurnal Moscov **5** 1936 pp. 633–656 5 figs. (Germ. summ. p. 655.)

1045.—Schmidt, H. Conodontenfunde in ursprünglichem Zusammenhang. Paläont. Z. Berlin **16** 1934 pp. 76–85 pl. vi 8 figs.

1046.—Schmidt, H. Einführung in die Palaeontologie. Stuttgart (Ferdinand Enke) 1935 253 pp. 466 figs. 47 pls. [Annelida pp. 17–19.]

1047.—Schmidt, M. Weitere Pseudofossilien und Problematica. Abh. heidelberg. Akad. Wiss. **22** 1936 pp. 18–140. [*Spirorbis* p. 34.]

1048.—Schoenaers, F. La strongylose chez le cheval. Ann. Méd. Vétér. Brussels **81** 1936 pp. 1–20.

Schoenborn, H. W. *vide* Stunkard, H. W.

1049.—Schoop, C. E. Trematodes infecting the neck of a great blue heron. Wilson Bull. **43** 1931 p. 145. [n.v.]

1050.—Schoop, G. and Dedié, K. Der Darmsaugwurm *Tocotrema lingua* bei deutschen Silberfischer. Deutsche Tierärztl. Woch. **44** 1936 pp. 579–581.

1051.—Schouten, G. B. Nota sobre un nematode. *Ankylostoma* sp. Revist. Soc. Cient. Paraguay Asuncion **3** 1934 p. 150.

1052.—Schrader, F. Notes on the behaviour of long chromosomes. Cytologia **6** 1935 p. 422.

Schroek, R. R. *vide* Twenhofel, W. H.

Schuchat, J. *vide* Chajutin, D.

1053.—Schuckmann, W. von. Ueber das Vorkommen tierischer Entoparasiten beim Menschen in Deutschland. Tierärztl. Mitteil. **16** 1935 pp. 339–341.

Schultz, R. E. S. *vide* Skrjabin, K. I.

1054.—Schulz, R. E. and Landa, D. M. Parasitische Würmer der grossen Reunmaus, *Rhombomys opimus* Licht. [In Russian.] Rev. Microbiol. Saratow **13** 1934 pp. 305–315.

1055.—Schulz, R. E. and Schchobalowa, N. Immunität bei Wurminvasionen. [In Russian, with German summary.] Med. Parasit. Moscow **4** 1935 pp. 257–280.

Schulz, R. E. *vide etiam* Sassuchin, D.

Schulz, R. E. *vide etiam* Skrjabin, K. I.

1056.—Schuermans-Stekhoven, J. H. De verzoeting der Zuiderzee en de vrijlevende Nematoden. Natuurwetenschap. Tidschr. **16** 1934 pp. 111–116.

1057.—Schwartz, B. Some parasites of dogs and cats transmissible to human beings and domesticated animals. Veter. Alumni Quart. Ohio **1932** June 5 pp.

1058.—Schwarz, E. Ueber die Echinokokkenkrankheit. Sitz.-Ber. naturf. Ges. Rostock (3) **1** 1927 pp. 88–106 5 figs.

1059.—Sciacchitano, I. Nota su una *Planaria* del Trentino. Studi trentini Trento **16** 1935 pp. 148–149.

1060.—Sciacchitano, I. Gordii del Trentino. Studi trentini Trento **16** 1935 pp. 158–160.

1061. — Sciacchitano, I. Anellidi cavernicoli d'Italia. Boll. Zool. Torino 7 1936 pp. 17-22.
1062. — Sciacchitano, I. Altre sanguisughe del Congo Belga. Rev. Zool. Bot. afr. Tervueren 28 1936 pp. 161-163.
- Scott, C. E. *vide* Godfrey, G. H.
- Scott, C. E. *vide etiam* Smith, R. E.
- Scott, H. W. *vide* Croneis, C.
1063. — Scott, J. A. Hookworm infestation and hookworm disease in Egypt. J. Parasit. Urbana 22 1936 p. 530.
1064. — Scott, J. A. The distribution of *Schistosoma haematobium* and *Schistosoma mansoni* in Egypt. J. Parasit. Urbana 22 1936 p. 534.
1065. — Scott, J. W. The plerocercoids of Yellowstone Lake trout. J. Colorado Wyoming Acad. Sci. 2 1935 p. 82.
1066. — Scott, T. O. Parasites a probable cause of colic in the horse. Veter. Med. Chicago 27 1932 p. 22.
1067. — Scriban, I. A. Über die Wandstruktur der ventralen Lakune bei *Haementeria costata* Fr. M. und das Ventralgefäß bei *Haemopsis sanguisuga* L. Zool. Anz. Leipzig 113 1936 pp. 64-67 1 fig.
1068. — Scriban, I. A. Recherches sur la structure des cellules chloragogenes chez les hirudinées. Bul. Soc. Ști. Cluj 8 1936 pp. 409-427.
1069. — Scriban, I. A. Beobachtungen über die Morphologie des Verdauungsepithels bei *Proclepsis tessellata* O. F. M. Zool. Anz. Leipzig 115 1936 pp. 191-193 3 figs.
1070. — Seeler, T. Über eine quantitative Untersuchung des Planktons der deutschen Ströme unter besonderer Berücksichtigung der Einwirkung von Abwässern und der Vorgänge der biologischen Selbstreinigung. Arch. Hydrobiol. Stuttgart 30 1936 pp. 85-114 16 figs.
- Seetharama Iyer, P. V. *vide* Menon, K. P.
1071. — Sen, S. C. Development of adult *Taenia echinococci* in a hydatid cyst in the muscle of a sheep. Calcutta Med. J. 31 1936 pp. 38-40.
1072. — Shapiro, H. Temperature dependence of metabolic change on fertilization in *Chaetopterus* eggs. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 95.
1073. — Shaw, T. H. The story of *Dirofilaria immitis* (Leidy), a parasitic thread worm in the heart of the domestic dog. China J. Shanghai 24 1936 pp. 228-231 2 figs.
1074. — Sheldon, A. J. Studies on active acquired resistance, natural and artificial, in the rat to infection with *Strongyloides ratti*. J. Parasit. Urbana 22 1936 p. 533.
1075. — Shen, T. H. Beiträge zum Studium der Geschlechtsbestimmung bei *Dinophilus apatris*. Zool. Jahrb. Jena Allg. Zool. 56 1936 pp. 219-238 pls. v-viii.
- Shirai, S. *vide* Tsunoda, T.
1076. — Shitamori, K. Histology of the integument of *Siphonosome cumanense* (Keferstein). J. Sci. Hiroshima Univ. Zool. 4 1936 pp. 155-175 3 figs. 2 pls.
1077. — Shmeleva, A. A. and Trofimova, A. A. Helminth fauna of the population of Kalmuck district. [In Russian, with German summary.] Rev. Microbiol. Epidém. Saratov 13 1934 pp. 69-72.
1078. — Sholl, L. B. Marked taeniasis in a dog. J. Amer. vet. med. Ass. Chicago 84 1934 pp. 805-806.
1079. — Sibono, J. Clonorchiasis among cats and dogs along the coast of Kahoku Bay in Ishikawa prefecture. [In Japanese.] J. Juzen Soc. Zasshi 37 1932 p. 1682. [n.v.]
- Sicé, A. *vide* Robin, C.
- Silva, D. *vide* Faria, A.
- Silveiro, R. *vide* Kouri, P.
1080. — Simitch, T. Les parasites intestinaux en Serbie du Sud. Bull. Mem. Off. Internat. Hyg. Publ. Paris 28 1936 pp. 861-886.
1081. — Simon, J. R. and Simon, F. *Philonema agubernaculum* sp. nov. (Dracunculidae), a nematode from the body cavity of fishes. Parasitology Cambridge 28 1936 pp. 440-442 5 figs.
- Simon, R. *vide* Kouri, P.

1082.—Singer, K. Experimentelle Beiträge zum Problem der Pathogenese der perniziösen Anämie. II. Mitteilung. Zur Kenntnis der Anämien bei künstlich mit *Bothriocephalus latus* infizierten agastrischen Hunden sowie der Sekretionsverhältnisse des Castleschen Prinzips bei dieser Tierart. Z. Gesamte Exper. Med. 95 1935 pp. 762–771.

Sisyakova, E. vide Skvortsov, A.

1083.—Sivickis, P. B. Studies on the physiology of regeneration in triclads. Vytauto didžiojo univ. matem. Gamtos fak. darbai 7 1933 p. 365. [n.v.]

1084.—Sivickis, P. B. Summer fauna in fresh water bodies of north-eastern Lithuania. Mem. Fac. Sci. Vytautas Le Grand Univ. [Kaunas] 9 1934 pp. 1–10. [n.v.]

1085.—Sizemore, P. D. *Cercaria concavocarpa* n. sp. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 483–486 pl. lxi.

1086.—Sizemore, P. D. Note on *Heronimus chelydrae* MacCallum. Trans. Amer. micr. Soc. Menasha 55 1936 p. 487.

1087.—Skrjabin, K. I. On the parasitic helminths of the Turkestan desert and steppes. [In Russian.] Trud. Gos. Inst. Exper. Vet. Med. Moscow 2 i 1924 16 pp. 9 figs.

1088.—Skrjabin, K. I. and Schikhobalova, N. P. Contribution au remaniement de la classification des nématodes de l'ordre des Filariata Skrjabin 1915. Ann. Parasitol. Paris 14 1936 pp. 61–75.

1089.—Skrjabin, K. I. and Schultz, R. E. S. Fascioliasis of animals and its control. [In Russian.] Moscow 1935 170 pp. 35 figs.

1090.—Skrjabin, K. I., Schulz, R. E., Metelkin, A. I. and Popov, P. P. Veterinary parasitology and parasitic diseases of domestic animals. [In Russian.] Moscow 1934 600 pp. [N.v.]

1091.—Skrjabin, K. I. and Schoultz, R. E. La dictyocaulose du gros bétail en U.R.S.S. Le Spécialiste Vétér. 1931 no. 10 p. 28.

1092.—Skvortsov, A., Smirnova, V. and Sisyakova, E. Studies on morphology and biology of the egg and

on the evolution of *Fasciola hepatica*. Med. Parasit. Moscow 5 1936 pp. 257–274.

1093.—Skvortzov, A. A. Zur Kenntnis der Helminthofauna der Wasserratten (*Arvicola terrestris* L.). [In Russian with German.] Rev. Microbiol. Saratow 13 1934 pp. 317–326.

1094.—Smedley, E. M. The action of certain halogen compounds on the potato eelworm, *Heterodera schachtii*. J. Helminth. London 14 1936 pp. 11–20.

Smirnova, V. vide Skvortsov, A.

1095.—Smirnow, G. G. Versuch einer helmintho-koprologischen Untersuchung des Militärverhandes im Lager. Militär.-Med. Zeit. Leningrad 3 1932 pp. 425–433. [In Russian.]

Smith, A. J. vide Moore, E. S.

1096.—Smith, R. E., Hansen, H. N. and Scott, C. E. A bud blight of gooseberry apparently caused by nematodes. Phytopathology Lancaster Pa. 24 1934 p. 1138.

1097.—Smith, S. Preliminary studies on cystocercous cercariae from Alabama and Georgia. J. Alabama Acad. Sc. 5 1934 p. 25.

1098.—Smith, S. *Cercaria catenaria* n. sp., a cystocercous cercaria from Florida, and its development into *Proterometra catenaria* n. sp. J. Alabama Acad. Sc. 6 1934 pp. 16–18 2 figs.

1099.—Smith, S. Life-cycle studies and distribution of cystocercous cercariae. J. Alabama Acad. Sc. 6 1934 p. 16.

1100.—Smith, S. Life cycle studies and distribution of cystocercous cercariae. J. Alabama Acad. Sci. 6 1935 p. 18.

1101.—Smith, S. *Cercaria stephano-cauda ocalana*, a new subspecies of cystocercous cercariae from Florida; its life-cycle and distribution. J. Alabama Acad. Sc. 7 1935 pp. 18–19 9 figs.

1102.—Smith, S. Life-cycle studies of *Cercaria hodgesiana* and *Cercaria melanophora*. J. Alabama Acad. Sc. 8 1936 pp. 30–32 4 figs.

1103.—Smorodincev, I. and Bebešin, K. La teneur en glycogène des ascarides. C.R. Acad. Sci. Moscow N.S. 1936 ii pp. 189-191.

1104.—Smorodincev, I. A. and Pavlova, P. I. La composition chimique des oeufs de *Taeniarrhynchus saginatus* et de *Diphyllobothrium latum*. C.R. Acad. Sci. Leningrad N.S. 3 1936 pp. 29-31.

1105.—Smorodintzev, I. A. and Pavlova, P. I. Répartition de l'azote des fractions albumineuses dans le corps des Ténias. Ann. Parasit. Paris 14 1936 pp. 489-494.

1106.—Smorodinzew, I. A. and Bebeschin, K. W. Beiträge zur Chemie der Helminthen. Mitteilungen III-V. J. Biochem. 23 1936 pp. 19-25.

Sokoloff, D. *vide* Caballero, E.

1107.—Soler, R. R. Contribución al estudio de la parasitología intestinal del cerdo de la región valenciana. Riv. Hig. San. Pecuar. Madrid 24 1934 pp. 343-361.

1108.—Somerén, V. D. van. The natural history of Barra, Outer Hebrides, Oligochaeta. Proc. phys. Soc. Edinb. 22 1936 p. 268.

1109.—Somerén, V. D. van. The natural history of Barra, Outer Hebrides, Hirudinea. Proc. phys. Soc. Edinb. 22 1936 p. 269.

Sommerville, E. T. W. *de vide* Dios, R. L.

1110.—Sondhi, C. Observations on a pigeon heavily infested with tape-worms. Proc. Indian Sci. Cong. Calcutta 14 1927 p. 193.

1111.—Soós, Á. Über die moos-bewohnenden Nematoden Ungarns. Allat. Közlem. Budapest 33 1936 pp. 53-62. [German summ. p. 62.]

Sotolongo, F. *vide* Kouri, P.

1112.—Souche, G. Sur un parasite de *Rhombus laevis* Rond. Bull. Sta. biol. Arcachon 32 1936 pp. 49-50.

1113.—Southern, R. Turbellaria of Ireland. Proc. Irish Acad. (B) 43 5 1936 pp. 43-72 5 figs.

1114.—Southwell, T. and Walker, A. J. Notes on a larval cestode from a fur-seal. Ann. Trop. Med. Parasit. L'pool. 40 1936 pp. 91-100 4 figs.

1115.—Spadaro, S. Un caso rarissimo di cisticidatidea nella vescica. Policlinico (Sez. Prat.) Rome 43 1936 498-499.

1116.—Spindler, L. A. Resistance of rats to infection with *Nippostrongylus muris* following administration of the worms by duodenal tube. Amer. J. Hyg. Baltimore 23 1936 pp. 237-242.

1117.—Spindler, L. A. Effects of various physical factors on the survival of eggs and infective larvae of the swine nodular worm, *Oesophagostomum dentatum*. J. Parasit. Urbana 22 1936 p. 529.

1118.—Spindler, L. A. The effect of tropical sunlight on eggs of *Ascaris suis*. J. Parasit. Urbana 22 1936 p. 529.

1119.—Spink, W. W. Cardio-vascular complications of trichinosis. Arch. Intern. Med. Chicago 56 1935 pp. 238-249 4 figs.

1120.—Spiridion, J. T. Schistosomiasis japonica: an account of an outbreak. J. trop. Med. London 39 1936 pp. 161-164.

1121.—Srivastava, H. D. Studies on the family Heterophyidae Odhner, 1914. Part II. Four new parasites of the genus *Haplorchis* Looss, 1899, from Indian freshwater fishes with a revision of the genus. Proc. Acad. Sc. U.P. India Allahabad 5 1935 pp. 75-85 4 figs.

1122.—Srivastava, H. D. A rare parasite of the family Monorchidae Odhner, 1911, from an Indian freshwater fish (*Ophiocephalus punctatus*). Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 319-324 1 fig.

1123.—Srivastava, H. D. New Hemiuroids (Trematoda) from Indian marine fishes. Part I. A new parasite of the sub-family Prosorchinae Yamaguti, 1934. Proc. Nat. Acad. Sci. Allahabad 6 1936 pp. 175-178 1 fig.

1124.—Srivastava, H. D. New Allocreadids (Trematoda) from Indian marine fishes. Part I. New Parasites of the genus *Helicometrina* Linton, 1910. Proc. Nat. Acad. Sci. Allahabad 6 1936 pp. 179-185 2 figs.

1125.—Srivastava, H. D. New Allocreadids (Trematoda) from Indian marine fishes. Part II. New parasites

of the genus *Decemtestis* Yamaguti 1934. Proc. Nat. Acad. Sci. India 7 1936 pp. 187-195 3 figs.

1126. — Staehelin, M. Les vers nématodes (Anguillules) parasites des plantes horticoles et maraîchères. Ann. Agric. Suisse 1931 pp. 37-77 13 figs. [n.v.]

1127. — Stammer, H. J. Untersuchungen über die Tierwelt der Karsthöhlengewässer. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 92-99.

1128. — Stammer, H. J. Die Entoparasiten der in Schlesien 1935 beobachteten Flamingos. Ber. Vereins Schlesisch. Ornithol. 21 1936 pp. 15-17.

1129. — Stammer, H. T. Die Wasserfauna der Schneeberghöhlen in Pax, Beitr. Biol. Glatzer Schneeberges Hft. 2 Breslau 1936 pp. 199-214.

1130. — Stauffer, C. R. The Conodont Fauna of the Decorah shale (Ordovician). J. Paleont. Sharon Mass. 9 1935 pp. 596-621.

1131. — Stefański, W. Constantin Janicki. Un distingué parasitologue polonaise. Folia morphol. Warsaw 4 1933 pp. 220-229, with portrait.

1132. — Stefański, W. Nématodes des lacs du Tatra. 1-re partie. Towarz. Nauk. Warszawsk. 26 1933 iv 1 p.

1133. — Stefanski, W. Obituary. J. S. Ruskowski (1887-1934). Ann. Parasit. Paris 12 1934 pp. 445-446.

1134. — Stefanski, W. Sur les nématodes parasites des vives *Trachinus draco* et des baudroies *Lophius piscatorius*. Bull. Stat. Biol. Arcachon Bordeaux 33 1936 pp. 59-88 16 figs.

1135. — Stefanski, W. and Strankowski, M. Sur un cas de pénétration du Strongle géant dans le rein droit du chien. Ann. Parasitol. Paris 14 1936 pp. 55-60 pl. ii.

1136. — Stefanski, W., Strankowski, M. and Nagórski, F. Nouveau cas du Strongle géant (*Diectophyme renale*) dans la cavité thoracique du chat. Wiadom. Weteryn. Warsaw 1936 pp. 219-225 3 figs.

1137. — Steiner, G. Opuscula miscellanea nematologica. iii. Proc. helminth. Soc. Washington 3 1936 pp. 16-22 figs. 5-8.

1138. — Steiner, G. Opuscula miscellanea nematologica. IV. Proc. helminth. Soc. Washington 3 1936 pp. 74-80 figs. 22-25.

1139. — Steiner, G. The status of the nematode *Aphelenchus avenae* Bastian, 1865, as a plant parasite. Phytopathology Lancaster 26 1936 pp. 294-295.

1140. — Steiner, G. *Anguillulina askenasyi* (Bütschli, 1875), a gall forming nematode parasite of the common fern moss, *Thuidium delicatulum* (L.) Hedw. J. Wash. Acad. Sci. 26 1936 pp. 410-414 3 figs.

1141. — Steiner, G. and Buhrer, E. M. Observations of interest on nematode diseases of plants. Plant Dis. Rep. Washington 20 1936 pp. 90-91.

1142. — Stekhoven, J. H. S. Nématodes libres capturés entre les hydraires dans le port de Plymouth. Bull. Mus. Hist. nat. Belg. 11 No. 33 1935 pp. 1-2.

1143. — Stekhoven, J. H. S. Nématodes. Bronns Klassen u. Ordnungen des Tierreichs Bd. 4 Abt. 2 Buch 3 Lfg. 3-4 pp. 65-264 Leipzig 1936.

1144. — Stekhoven, J. H. S. Nouvelles recherches sur les nématodes parasites des plantes au Congo belge. Bull. Mus. Hist. nat. Belg. 12 No. 9 1936 pp. 1-16 2 pls.

Stekhoven, J. H. S. *vide etiam* Schuurmans Stekhoven, J. H.

1145. — Steopoe, I. Parasomii din ovocytele de *Leptoplana tremellaris* și *Prosthlostomum siphunculius*. Bul. Soc. Nat. România București 4 1933 p. 21.

1146. — Stepanow, N. La faune helminthique des indigènes du Tourkménistane. [In Russian.] Arch. Sc. Biol. 31 1931 pp. 9-14. [French summary pp. 15-16.]

1147. — Stephenson, L. W. Geology and paleontology of the Georges bank canyons. II. Upper Cretaceous fossils from Georges Bank (including species from Banquersan, Nova Scotia). Bull. Geol. Soc. Amer. Washington D.C. 47 1936 pp. 367-410 5 pls. [*Serpula* sp. p. 371.]

1148. — Stévenel, L. and Berny, P. Présence du physaloptère tronqué dans le gésier d'un poulet à Cayenne. Bull. Soc. Path. Exot. Paris 28 1935 pp. 827-828.

1149.—Steward, J. S. Fistulous withers and poll-evil. [Discussion.] *Veter. Rec.* London **16** 1936 pp. 175-181.

1150.—Stiles, C. W. Suggested cases for suspension of rules of nomenclature. *Nature* London **138** 1936 pp. 34-35.

1151.—Stiles, C. W. Notice of possible suspension of rules of nomenclature in certain cases. *Zool. Anz.* Leipzig **115** 1936 pp. 110-111.

1152.—Stokell, G. The nematode parasites of Lake Ellesmere trout. *Trans. Proc. Roy. Soc. N.Z.* **66** 1936 pp. 80-96 1 pl.

1153.—Stoll, N. R. Tapeworm studies. II. Persistence of the pasture stage of *Moniezia expansa*. *Amer. J. Hyg.* Baltimore **22** 1935 pp. 683-703.

1154.—Stoll, N. R. Tapeworm studies. III. Sheep parasitized with one *Moniezia expansa* each. *J. Parasit. Urbana* **22** 1936 pp. 161-179 6 figs.

1155.—Stoll, N. R. Observations on cattle nematode infections with a demonstration of their secondary transmission to grazing sheep. *J. Parasit. Urbana* **22** 1936 pp. 386-407.

1156.—Stoll, N. R. Certain net effects in helminthic parasitism, with special reference to the sheep host. *Cornell Veter. Ithaca* **26** 1936 pp. 171-179.

1157.—Stolte, H. A. Die Herkunft des Zellmaterials bei regenerativen Vorgängen der wirbellosen Tiere. *Biol. Rev. Cambridge* **11** 1936 pp. 1-48 12 figs. [Vermes at pp. 13-40.]

1158.—Stolte, H.-A. Das Werden der Tierformen. Stuttgart 1936 112 pp. 71 figs.

1159.—Stone, R. G. Regeneration in the Enteropneustan *Ptychodera* and the Annelid *Euratella*. *Yearb. Carnegie Inst. Washington* **34** 1935 p. 90.

1160.—Stone, R. C. Regeneration in the Cirratulid *Cirrineris*. *Pap. Tortugas Lab. Carnegie Instn.* **29** 1936 pp. 1-12.

1161.—Stonier, L. A note on onchocerciasis as observed at the municipal abattoir, Pietermaritzburg. *J. S. Afric. Vet. Med. Ass.* **7** 1936 pp. 49-51.

1162.—Storti, E. Anemia sperimentale da botriocefalo. *Haematologica* Jena **12** 1931 p. 237.

1163.—Strand, E. Miscellanea nomenclatorica zoologica et palaeontologica. *Folia zool. hydrobiol.* Riga **9** 1936 pp. 167-170.

Strankowski, M. *vide* Stefanski, W.

1164.—Stroh, G. Trichinose beim Fuchs der freien Wildbahn. *Z. Fleisch. Milchhyg.* Berlin **46** 1936 pp. 293-294.

1165.—Studentowicz, J. La comportement de l'Annélide terricole sous l'influence de la lumière. *C.R. Acad. Cracovie* 1936 1 p. 5.

1166.—Studentowicz, I. Der Einfluss des Lichtes auf das Verhalten des Oligochaeten *Enchytraeus albidus* Henle. *Bull. int. Acad. Cracovie* 1936 (BII) pp. 37-66.

1167.—Stunkard, H. W. The morphology and life history of *Plagitura parva* Stunkard, 1933 (Trematoda). *J. Parasit. Urbana* **22** 1936 pp. 354-374 11 figs.

1168.—Stunkard, H. W. The morphology and life history of *Plagitura parva* Stunkard, 1933 (Trematoda). Errata. *J. Parasit. Urbana* **22** 1936 p. 521.

1169.—Stunkard, H. W. The life cycle of *Cercariaeum lintoni* Miller and Northup. *J. Parasit. Urbana* **22** 1936 pp. 542-543.

1170.—Stunkard, H. W. and Schoenborn, H. W. Notes on the structure, distribution and synonymy of *Diphyllobothrium lanceolatum*. *Amer. Mus. Novit.* **880** 1936 9 pp. 2 figs.

1171.—Suarez, C. V. Ascariidiosis y vomitos incoercibles del embarazo. *Semana Méd.* Buenos Aires **1926** ii pp. 1375-1379.

1172.—Subrahmanian, K. Studies on the Acanthocephalan fauna of Burma. *Rec. Ind. Mus. Calcutta* **38** 1936 pp. 311-315 4 figs.

1173.—Subramaniam, M. K. and Aiar, R. G. Two methods of formation of dictyosomes from vesicular Golgi bodies. *Nature* London **137** 1936 pp. 830-831 2 figs.

1174.—Subramaniam, M. K. and Aiyar, R. G. On the possible effect of the environment on the cytoplasmic inclusions in the oocytes and oögonia of *Dasychone cingulata*, *Salmacis bicolor* and *Clibanarius olivaceus*. Proc. Indian Acad. Sci. (B) 3 1936 pp. 175-194 19 figs. pl. i.

Subramaniam, M. K. *vide etiam* Aiyu, R. G.

1175.—Suchlandt, O. and Schmassmann, W. Limnologische Beobachtungen an acht Hochgebirgsseen der Landschaft Davos. Rev. Hydrol. Aarau 7 1935 pp. 1-201.

1176.—Sugimoto, M. On some Trematodes (Genus *Prosthogonimus* Lühe, 1899) from Formosan domestic birds. J. Soc. trop. agric. Formosa 7 1935 pp. 361-369 6 figs.

1177.—Sumi, I. and Kawasaki, S. Influences of *Ascaris* infection on the growth of school children. J. Orient. Med. Dairen 17 1932 p. 73.

1178.—Suwalski, T. Die Bedeutung der Darmparasiten bei der Entzündung des Wurmfortsatzes. [In Polish.] Chir. Klin. Poznań 3 1934 pp. 70-103. [n.v.]

1179.—Svetlov, P. *Lamprodrilus isoporus* Mich. (Lumbriculidae) aus dem Ladoga und dem Onegasee. Zool. Anz. Leipzig 113 1936 pp. 87-93 2 figs.

1180.—Svetlov, P. G. The Oligochaeta of the Kama Expedition, 1935. Bull. Inst. Rech. biol. Perm 10 1936 pp. 145-149. [Engl. summ. p. 149.]

1181.—Swales, W. E. Schistosome dermatitis in Canada. Notes on two causative agents and their snail hosts in Manitoba. Canad. J. Res. Ottawa (D) 14 1936 pp. 6-10 1 pl.

1182.—Swales, W. E. Further studies on *Fascioloides magna* (Bassi, 1875) Ward, 1917, as a parasite of ruminants. Canad. J. Res. Ottawa (D) 14 1936 pp. 83-95 3 pls.

1183.—Swales, W. E. *Tetrameres crami* Swales, 1933, a Nematode parasite of ducks in Canada. Canad. J. Res. Ottawa (D) 14 1936 pp. 151-164 pl. x.

1184.—Swales, W. E. Morphological and biological studies on *Tetrameres crami* Swales, 1933, an important

nematode parasite of ducks. J. Parasit. Urbana 22 1936 p. 528.

Swanger, H. H. *vide* Thorne, G.

Sweet, W. C. *vide* Moorthy, V. N.

1185.—Sylvers, I. Observations sur l'hématologie de la trichinellose. [In Russian, with French summary.] Rev. Microbiol. Saratov 14 1935 pp. 290-298.

1186.—Syôgaki, Y. Some observations on *Aspidogaster conchicola* Baer. [In Japanese, with English summary.] Zool. Mag. Tokyo 48 1936 pp. 56-59 3 figs.

1187.—Syabó, K. Über den Askaris-Ileus. Zbl. Chirug. 62 1935 pp. 691-693.

1188.—Szabó, M. On a culture method for the Rotifer *Lecane inermis* Bryce, together with some notes on the biology of this animal. Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 174-177.

1189.—Szarski, H. Contribution à l'étude de la physiologie des vers rangés dans le genre *Chaetogaster*. C.R. Acad. Cracovie 1936 ii p. 6.

1190.—Szarski, H. Contribution to the physiology of Oligochaeta belonging to the genus *Chaetogaster*. Bull. int. Acad. Cracovie 1936 (B II) pp. 101-112 pl. iv.

1191.—Szarski, H. Anatomie et physiologie du tube digestif des vers de la famille des Naidiens. C.R. Acad. Cracovie 1936 vii p. 7.

1192.—Szarski, H. Studies on the anatomy and physiology of the alimentary canal of worms belonging to the Naididae family. Bull. Acad. Polon. Sc. Lett. Cracow 1936 pp. 387-409 pl. xviii.

1193.—Szidat, L. Warum wirft der Storch seine Jungen aus dem Nest? J. Ornith. Berlin 83 1935 pp. 76-87 7 figs.

1194.—Szidat, L. Parasiten aus Seeschwalben. I. Über neue Cyathocotylen aus dem Darm von *Sterna hirundo* L. und *Sterna paradisea*. Z. Parasitenk. Berlin 8 1936 pp. 285-316 20 figs.

1195.—Szidat, L. Studien zur Systematik und Entwicklungsgeschichte der Gattung *Leucochloridium* Carus. I. Bemerkungen zur Arbeit von G,

Witenberg (1925) Versuch einer Monographia der Trematodenunterfamilie Harmostominae Braun. Z. Parasitenk. Berlin 8 1936 pp. 645-653 4 figs.

1196.—Szidat, L. Über die Entwicklungsgeschichte und den ersten Zwischenwirt von *Paramphistomum cervi* Zeder 1790 aus dem Magen von Wiederkäuern. Z. Parasitenk. Berlin 9 1936 pp. 1-20 13 figs.

1197.—Szidat, L. and Wigand, R. Leitfaden der einheimischen Wurmkrankheiten des Menschen. Leipzig (Georg Thieme) 1934 212 pp. 156 figs.

1198.—Szidat, U. Beiträge zur Kenntnis der Trematodengattung *Notocotylus* Diesing. III. *Notocotylus linearis* (Rud. 1819?) n. sp. aus den Blinddärmen des Kiebitz (*Vanellus vanellus* L.). Zbl. Bakt. Jena (i) 136 1936 pp. 231-235 3 figs.

1199.—Szidat, U. Über eine neue Echinostomiden - cercaria, *Echinocercaria choanophila* n. sp. Zool. Anz. Leipzig 116 1936 pp. 304-310 7 figs.

1200.—Tajimi, T. On the prevalence of helminthiasis among the Japanese and Chinese in the district of Shanghai. 5. Results of examinations of helminth ova among Japanese Kindergarten children and their family members. J. Shanghai Sci. Inst. Sect. IV 2 1936 pp. 169-183.

1201.—Takenouchi, E. Beiträge zur Kenntnis der Biologie des *Paragonimus westermanni*. [In Japanese.] Trans. Soc. Path. Jap. Tokyo 26 1936 pp. 687-689.

1202.—Takeuti, E. A new Trematode, *Steganoderma kamatukae* from *Pseudogobio esocinus* (Temminck and Schlegel). Zool. Mag. Tokyo 48 1936 pp. 581-583 1 fig.

1203.—Talbot, S. B. Studies on schistosome dermatitis. II. Morphological and life history studies on three dermatitis-producing schistosome cercariae, *C. elvae* Miller, 1923, *C. slagnicolae* n. sp. and *C. physellae* n. sp. Amer. J. Hyg. Baltimore 23 1936 pp. 372-384.

Talbot, S. B. *vide etiam* Cort, W. W.

Talbot, S. B. *vide etiam* Culbertson, J. T.

Taliaferro, W. H. *vide* Sarles, M. P.

1204.—Tang, C. C. A survey of the helminth fauna of cats in Foochow. Peking nat. Hist. Bull. 10 1936 pp. 223-231.

Tang, C. C. *vide etiam* Faust, E. C.

1205.—Tan Ping Ie. Een geval van hirudiniasis van de neus. Geneesk. Tijdschr. Ned. Ind. 75 1935 p. 1575.

1206.—Tao, C. S. Transmission of helminth ova by flies. J. Shanghai Sci. Inst. (4) 2 1936 pp. 109-116.

Tao, C. S. *vide etiam* Komiya, Y.

1207.—Tarasov, V. A. Expérience acquise par cinq années d'études sur les Bothriocephales dans la partie nord-est de l'U.R.S.S. Ann. Parasit. Paris 14 1936 pp. 472-484.

1208.—Tauson, A. O. Lake Dikoye and its biology. Scient. Mem. M. Gorky St. Univ. Perm 1 ii-iii 1935 pp. 3-51 3 maps. [English summ. p. 51.]

1209.—Taylor, A. L. The genera and species of the Criconematinae, sub-family of the Anguillulidae (Nematoda). Trans. Amer. micr. Soc. Menasha 55 1936 pp. 391-421 pls. xlviii-lii.

1210.—Taylor, E. L. *Davainea proglottina* and disease in fowls. The pathogenicity of the common poultry parasites; an unknown factor in the causation of disease. Proc. 5th World's Poultry Cong. Rome 1933. [N.v. Cf. Vet. J. London 89 1933 p. 500.]

1211.—Taylor, E. L. Attempt to produce *Ostertus* infestation by feeding possible intermediate hosts to puppies. Veter. Rec. London 16 1936 p. 17.

1212.—Teichler, G. *Mikrofilaria bancrofti* in Bauchzyste und Hydrozele. Arch. Schiffs. Tropen-Hyg. Leipzig 40 1936 pp. 32-34.

Teixeira de Freitas, J. F. *vide* Freitas, J. F. T. de.

1213.—Templeton, W. L. Cysticercosis and epilepsy. Brit. Med. J. London 1936 i p. 32.

1214.—Tenhaeff, C. and Ferwerda, S. Die Echinokokkenkrankheit bei den Haustieren. Intern. Cong. Comp. Pathol. 3 i Sect. Veter. Med. Athens 1936 pp. 3-22.

1215.—Tanhaeff, C. and Ferwerda, S. De echinococcosis bij de huisdieren. Tijdschr. Diergeneesk. Utrecht 63 1936 pp. 847-856, 919-924.

1216.—Tetley, J. H. Route of migrating parasites in ruminants. *Nature* London **138** 1936 p. 802.

1217.—Tétay, A. Contribution à la connaissance de la faune de l'étang de Lindre. *Bull. Soc. Hist. nat. Metz* (3) **34** 1935 pp. 249-265.

1218.—Tétay, A. Description d'un Lumbricidé nouveau de la faune française (*Eisenia metallorum* n. sp.). *C.R. Acad. Sci. Paris* **202** 1936 pp. 1531-1533.

1219.—Thamdrup, H. M. Beiträge zur Ökologie der Wattenfauna auf experimenteller Grundlage. *Medd. Komm. Havundersog. Kjøb. (Fiskeri)* **10** No. 2 1935 pp. 1-125 125 figs.

1220.—Thapar, G. S. and Lal, M. B. On a new Trematode from kingfisher. *Proc. Indian Sci. Congr. Calcutta* **22** 1935 pp. 319-320.

1221.—Theiler, G. Some recent developments in the study of parasitic worms. *S. Afr. J. Sci. Cape Town* **32** 1935 pp. 49-71.

1222.—Theiler, H. and Augustine, D. L. Zur Frage der immunbiologischen Diagnose der Trichinose. *Zbl. Bakt. Orig. (i)* **135** 1935 pp. 299-309.

1223.—Theiler, H. and Farber, S. M. *Trichomonas muris* parasitic in the Oxyurid nematodes, *Aspicularis tetraptera* and *Syphacia obvelata* from white mice. *Parasitology* Cambridge **28** 1936 pp. 149-160 1 fig.

1224.—Thompson, H. W. Plant pests in Glamorgan. III. *Trans. Cardiff Nat. Soc.* **66** 1935 pp. 103-109.

Thompson, H. W. *vide etiam* Johnson, L. R.

1225.—Thompson, J. E. Some observations on the European broad fish tapeworm *Diphylobothrium latum*. *J. Amer. Vet. Med. Ass.* **89** 1936 pp. 77-86.

1226.—Thorne, G. The sugar beet nematode and other indigenous nematode parasites of shadscale. *J. Agric. Res. Washington* **51** 1935 pp. 509-514 3 figs.

1227.—Thorne, G. and Swanger, H. H. A monograph of the nematode genera *Dorylaimus* Dujardin, *Aporcelaimus* n. g., *Dorylaimoides* n. g.

and *Pungentus* n. g. *Capita zool. The Hague* **6** Pt. 4 1936 pp. 1-223 31 pls.

Thorne, G. *vide etiam* Corder, M. N.

Thorp, F. *vide* Torrey, J. P.

1228.—Thorson, G. The larval development, growth and metabolism of arctic marine bottom invertebrates compared with those of other seas. *Medd. Grønland* **100** vi 1936 pp. 1-155 32 figs. [*Polychaeta* pp. 26-37 figs. 4-6.]

1229.—Threlkeld, W. L. and Downing, T. O. A report on experimental infections of *Ovis aries* with the infective larvae of *Ostertagia circumcincta*. *J. Parasit. Urbana* **22** 1936 pp. 187-201 6 figs.

Tiflov, V. *vide* Sassuchin, D.

1230.—Timbal, G. L'ankylostomiase en Belgique. *Bull. Mem. Off. Intern. Hyg. Publ. Paris* **28** 1936 pp. 1513-1515.

Timon-David, J. *vide* Joyeux, C.

1231.—Ting, H. P. On the extent of infestation by intestinal helminths of the chicken in Peiping. *Peking nat. Hist. Bull.* **11** 1936 pp. 151-155.

1232.—Tinio, J. R. Bradycardia in ankylostomians. *Bull. San Juan de Dios Hosp. Manila* **6** 1932 pp. 125-133.

1233.—Tisseuil, J. Processus de destruction des microfilaires vivantes par l'épiploon chez la sarigue philander. *Bull. Soc. Path. exot.* **27** 1934 pp. 735-737.

1234.—Tisseuil, J. Filaire de Bancroft en Guyane: statistique, rôle pathologique. *Bull. Soc. Path. Exot.* Paris **29** 1936 pp. 47-49.

1235.—Tisseuil, J. Contribution à l'étude étiologique de la lymphangite endémique et de l'éléphantiasis. *Bull. Soc. Path. Exot. Paris* **29** 1936 pp. 374-377.

Tobie, J. E. *vide* Bennett, H. J.

Tomiha, G. *vide* Yoshida, S.

1236.—Torrealba, J. F. Breves notas para el estudio de algunas parasitosis intestinales en Zaraza y otras poblaciones del Guárico y Anzoátegui. *Gac. Med. Caraccas* **39** 1932 pp. 355-358.

- 1237.—Torres, C. M. and Pinto, C. Processos pathogenicos determinados pelos trematoides *Eurytrema fastosum* e *E. coelomaticum*. Mem. Inst. Oswaldo Cruz Rio de Jan. **31** 1936 pp. 731-746 2 figs. 12 pls.
- 1238.—Torrey, J. P., Thorp, F. and Graham, R. A note on pathological changes encountered in wild ducks. Cornell Veter. Ithaca **24** 1934 pp. 289-298.
- 1239.—Toryu, Y. Contributions to the physiology of the *Ascaris*. IV. Products from glycogen during anaerobic and aerobic existence of the *Ascaris*, *Ascaris megalocephala* Cloq. Science Rep. Tōhoku Imp. Univ. Sendai (4) **10** 1936 pp. 687-696 3 figs.
- 1240.—Toryu, Y. Contributions to the physiology of the *Ascaris*. V. Survival and respiratory exchange of the *Ascaris*, *Ascaris megalocephala* Cloq. intercepted from light, in presence and absence of oxygen. Sci. Rep. Tōhoku Univ. (4) **11** 1936 pp. 1-18 4 figs.
- Townsend, L. H. *vide* Van Cleave, H. J.
- 1241.—Trawiński, A. Neue Diagnose-methode der Trichinose. Zeitschr. Fleisch. Milchhyg. Berlin **45** 1935 pp. 166-168.
- 1242.—Trawiński, A. Ueber Anwendung der Präzipitationsreaktion zum Nachweis der Schweinezystizerkose. Zbl. Bakt. Jena (i) **136** 1936 pp. 116-120.
- 1243.—Trawiński, A. Stellungnahme zu dem Artikel "Zur Frage der immunobiologischen Diagnose der Trichinose" von Hans Theiler und Donald L. Augustin. Zbl. Bakt. Jena (i) **136** 1936 pp. 238-241.
- 1244.—Treadwell, A. L. Polychaetous annelids from the vicinity of Nonsuch Island, Bermuda. Zoologica New York **21** 1936 pp. 49-68 3 pls.
- 1245.—Treadwell, A. L. Polychaetous annelids from Amoy, China. Proc. U.S. Nat. Mus. **83** 1936 pp. 261-279 20 figs.
- 1246.—Trim, E. A. Schistosomal cirrhosis and splenomegaly in the Central Kavirondo district of Kenya Colony. E. Afric. Med. J. **13** 1936 pp. 130-141 1 pl.
- Trofimova, A. A. *vide* Shmeleva, A. A.
- 1247.—Trowbridge, A. H. and Hefley, H. M. Preliminary studies on the parasite fauna of Oklahoma anurans. Proc. Okla. Acad. Sci. **14** 1934 pp. 16-19.
- 1248.—Tsuchiya, H. and Rector, L. E. Studies on intestinal parasites among wild rats caught in Saint Louis. Amer. J. trop. Med. Baltimore **16** 1936 pp. 705-714.
- 1249.—Tsunoda, T., Shirai, S. and Nakamoto, T. Über eine Art von Blasenwurm, der bei wildlebenden Hasen vorkommt. Trans. Jap. Path. Soc. **24** 1934 pp. 402-404.
- 1250.—Tubangui, M. A., Basaca, M. and Pasco, A. M. Observations on the geographical distribution of hookworm parasites and hookworm disease in the Philippines. Philipp. J. Sci. Manila **58** 1935 pp. 447-469 7 figs.
- 1251.—Tubangui, M. A. and Masilunigan, V. A. Trematode parasites of Philippine vertebrates. VII. Additional records of new species. Philipp. J. Sci. Manila **58** 1935 pp. 435-444 pls. i-iii.
- 1252.—Tufts, W. P. and Day, L. H. Nematode resistance of certain deciduous fruit tree seedlings. Proc. Amer. Soc. Hortie. Sc. **31** 1934 (suppl.) 1935 pp. 75-82.
- 1253.—Turner, E. L., Berberian, D. A. and Dennis, E. W. The production of artificial immunity in dogs against *Echinococcus granulosus*. J. Parasit. Urbana **22** 1936 pp. 14-28.
- 1254.—Turner, E. L., Dennis, E. W. and Berberian, D. A. Studies on the production of artificial immunity against *Echinococcus granulosus* in the definitive host. J. Egypt. Med. Ass. Cairo **18** 1935 pp. 536-546.
- 1255.—Turner, E. L., Dennis, E. W. and Berberian, D. A. The value of the Casoni test in dogs. J. Parasit. Urbana **21** 1935 pp. 180-182.
- 1256.—Tustanowska, A. Występowanie larw brzożdżogłowa szerokiego (*Dibothriocephalus latus*) w szczupakach z rynku Warszawskiego iz jeziora Wigry. Medycyna Doświad. Społeczna **16** 1933 nos. i, ii. [n.v.]

1257.—Twenhofel, W. H. and Schrock, R. R. Invertebrate Paleontology. New York (McGraw-Hill) 1935 511 pp. 175 figs. [Annelida pp. 129–148 figs. 39–44.]

1258.—Tyler, A. On the energetics of differentiation. III. Biol. Bull. Woods Hole 71 1936 pp. 59–81 4 figs.

1259.—Tyler, A. On the energetics of differentiation. IV. Biol. Bull. Woods Hole 71 1936 pp. 82–100 1 fig.

1260.—Uéno, M. Zooplankton of Lake Taraika and its neighbouring waters, Southern Sakhalin. Trans. Sapporo nat. Hist. Soc. 14 1936 pp. 174–178 pl. v.

1261.—Ujiie, M. Über die anämischen Augenveränderungen bei Ankylostomiasis. J. Kumamoto Med. Soc. 8 1932 p. 38.

1262.—Ujiie, N. A case of empyema caused by heterotopic parasitism of an *Ascaris lumbricoides*. [In Japanese, with English summary.] J. Med. Ass. Formosa 34 1935 pp. 1390–1395 1 pl.

1263.—Ujiie, N. On acute appendicitis associated with intestinal parasites. [In Japanese, with English summary.] Taiwan Igak. Zasshi 34 1935 pp. 1773–1789 1 pl.

1264.—Ujiie, N. On structure and development of *Echinocasmus japonicus* and its parasitism in man. [In Japanese, with English summary.] Taiwan Igak. Zasshi 35 1936 pp. 535–545 1 pl.

1265.—Ujiie, N. On the identification of certain worms of the Trematode genus *Monorchotrema* occurring in Formosa. [In Japanese, with English summary.] Taiwan Igak. Zasshi 35 1936 pp. 938–945 2 pls.

1266.—Ujiie, N. On the structure and function of Mehlis' gland in the formation of the egg-shell of *Echinocasmus japonicus*. [In Japanese, with English summary.] Taiwan Igak. Zasshi 35 1936 pp. 1000–1009 5 figs. 1 pl.

1267.—Ujiie, N. On the process of egg-shell formation of *Clonorchis sinensis*, a liver fluke. [In Japanese, with English summary.] J. Med. Ass. Formosa 35 1936 pp. 1862–1896 5 pls.

1268.—Ulliyott, P. The behaviour of *Dendrocoelum lacteum*. I. Responses

at light-and-dark boundaries. J. Exp. Biol. Cambridge 13 1936 pp. 253–264 5 figs.

1269.—Ulliyott, P. The behaviour of *Dendrocoelum lacteum*. II. Responses in non-directional gradients. J. Exp. Biol. Cambridge 13 1936 pp. 265–278 9 figs.

1270.—Ulliyott, P. A note on the zoogeographical history of north-western Europe. Proc. Prehist. Soc. 1936 pp. 169–177 pl. xxxvi 4 figs.

1271.—Underwood, J. R. Equine dhobie itch a symptom of filariasis. A report on fifty-six cases. Veter. Bull. Washington 28 1934 pp. 227–236.

1272.—Underwood, J. R. Habronemiasis. Veter. Bull. Washington 30 1936 pp. 16–28.

1273.—Upton, R. G. Incidence and severity of hookworm infestation in East Texas. Amer. J. Publ. Health Baltimore 26 1936 pp. 924–926.

1274.—Ussing, H. Fra den pelagiske Fauna i Lillebaelt. Flora og Fauna Kjøbenh. 1936 pp. 59–62 2 figs.

1275.—Vaills, I. Filariose et microfilariose autochtone chez le chien. Formes cliniques. Considérations. Rev. Vétér. Toulouse 88 1936 pp. 133–141.

1276.—Valkanov, A. Notizen über die Brackwässer Bulgariens. I. Ann. Univ. Sofia 31 1935 pp. 249–285 28 figs. [German summary pp. 286–293.]

1277.—Valkanov, A. Über die Anatomie und Cytologie der Nematode *Binema binema* Travassos. Trav. Soc. Bulg. Sc. Nat. Sofia 17 1936 pp. 153–167 21 figs.

1278.—Valkanov, A. Beitrag zur Anatomie und Morphologie der Rotatoriengattung *Trochospaera* Semper. Trav. Soc. Bulg. Sc. Nat. Sofia 17 1936 pp. 177–195 12 figs.

1279.—Valkanov, A. Notizen über die Brackwässer Bulgariens. 2. Versuch einer hydrographischen und biologischen Erforschung derselben. Ann. Univ. Sofia 32 1936 pp. 209–326 31 figs. [German summary pp. 327–336.]

Valverde, A. vide Kouri, P.

1280.—Van Cleave, C. D. A study of the process of fission in the Naid, *Pristina longiseta*. [Abstract.] Anat. Rec. Philadelphia 67 1936 suppl. i p. 95.

1281.—Van Cleave, H. J. The recognition of a new order in the Acanthocephala. *J. Parasit. Urbana* **22** 1936 pp. 202–206.

1282.—Van Cleave, H. J. *Tenuisentis*, a new genus of Acanthocephala, and its taxonomic position. *Parasitology Cambridge* **28** 1936 pp. 446–451 4 figs.

1283.—Van Cleave, H. J. Acanthocephala from amphibians and reptiles of China. *J. Parasit. Urbana* **22** 1936 p. 530.

1284.—Van Cleave, H. J. and Townsend, L. H. On the assignment of *Echinorhynchus dirus* to the genus *Acanthocephalus*. *Proc. helminth. Soc. Washington* **3** 1936 p. 63.

1285.—Vandebroek, G. Organogénèse des follicules sétigères chez *Eisenia foetida* Sav. *Mem. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 559–568 23 figs.

1286.—Van den Berghe, L. On the occurrence of a species of *Ancylostoma* closely related to *A. duodenale* in an African lemur. *J. Parasit. Urbana* **22** 1936 pp. 224–226.

1287.—Van Den Berghe, L. Sur le polymorphisme des œufs de *Schistosoma haematobium* et la présence d'œufs du type bovin dans les infections de l'homme au Katanga (Congo Belge). *Bull. Soc. Path. Exot. Paris* **29** 1936 pp. 41–46.

1288.—Van den Berghe, L. and Vuylsteke, C. Quelques *Setaria* du Congo belge, avec la description d'une espèce nouvelle du Potamochère. *Rev. Zool. Bot. afr. Tervueren* **28** 1936 pp. 421–430 10 figs.

Van Gundy, C. O. *vide* Gundy, C. O. Van.

1289.—Vanni, V. Parassiti animali e appendicite. *Riforma Med.* **47** 1931 pp. 1442–1447 2 figs.

1290.—Van Oye, E. L. De verspreiding der Beek-Tricladen in Laag-Luxemburg (België), en hare oorzaken. *Biol. Jb. Antwerp* **3** 1936 pp. 116–181 5 pls.

1291.—Van Oye, P. Sur la distribution de *Planaria alpina*, *Planaria gonocephala* et *Polycelis cornuta* dans le Jurassique belge. *Ann. Soc. Roy. Zool. Belg. Brussels* **66** 1935 pp. 119–122.

Van Someren, V. D. *vide* Someren, V. D. van.

1292.—Van Volkenberg, H. L. Report of the parasitologist. *Rept. Porto Rico Agric. Exper. Stat. Washington* 1928 1929 pp. 36–38. [n.v.]

1293.—Van Volkenberg, H. L. A method for recovering the strongyle larvae of the horse. *Proc. helminth. Soc. Washington* **3** 1936 p. 65.

1294.—Varga, L. *Collotheca balatonica* n. sp., ein neues pelagisches Rädertier aus dem Balaton-See. *Arb. Ung. Biol. Forsch. Inst.* **8** 1936 pp. 178–182 2 figs.

1295.—Varga, L. Beiträge zur Limnologie und zur Kenntnis der Rotatorien-Fauna des norwegischen Lapplandes. II. *Arch. Hydrobiol. Stuttgart* **30** 1936 pp. 371–378 4 figs.

1296.—Vaz, Z. Estudos sobre o *Neoscaris vitulorum*; sua presença em bovidos do Brasil. *Boletim biol. S. Paulo* **2** 1934 pp. 41–46 9 figs.

1297.—Vaz, Z. Sobre a pretensa validade de "*Syngamus nasicola*"—presença do *Syngamus laryngeus* nas fossas nasales de Carneiros do Brasil. *Arch. Inst. Biol. São Paulo* **6** 1935 pp. 35–39 8 figs.

1298.—Vaz, Z. Lesões produzidas no estomago de cobras por um novo nematoide, *Ophidascaris trichuriformis* n. sp. *Arch. Inst. Biol. São Paulo* **6** 1935 pp. 41–44 5 figs. 4 pls.

1299.—Vaz, Z. Adaptação ao porco doméstico do *Stichorhis giganteus*, parasita de porcos selvagens. *Re-descrição*. *Arch. Inst. Biol. São Paulo* **6** 1935 pp. 45–52 7 figs.

1300.—Vaz, Z. and Pereira, C. Some new Brazilian nematodes. *Trans. Amer. micr. Soc. Menasha* **54** 1935 pp. 36–40 pl. ix.

1301.—Veenendaal, H. Een bij den hond afgedreven *Taenia serrata* van zeer groote lengte. *Tijdschr. Diergeneesk. Utrecht* **63** 1936 p. 260.

1302.—Vergeer, T. The eggs and the coracidia of *Diphyllbothrium latum*. *Papers Michigan Acad. Sc.* **21** 1935 (1936) pp. 715–726 pl. lxxi.

1303.—Verma, S. C. On a new species of *Opisthorchis* from *Rita rita*. *Proc. Indian Sci. Congr. Calcutta* **13** 1926 pp. 186–187.

1304.—Verma, S. C. Studies on the family Bucephalidae (Gasterostomata). Part I. Descriptions of new forms from Indian fresh-water fishes. Proc. Nat. Acad. Sci. Allahabad **6** 1936 pp. 66–89 15 figs. 1 pl.

1305.—Verma, S. C. Notes on Trematode parasites of Indian birds. Part I. Allahabad Univ. Stud. **12** 1936 pp. 147–188.

1306.—Verma, S. C. A new Strigeid parasite of the rare genus *Cyathocotyle*. Nature London **138** 1936 p. 589 1 fig.

Vernières, P. *vide* Harant, H.

1307.—Vidallon, —. Des infestations vermineuses pulmonaires. Thesis Vet. Toulouse 1930. [n.v.]

1308.—Vigueras, I. P. Notas sobre la fauna parasitológica de Cuba. Mem. Soc. cubana Hist. nat. **10** 1936 pp. 53–86.

1309.—Vigueras, I. P. *Proteocephalus manjuariphilus*, n. sp. (Cestoda) parásito de *Atractosteus tristoechus* (Bloch and Schn.) (Pisces). Revista Parasitol. Habana **2** 1936 pp. 17–18.

1310.—Visser, P. Trichinen bei Schweinen, erstmalige. Z. Fleisch. Milchhyg. Stuttgart **40** 1930 p. 202.

1311.—Vittot, M. Bilharziose intestinale chez un très jeune enfant. Arch. Malad. Appareil Digest. **22** 1932 pp. 47–48.

1312.—Vlach, G. La filariosi nei cani di Trieste e Provincia. Arch. Ital. Sc. Med. Colon. Rome **17** 1936 pp. 418–445.

1313.—Vlasenko, P. V. До фавни трематод амфібій та рептилій околиць м. харкова. Trav. Soc. Nat. Kharkov **53** 1930 pp. 49–57 2 figs.

1314.—Vo Gan Can, N. [sc. Vo Van Can, M.]. L'helminthiase chez les enfants de la région provençale. Bull. Soc. Path. Exot. Paris **28** 1935 pp. 829–832.

1315.—Vogel, H. Beobachtungen über Fasciolopsisinfection. Arch. Schiff's Tropenhyg. Berlin **40** 1936 pp. 181–187.

1316.—Vogel, R. *Polycladodes alba* Steinmann, ein für Deutschland neuer Strudelwurm, in Quellen der Schwäbischen Alb. Jh. Ver. vaterl. Naturk. Württemb. **91** 1935 pp. 155–156.

Volkenberg, H. L. van *vide* Van Volkenberg, H. L.

Von Brand, T. *vide* Brand, T. v.

Von Frankenberg, C. *vide* Frankenberg, G. v.

Von Schuckmann, W. *vide* Schuckmann, W. von.

1317.—Vos, J. J. T. Cysticercus-leversarcom bij ratten. Geneeskund. Tijdschr. Ned. Ind. Batavia **75** 1935 pp. 1271–1286.

1318.—Vuylsteke, C. Un Nématode nouveau du Pangolin d'Afrique. Rev. Zool. Bot. afr. Tervueren **29** 1936 pp. 13–16 7 figs.

Vuylsteke, C. *vide etiam* Van den Bergh, L.

Waele, A. de *vide* De Waele, A.

1319.—Wager, V. A. The possibility of eradicating *Bilharzia* by extensive planting of the tree *Balanites*. South Afr. Med. J. Cape Town **10** 1936 pp. 10–11.

1320.—Wagner, H. Ein Beitrag zum Sklerostomenbefall der Pferde unter besonderer Berücksichtigung der Verhältnisse bei den Fohlen. Deutsch. Tierärztl. Woch. Hanover **43** 1935 pp. 401–406.

1321.—Walker, A. E. Cysticercosis cellulosa in the monkey. J. Comp. Pathol. Croydon **49** 1936 pp. 141–145.

Walker, A. J. *vide* Southwell, T.

1322.—Walker, A. T. Trichiniasis, report of an outbreak caused by eating trichinous bear meat in the form of jerky. J. Amer. Med. Ass. Chicago **98** 1932 pp. 2051–2053.

1323.—Wallace, F. G. A new intermediate host of *Fasciolopsis buski* (Lankester) (Trematoda; Fasciolidae). Lingnan Sci. Journ. Canton **15** 1936 pp. 125–126.

1324.—Wallace, F. G. *Polydelphis attenuata* (Nematoda; Ascaridae) from a Hainan python. Lingnan Sci. Journ. Canton **15** 1936 pp. 309–310 3 figs.

1325.—Wallace, F. G. Two new trematode parasites of Canton snakes (Trematoda: Lepodermatidae). Lingnan Sci. Journ. Canton **15** 1936 pp. 355–364 7 figs.

- 1326.—Walters, A. H., Low, G. C. and Manson-Bahr, P. H. Ankylostomiasis in Indian seamen. *Lancet* London 230 1936 p. 599.
- 1327.—Walton, A. C. A new species of *Zanchlophorus* [sc. *Zanclophorus*] from *Cryptobranchus alleganiensis*. *Trans. Illinois Acad. Sci.* 28 1936 pp. 267–268 7 figs.
- 1328.—Walton, A. C. The life cycle of *Ophidascaris labiatopapillosa* Walton 1927. *J. Parasit. Urbana* 22 1936 p. 537.
- 1329.—Walton, A. C. A suggested life cycle for *Multicaecum tenuicollis* (Rud., 1819) Walton, 1927. *J. Parasit. Urbana* 22 1936 p. 537.
- 1330.—Walton, A. C. The larval form of *Foleyella americana* Walton, 1929. [Abstract.] *Anat. Rec. Philadelphia* 67 1936 suppl. i p. 87.
- 1331.—Walton, W. R. Autotomy in a peregrine earthworm. *Science* N.Y. N.S. 84 1936 p. 202.
- Wanderley, F. *vide* Lins, M.
- 1332.—Wang, C. Study on the parasitic ova examination of faeces outside the human dwellings in Nantao, Shanghai. *Nat. Med. J. China* 20 1934 pp. 1020–1024.
- 1333.—Wang, M. S. Über die Krankheitserscheinungen bei Infektion mit *Fasciolopsis buski*. *Arch. Schiffs. Tropenhyg.* 40 1936 pp. 243–255, 295–301.
- 1334.—Wantland, W. W. Effect of irradiated ergosterol and calcium lactate on calcification of *Trichina* cysts. *Anat. Rec. Philadelphia* 60 1934 p. 75.
- 1335.—Wantland, W. W. Effect of irradiated ergosterol on trichinized white rats. *J. Parasit. Urbana* 22 1936 p. 537.
- Ward, C. B. *vide* Lamson, P. D.
- 1336.—Ward, J. W. A study of some parasites of rabbits of Central Oklahoma. *Proc. Okla. Acad. Sci.* 14 1934 pp. 31–32.
- Warren, M. *vide* Drake, E. H.
- 1337.—Warwick, M. The relationship between oxyuriasis and appendicitis. *Amer. J. Clin. Path.* 5 1935 pp. 238–248.
- 1338.—Warwick, T. The parasites of the muskrat (*Ondatra zibethica* L.) in the British Isles. *Parasitology Cambridge* 28 1936 pp. 395–402.
- 1339.—Watanabe, M. Ueber die Embryonalentwicklung von *Paragonimus westermanni*. [In Japanese, with German summary.] *Okayama Igakk. Zasshi* 47 1935 pp. 1173–1190 3 pls.
- 1340.—Watanabe, M. Ueber den Körperbau des Miracidiums von *Paragonimus westermanni*. [In Japanese, with German summary.] *Okayama Igakk. Zasshi* 47 1935 pp. 1474–1479.
- 1341.—Watarai, J. Studies on the skin reaction caused by *Schistosoma japonicum*, cutaneously applied on the animals. *Jap. J. Exp. Med. Tokyo* 14 1936 pp. 1–18.
- 1342.—Waterlot, G. Basin Houiller de la Sarre et de la Lorraine. II. Faune fossils. Étude de la faune continentale du terrain houiller Sarro-Lorrain. *Études Gîtes Min. France* 1934 p. 32.
- 1343.—Waterman, A. J. The surface layer of the germinal vesicle of the egg of *Sabellaria vulgaris*. [Abstract.] *Anat. Rec. Philadelphia* 67 1936 suppl. i p. 88.
- 1344.—Wawilowa, N. M. Vogel-nematoden des Moskauer Gouvernements. *J. Trab. Inst. Vet. Exp.* 3 no. 2. [N.v.]
- Webster, J. L. A. *vide* Campbell, H. E.
- 1345.—Weese, A. O. The annelids of a marine sere. *Proc. Okla. Acad. Sci.* 13 1933 pp. 18–21.
- 1346.—Wehr, E. E. Earthworms as transmitters of *Capillaria annulata*, the “crop-worm” of chickens. *North Amer. Veter. Chicago* 17 1936 viii pp. 18–20.
- 1347.—Weimer, B. R., Hedden, R. S. and Cowdery, K. Flatworm and roundworm parasites of wild rabbits of the Northern Panhandle. *Proc. W. Virginia Acad. Sc.* 7 1934 pp. 54–55.
- 1348.—Weise, M. *Euplanaria gonocephala* (Dugès) im Triasgebiet der Mark Brandenburg (Vermes). *Märk. Tierw. Berlin* 1 1936 pp. 238–239.

- 1349.—Welsh, M. F. Oxygen production by zooxanthellae in a Bermudan Turbellarian. *Biol. Bull. Woods Hole* **70** 1936 pp. 282–287.
- 1350.—Weniger, H. Versuche zur Verbesserung der Methoden zum morphologischen Studium bescheideter Larvenstadien der Pferdestrongyliden. Inaug.-Dissert. Berlin 1935. [n.v.]
- 1351.—Wesenberg-Lund, E. Tomopteridae and Typhloscolecidae. Danish Ingolf Exped. Copenhagen **4** 1935. Pt. xi pp. 1–16 3 text-figs. 1 pl.
- 1352.—Wesenberg-Lund, E. Tomopteridae and Typhloscolecidae. The Godthaab Expedition 1928. Medd. Grønland **80** iii 1936 pp. 1–17 6 figs.
- 1353.—West, R. M. The cercaria of *Neodiplostomum lucidum* La Rue and Bosma. *Trans. Amer. micr. Soc. Menasha* **54** 1935 pp. 15–18 pl. iii.
- 1354.—Wetzel, R. Die Beziehungen parasitischer Würmer zum Wirtstier. SitzBer. Ges. naturf. Fr. Berlin 1935 1936 pp. 291–304 4 figs.
- 1355.—Wetzel, R. Neuere Ergebnisse über die Entwicklung von Hühnerbandwürmern. *Verh. Deutsch. zool. Ges. Leipzig* **38** 1936 pp. 195–200 2 figs.
- 1356.—Wetzel, R. and Enigk, K. Zur Wurmfauna des Elches. *Deutsche Tierärztl. Woch.* **44** 1936 pp. 576–577.
- 1357.—Wetzel, R. and Müller, F. R. Die Lebensgeschichte des schachtelhalmförmigen Füchslungenwurmes *Crenosoma vulpis* und seine Bekämpfung. *Deutsche Pelztierzüchter* **10** 1935 pp. 361–365.
- 1358.—Weve, H. Ein Fall von doppelseitigem *Cysticercus intraocularis*. *Klin. Mbl. Augenheilk.* **87** 1931 pp. 597–602.
- 1359.—Wheeler, J. F. G. Record of *Gorgonorhynchus* at Bermuda. *Nature London* **137** 1936 p. 33.
- 1360.—Wheeler, J. F. G. Nemertea. *Sci. Repts. John Murray Exped.* **4** 1936 pp. 79–86 2 figs.
- 1361.—White, M. J. D. Chromosome cycle in *Ascaris megalocephala*. *Nature London* **137** 1936 p. 783 4 figs.
- 1362.—Whitlock, J. H. and Morrill, C. C. An acanthocephalid parasitic in a calf. *J. Amer. Vet. Med. Ass. Chicago* **88** 1936 pp. 764–766.
- Wierzbicka, M. *vide* Michajłow, W.
- 1363.—Wiiese, E. Distomatose hos storfe i Vestfold. *Norsk Veter. Tidsskr.* **46** 1934 pp. 489–502.
- 1364.—Wigand, R. Anguilluliasis. (An Hand eines sporadischen Falles von *Anguillula intestinalis* in Ostpreussen.) *Zeitschr. Klin. Med.* **128** 1935 pp. 308–323.
- 1365.—Wigand, —. Klinisch-parasitologische Beobachtungen. II. *Deutsche Med. Woch. Leipzig* **62** 1936 pp. 175–177.
- Wigand, R. *vide etiam* Szidat, L.
- 1366.—Wilde, S. A. Soil nematodes in forest nurseries. *Phytopathology Baltimore* **26** 1936 198–199.
- 1367.—Willett, J. C. and Pfau, C. L. Trichinosis: an outbreak involving twenty cases and one death. *J. Amer. Med. Ass. Chicago* **94** 1930 p. 1060.
- 1368.—Willey, C. H. Studies on the morphology and systematic position of the Trematode *Procladorchis pangasii* n. g. (*Cladorchis pangasii* MacCallum 1905). *Trans. Amer. micr. Soc. Menasha* **54** 1935 pp. 8–14 pl. ii.
- 1369.—Willey, C. H. The morphology of the Amphistome cercaria *C. poconensis* Willey, 1930, from the snail, *Helisoma antrosa*. *J. Parasit. Urbana* **22** 1936 pp. 68–75 5 figs.
- 1370.—Willey, C. H. Cytology and development of flame cells in the redial generation of a Trematode. [Abstract.] *Anat. Rec. Philadelphia* **67** 1936 suppl. i p. 85.
- Williams, O. L. *vide* Kofoid, C. A.
- 1371.—Williams, P. H. A new eelworm disease of the tomato. *Gardeners' Chron. London* **99** p. 316.
- 1372.—Wilson, D. P. Life of the Shore and Shallow Sea, London 1935 150 pp. 128 figs.
- 1373.—Wilson, D. P. The development of *Audouinia tentaculata* (Montagu). *J. Mar. biol. Ass. Plymouth N.S.* **20** 1936 pp. 567–579 12 figs.
- 1374.—Wilson, D. P. The development of the Sabellid *Branchiomma vesiculosum*. *Quart. J. micr. Sci. London N.S.* **78** 1936 pp. 543–603 30 figs.

1375.—Wilson, D. P. Notes on the early stages of two Polychaetous worms, *Nephtys hombergi* Lamarck and *Pectinaria koreni* Malmgren. J. Mar. Biol. Ass. Plymouth **21** 1936 pp. 305–310 3 figs.

1376.—Winfield, G. F. On the use of *Ascaris lumbricoides* as a public health standard in the study of problems of rural sanitation. Trans. 9th Congr. Far-East. Ass. Trop. Med. Nanking **2** 1935 791–797.

1377.—Winfield, G. F. and Chang, C. F. *Raillietina (Raillietina) sinensis* a new tapeworm from the domestic fowl. Peking Nat. Hist. Bull. **11** 1936 pp. 35–37 3 figs.

1378.—Winfield, G. F. and Chang, C. F. *Raillietina (Raillietina) shantungensis* a new name for *Raillietina (Raillietina) sinensis* Winfield and Chang, 1936. Peking nat. Hist. Bull. **11** 1936 p. 161.

1379.—Winogradow, K. A. *Magelona rosea* Moore. Note sur la presence de la *Magelona rosea* Moore dans la Mer Noire. [In Russian.] Trav. Stat. Biol. Karadagh **3** 1930 pp. 39–40 1 fig.

1380.—Winternitz, J. K. New species of Polychaetous Annelids collected at Appalachicola, Florida, by Dr. A. S. Pearse, in 1935. Amer. Mus. Nov. **888** 1936 3 pp. 12 figs.

1381.—Wiśniewski, L. W. O rodzajach rodziny Coitocaeidae (Trematoda). Arch. Tow. nauk. Lwow (3) **6** ii 1933 pp. 1–13 1 pl.

1382.—Wiszniewski, J. Note sur le psammon du lac Ohrid. Verh. int. Vereinig. Limnol. Beograd **7** 1935 pp. 238–244 2 figs.

1383.—Wiszniewski, J. Über die Nomenklatur der *Cephalodella catellina* —ähnlichen Rotatorienarten. Zool. Polon. Lwow **1** 1936 pp. 171–179 3 figs.

1384.—Wiszniewski, J. Notes sur le psammon. III. Deux tourbières aux environs de Varsovie. Arch. Hydrobiol. Ichtyol. Suwalki **10** 1936 pp. 173–187 5 figs.

1385.—Wolf, B. Animalium Cavernarum Catalogus. 's-Gravenhage **2** 1936 pp. 369–456.

1386.—Wolffhügel, K. Die Parasiten der Haustiere in Südamerika, besonders in den La Plata-Staaten. Festschrift für Zschokke Basel 1920 no. 29 18 pp.

1387.—Wolffhügel, K. Fimbriariinae (Cestodes). Z. Infektionskrankh. Haustiere **49** 1936 pp. 257–291.

1388.—Wood, J. I. Estimates of plant losses from diseases in the United States. Plant Dis. Rep. Suppl. no. **87** 1935 82 pp.

Wood, J. I. *vide* Humphrey, H. B.

1389.—Wood, W. A. On a new species of *Labiostrongylus*. Rept. Direct. Inst. Anim. Path. Cambridge **1** 1931 p. 205. [Reprint from Ann. Mag. Nat. Hist. (10) **4** 1929 p. 550.]

1390.—Woodhead, A. E. An extraordinary case of multiple infection with the sporocysts of *Leucochloridium*. J. Parasit. Urbana **22** i 1936 pp. 227–228.

1391.—Woodhead, A. E. A study of the Gasterostome cercariae of Huron river. Trans. Amer. micr. Soc. Menasha **55** 1936 pp. 465–476 pls. lviii, lix.

1392.—Woodhead, A. E. and Malewitz, H. *Mediogonimus ovilacus* n. g. n. sp. J. Parasit. Urbana **11** 1936 pp. 273–275 1 fig.

1393.—Woolcock, V. Monogenetic Trematodes from some Australian fishes. Parasitology Cambridge **29** 1936 pp. 79–91 4 text-figs. pl. iii.

1394.—Wu, K. Distribution of paragonimiasis in China. Chinese Med. J. Shanghai 1936 suppl. pp. 442–448.

1395.—Wu, L. C. Chronic salpingitis caused by *Oxyuris vermicularis*. Report of a case. Chinese Med. J. Shanghai **49** 1936 pp. 256–259 1 pl.

1396.—Wulfert, K. Beiträge zur Kenntnis der Rädertier-fauna Deutschlands. Teil ii. Arch. Hydrobiol. Stuttgart **30** 1936 pp. 401–437 5 pls.

Wulzen, R. *vide* Bahrs, A. M.

Wyman, B. F. *vide* Leathers, W. S.

Yamada, K. *vide* Koidzumi, M.

1397.—Yamada, S., Asada, J. and Miyada, I. Studies on the life-history of a common rat-tapeworm, *Hymenolepis diminuta* (Rudolphi), especially in the relation between this tapeworm and rat-fleas. Zool. Mag. Tokyo **48** 1936 pp. 437–457 pls. xii–xiv.

1398.—Yamaguchi, H. Occurrence of the luminous oligochaete, *Microscolex phosphoreus* (Dug.) in Japan. Annot. zool. jap. 15 1935 pp. 200–202 1 fig.

1399.—Yamaguchi, H. Studies on the aquatic Oligochaeta of Japan. I. Lumbriculids from Hokkaido. J. Fac. Sci. Hokkaido Univ. Zool. 5 1936 pp. 78–94 15 figs. pls. iv, v.

1400.—Yamaguchi, H. On the genus *Lumbriculus* Grube (Aquatic Oligochaeta). [In Japanese.] Zool. Mag. Tokyo 48 1936 pp. 791–795.

1401.—Yamaguchi, M. Über Gewebsveränderungen insbesondere Granulationsgeschwülste durch Askariden. Mitteil. Grenzgeb. Med. Chir. 37 1924 p. 469.

1402.—Yamaguti, S. Studies on the helminth fauna of Japan. Part 14. Amphibian Trematodes. Japan. J. Zool. Tokyo 6 1936 pp. 551–576 26 figs.

1403.—Yamaguti, S. Studies on the helminth fauna of Japan. Part 15. Trematodes of fishes, ii. Jap. J. Zool. Tokyo 7 1936 pp. 1–6 8 figs.

1404.—Yamaguti, S. Studies on the helminth fauna of Japan. Part 16. Trematodes of fishes, iii. Jap. J. Zool. Tokyo 1936 pp. 1–6 2 figs.

1405.—Yamamoto, K. Histo-pathological findings of the uterus, the placenta and the fetus of dogs infected with *Dirofilaria immitis*. I. Trans. Soc. Path. Jap. Tokyo 26 1936 pp. 690–694.

1406.—Yamasaki, Y. Das Ergebnis der Parasiteneier-Untersuchungen des Verdauungsorgans von Bewohner im Suigen-Gegend. [In Japanese, with English summary.] J. Chosen Med. Ass. 26 1936 pp. 464–468.

1407.—Yamashita, J. On the morphological study of *Glypthelminis rugocaudata* (Yoshida) a Trematode of the frog. [In Japanese.] Botany & Zool. Tokyo 4 1936 pp. 1359–1370 4 figs.

1408.—Yokogawa, S. A human case of accidental parasitism of *Diploscopter coronata* (Cobb, 1893) Cobb, 1913. Zool. Mag. Tokyo 48 1936 pp. 507–511 pl. xv.

1409.—Yoshida, S., Onohara, K. and Tomiha, G. On a first case of *Gnathostoma spinigerum* Owen in Japanese cat,

with especial reference to its development. Zool. Mag. Tokyo 48 1936 pp. 565–571 3 figs.

1410.—Yoshino, K. Two cases of *Enterobius vermicularis* causing violent paroxysmal pains in the rectum. J. Med. Assoc. Formosa 32 1933 pp. 1410–1413. [In Japanese, with English summary.]

1411.—Young, H. H. Some unusual cases of filariasis of the scrotum and groin. J. Urology 32 1934 pp. 383–415.

1412.—Young, R. T. Some unsolved problems of Cestode structure and development. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 229–239 pl. xxxviii.

1413.—Young, R. T. A fork-tailed cercaria from Bering Sea, with a note on the marine furcocercous cercariae hitherto described. J. Parasit. Urbana 22 1936 pp. 255–258 1 fig.

1414.—Young, S. Studies on the final host of *Fasciolopisi buski* and its development in the intestine of the pig. J. Shanghai Sci. Inst. (4) 2 1936 pp. 225–236 6 pls.

1415.—Yumoto, Y. On the minute structure of the egg-shells of *Clonorchis sinensis*, and on its abnormal eggs. [In Japanese, with English summary.] J. Med. Ass. Formosa 35 1936 pp. 1836–1846 1 pl.

Yumoto, Y. *vide etiam* Kawai, T.

1416.—Zachvatkin, V. A. Über die Parasiten-Fauna der Fische des Kama-Flusses. Scient. Mem. Univ. Perm 1 1935 pp. 83–104 pl. iii. [German summ. p. 102.]

Zarrow, M. X. *vide* Pomerat, C. M.

Zee, G. F. *vide* Chu, T. C.

Zertschaninov, L. *vide* Plotnikov, N.

1417.—Zhinkin, L. Über die abhängige Differenzierung des Nervensystems während der Regeneration bei *Lumbriculus variegatus*. Arch. Entw. Mech. Org. Berlin 134 1936 pp. 251–261 6 figs.

1418.—Zhinkin, L. The influence of the nervous system on regeneration in *Rhynchelmis limosella* Hof. J. exp. Zool. Philadelphia 73 1936 pp. 43–65 14 figs.

1419.—Zunker, M. Zur Biologie von Menschenbandworm und Rinderfinne. Zbl. Bakt. (1) Ref. 117 1935 pp. 379–384.

1420.—Zunker, M. Vergleichende Parasitologie und Hygiene. Reichsgesundheitsblatt 1935 p. 923. [N.v.]

1421.—Zurbuchen, K. and Baltzer, F. Das Tempo der männlichen, weiblichen und intersexuellen Differenzierung bei *Bonellia viridis* und die Goldschmidt'sche Theorie der Geschlechtsbestimmung. Rev. suisse Zool. Genève 43 1936 pp. 489–494.

1422.—Zwirn, D., Joyeux, C. and Abougaya, A. *Ascaris lumbricoides* dans la cavité pleurale au cours d'une pleurésie purulente. Marseille Méd. 72 1935 pp. 701–715 4 figs.

Taxonomy.—*Ostiolum* Pratt. syn. of *Pneumonoeces*, DOLLFUS, 299; New taxonomy of Strigeids, DUBOIS, 308; Classification of Harmostomatidae, MEHEA, 753; Two new Allocread genera, Japan, OZAKI, 873; New *Gyliauchenid* genus in fish, Japan, OZAKI, 874; New genera of Coitocaecidae, WIŚNIEWSKI, 1381; Notes on systematics of *Leucochloridium* spp., SZIDAT, 1195; Classification of Cyathocotylidae, SZIDAT, 1194; *Diphyllobothrium mansonoides* Mueller syn. of *D. erinacei* (Rud.), IWATA, 533; *Porotaenia* Szpotañska suppressed, JOHNSTON, 547; Notes on Cestode taxonomy, JOYEUX & BAER, 554; Specific distinction of *Echinococcus alveolaris* and *E. hydatidosus*, POSSELT, 942; Identification of *Moniezia* sp. of hippopotamus, SANDGROUND, 1016; Two new genera of Fimbriariinae, WOLFFHÜGEL, 1387; Synonymy of *Diphyllobothrin lanceolatum*, STUNKARD & SCHOENBORN, 1170; Notes on taxonomy of Dilepididae, LÓPEZ-NEYRA, 688.

PLATYHELMINTHES,

NEMERTEA,

MESOZOA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Text-books.—Text-book of medical and veterinary helminthology, NEVEU-LEMAIRE, 829; Text-book of invertebrates, PRATT, 944; Vermes in Regan, Natural History, ROBSON, 981; Text-book of veterinary parasitology, SKRJABIN ET ALII, 1090; Text-book of helminth infections of man, Germany and middle Europe, SZIDAT & WIGAND, 1197.

Reviews.—H. B. Ward's services to the "Journal of Parasitology," CORT, 233; Parasites and parasitism, GRASSÉ, 434; Recent developments in helminthology, PETERS, 921; Recent developments in study of parasitic worms, THEILER, 1221; Recent discoveries in the life history of Cestodes, DE WAELE, 286; Advances in hydatid disease, DEW, 285; Parasitism in Hawaii, HALL, 445; Aspects of zooplankton research, RUSSELL, 1005.

Technique.—Aceto-formalin in enrichment coprological technique, BASNUEVO & ANIDO, 79; Parasitic egg counts in lambs and sheep, MARSH, 748; Comparison of coproscopic and post-mortem helminthological findings, MARTORELLI, LLIBRE & GONZALEZ, 740; Coproscopic technique for fowls, SCHMID, 1041; Faecal examination for helminth ova, Shanghai, WANG, 1332; Helminthocoprological investigations in man, Korea, YAMASAKI, 1406; Application of precipitin reaction in diagnosis of swine cysticercosis, TRAWIŃSKI, 1242; Casoni test for *Echinococcus* in dogs, TURNER, DENNIS & BERBERIAN, 1255; Precipitin reactions to helminth extracts, EISENBRANDT, 319; Intracutaneous test with *Schistosoma* antigen, KAN, 568, WATSON, 1341; Intradermal reaction in hydatid infection, NUNEZ & LOPEZ, 841; Preparation of histolytic ferment from cercariae, DAVIS, 265; Staining of tapeworms, BRAGG, 132; Method of staining excretory system of Trematodes, McMULLEN, 717; Thermotropic gradient apparatus in study of planarian, EDDY & GLEIM, 310; Experimental methods in study of helminth infections, FAUST, 329; Technique for morphological study of *Fasciola hepatica*, KOURI, BASNUEVO, ALVARE & LISCANO,

615; Notes on helminthological technique, LENT & FREITAS, 667; Diagnosis of *Taenia saginata* infection, PENFOLD & PENFOLD, 906; Technique for rearing *Larus ridibundus* in captivity for study of Trematode life-histories, ROTHSCHILD, 997.

Obituaries.—R. Moniez, LAVIER, 653; C. Janichi, RUSZKOWSKI, 1007, STEFAŃSKI, 1131; J. S. Ruskowski, STEFANSKI, 1133.

STRUCTURE.

General.—Morphology of *Macrostomum tuba*, HYMAN, 517, *Paraplano-cera*, KATO, 574, *Sphyranura* spp., ALVEY, 25, *Apophallus venustus*, CAMERON, 168, *Haplorchis taakree*, DAYAL, 270, *Plagitura parva*, STUNKARD, 1168, *Aspidogaster conchicola*, SYÔGAKI, 1186, *Procladorchis pangasii* (MacCallum), WILLEY, 1368; Revision of *Haplorchis* (*Monorchotrema*) spp. in dogs and cats, CHEN, 194; Differential key to genus *Phyllodistomum*, LEWIS, 673; Morphological variation in *Eurytrema fastosum*, PINTO, 925; Morphology of *Dilepis undula*, DAVIES, 263; *Diphyllbothrium lanceolatum*, STUNKARD & SCHOENBORN, 1170; Comparative anatomy of *Diphyllbothrium* spp., MUELLER, 809; Morphology of *Dicyema schulzianum*, NOUVEL, 838; Notes on *Rhopalura* spp., ROSCOFF, NOUVEL, 839.

Cytology.—Cytology of *Macrostomum tuba*, PHILLIPS, 922; Parasomes in oocytes of *Leptoplana* and *Prosthio-stomum*, STEOPOE, 1145; Cytology of flame cells in Trematode rediae, WILLEY, 1370; Parenchyma in Cestodes, PINTNER, 924; Cytology of *Dicyema Schulzianum*, NOUVEL, 838.

Vitellaria.—Characters of phenophil granules in vitellaria of Platyhelminths, MARCHESE, 729.

Cuticle.—Spines of *Fasciola hepatica*, MÜLLER, 815.

Organogenesis.—Problems in Cestode organogenesis, YOUNG, 1412.

Asymmetry.—Experimental cephalic asymmetry in *Euplanaria dorocephala*, RULON, 1003.

Abnormal.—Triradiate and tetra-radiate specimens of *Taenia pisiformis* in dog, COATNEY, 225; Polyradiate specimens of *Taenia pisiformis* from dog, DOBROVOLNY & DOBROVOLNY, 297; Abnormal ovary in *Fasciola hepatica*, HOFFMANN, 489; Abnormal *Cysticercus cellulosae* in human brain, HUFF & BUCY, 504; Unusually large *Taenia serrata* from a dog, VEENAN-DAAL, 1301.

PHYSIOLOGY.

Chemical constitution.—Alkaloids in tissues of nemerteans, BACQ, 53; Nutritional value of mammalian tissue for planarians, BAHR & WULZEN, 59; Distribution of albuminoid nitrogen in tapeworms, SMORODINTZEV & PAVLOVA, 1105; Chemical constitution of cestodes, SMORODINZEV & BEBESCHIN, 1106; Chemical constitution of eggs of *Taenia saginata* and *Diphyllbothrium latum*, SMORODINCEV & PAVLOVA, 1104; Oxygen-production, by zoo-xanthellae in Turbellarian, *Amphiscolops*, WELSH, 1349.

Environmental effects and responses.—Effect of digestive juices on *Echinococcus scolices*, BERBERIAN, 100; Locomotor reactions to light in *Planaria*, BOCK, 126; Action of light on planarians, CĂLUGĂREANU, 164; Effect of light on periodicity of emission of cercariae from snail host, GIOVANNOLA, 413; Effect of short wave length light on Turbellaria, MERKER, 759; Responses of *Dendrocoelum* at light and shade boundary, ULLYOTT, 1268; Properties of growth-promoting factor for *Planaria maculata*, GREENBERG & SCHMIDT, 435; Influence of environmental changes on development of eggs of *Bothriocephalus scorpii*, MARKOWSKI, 732; Responses of *Dendrocoelum* in non-directional gradients, ULLYOTT, 1269.

Metabolism.—Cryptometabolism in *Lineus*, JESCHIKOV, 543.

Movement.—Influence of head on movement and sensation in Triclad, BENAZZI, 93.

Egg-shell Formation.—Function of Mehlis gland in egg-shell formation in *Echinochasmus*, UJIE, 1266.

Physiological Races.—Physiological races of *Euplanaria gonocephala* as determined by scissiparity, BENAZZI, 97.

Regeneration.—Histology of regeneration in land planarians, BANDIER, 69; Wound-healing in Planarians, a fermentative process, HAU, 463; Notched incision experiments on regeneration in *Planaria*, KAHL, 562; Effect of strychnine in reconstitution in *Euplanaria*, MILLER, 775; Heteroplastic transplantation in Triclad, MILLER, 777; Reversal of polarity in *Planaria*, SCHEWTSCHENKO, 1038; Physiology of regeneration in triclad, SIVICKIS, 1083; Origin of cell material in regenerative processes in Turbellaria and Nemertea, STOLTE, 1157.

REPRODUCTION AND DEVELOPMENT.

Life cycle.—Life history of *Microcotyle spinicirrus*, REMLEY, 965; Extra-mammalian phases in life cycle of *Schistosoma mansoni*, FAUST & HOFFMAN, 334; Notes on life-history of *Schistosoma turkestanicum*, MACHATTIE, 707, 708; Life-cycle of *Schistosoma haematobium* in Iraq, MILLS, MACHATTIE & CHADWICK, 776; Experimental life-history of *Neascus vancouveri*, FERGUSON, 342; Life-cycle of *Crassiphiala ambloplitis*, HUNTER & HUNTER, 514; Life history of *Lecithodendrium pyramidum*, with new cercaria, AZIM, 46; Life-histories of Reniferinae from reptiles, BYRD, 150; Life history of *Parorchis acanthus*, CABLE, 162; Life-histories of *Apophallus venustus* and *Paramorchis* in Canada, CAMERON, 170; Developmental cycle of new *Maritrema* sp., CARRÈRE, 176; Life-history of *Paragonimus* from rats, CHEN, 195; Feeding experiments with *Leucochloridium* spp. in birds, HSÜ, 500; Life-cycle of *Chinostomum marginatum*, HUNTER & HUNTER, 514; *Brachylaemus virginiana*, KRULL, 635, *Telorchis robustus*, KRULL, 636, *Allocreadium angusticolle*, MATHIAS, 744; Larval life-history of *Dicrocoelium lanceatum*, MATTES, 750; Development of *Gorgodera amplicava*, ODLAUG, 847; Life-history of *Eozorchis oviformis*, OKABE, 850, *Plagitura parva*, STUNKARD, 1167, 1168, *Cotylophorum cotylophorum*, BENNETT, 98, *Paramphistomum cervi*, BRUMPT, 141, SZIDAT,

1196, *Cercaria multicellulata*, HUNTER, 510; Life-cycles and distribution of cystocercous cercariae in North America, SMITH, 1099, 1100; Life-cycles of *Cercaria hodgeiana* and *C. melanophora*, SMITH, 1102, *Cercariaeum lintoni*, STUNKARD, 1169, *Diphyllbothrium mansonoides*, MUELLER, 811, *Proteocephalus ambloplitis*, HUNTER & HUNNINEN, 512, *Metroliasthes lucida* in grasshoppers, JONES, 549, *Hymenolepis diminuta*, YAMADA, ASADA & MIYADA, 1397; Experimental re-infection of duck and gull with *Ligula JOYEUX & BAER*, 557.

Development.—Comparative developmental history of Platyhelminths, KORSCHULT, 613; Development of *Sphyrnura* spp., ALVEY, 25, *Lecithodendrium pyramidum*, AZIM, 46, *Metagonimoides* sp. in *Goniobasis*, INGLES, 525, *Cercaria vitrina*, NEUHAUS, 828, *Leucochloridium* spp., SZIDAT, 1195, *Echinocasmus japonicus*, UJIE, 1264, *Paragonimus westermani*, WATANABE, 1339, *Fasciolopsis buski* in pig, YOUNG, 1414, *Choanotaenia infundibulum*, WETZEL, 1355, hydatids, DÉVÉ, 284, adult *Echinococcus*, ROSS, 989.

Larval forms.—Miracidium of *Neodiplostomum lucidum*, PARK, 883; Structure of miracidium of *Paragonimus westermani*, WATANABE, 1340; Sporocysts of *Brachylaemus* sp. in *Helix aspersa*, CHALAUX, 187; New *Leucochloridium* sporocyst, Louisiana, GOWER, 429; Cercaria of *Schistosoma mansoni*, ARCHIBALD & MARSHALL, 35; Schistosome cercaria in *Melania tuberculata*, Egypt, AZIM, 45; Cercariae and metacercariae of a *Brachylaemus* sp., BALOZET, 67; Cercaria of *Paramphistomum cervi*, BRUMPT, 141; New cercariae from molluscs, Tunis, CALLOT, 163; Three new cercariae in *Australorbis glabratus*, Porto Rico, FAUST & HOFFMAN, 334; Larval Trematodes from freshwater molluscs, Russia, LUTTA, 696; Larval Trematodes in Baltic molluscs, MARKOWSKI, 734; Cercariae from North America, MILLER, 774; Structure of *Cercaria vitrina*, NEUHAUS, 828; Morphology of free-swimming larva of *Diploorchis*, OZAKI, 871; *Cercaria ubiquitoides* (?) in *Littorina* spp., Plymouth, REES, 961; Larval Trematodes in *Peringia ulvae*, ROTHSCHILD, 994; Pigmentation in normal and abnormal forms of *Cercaria*

ephemera, ROTHSCILD, 996; Variation in cercariae, ROTHSCILD, 996; New Cercaria in *Helisoma trivolvis*, OKLAHOMA, SIZEMORE, 1085; Cystocercous cercariae from Alabama and Georgia, SMITH, 1097; New cystocercous cercaria and development into *Proterometra catenaria*, SMITH, 1098; New subspecies of cystocercous cercaria, Florida, and life-cycle, SMITH, 1101; New Echinostome cercaria in *Planorbis*, Germany, SZIDAT, 1199; Cercaria of *Neodiplostomum lucidum*, WEST, 1353; Morphology of *Cercaria poconensis*, WILLEY, 1369; Furcocercous cercaria from Bering Sea, YOUNG, 1413; Tetrarhynch larvae in fishes, FARIA & SILVA, 326; Coracidia of *Diphyllbothrium latum*, VERGEER, 1302; Plerocercoids of *Diphyllbothrium latum* in fluviatile fishes, Russia, PLOTNIKOV, 933; Plerocercoids in trout, Yellowstone Park, SCOTT, 1065; Plerocercoid larva of *Proteocephalus ambloplitis*, HUNTER & HUNNINEN, 512; Plerocercoid of *Proteocephalus neglectus*, KATAOKA & MOMMA, 572; Cysticercoid of *Raillietina cesticillus* in beetle, *Amara*, ACKERT & REID, 4; Larval cestode from a fur-seal, SOUTHWELL & WALKER, 1114; Cestode parasites of marine invertebrates, DOLLFUS, 301.

Intermediate hosts.—Aquatic molluscs as vectors of Trematode infections, FAUST, 328; Crustacea as helminth intermediaries, LEIPER, 662; Gastrostome cercariae in molluscs, Huron river, N. America, WOODHEAD, 1391; Int. hosts of *Schistosoma japonicum*, BARTSCH, 74, 75; *Planorbis exustus* not an int. host of *Schistosoma mansoni* and *S. bovis*, BRUMPT, 139; Adaptation of schistosomes to new int. hosts, FROILANO DE MELLO, 380; Molluscan int. host of *Heterophyes heterophyes* in Egypt, KHALIL, 587; Snail hosts of two dermatorrhagic cercariae, Canada, SWALES, 1181; *Lymnaea philippinensis* as int. host of *Fasciola hepatica* in Philippine Is., DE JESUS, 277; *Galba cubensis* as int. host of *Fasciola hepatica* in Cuba, VAN VOLKENBERG, 1292; *Segmentina calathus*, new int. host of *Fasciolopsis buski*, WALLACE, 1323; *Potamon rathbuni* a second int. host of *Paragonimus westermani*, Formosa, KOBA, 594; New fish int. host of *Clonorchis sinensis*, Japan, IDE, 521, 522; Distribution of

Clonorchis cercariae in fish, *Pseudorasbora parva*, KAWAI & YUMOTO, 579; Second int. host of *Clonorchis*, KOMIYA & KAWANA, 603; New larval hosts (Pisces) of *Isoparorchis hypselobagri*, BHALERAO, 116; New int. hosts of *Gorgodera amplicava*, KRULL, 638; New int. hosts of *Brachylaemus virginianus*, KRULL, 637; Adolescaria of *Brachylaemus* and *Panopistus* spp. in *Agriolimax*, REYNOLDS, 967; Multiple infection of mollusc with sporocysts of *Leucochloridium*, WOODHEAD, 1390; Amphipod, *Orchestia*, as int. host of *Hymenolepis exigua*, Hawaii, ALICATA, 15, McMULLEN, 716; Copepod int. hosts of *Diphyllbothrium latum*, MICHALOW & WIERZBICKA, 772; *Musca domestica* int. host of *Choanotaenia infundibulum*, ACKERT & REID, 5; Ants as int. hosts of avian tapeworms, EICHLER, 318, JONES & HORSFALL, 551; *Cysticercus tenuicollis* in a goat, BHATIA, 120; Plerocercus in a monkey, KOIDZUMI & YAMADA, 599.

Larval bionomics, behaviour.—Behaviour of dermatitis-producing cercariae, CORT & TALBOT, 236; Cercaricidal actino of normal serums, CULBERTSON, 249, CULBERTSON & TALBOT, 250; Emission of Schistosome cercariae from molluscan hosts, GIOVANNOLA, 410; Miracidial twinning in *Schistosoma mansoni*, HOFFMAN & JANER, 490; Penetration of *Cercaria multiseptata* into sunfish, HUNTER, 510; Cyst wall of encysted cercariae of *Clinostomum marginatum*, HUNTER & DALTON, 511; Effect of cercarial infection on weight of snail host, HUNTER & HUNTER, 515; Survival of *Heterophyes* cercariae in salted fish, KHALIL, 588; Host location by liver fluke miracidia, MATTES, 751; Behaviour of free-swimming larvae of *Diploorchis*, OZAKI, 871; Encystment process in a new Gymnocephaline cercaria, ROTHSCILD, 993; Features in Taenioid larval migration, DE WAELE, 287; Evagination and migration of *Cysticercus bovis*, DE WAELE & DEDEKEN, 288; Bionomics of embryophores of *Echinococcus*, GENTILE, 403; Larval bionomics of *Proteocephalus ambloplitis*, HUNTER & HUNNINEN, 512.

Structure and biology of ova.—Developmental cytology in egg of *Polystomum integerrimum*, MINOUCHI, 778; Origin of egg-shell material in *Fasciola*

hepatica, KOURI, BASNUEVO, ALVARÉ, LESCANO & SIMON, 617; Morphology, biology and development of egg of *Fasciola hepatica*, SKVORTSOV, SMIRNOVA & SISYAKOVA, 1092; Egg-shell formation in *Clonorchis sinensis*, UJIE, 1267; Structure of egg-shell of *Clonorchis sinensis*, YUMOTO, 1415; Polymorphism of *Schistosoma* eggs and occurrence of bovine type in man, Belgian Congo, VAN DEN BERGHE, 1287; Influence of age on output of eggs of *Schistosoma* and *Hymenolepis*, RAMSAY, 955; Eggs of *Proteocephalus neglectus*, KATAOKA & MOMMA, 572; Eggs of *Diphyllbothrium latum*, VERGEER, 1302.

Gametogenesis.—Gametogenesis in primary generation of *Proterometra macrostoma*, ANDERSON, 29; Sex and chromosomes in *Schistosoma japonicum*, IKEDA & MAKIM, 524; Maturation chromosomes in germ cells of *Pneumonoeces*, PENNYPACKER, 911.

Copulation.—Copulation in *Euplana cretica*, BEAUCHAMP, 91; Copulation in Turbellarian, *Amphiscolops langerhansii*, HYMAN, 518.

Asexual reproduction.—Schizogony in cestodes, BAER, 55.

Sex-selection.—Action of hosts on sex-selection in schistosomes, BRUMPT, 140.

Paedogenesis.—Adult *Taenias* developing in a muscle hydatid in sheep, SEN, 1071.

ETHOLOGY.

Bionomics.—Bionomic notes on estuarine Turbellaria, Brittany, CAZALLET, 179; Symbiosis of a terrestrial triclad with a mollusc, JUTTING, 561; Ecology of psammocolous Turbellaria, Wisconsin, PENNAK, 910; Ecology of freshwater Triclad in Luxemburg, VAN OYE, 1290; Observations on biology of Trematodes, KATSUDARA, 576; Peculiarities in occurrence of Gyrodactylids on fishes, N. America, MUELLER, 812; Bionomics of *Fasciola hepatica* in Philippine Is., DE JESUS, 277; Notes on the biology of blood-flukes, JOYEUX, 552; Bionomics of *Heronimus chelydrae*, SIZEMORE, 1086; Biology of *Paragonimus westermani*,

TAKENOUCHI, 1201; Adaptation of *Stichorchis giganteus* to domestic pig, VAZ, 1299; Trematode infection as possible incitement to expulsion of fledgling stork from nest, SZIDAT, 1193; Biology of hydatids, DÉVÉ, 284; Biology of *Taenia saginata* and *Cysticercus bovis*, ZUNKER, 1419; Viability of cattle cysticerci after freezing, KELLER, 582; Note on the duration of *Diphyllbothrium* infection in man, LEIPER, 663; Potential longevity of parasitic helminths, SANDGROUND, 1017; Biology of helminths in relation to control, SCHMID, 1043; Case of polyparasitism, JAME, GIRAUD & CROSNIER, 537.

Mode of infection.—Intra-uterine liver-fluke infection in a calf, CURTZE, 254; Reinfection experiments with *Fasciolopsis*, VOGEL, 1315; Feeding experiments in birds with *Clinostomum* larvae from bass, HUNTER & HUNTER, 513; Hepatic stage in experimental Schistosome infection, DIAMANTIS, 290; Unisexual infection with *Schistosoma mansoni*, GIOVANNOLA, 412; Molluscan transmission of Schistosomes, LANE, 647; Experimental Schistosome infection, LEIPER, 658; Mode of infection of final host by *Cercaria vitrina*, NEUHAUS, 828; Experimental hydatid infection DÉVÉ, 284; Internal auto-reinfection with *Hymenolepis fraterna* in mice, HUNNINEN, 509; Transmission of helminths by vegetables, ROBERTSON, 979.

Immunology, Serology.—Serology of hydatid infection, BOTTERI, 129; Negative investigation of carnivorous birds as potential hosts of hydatid, COUTELEN, 239-241; Immunization of rats with protein of *Taenia taeniaeformis* and *Cysticercus fasciolaris*, CAMPBELL, 172; Age-resistance in dogs to tapeworm infections, HINMAN & BAKER, 482; Acquired immunity in ox to *Cysticercus bovis*, PENFOLD, PENFOLD & PHILLIPS, 908; Production of acquired immunity to *Echinococcus* in dogs, TURNER, BERBERIAN & DENNIS, 1253, 1254; Immunity phenomena in helminthic infections, DI AICHELBURG, 289, SCHMID, 1042, SCHULZ & SCHICHOBALOVA, 1055.

Pathology, Relation to Disease.—*Stylochus pilidium* injurious to oysters, ISTRIA, BYTINSKI-SALZ, 155; Notes on

pathogenicity of Trematodes, KATSUDARA, 576; Pathological effects caused by penetration of Strigeid cercariae in fishes, DAVIS, 266; Pathological effects of cercarial infections on *Limnaea natalensis*, FANTHAM & PORTER, 324; *Cercaria rhodometopa* sporocysts as cause of atrophy of genitalia in *Turritella*, PÉREZ, 917; Larval Trematodes as cause of gigantism and variation in mollusc, *Peningia* (s. *Hydrobia*) *ulvae*, ROTHSCHILD, 995; *Echinoparyphium parvulum* associated with fatal enteritis in pigeons, AMUNDSEN & ØKLAND, 27; Heterophyids as cause of disease in man, AFRICA, LEON & GARCIA, 8, 9; Pathology of *Clonorchis* infections, GALLIARD, 395, GALLIARD *et alii*, 398, KOURI *et alii*, 616; Pathology of *Eurytrema* infections, TORRES & PINTO, 1237; *Fascioloides magna* in ruminants, reactions of hosts, SWALES, 1182; Pathogenic effects of *Fasciolopsis buski*, WANG, 1333; Schistosome dermatitis in man, CORT, 234, 235, LA RUE, 651, McLEOD, 714, TALBOT, 1203; *Schistosoma japonicum* as cause of epilepsy, EDGAR, 312; Schistosomiasis mortality, Egypt, KHALIL & AZIM, 590; Indigenous case of vesical schistosomiasis, LE GAC, ESPIAN & RARIVOSON, 656; Schistosome cirrhosis and splenomegaly in Kenya, TRIM, 1246; Intestinal Schistosomiasis in a young infant, VITTOT, 1311; Relation of cysticerci to etiology of malignant tumours, CURTIS, DUNNING & BULLOCK, 252; Genetic constitution of host in relation to *Cysticercus* sarcoma, CURTIS, DUNNING & BULLOCK, 253; *Cysticercus* sarcoma in rats, VOS, 1317; *Cysticercosis* in animals, FAURE, 327, GOUGE, 428, JASTRZEBSKI, 540, MORRISON, 804; *Cysticercosis* in man, APABLAZA, 34, BORLETTA, 72, CHAJUTIN & SCHUCHAT, 184, DOLGOPOL & NEUSTAEDTER, 298, MARSH, 737, MICHAEL, 771, PULGRAM, 950, SCHICK, 1039, TEMPLETON, 1213, WEVE, 1358; Hydatid disease in man, APABLAZA, 34, BRAILSFORD, 133, LEBEDENKO, 655, PATERNO, 890, SABADINI, 1012, SPADORO, 1115; Ocular spargamiasis in animals, Indo-China, HOUEMER, DODERO & CORNET, 496; Anaemia due to *Diphyllbothrium* infection, HUNNICUT, 508, HOFF & SAUERSTEIN, 488, STORTI, 1162, SINGER, 1082; *Hymenolepis* spp. in causal relation to appendicitis, NAVARINI, 825; Taeniasis in dogs, BAKER & HINMAN, 64, SHOLL, 1078; Effect of

heavy tapeworm infection in pigeon SONDI, 1110; *Davainea proglottina* in relation to disease in fowls, TAYLOR, 1210; Effects of helminth toxins on host, GUENTHER, 437, KOROPOV, 612; Rôle of helminths in appendicitis, SUWALSKI, 1178; Effects of helminth parasitism in sheep, STOLL, 1156; Helminthopathology of birds, REIS & NOBREGA, 963.

Epidemiology.—Cattle schistosomiasis, Tunisia, ANDERSON & GOBERT, 28, Italy, BERTOLINI, 108, Morocco, BLANC & DESPORTES, 124; Schistosomiasis problem in India, BINDRA, 121; Correlation of molluscan hosts with sporadic schistosomiasis in India, FROILANO DE MELLO, 380; Sporadic occurrence of Schistosomiasis in Washington, PEACOCK & VOEGTLIN, 903; Outbreak of Japanese schistosomiasis in China, SPIRIDION, 1120; Clonorchiasis in Chinese, Cuba, BOLANOS, KOURI, ANIDO & BASNUEVO, 127; Fish-eating habit in relation to *Clonorchis* infection, KOMIYA, 602; Liver-fluke infection in cattle, Norway, WIESE, 1363; Frequency of tapeworms in school children, Switzerland, LARDELLI, 650; Frequency of helminths in man, Formosa, MORIOKA, IMAIZUMI & KOO, 801; Incidence and eradication of *Taenia saginata* in Victoria, Australia, PENFOLD, PENFOLD & PHILLIPS, 907, 909; Persistence of pasture infective stage of *Moniezia expansa*, STOLL, 1153; Spread of poultry helminths, HORSFALL, 495; Helminthic conditions in Brazil, PEREIRA, 912; Multiple intestinal helminthic infection, POGGI, 936; Helminth infections in Japanese in Shanghai, TAJIMI, 1200; Helminth infections in infants, Russia, MUFEL, 813; Incidence of tapeworms in children, Provence, Vo GAN CAN, 1314.

Economics, Control.—Helminth incidence in unemployed inhabitants of Georgia, BYRD, 152; Helminth parasites of university students, BYRD 153; Intestinal helminths of children, Mexico, CABALLERO, 158; Relation of helminths to public health in North America, CAMERON, 165; Parasitology in relation to public health, HALL, 442; Intestinal helminthiasis in school children, Peru, IGLESIAS, 523; Helminthogical inspection of soldiers in camp, SMIRNOW, 1095; Relations of parasitic helminths to their hosts,

WETZEL, 1354; Comparative parasitology (Cestodes) of man and animals, ZUNKER, 1420; Helminths in meat inspection N. America, CAMERON, 171; Eradication or adjustment in helminth control, HALL, 443; Control of animal parasites, HALL, 444; Control of schistosomiasis in South Africa, CAWSTON, 177; History of schistosomiasis in South Africa, CAWSTON, 178; Aspects of schistosomiasis in America, FAUST, 330; Irrigation schemes responsible for spread of schistosomiasis, Egypt, KHALIL & AZIM, 589; Focus of *Schistosoma haematobium* in Eritrea, SATTA, 1028; Eradication of Schistosomes by planting *Balanites* trees, WAGER, 1319; Reduction of liver-fluke by ducks, DOMINIAK, 303; Control of fascioliasis in animals, SKRJABIN & SCHULTZ, 1089; Hydatid disease in man, SCHWARZ, 1058; Hydatid disease in domestic animals, TENHAEFF & FERWERDA, 1214, 1215; Effect of salting pasture on helminth incidence in sheep, FRASER & ROBERTSON, 365; Effect of helminths on growth in sheep, FRASER, ROBERTSON & RITCHIE, 366; Helminthic gastroenteritis in bovines, LIMA, 675; Helminths of stock in Antilles, METTVER, 760; Liver fluke in stock, Estonia, OTS, 866; Distribution of tapeworms of sheep in Queensland, ROBERTS, 974; Helminth parasites and diseases of sheep, ROSS & GORDON, 990; Experimental study on sheep parasitized by single tapeworms (*Moniezia expansa*), STOLL, 1154; Records of helminths in domestic mammals and birds, Queensland, ROBERTS, 972; Helminths as factors in partridge mortality, MIDDLETON, 773; Effect of ground dressings in poultry parasite control, NEWBIGIN & MORGAN, 830; Helminths of domestic fowl and pigeon in Queensland, ROBERTS 971; Economic importance of fish helminths, PARNELL, 884.

AETIOLOGY.

Variation.—Variation in cercariae, ROTHSCHILD, 996.

Phylogeny.—A possible evolutionary tendency in Trematodes, DAWES, 268.

HOST-DISTRIBUTION.

Pisces.—Helminths in fresh-water fishes, BABIĆ, 47; Helminth parasites

in stomach of fishes, Roumania, HAREGA, 450; Helminth parasites of fishes, Russia, MARKEWITSCH, 731; Parasitic worms of fishes, Siberia, SACHWATKIN, 1013; Helminth parasites of fishes, Kama river, Russia, ZACHVATKIN, 1416; Helminths from *Plecoglossus ativelis*, Japan, KATAOKA & MOMMA, 571; Helminth parasites of *Gobius minutus* in Polish Baltic, MARKOWSKI, 733; Ectoparasitic Trematodes of Black Sea fishes, FROISSANT, 381; *Microcotyle* spp. on gills of *Aplodinotus*, Lake Erie, BANGHAM & HUNTER, 70; Two new ectoparasitic Monogenea on sting ray, California, GUBERLET, 438; New Monogenea on marine fishes, Japan, ISHII, 530; New Trematode parasites on gills of fishes, Illinois, MIZELLE, 786; New Gyrodactylids on fishes, North America, MUELLER, 808, 810; New monogenetic Trematodes from fishes, Australia, WOOLCOCK, 1393; New *Allocreadium* sp. in *Onchorhynchus macrostomus*, Japan, EGUCHI, 317; New *Stichocotyle* sp. in *Rhinoptera quadriloba*, Mississippi, FAUST & TANG, 335; New *Tetrochetes* sp. in *Spheroides*, Japan, FUKUI & OGATA, 385; *Syncoelium filiferum* in Pacific salmon, LLOYD & GUBERLET, 686; Endoparasitic Trematodes in marine fishes, British Columbia, McFARLANE, 704; Two new digenetic Trematodes from fishes, Yucatan, MANTER, 724; New papillose *Allocread* genus in fish, Canada, MILLER 779; *Bunocotyle cingulata* in *Acerina*, Sweden, NYBELIN, 842; New Hemirurids from fishes, California, PARK, 982; New *Haplorchis* spp. from fishes, India, SRIVASTAVA, 1121; New *Asymphylodora* sp. in fish, *Ophiocephalus*, India, SRIVASTAVA, 1122; New *Prosorchis* sp. in marine fish, Bay of Bengal, SRIVASTAVA, 1123; Two new *Helicometrina* spp. in marine fishes, Bay of Bengal, SRIVASTAVA, 1124; New *Decemtestis* spp. from marine fishes, India, SRIVASTAVA, 1125; New *Steganoderma* sp. in *Pseudogobio esocinus*, Japan, TAKENTI, 1202; New *Opisthorchis* sp. in Siluroid fish, *Rita*, India, VERMA, 1303; New Gastrostomes from freshwater fishes, India, VERMA, 1304; Two new digenetic Trematodes from freshwater fishes, Japan, YAMAGUTI, 1403; Two new *Allocread* Trematodes from marine fishes, Japan, YAMAGUTI, 1404; New *Amphilina* sp. in sturgeon, Japan,

GOTO & ISHII 427; *Ligula* in fishes, Northern India, DATTA, 260; Tetra-rhynchs from fishes, Puget Sound, N. America, HART, 453; *Trienophorus robustus* in fish, Finland, OSTERHOLM, 865; *Bothriocephalus punctatus* in *Rhombus laevis*, SOUCHE, 1112; Phyllobothrioids in fishes, Puget Sound, HART, 454; New *Proteocephalus* sp. in fish, Cuba, VIGUERAS, 1309; Fish cestodes, Puget Sound, N. America, HART & GUBERLET, 455.

Amphibia.—Helminths from Amphibia, California, INGLES, 526; Trematodes from amphibians, India, BHALERAO, 115, Russia, VLASENKO, 1313, Japan, YAMAGUTI, 1402; New *Cercorchis* spp. in amphibian, Mexico, CABALLERO, 156, Iowa, McMULLEN & ROUDABUSH, 718; New *Cephalogoni-mus* sp. in *Rana montezumae*, Mexico, CABALLERO & SOKOLOFF, 161; *Pleurogenes tacapensis* in *Rana ridibunda*, Tunis, CALLOT, 163; New *Phyllodis-tomum* sp. in salamander, Oregon, LYNCH, 699; *Glypthelminis rugocaudata* in frogs, Japan, YAMASHITA, 1407.

Reptilia.—Trematodes from reptiles, India, BHALERAO, 115; Redescriptions of two reptilian flukes from Quebec, PRICE, 946; Two new Trematodes from African reptiles, PRICE, 947; Trematodes from reptiles, Russia, VLASENKO, 1313; New *Harmotrema* sp. in gavia, India, MEHRA, 755; New *Dasymetra* sp. in *Natrix* spp., Louisiana, BYRD, 150; New *Dasymetra* sp. in water-snake, Pennsylvania, HOLL & ALLISON, 491; New *Renifer* sp. in water-snake, Mississippi, BYRD, 151; Trematodes in snakes, *Ptyas* spp., Burma, GOGATE, 422; New Plagiorchiids from snakes, China, WALLACE, 1325; New *Cercorchis* sp. in mud turtle, Louisiana, BYRD, 154; New Schizamphistome in turtle, Mexico, CABALLERO & SOKOLOFF, 160; New Trematodes in turtles, Burma, CHATTERJI, 193; New Aspidogastriids in turtle, China, FAUST & TANG, 335; Two new *Polystomoides* spp. in turtle, *Ocadia*, Formosa, FUKUI & OGATA, 386; New Trematodes from tortoise, *Geoemyda*, Loochoo Islands, OZAKI, 872.

Aves.—Helminth parasites of birds, Tanganyika, BANGS & LOVERIDGE, 71, partridge, Britain, CLAPHAM, 220, ruffed grouse, CLARKE, 223, crows,

KORKHAUS, 611, poultry, Bulgaria, PAWLOFF, 894, fowls, Peiping, TING, 1231; Trematodes in fowls, Afghanistan, AKHTAR, 13; New *Notocotylus* sp. in *Rallus aquaticus*, Britain, BAYLIS, 83; New Monostomes in birds, India, BHALERAO, 110; *Zygocotyle lunatum* in *Gallus domesticus*, Brazil, FERREIRA, 343; Two Trematodes from the king-fisher, Tennessee, HARWOOD, 461; Two *Leucochloridium* spp. in birds, Kurische Nehrung, Germany, Hsü 500; Two new *Paramonostomum* spp. with notes on genus, LAL, 642; New *Parorchis* sp. in snipe, India, LAL, 643; New Typhlocoeline genus in shoveller duck, India, LAL, 644; New *Levinseniella* sp. in *Gallinago gallinula*, India, LAL, 645; New *Laterotreme* sp. in song birds, N. America, MCINTOSH, 710; New *Gyrobascus* sp. from chat, N. America, MCINTOSH, 711; New *Macrobilharzia* spp. in *Nyroca valisneria*, Canada, MCLEOD, 714; New Lecithodendriid from night-hawk, N. America, McMULLEN, 715; *Echinostoma revolutum* in *Gallus domesticus*, Brazil, MELLO, 756; New *Neodiplostomum* spp. in birds, California, NOBLE 833; Two new Trematodes from birds, California, PARK, 881; New *Ascocotyle* sp. in white ibis, Florida, PRICE, 945; New *Prosthogonimus* sp. in bittern, Kansas, REID & FREEMAN, 982; Purple finch, *Carpodacus purpureus*, new host of *Leucochloridium dryobatae*, Virginia, REYNOLDS, 966; Trematodes in neck of blue heron, SCHOOP, 1049; Trematode parasites of flamingo observed in Schleswig, STAMMER, 1128; *Prosthogonimus* spp. in domestic birds, Formosa, SUGIMOTO, 1176; *Cyathocotylids* in terns, SZIDAT, 1194; *Notocotylus* sp. in *Vanellus*, SZIDAT, 1198; New Psilostomid in kingfisher, India, THAPAR & LAL, 1220; Trematodes of birds, India, VERMA, 1305; New *Cyathocotyle* sp. in king vulture, India, VERMA, 1306; *Prosthogonimus* sp. in fowl, Argentina, WOLFFHÜGEL, 1386; Tapeworm infections of poultry, India, BHALERAO, 112; New *Dilepis* sp. in little cormorant, Ceylon, BURT, 148; New *Hymenolepis* sp. in bird, *Chrysolampis*, Brazil, CLAPHAM, 222; New progynous Acoleid genus in flamingo, FUHRMANN, 382, 383; New *Houttuynia* sp. from pigeon, Lucknow, JOHRI, 548; New *Davainea* sp. in turkey, N. America, JONES, 550; New Ophryocotylinae genus in *Turdus musicus*,

LOPEZ-NEYRA, 689; New *Railletina* sp. in domestic fowl, China, WINFIELD & CHANG, 1377.

Mammalia, general and various.—Helminth parasites of domestic animals, Serbia, DSCHUNKOVSKY, 307; Synopsis of the helminth parasites of domestic animals in Brazil, PINTO & LINS DE ALMEIDA, 930; *Fasciolopsis* infection in *Eleotris legendrei*, Madagascar, POISSON, 937; New Cestodes from mammals, Somaliland, JOYEUX, BAER & MARTIN, 559.

Ungulata.—Helminths from deer, Trinidad, CAMERON, 169; Helminth parasites of pigs, CHEN, 196, ERDES, 322; Incidence of helminths in cattle, Lahore, DYAL, 309; Helminth parasites from the okapi, LEIPER, 660, 661; Helminth parasites of the elk, WETZEL & ENIGK, 1356; Records of Trematodes in sheep, Afghanistan, AKHTAR, 13; New paramphistome in okapi, BAER, 54; New *Brachylaemus* sp. in pig, BALOZET, 68; New pathogenic *Harmostomum* sp. in pig, Tunis, MAROTEL, 735, 736; *Eurytrema pancreaticum* in cattle, BURGGRAAF, 146; Anoplocephalid cestodes in sheep, Argentina, ANTEQUEDA, 33; *Stilesia vitata* in ovines in India, BHALERAO, 111; Frequency of *Cysticercus ovis* in sheep, Holland, DE GRAAF, 273; New *Avitellina* spp. from goats, India, BHALERAO, 113; Cestode parasites of equines, Panama, FOSTER, 357; Hydatids in horse, IBSCHER, 520; Cysticerci in deer, CHRISTIANSEN, 211; Tapeworms in reindeer, Norway, HELLESNES, 473; *Hymenolepis benedeni* in American moose, JELLISON, 541; Cestode parasites of American bison, ROUDABUSH, 998.

Rodentia.—Helminth parasites of rodents, Carolina, BRANDT, 135, HARKEMA, 451; Helminth parasites of *Rhombomys opimus*, SASSUCHIN, TIFLOW & SCHULZ, 1025, SCHULZ & LANDA, 1054; Helminths from rodents, Turkestan, SKRJABIN, 1087; Helminth parasites of the water-rat, *Arvicola terrestris*, Russia, SKWORTZOW, 1093; Helminth parasites of muskrat, Britain, WARWICK, 1338; Helminth parasites of wild rabbits, Virginia, WEIMER, HEDDEN & COWDERY, 1347; New *Railletina* sp. in rats, Madagascar, JOYEUX & BAER, 558; Cestodes in rats, St. Louis,

TSUCHIYA & RECTOR, 1248; Tapeworms of mice, Marseilles, PALAIS, 876; Coenurus infection in hare, Japan, TSUNODA, SHIRAI & NAKAMOTO, 1249; Cestode parasites of rabbits, Oklahoma, WARD, 1336; Hydatid in coypu, S. America, WOLFFHÜGEL, 1386.

Carnivora.—Helminth parasites of fur-bearing mammals, ALLEN, 16; Helminth parasites of dogs, DAMON, 256, MARTORELLI, LLIBRE & GONZALEZ, 741; Helminth parasites of cats, Foochow, TANG, 1204; *Pseudamphistoma truncatum* in the otter, France, DOLLFUS, 302; New *Diaschistorchis* sp. in *Acadia sinensis*, Japan, FUKUI & OGATA, 387; *Paragonimus westermani* in a lion, NAGAHANA, 821; *Tocotrema lingua* in silver fox, Germany, SCHOOP & DEDIÉ, 1050; Heterophyids in dogs, Philippine Is., AFRICA, GARCIA & DE LEON, 7; New *Alaria* sp. in dog, N. America, LA RUE & FOLLIS, 652; Reservoir hosts of *Clonorchis*, Shanghai, KAWANA, 580; *Clonorchis* infection in cats and dogs, Japan, SIBANO, 1079; New *Diphyllbothrium* spp. in ocelot and raccoon, Trinidad, CAMERON, 167; *Mesocostoides lineatus* in *Procyon lotor*, COATNEY, 225; *Taenia laticollis* in *Viverra*, France, JOYEUX & BAER, 554; *Taenia taeniaeformis* in cats, Brazil, PINTO, 928; Tapeworms in dogs, New Orleans, HINMAN & BAKER, 482; *Diphyllbothrium latum* infection in dog, Italy, RHO, 968; Tapeworms of dogs and cats transmissible to man and other domestic animals, SCHWARTZ, 1057.

Insectivora.—Platyhelminth parasites of *Crociodura russula*, JOYEUX & BAER, 555; *Schizotaenia* spp. in porcupines, CHANDLER, 191; New *Hymenolepis* sp. in mole shrew, *Blarina brevicauda*, N. America, GUNDY, 440.

Cheiroptera.—New Trematodes from bats, North America, MACY, 719-721; New Plagiorchid genus in *Microtus*, Michigan, WOODHEAD & MALEWITZ, 1392.

Primates.—Cerebral Coenurus in *Cercopithecus nictitans*, SANDGROUND, 1020; *Cysticercus cellulosae* in monkey, WALKER, 1321.

Homo.—Helminth parasites of man, China, CHU, LIU, LING & ZEE, 218;

Hsü, 499, KOMIYA, KAWANA & TAO, 604-607; Helminth parasites of man in Canada and South Africa, FANTHAM & PORTER, 323; Helminth parasites of man, Marseilles, JOYEUX, 553; Helminth infections in man, Pugliese, LIDDO, 674; Helminths of indigenous population of southern Oran, MONFORT, 787; Helminth infections in infants, Argentina, PARDINA, 879, 880; Worm parasites of man in Turkmanistan, STEPANOW, 1146; Occurrence of helminth parasites in man, Germany, SCHUCKMANN 1053, WIGAND, 1365; Notes on intestinal parasites of man, Venezuela, TORREALBA, 1236; Heterophyids in man, Philippine Is., AFRICA, GARCIA & DE LEON, 7; *Fasciola hepatica* and *Clonorchis sinensis* infection in man, Cuba, KOURI, ANIDO, FERMOSELLE, BASNUEVO & SOTOLONGO, 614, KOURI, SILVEIRO & ANIDO, 622, KOURI & VALVERDE, 623, 624; Occurrence of tapeworms in malarial subjects, Argentina, DIOS, SOMMERVILLE, BONACCI, ALDAO & BARBA, 295; Tapeworm parasites in college students, Kentucky, HEADLEE & CABLE, 468; Note on Cestode parasites of man, Montreal, PORTER, 940; Intestinal tapeworms of man Serbia, SMITH, 1080; Case of *Taenia solium* in Uruguay, MORALES-MENOUD, 798; *Dipylidium* in an infant of three months, SCAFFO DE CASAS, 1034; Human case of *Dipylidium caninum* infection, Cuba, BACARDI & DEL PINO, 49; *Sparganum* infection in man, Poochow, CAMPBELL, WEBSTER & LI, 174; Incidence of *Hymenolepis* spp. in man, Kentucky, KELLER & LEATHERS, 581; *Bertiella studeri* in a European, India, MAPLESTONE & RIDDLE, 727; Case of *Cysticercus cellulosae* in man, Manchuria, MATSUURA, 749; Notes on human infection with *Diphyllobothrium latum*, N. America, THOMPSON, 1225.

Vertebrata, various.—Helminths from postmortems in Berlin zoo, DOBBERSTEIN, 296; List of helminth parasites of animals, China, Hsü, 499; Helminth parasites of vertebrates, Marseilles, JOYEUX, 553; Trematodes from vertebrates, India, BHALERAO, 114, 117; New Digenea from vertebrates, Philippine Is., TUBANGUI & MASILUNGAN, 1251; Cestodes from vertebrates, Liberia, HILMY, 480.

FAUNAS.

GEOGRAPHICAL DISTRIBUTION.

Europe.—Cavernicolous *Dendrocoelum* sp., Belgium, BEAUCHAMP, 92; Distribution of benthic Turbellaria in Polish Baltic, DEMEL, 282; Faunal list of Turbellaria, Outer Hebrides, FLEMING, 350; Turbellarian fauna of Poland, FULIŃSKI, 388; Notes on habitat of *Polycelis cornuta*, GABAŃSKI & KULMATYCKI, 389; Turbellaria in cavernicolous fauna, Westphalia, GRIEPENBURG-SCHÉE, 436; Turbellaria in profundal and sublittoral fauna, Windermere, HUMPHRIES, 506; *Rhynchodemus terrestris* in Rumanian fauna, IONESCU, 528; *Geocentrophora sphyrocephala* in Rumania, IONESCU, 529; Turbellaria in fauna of subterranean waters, Yugoslavia, KARAMAN, 570; Notes on cavernicolous Triclad, Slovenia, KENK, 583; New *Fonticola* sp., Yugoslavia, KENK, 584; Notes on *Polycelis nigra* and *P. tenuis*, LENDER, 665; Polyclads from Naples, PALOMBI, 877; Turbellaria in freshwater fauna of Glatzer Schneeberg, PAX & MASCHKE, 902; Habitat of *Procerodes ulvae*, PYEFINCH, 952; *Polycelis nigra* in Trentino, SCIACCHITANO, 1059; Turbellaria fauna of Ireland, SOUTHERN, 1113; Limnological notes on mountain lake Turbellaria, Davos, SUCHLANDT & SCHMASSMANN, 1175; Turbellaria in fauna of Lake Dikroye, Russia, TAUSON, 1208; Notes on geographical distribution of Planarians, North-west Europe, ULLYOTT, 1270; Turbellaria in the brackish water fauna, Bulgaria, VALKANOV, 1276, 1279; Distribution of *Planaria alpina*, *P. gonocephala* and *Polycelis cornuta* in the Belgian Jura, VAN OYE, 1291; First record of *Polycladodes alba* in Germany, VOGEL, 1316; *Euplanaria gonocephala* in the Trias area, Brandenburg, WEISE, 1348; Platyhelminths in fresh-water fauna, Lithuania, SIVICKIS, 1084; *Bilharzia* foci in Côte d'Ivoire, FARGES, 325; Cases of liver-fluke infection in man, Serbia, RUKAVINA, 1002; Absence of *Cysticercus cellulosae* in sheep in Holland, GRAAF, 431; Cestode fauna of France, JOYEUX & BAER, 556; List of avian cestodes, Marseilles region, JOYEUX & TIMON-DAVID, 560; Tapeworms of man, Kalmuck district, Russia, SHMELEVA & TROFIMOVA, 1077; *Bothriocephalus* infection in North-east

Russia, TARASSOV, 1207; *Diphyllbothrium latum* in Poland, TUSTANOWSKA, 1256; Nemertea of the North Sea and Baltic, FRIEDRICH, 377; New Palaeonemertean, *Tubulanus* sp., North Sea, FRIEDRICH, 378; Nemerteans in cavernicolous fauna, Westphalia, GRIEFENBURG-SCHÉE, 436; Nemertea in brackish water fauna of Bulgaria, VALKANOV, 1279.

Asia.—New Polyclad, South Japan, KATO, 573; New *Discoplana* sp. parasitic in Ophiurid, Japan, KATO, 575; Triclad from Turkestan, KENK, 585; Turbellaria in rice fields, PASHITNOWA, 888; Paramphistomes from Malaya, DAWES, 269; Incidence of *Schistosoma japonicum* in Chekiang, KAN & KUNG, 569; *Monorchotrema* spp. in Formosa, UJIE, 1265; Distribution of *Paragonimus* in China, WU, 1394; *Hymenolepis nana* in man in Korea, OGURA, 848; Liver flukes in man and domestic carnivora, Tobolsk, Russia, PLOTNIKOV & ZERTSCHANINOV, 934; Helminth infection in man, Fushun, China, RYO, 1009; Nemertea from Indian Ocean and Arabian coast, WHEELER, 1360.

Africa.—New Turbellaria, Abyssinia, BEAUCHAMP, 90; Polyclads from South Africa, PALOMBI, 877; Helminth infections in Eritrea, GIORDANO, 409; First record of *Schistosoma focus* in Eritrea, SATTA, 1029; Distribution of human Schistosomes in Egypt, SCOTT, 1064.

North America.—Estuarine Platyhelminths at Beaufort, North Carolina, PEARSE, 905; New *Phaenocora* spp., N. America, GILBERT, 405; New *Dendrocoelopsis* sp., Montana, HYMAN, 516; New cavernicolous planarians from United States, HYMAN, 519; Polyclads from Florida, PALOMBI, 877; Intestinal helminth parasites of man, New Orleans, FAUST & HEADLEE, 333; Notes on helminth fauna of Oklahoma, TROWBRIDGE & HEFLEY, 1247; Notes on Polystomes, N. America, PAUL, 893; New localities of Telorchinae in *Pseudemys elegans*, Louisiana, BENNETT & TOBLE, 99; *Euryhelmis squamula* (Rud.) in United States, MCINTOSH, 712; Cestodes in vertebrates, New York State, GATES, 400; *Hymenolepis diminuta* in man, Canada, LUNEY, 695; Cestode parasites of house rats,

Baltimore, LUTTERMOSER, 697; *Hymenolepis nana* infection of man, Southern United States, OTTO, 867; Bathypelagic Nemerteans, Bermuda, COE, 226; Occurrence of *Gorgonorrhynchus* at Bermuda, WHEELER, 1359.

West Indies.—Distribution of intestinal parasites in Cuba, FONSECA, KOURI & BASNUEVO, 354, 356, KOURI & DEL FRADE, 620, KOURI, FONSECA & BASNUEVO, 621.

South America.—Distribution of schistosomiasis in Pernambuco, LINS & WANDERLEY, 680; Trematode parasites of fowl in Brazil, LINS DE ALMEIDA, 684; New record of *Tamerlania zarudnyi* in Brazil, LINS DE ALMEIDA, 685.

General.—Faunistic list of cavernicolous Turbellaria, WOLF, 1385; Geographical distribution of *Haploplanchinus* spp., MANTER, 725; Distribution of *Diphyllbothrium lanceolatum*, STUNKARD & SCHOENBORN, 1170.

SYSTEMATIC INDEX.

PLATYHELMINTHES.

TURBELLARIA.

Tricladida.

PLANARIOIDEA.

Dendrocoelopsis vaginatus sp. n. Montana, HYMAN Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 338-344 pl. li.

Dendrocoelium (Dendrocoelides) Collini Beauchamp, cavernicolous, Belgium BEAUCHAMP Bull. Mus. Hist. Nat. Belg. 12 ii 1936 pp. 1-3.

Euplanaria gonocephala, physiological race, BENAZZI Rend. Acc. Lincei (6) 23 1936 pp. 361-365.—*E. cretica* Meixner, BEAUCHAMP Bull. Soc. Zool. Fr. 61 1936 pp. 433-440 3 figs.

Fonticola opisthogona sp. n. Jugoslavia, KENK Zool. Anz. Leipzig 113 1936 pp. 305-314 3 figs.

Kenkia rhynchida sp. n. Oregon caves, HYMAN Anat. Rec. Philadelphia 67 1936 suppl. i p. 129.

Phagocata subterranea sp. n. Indiana caves, HYMAN Anat. Rec. Philadelphia 67 1936 suppl. i p. 129.

Planaria torva, with varieties, unnamed, subterranean water, Yugoslavia, KARAMAN Verh. int. Verein. Limnol. Beograd 7 1935 p. 50.

Polycelis sabussowi (Seidl), Turkestan, KENK Zool. Anz. Leipzig 115 1936 pp. 76-77 fig. 1.—*P. nigra* (Ehrbg.) and *P. tenuis* (Ijima), LENDER Arch. Zool. exp. gén. Paris (Notes) 78 1936 pp. 49-56 4 figs.

Sorocelis stummeri, *gracilis*, *lactea*, *sabussowi* assigned to *Polycelis*, KENK Zool. Anz. Leipzig 115 1936 pp. 78-79.

Speophila buchanani Mammoth cave, pricei Pennsylvania, spp. n. HYMAN Anat. Rec. Philadelphia 67 1936 suppl. i p. 129.

GEOPLANOIDEA.

Artiocotylus macrothylax pp. 141-144, *cherangani* pp. 144-146 figs., spp. n. Abyssinia, BEAUCHAMP Mém. Mus. Hist. nat. Paris 4 1936.

Rhabdocoela.

MICROSTOMATOIDEA.

Macrostomum tuba (Graff), North America, HYMAN Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 14-20 pl. iii. cytology, PHILLIPS Zool. Anz. Leipzig 114 1936 pp. 322-330 25 figs.—*M. viride* E. Ben. var. *elgonense* var. n. Abyssinia, BEAUCHAMP Mém. Mus. Hist. nat. Paris 4 1936 pp. 147-148 fig. 4.

DALYELLIOIDEA.

Dalyellia bicoronaria sp. n. Poland, FULIŃSKI Arch. Tow. nauk. Lwow (3) 6 i 1933 p. 11 fig. 1.

Provortex punctatus (Levensen) Ireland, SOUTHERN Proc. Irish Acad. B 43 5 1936 p. 53 fig. 1.

GYRATRICOIDEA.

Polycystis hibernica sp. n. Ireland, SOUTHERN Proc. Irish Acad. B 43 5 1936 pp. 59-60 figs. 2-5.

TYPHLOPLANOIDEA.

Phaenocora virginiana pp. 292-296, *kepneri* pp. 296-298, *highlandense* pp. 298-301 5 pls., spp. n. N. America, GILBERT Acta zool. Stockholm 16 1935.—*P. Chappuisi* sp. n. Abyssinia, BEAUCHAMP Mém. Mus. Hist. nat. Paris 4 1936 pp. 148-150 fig. 5.

Polycladida.

PLANOCEROIDEA.

Leptoplana tremellaris (O.F.M.), in *Diogenes pugilator*, Bay of Naples, PALOMBI Arch. Zool. Torino 23 1936 pp. 16-17.

Notoplana ovalis Bock, in *Patella oculus* and *P. longicosta*, S. Africa, PALOMBI Arch. Zool. Torino 23 1936 pp. 18-23 figs. 13-16 pl. i figs. 5, 6.

Paraplanocera misakiensis Yeri & Kaburaki, anatomy, KATO Jap. J. Zool. Tokyo 7 1936 pp. 22-28 5 figs.

Planocera gilchristi Jacubowa, S. Africa, PALOMBI Arch. Zool. Torino 23 1936 pp. 23-25.

Planocerooides gen. n. *ceratommota* S. Africa, PALOMBI Arch. Zool. Torino 23 1936 pp. 25-30 figs. 17-21 pl. i fig. 7.

Stylochoplana tenuis sp. n. S. Africa, PALOMBI Arch. Zool. Torino 23 1936 pp. 13-16 figs. 10-12 pl. i fig. 4.

STYLOCHOIDEA.

Cryptocelis amakusuensis sp. n. South Japan, KATO Jap. J. Zool. Tokyo 7 1936 pp. 17-20 pl. i 3 figs.

Leptostylochus sp. S. Africa, PALOMBI Arch. Zool. Torino 23 1936 pp. 11-13 figs. 8, 9 pl. i fig. 3.

Stylochus tenax sp. n. in *Ostrea virginia*, Florida, PALOMBI Arch. Zool. Torino 23 1936 pp. 4-10 figs. 1-7 pl. i figs. 1, 2.

COTYLEA.

Euprosthiostomum viscosum sp. n. in *Eupagurus prideauxi*, Bay of Naples, PALOMBI Arch. Zool. Torino 23 1936 pp. 32-39 figs. 23-27 pl. i fig. 9.

Prosthiostomum siphunculus (Della Chiaje), S. Africa, PALOMBI Arch. Zool. Torino 23 1936 pp. 31-32 fig. 22 pl. i fig. 8.

Incertae sedis.

Discoplana takewarii sp. n. parasitic in genital bursa of ophiurid, *Ophioplocus japonicus*, Japan, KATO Annot. Zool. jap. 15 1935 pp. 149-156 2 text-figs. pl. x.

TREMATODA.

MONOGENEA.

GYRODACTYLOIDEA.

Ancyrocephalus bychowskii sp. n. in fresh water fishes, Russia, MARKOVITSCH Maladies parasitaires des poissons 1934 [N. v.].—*A. bursatus* sp. n. on gills of *Micropterus salmoides*, Ohio, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936 p. 71 3 figs.

Aristocleidus gen. n. Tetraonchinae, *hastatus* sp. n. on gills of *Roccus lineatus*, Florida, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936 p. 460 figs. 4-9.

Cleidodiscus inermis on gills of *Helio-perca minor* p. 790, *capax* on *Pomoxis annularis* and *P. sparoides* p. 791, *longus* p. 793, *uniformis* p. 794 *vancleavei* p. 795 on *Pomoxis annularis*, *articularis* p. 796, *bedarti* p. 797 on *Xenstis megalotis*, spp. n. Illinois, MIZELLE Amer. Midl. Nat. Notre Dame 17 1936.—*C. robustus* Mueller, *fusiformis* Mueller, *oculatus* Mueller on fishes, pp. 64-65 figs., *floridanus* sp. n. on gills of *Ictalurus punctatus* p. 463 figs. 10, 16-19, *pricei* p. 464 figs. 11-15 on gills of *Ictalurus punctatus*, *Ameiurus nebulosus* and *A. natalis*, spp. n. Florida, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936.

Dactylogyrus extensus Mueller and van Cl. p. 56 fig. 22, *anchoratus* Duj. p. 56, figs. 59, 65 on fishes, North America, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936.

Gyrodactylus elegans varr. on trout and *Cararsios* p. 58 figs., *spathulatus* sp. n. on *Catortomus commersonnii*, New York, p. 60 figs. MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936.

Lepidotes collinsi sp. n. on gills of *Roccus lineatus*, Florida, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936 p. 458 figs. 1-3.

Leptocleidus gen. n. Tetraonchinae *megalonchus* sp. n. in throat and on

gills of *Micropterus dolomieu*, Ohio MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936 p. 69 figs.

Onchocleidus gen. n. Tetraonchinae, type *Urocleidus ferox* (Mueller) on *Eupomotis gibbosus* p. 66, *similis* on *Eupomotis* p. 67, *helicis* on *Micropterus salmoides* p. 67, *acer*, *dispar* on *Eupomotis* p. 69 figs. spp. n. New York, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936.—*O. formosus* sp. n. Florida (? syn. of *Cleidodiscus vancleavei* Mizelle 1936), MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936 p. 462 figs. 20-25.—*O. principalis* sp. n. on *Micropterus pseudoplites* p. 798, *interruptus* on *Morone interruptus* p. 799, *macronathi* on *Heliperdia micronatha* pp. 800-801, *distinctus* on *Xenotis megalotis* p. 803 MIZELLE Amer. Midl. Nat. 17 1936.

Tetracleidus gen. n. Tetraonibinae *banghami* sp. n. on gills of *Micropterus dolomieu*, Ohio, MUELLER Trans. Amer. Micr. Soc. Menasha 55 1936 p. 70 6 figs.

Urocleidus aculeatus V. Cl. & Mueller on *Stizostedion vitreum*, *adspectus* sp. n. on gills of *Perea flavescens*, New York, MUELLER Trans. Amer. micr. Soc. Menasha 55 1936 pp. 65-66 figs.

MONOCOTYLOIDEA.

Calicotyle inermis sp. n. in oviducts of shark, *Pristiophorus cirratus*, Port Philip Bay, Australia, WOOLCOCK Parasitology Cambridge 28 1936 pp. 82-84 pl. iii fig. 6 text-fig. 1.

Calinella myliobati sp. n. on sting ray, *Myliobatus californicus*, California, GUBERLET Amer. Midl. Nat. Notre Dame 187 1936 pp. 958-961.

Epibdella pacifica sp. n. on sting ray, *Myliobatus californicus*, GUBERLET Amer. Midl. Nat. Notre Dame 17 1936 pp. 954-957.

Megalocotyle helicoleni sp. n. on gills of red gurnet, *Helicolenus percoides*, Port Philip Bay, Australia, WOOLCOCK Parasitology Cambridge 28 1936 pp. 80-82 pl. iii fig. 1.

Tristoma magronum [maguronum] on *Thunnus orientalis* p. 781 fig. 1, *katsuwonum* on *Katsuwonus vagans* p. 782 fig. 2, spp. n. Japan, ISHII Zool. Mag. Tokyo 48 1936.

POLYSTOMATOIDEA.

Azine seriola sp. n. on *Seriola quinqueradiata*, Japan, ISHII Zool. Mag. Tokyo 48 1936 pp. 785-786 fig. 6.

Dactylocotyla minor sp. n. on *Thunnus orientalis*, Japan, ISHII Zool. Mag. Tokyo 48 1936 pp. 783-784 fig. 3.

Diplorchis ranae Ozaki in bladder of *Rana rugosa*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 p. 552 figs. 1, 2.

Gotocotyla gen. n. Microcotylidae sawara sp. n. on *Sawara nipponia*, Japan, ISHII Zool. Mag. Tokyo 48 1936 pp. 781-789 figs. 11, 12.

Microcotyle sillaginae on gills of whiting, *Sillaginoides punctatus* pp. 84-87 *victoriae* on gills of gurnet, *Helicolenus percoides* pp. 84-91 figs. spp. n. Port Philip Bay, Australia, WOOLCOCK Parasitology Cambridge 28 1936.—*M. spinicirrus* MacCallum pp. 334-335 figs. 1-7, *eriensis* sp. n. pp. 335-336 figs. 8-12 on gills of *Aplodinotus grunniens*, Lake Erie, BANGHAM & HUNTER Trans. Amer. Micr. Soc. 55 1936.—*M. spinicirrus* MacCall. on gills of *Aplodinotus grunniens*, REMLEY J. Parasit. Urbana 22 1936 p. 535.

Polystoma rhacophori sp. n. in bladder of *Rhacophorus schlegeli*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 pp. 553-558 figs. 3-10.

Polystomoides microrchis, ocadiae spp. n. in turtle, *Ocadia sinensis*, Formosa, FUKUI & OGATA Zool. Mag. Tokyo 48 1936 pp. 765-770 5 figs.—*P. megaovum* sp. n. in urinary bladder of *Geoemyda spengleri*, Loochoo Is., OZAKI J. Sci. Hiroshima Univ. Zool. 4 1936 pp. 86-89 figs. 4-7.

Pseudaxine katsuwonis, vagans spp. n. on *Katsuwonus vagans*, Japan, ISHII Zool. Mag. Tokyo 48 1936 pp. 786-788 figs. 8-10.

Sphyrnura oligorchis (Alvey) pp. 235-241 pl. x fig. 1, *polyorchis* sp. n. p. 246 pls. x, xi in *Necturus maculosus*, N. America, ALVEY Parasitology Cambridge 28 1936.

ASPIDOGASTREA.

Aspidogaster conchicola Baer, structure and occurrence, Japan, SYÔGAKI Zool. Mag. Tokyo 48 1936 pp. 56-59 3 figs.

Aspidogastrea subclass. nom. n., FAUST & TANG Parasitology Cambridge 28 1936 p. 487.

Cotylaspis sinensis sp. n. in intestine of turtle, *Amyda tuberculata* China, FAUST & TANG Parasitology Cambridge 28 1936 pp. 487-489 fig. 1.

Lophotaspis orientalis sp. n. in stomach and intestine of turtle, *Amyda tuberculata*, China, FAUST & TANG Parasitology Cambridge 28 1936 pp. 490-492 figs. 2-5.

Multicalyx subg. n. of *Stichocotyle*, type *S. cristata* Faust & Tang, FAUST & TANG Parasitology Cambridge 28 1936 p. 498.

Stichocotyle subg. n. of *Stichocotyle* Cunningham p. 498, *cristata* sp. n. in spiral valve of *Rhinoptera quadriloba*, Mississippi, FAUST & TANG Parasitology Cambridge 28 1936 pp. 492-498 figs. 6-14.

Stichocotylidae fam. n. type *Stichocotyle* Cunningham, FAUST & TANG Parasitology Cambridge 28 1936 p. 500.

DIGENEA.

Bucephalata.

Bucephalopsis fusiformis in butterfly, *Eutropichthys vacha* pp. 68-72 figs. 1-4, *garuai* in *Pseudotropius garua* pp. 72-76 figs. 5-7, *magnum* in *Pangasius buechanani* pp. 77-80 figs. 8, 9, *confusus* in *Pangasius buechanani* and *Silundia gangetica* pp. 80-82 figs. 10, 11, *minimum* in *Pseudotropius garua* pp. 82-83 fig. 12 spp. n. Allahabad, India, VERMA Proc. Nat. Acad. Sc. Allahabad 6 1936.

Bucephalus marinum sp. n. in intestine and caeca of *Onos tricirratus*, Black Sea, VLAŠENTRO Trav. Stat. Biol. Karadagh 4 1931 p. 98.—*B. tridentacularia* in intestine of *Aoria* (*Macrones*) *aoria* and *A. (M.) seenghala* pp. 84-87 fig. 19a, b, *aoria* in *Aoria aoria* pp. 87-89 figs. 14, 15 spp. n. Allahabad, India, VERMA Proc. Nat. Acad. Sc. Allahabad 6 1936.

Prosorhynchus scalpellus in intestine of *Scorpaenichthys marmoratus*, *apertus* in *Ophiodon elongatus*, spp. n. British Columbia, MCFARLANE J. Biol. Bd. Canada 2 1936 pp. 336-337 7 figs.

Rhipidocotyle elongatum sp. n. in intestine of *Ophiodon elongatus*, British Columbia, MCFARLANE J. Biol. Bd. Canada 2 1936 p. 339 3 figs.

Schistosomata.

Microbilharzia canadensis pp. 43-45, *manitobensis* pp. 45-46 2 pls. spp. n. in hepatic portal vein of *Nyroca valisneria*, Canada, McLEOD Trans. R. Soc. Canada (3) 30 v 1936.

Strigeata.

DIPLOSTOMATOIDEA.

Alaria robusta sp. n. in intestine of king vulture, India, VERMA Allahabad Univ. Stud. 12 1936 p. 172.—*A. canis* sp. n. in intestine of dog, N. America, LA RUE & FALLIS Trans. Amer. Micr. Soc. 55 1936 pp. 340-351 pls. xxxix-xli.

Alariidae Tubangui 1922 syn. of Diplostomidae Poirier, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Allodiplostomum hindustani sp. n. in intestine of red-wattled lapwing, India, VERMA Allahabad Univ. Stud. 12 1936 p. 178.

Apharyngostrigea egretii sp. n. in cattle egret, India, VERMA Allahabad Univ. Stud. 12 1936 p. 184.

Crassiphialini subsubf. n. of Diplostominae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Cynodiplostomum gen. n. Diplostomidae type *Diplostomum azimi* Gohar in Canidae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Cystodiplostomum gen. n. Proterodiplostomidae, *hollyi* sp. n. in *Jacaretinga crocodilus*, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Diplostomines subsuperfam. n. of Strigeides, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 510.

Diplostomini subsubf. n. of Diplostominae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Diplostomulum hughesi sp. n. in freshwater fishes, Russia, MARKEWITSCH Maladies parasitaires de poissons 1934 [n.v.].

Diplostomum cuticola Nordm. type of *Posthodiplostomum* gen. n., DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Fibricola minor sp. n. in *Hydromys chrysogaster*, Australia, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Herpetodiplostomum gen. n. Proterodiplostomidae, type *caimancola* Dollfus, *testudinis* sp. n. in *Testudo* sp., Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Heterodiplostomum gen. n. Proterodiplostomidae, *lanceolatum* sp. n. in *Coluber* sp., Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 515.

Lophosicyadiplostomum gen. n. Diplostomidae, *saturnium* sp. n. in *Pyroderus scutatus*, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Mesodiplostomum gen. n. Proterodiplostomidae, *gladiolum* sp. n. in alligators, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Mesophorodiplostomum gen. n. Diplostomidae, type *Neodiplostomum pricei* Krull, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Neodiplostominae (Brandes) syn. of Diplostominae Monticelli, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Neodiplostomum paraspithula sp. n. in intestine of hawk, *Archibuteo ferrugineus*, pp. 247-250 figs. 1-3, *orchilongum* sp. n. in blue heron, *Ardea herodias hyperonca* pp. 250-254 figs. 4-7, spp. n. California, NOBLE J. Parasit. Urbana 22 1936.—*N. globiferum* sp. n. in cuckoo, India, VERMA Allahabad Univ. Stud. 12 1936 p. 175.

Ophiodiplostomidi supersubf. n. of Polycotyliidae Monticelli, DUBOIS Rev. suisse Zool. Geneve 43 1936 p. 512.

Ophiodiplostominae subf. n. of Proterodiplostomidae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512.

Ophiodiplostomum gen. n. Proterodiplostomidae, *spectabile* sp. n. in *Coluber* sp., Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Ophiosoma macrocephala sp. n. in hawk cuckoo, India, VERMA Allahabad Univ. Stud. 12 1936 p. 185.

Ornithodiplostomum gen. n. Diplostomidae, type *Paradiplostomum ptychocheilus* (Faust), DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Paradiplostomum ptychocheilus (Faust) type of *Ornithodiplostomum* gen. n., DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Petalodiplostomum gen. n. Proterodiplostomidae, *ancyloides* sp. n. in *Coluber* sp., Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Posthodiplostomum gen. n. Diplostomidae, type *cuticola* (Nordm.), *microsicya* sp. n. in *Ardea* sp., Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Proalaria butasturina Tubangui 1932 assigned to *Neodiplostomum*, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 509. —*P. grayii* sp. n. in intestine of pond heron, India, VERMA Allahabad Univ. Stud. 12 1936 p. 179.

Proalarioides serpentis Yamag., tetracotyle encysted in muscles of *Rana nigromaculata*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 pp. 574–575 fig. 26.

Procrassiphiala gen. n. Strigeidae p. 173, *titricum* in lapwing, *cuckooi* in cuckoo p. 174 spp. n. India, VERMA Allahabad Univ. Stud. 12 1936.

Prodiplostomum americanum sp. n. in *Tantulus loculator* and *Mycteria americana*, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Prolecithodiplostomum gen. n. Proterodiplostomidae, *constrictum*, *cavum* spp. n. in *Jacaretinga crocodilus*, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Proterodiplostomidae fam. n. pro Polycotylidae Cobbold 1877, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Proterodiplostomidi supersubf. n. of Proterodiplostomidae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Proterodiplosteminae subf. n. of Proterodiplostomidae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 511.

Proterodiplostomum gen. n. Proterodiplostomidae, type *longum* (Brandes), *tumidulum* sp. n. in *Jacaretinga crocodilus*, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

Pseudodiplostomum cochlearis, *fraterni* spp. n. in kingfisher, India, VERMA Allahabad Univ. Stud. 12 1936 p. 178.

Pseudoneodiplostomum gen. n. Proterodiplostomidae, type *thomasi* Dollfus, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 514.

Sphincterodiplostomum gen. n. Diplostomidae, *musculosum* sp. n. in *Ardea agami*, Brazil, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 513.

STRIGEOIDEA.

Cotylurini subsubf. n. of Strigeinae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 510.

Cotylurus mamilliformis Tubangui transferred to *Pseudapatemon*, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512. —*C. streptocorpus* sp. n. in intestine of fishing eagle, India, VERMA Allahabad Univ. Stud. 12 1936 p. 185.

Pseudapatemon gen. n. Strigeidae, type *Apatemon classocotylus* Dub., DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512.

Ridgeworthia gen. n. Strigeinae, *ramai* sp. n. in intestine of herons, India, VERMA Allahabad Univ. Stud. 12 1936 pp. 186–187.

Strigea elongata var. *indica* in black-headed oriole p. 181, *falconis* var. *eagles* in Indian fishing eagle p. 182 varr. n., *globocephalum* sp. n. in crested serpent eagle pp. 182–183, India, VERMA Allahabad Univ. Stud. 12 1936.

Strigeides superf. nom. n. pro Strigeoidea Raill. e. p., DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 510.

Strigeines subsuperfam. n. of Strigeides, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 510.

Strigeini subsubf. n. of Strigeinae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 510.

BOLBOCEPHALODOIDEA.

Bolbocephalodinae subf. n. of Bolbocephalodidae, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512.

Bolbocephalodines subsuperf. n. of Strigeides, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512.

CYATHOCOTYLOIDEA.

Brauninidae included in superf. Cyathocotylides, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512.

Cyathocotyle oviformis sp. n. in *Sterna hirundo*, Germany, pp. 306-307 figs. 14, 15, SZIDAT Z. Parasitenk. Berlin 8 1936.—*C. calvusi* sp. n. in intestine of king vulture, *Torgos calvus*, India, VERMA Nature London 138 1936 p. 589 1 fig.

Cyathocotylides superf. n. of Strigeida, to include *Cyathocotylidae* and *Brauninidae*, DUBOIS Rev. suisse Zool. Geneva 43 1936 p. 512.

Cyathocotylodes gen. n. *Cyathocotylinae*, *curonensis*? n. sp. in *Anas boschas* dom. (exper.) p. 302 fig. 9, *dubius* sp. n. in *Sterna hirundo* and *S. paradisea* pp. 303-305 fig. 10, SZIDAT Z. Parasitenk. Berlin 8 1936.

Duboisia gen. n. *Prosostephaninae*, type *Prohemistomum syriacum* Dubois 1934, SZIDAT Z. Parasitenk. Berlin 8 1936 p. 310 footnote.

Holostephanus gen. n. *Cyathocotylinae*, *Lühei* sp. n. in *Sterna paradisea* and *Larus fuscus* p. 300 fig. 7, *bursiformis* sp. n. in *Sterna paradisea* p. 301 fig. 8, SZIDAT Z. Parasitenk. Berlin 8 1936.

Paracyathocotyle gen. n. *Cyathocotylinae*, to include *C. orientalis* Faust and *melanittae* Yamaguti, SZIDAT Z. Parasitenk. Berlin 8 1936 pp. 307-308.

Pharyngostominae subf. n. *Cyathocotylidae*, type *Pharyngostomum Ciurea*, SZIDAT Z. Parasitenk. Berlin 8 1936 p. 311.

Prosostephaninae subf. n. *Cyathocotylidae*, type *Prosostephanus Lutz*, SZIDAT Z. Parasitenk. Berlin 8 1936 p. 308.

Pseudhemistominae subf. n. *Cyathocotylidae*, type *Pseudhemistomum* gen. n., SZIDAT Z. Parasitenk. Berlin 8 1936 p. 312.

Pseudhemistomum gen. n. *Cyathocotylidae*, *unicum* in *Sterna hirundo* and *S. paradisea* p. 314 fig. 19, *minor* in *Sterna hirundo* p. 314 fig. 20, spp. n. SZIDAT Z. Parasitenk. Berlin 8 1936.

Fasciolata.

DIDYMOZOOIDEA.

Philopinna gen. n. *Didymozoidae*, *higai* sp. n. in fins and orbit of *Sarcocheilichthys variegatus*, Lake Biwa, Japan, YAMAGUTI Jap. J. Zool. Tokyo 1936 pp. 1-4 figs. 1-7.

HEMIUROIDEA.

Bunocotyle cingulata Odhner in *Acerina cernua*, NYBELIN Ark. Zool. Stockholm 28 1936 B 10 pp. 1-6 1 fig.

Derogenes tropicus sp. n. in stomach and on gills of *Rhamdia guatemalensis* Yucatan, MANTER Publ. Carnegie Inst. Washington 457 1936 p. 35.

Derogenoides skrjabini sp. n. in intestine of *Onos tricirratus*, Black Sea, VLASENKO Trav. Stat. Biol. Karadagh 4 1931 p. 120.

Dinurus nanaimoensis sp. n. in intestine of *Parophrys vetulus* and *Scorpaenichthys marmoratus*, British Columbia, MCFARLANE J. Biol. Bd. Canada 2 1936 p. 345 figs. 3e, g.

Ectenurus lemeriensis sp. n. in intestine of *Scomberoides* sp., Philippine Is., TUBANGUI & MASILUNGAN Philipp. J. Sc. Manila 58 1935 pp. 442-443 pl. iii fig. 1.

Halipegus kessleri (Grebnitzky) in *Natrix natrix*, Russia, VLASENKO Trav. Soc. Nat. Kharkov 53 1930 p. 56 fig. 2.—*H. aspina* sp. n. in stomach of *Rana boylei*, California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 83 pl. xvi.—*H. japonicus* sp. n. in mouth of *Rana nigromaculata*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 pp. 561-563 figs. 16, 17.

Isoparorchis hypselobagri (Billet), new larval hosts, India, BHALERAO J. Helminth. St. Albans 14 1936 pp. 223-225.

Lecithochirium exodicum sp. n. in stomach of *Ophiodon elongatus*, British Columbia, MCFARLANE J. Biol. Bd. Canada 2 1936 p. 346 figs. 3a, j.

Prosorchis breviformis sp. n. in intestine of *Seriolichthys bipinnulatus*, Bay of Bengal, SRIVASTAVA Proc. Nat. Acad. Sci. Allahabad 6 1936 pp. 175-178 1 fig.

Proterometra catenaria sp. n. in *Centrarchidae* [Pisces], Florida, SMITH J. Alabama Acad. Sc. 6 1934 pp. 16-17 fig. 2.—*P. hodgesiana* sp. n. experimentally in *Centrarchidae*, Alabama, SMITH J. Alabama Acad. Sc. 8 1936 p. 30 figs. 2-4.

Sterrhurus magnitestis sp. n. in stomach of *Citharichthys sordidus*, California, PARK Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 477-480 pl. lx.

Syncoelium filiferum (Sars) on gills and in mouth of Pacific salmon, *Oncorhynchus gorboscha* and *O. nerka*, Puget Sound, LLOYD and GUBERLET Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 44-48 pl. x.

Tetrorchetus hamadai sp. n. in intestine of *Spheroides spadiceus*, Japan, FUKUI & OGATA Sci. Rep. Tokyo Bunrika Daig. B 36 1935 pp. 149-154 1 fig.

Tubulovesicula californica sp. n. in stomach of *Enophrys bison*, California, PARK Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 481-482 fig. 4.

ALLOCREADIOIDEA.

Acanthostomum burminis (Bhal.) in intestine of *Tropidonotus piscator*, Burma, BHALERAJ J. Helminth. St. Albans 14 1936 p. 184.

Allocreadium oncorhynchi sp. n. in *Oncorhynchus macrostomus*, Japan, EGUCHI Third Cong. Japan. Parasit. Soc. 1931 p. 20.

Bunoderina gen. n. Allocreadiidae, *eucaliae* sp. n. in intestine of stickleback, *Eucalia inconstans*, Quebec, MILLER Canad. J. Res. Ottawa 14 D 1936 pp. 11-14 2 figs.

Coitocaecum proavium sp. n. in *Salmo fario* and *S. irideus*, Jugoslavia, WIŚNIEWSKI Arch. Tow. nauk. Lwow (3) 6 ii 1933 pp. 1-7 figs. 1, 2.

Crassicutis gen. n. Allocreadiidae, *cichlasomae* sp. n. in stomach of *Cichlasoma majorum*, MANTER Publ. Carnegie Inst. Washington 457 1936 p. 33.

Decemtestis brevicirrus pp. 188-190 fig. 1, *mehrai* pp. 190-192 fig. 2 in intestine of *Sillago sihama*, *biacetabulata* in *Scomber micropeditorus* pp. 192-195 fig. 3 spp. n. India, SRIVASTAVA Proc. Nat. Acad. Sci. India 7 1936.

Helicometrina septorchis in intestine of *Sillago sihama* pp. 180-182 fig. 1, *orientalis* in *Scomber micropeditorus*, pp. 182-185 fig. 2, spp. n. Bay of Bengal, SRIVASTAVA Proc. Nat. Acad. Sci. Allahabad 6 1936.

Hypocreadium gen. n. Allocreadiidae, *symmetrorchis* sp. n. in intestine of fish, *Monacanthus cirrhifer*, Japan, OZAKI Zool. Mag. Tokyo 48 1936 p. 514 figs. 3, 4.

Kaurma gen. n. Allocreadiidae, *longicirra* sp. n. in intestine of *Emyda scutata* Burma, CHATTERJI Rec. Ind. Mus. Calcutta 38 1936 pp. 81-84 figs. 1, 2.

Labrifer gen. n. Allocreadiidae, *semicossyphi* sp. n. in small intestine of *Semicossyphus reticulatus*, Inland sea, Japan, YAMAGUTI Jap. J. Zool. Tokyo 1936 pp. 3-5 fig. 2.

Lepocreadioides gen. n. Allocreadiidae, *zebrini* sp. n. in stomach and intestine of *Zebrias zebrinus*, China Sea and Sea of Japan, YAMAGUTI Jap. J. Zool. Tokyo 1936 pp. 1-3 fig. 1.

Leptocreadium gen. n. Allocreadiidae, *skrjabini* in intestine of fish, *Cantharides modestus* p. 513, *vitellorum* in *Goniistius zonatus* p. 514 figs., spp. n. Japan, OZAKI Zool. Mag. Tokyo 48 1936.

Nicollia gen. n. Coitocaeidae, type *Coitocaecum ovatum* Fig., to include *C. macrostoma* Fig., WIŚNIEWSKI Arch. Tow. nauk. Lwow (3) 6 ii 1933 p. 7.

Ozakia gen. n. Coitocaeidae type *Coitocaecum plagiorchis* Ozaki, WIŚNIEWSKI Arch. Tow. nauk. Lwow (3) 6 ii 1933 p. 10.

Podocotyle abitionis sp. n. in intestine of *Sebastodes* sp., British Columbia, McFARLANE J. Biol. Bd. Canada 2 1936 pp. 339-341 fig. 3.

Stephanostomum tristephanum sp. n. in intestine of *Ophiodon elongatus*. British Columbia, McFARLANE J. Biol. Bd. Canada 2 1936 p. 343 figs. 2a, b.

HAPLOPOROIDEA.

Asymphyllodora demeli sp. n. in intestine of *Gobius minutus*, Poland, MARKOWSKI Bull. int. Acad. Cracow B II 1935 pp. 254-256 pl. x figs. 1-4.—*A. indica* sp. n. in intestine of fish, *Ophiocephalus punctatus*, India, SRIVASTAVA Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 319-324 1 fig.—*A. diploorchis* sp. n. in intestine of *Pseudogobio esocinus*, Lake Suwa, Japan, YAMAGUTI Jap. J. Zool. Tokyo 1936 pp. 4-6 fig. 8.

Deretrema cholaeum sp. n. in gall-bladder of *Sebastodes* sp., British Columbia, McFARLANE J. Biol. Bd. Canada 2 1936 p. 344 fig. 2c.

Diptherostomum sargus annularis sp. n. in intestine of *Sargus annularis*, Black Sea, VLASENKO Trav. Stat. Biol. Karadagh 4 1931 p. 103.

Haploporus longicolum sp. n. in intestine of *Mugil cephalus*, Black Sea, VLASENKO Trav. Stat. Biol. Karadagh 3 1931 p. 104.

Steganoderma kamatukae sp. n. in intestine of *Pseudogobio esocinus*, Japan, TAKEUTI Zool. Mag. Tokyo 48 1936 pp. 581-585 1 fig.

HETEROPHYOIDEA.

Apophallus eccentricus Afr. & Gar. in dog, AFRICA, GARCIA & DE LEON Philipp. J. Publ. Health 2 1935 p. 1 fig.—*A. venustus* (Ransom) in cat, dog, raccoon and heron, Canada, CAMERON Canad. J. Res. Ottawa D 14 1936 pp. 57-69 3 figs. 1 pl.

Ascocotyle mcintoshi sp. n. in small intestine of white ibis, *Guara alba*, Florida, PRICE Proc. Helminth. Soc. Washington 3 1936 pp. 31-32 fig. 11.

Diorchitrema sp. in man and dog, AFRICA, GARCIA & DE LEON Philippine J. Publ. Health 1 1935 p. 1 fig.

Galactosomum humbargari sp. n. in intestine of *Larus californicus*, California, PARK Trans. Amer. Micr. Soc. 55 1936 p. 364 pl. xlv.

Haplorchis Lss., note on genus, BHALERAO J. Helminth. St. Albans 14 1936 pp. 221-223.—*H. pumilio* Lss. p. 43 fig. 1-4 *taichui* (Nishigori) p. 47 figs. 5-8, *yokogawai* (Katsuta) p. 50 figs. 9-12 in dogs, cats, birds and experimentally in man, CHEN Parasitology Cambridge 28 1936.—*H. taakree*, morphology, DAYAL Proc. Ind. Sci. Congr. Calcutta 22 1935 p. 322.—*H. attenuatum* in intestine of *Macrones seenghala* pp. 76-78 fig. 1, *piscicola* in *Eutropichthys vacha* pp. 78-80 fig. 2, *gangeticum* in *Pseudotropius athenoides* pp. 80-82 fig. 3, *silundii* in *Silundia gangetica* pp. 82-84 fig. 4, spp. n. India, SRIVASTAVA Proc. Acad. Sc. U.P. India 5 1935.

Heterophyes expectans Afr. & Gar., *brevicaeca* Afr. & Gar. in dog and man, Philippine Is., AFRICA, GARCIA & DE LEON Philipp. J. Publ. Health 2 1935 p. 1 fig.

Levinseniella indica sp. n. in bursa Fabricii of Jack snipe, *Gallinago gallinula*, Lucknow, LAL Proc. Indian Acad. Sc. 4 1936 pp. 92-96 2 figs.

Maritrema rhodanicum sp. n. larvae in *Palaudestrina acuta*, *Pseudam-*

monicola similis, and *Gammarus locusta*, adult exper. in *Larus argentatus* var. *michahellesii*, Rhône delta, CARRÈRE C.R. Acad. Sc. Paris 202 1936 pp. 244-246.

Monorchotrema calderoni Afr. & Gar. in dog, Philippine Is., AFRICA, GARCIA & DE LEON Philipp. J. Publ. Health 2 1935 p. 1 figs.—*M. taihokui*, *taichui*, *yokogawai*, identification and differentiation, UJIE J. Med. Ass. Formosa 35 1936 pp. 938-945 2 pls.

Parascocotyle sinoecium sp. n., CIUREA Arch. roumain. Path. exp. Paris 6 1933 p. 6.

Pricetrema gen. n. Heterophyidae, type *Apophallus zalophi* Price, CIUREA Arch. roumain. Path. exp. Microbiol. Paris 6 1933 p. 104.

Stictodora manilensis Afr. & Gar. in dog, Philippine Is., AFRICA, GARCIA & DE LEON Philipp. J. Publ. Health 2 1935 p. 1 figs.

OPISTHORCHOIDEA.

Cyclorchis varani sp. n. in small intestine of *Varanus niloticus*, Tanganyika, PRICE Proc. Helminth. Soc. Washington 3 1936 p. 68 fig. 18b.

Opisthorchis ophidiarum sp. n. in intestine of water snake, *Lapemis hardwickii*, Philippine Is., TUBANGUI & MASILUNGAN Philipp. J. Sc. Manila 58 1935 pp. 435-437 pl. i fig. 1.—*O. noverca* Braun in dog and wild dog, *Cyon dukhunensis*, India, BHALERAO J. Helminth. St. Albans 14 1936 pp. 218-220 fig. 4.

Pseudamphistoma truncatum (Rud.) p. 520 figs. 1, 2, *danubiense* Ciurea p. 521 possible identity with *truncatum* var. *lutrae* var. n. in *Lutra* p. 522, DOLLEUS Ann. Parasit. Paris 14 1936.

ECHINOSTOMATOIDEA.

Chaunocephalus similiferox sp. n. in intestine of black-necked stork and sooty gull, India, VERMA Allahabad Univ. Stud. 12 1936 pp. 167-168.

Dissurus gen. n. Echinostomatidae *farrukhabadi* sp. n. in intestine of white-necked stork, India, VERMA Allahabad Univ. Stud. 12 1936 pp. 170-171.

Echinochasmus japonicus (Tanabe), structure and development, UJIE Taiwan Igakk. Zasshi 35 1936 pp. 535-545 8 figs.

Echinoparyphium sisjakowi sp. n. in *Arvicola terrestris*, Volga, SKWORTZOW Rev. Microbiol. Saratov 13 1934 p. 317.—*E. recurvatum* var. *indiana* var. n. in snipe and brahmany duck p. 153, *splendens* in crows pp. 153–155, *gizzardai* in black swan p. 155 spp. n. India, VERMA Allahabad Univ. Stud. 12 1936.

Echinostoma charadrii sp. n. in intestine of *Pluvialis fulvus*, Philippine Is., TUBANGUI & MASILUNGAN Philipp. J. Sc. Manila 58 1935 pp. 437–438 pl. i figs. 2, 3.—*E. bhattacharyai* in stilt p. 148, *crecci* in teal p. 149, *minimum* in black swan p. 150, *longicirrus* in mute swan p. 152, spp. n. India, VERMA Allahabad Univ. Stud. 12 1936.

Euparyphium longitestis sp. n. in intestine of black swan, India, VERMA Allahabad Univ. Stud. 12 1936 p. 156.

Hypodærium [sc. *Hypodærum*] *magnocirrusa* in intestine of pintail p. 163, *mainpuria* in shoveller duck p. 164, spp. n. India, VERMA Allahabad Univ. Stud. 12 1936.

Mesorchis pennanti sp. n. in intestine of Indian darter, VERMA Allahabad Univ. Stud. 12 1936 p. 162.

Microparyphium montei sp. n. in intestine of kingfishers, Bengal, VERMA Allahabad Univ. Stud. 12 1936 p. 157.

Parorchinae subf. n. Echinostomidae. type *Parorchis* Nicoll, LAL Proc. Ind. Acad. Sc. 4 1936 p. 32.

Parorchis snipis sp. n. in cloaca of snipe, *Totanus hypoleucos*, India, LAL Proc. Indian Acad. Sc. 4 1936 pp. 27–35 4 figs.

Paryphostomum novum in ducks and geese, p. 158, *pentalobum* in snipes p. 159 spp. n. India, VERMA Allahabad Univ. Stud. 12 1936.

Patagifer wesleyi sp. n. in intestine of curlew, India VERMA Allahabad Univ. Stud. 12 1936 pp. 160–162.

Pegosomum bubulcum sp. n. in liver of *Bubuleus coromandus*, Philippine Is., TUBANGUI & MASILUNGAN Philipp. J. Sc. Manila 58 1935 pp. 438–439 pl. ii fig. 1.

Pseudoechinochasmus gen. n. Echinostomatidae, *satjivani* sp. n. in duodenum of sooty gull, India, VERMA Allahabad Univ. Stud. 12 1936 pp. 168–169.

CLINOSTOMATOIDEA.

Euclinostomum multicaecum sp. n. encysted in muscles of *Ophiocephalus striatus*, Philippine Is., TUBANGUI & MASILUNGAN Philipp. J. Sc. Manila 58 1935 pp. 441–442 pl. iii fig. 2.

Harmostomum suis sp. n. in intestine of pig, Tunis, MAROTEL Rev. Vétér. Toulouse 88 1936 pp. 130–133 2 figs., Bull. Acad. Méd. Paris 45 1936 pp. 440–442.

Harmotrema nicollii sp. n. in small intestine of *Gavialis gangeticus*, India, with revision of Harmostomatidae, MEHRA Proc. Nat. Acad. Sc. India Allahabad 6 1936 pp. 218–225 2 figs.

Leucochloridium spp., notes on systematics, SZIDAT Z. Parasitenk. Berlin 8 1936 pp. 645–653 4 figs.—*L.* spp. innom. from *Vanellus* and *Pavonella pugnax*, Kurische Nehrung, Hsü Z. Parasitenk. Berlin 8 1936 pp. 715–720 figs. 1, 2.—*L. problematicum* Magath, sporocysts in *Succinea ovalis*, N. America, MILLER Illinois Biol. Monog. 14 ii 1936 pp. 96–99 figs. 16–19.

FASCIOLOIDEA.

Fascioloides magna (Bassi) in ruminants, Canada, SWALES Canad. J. Res. Ottawa (D) 14 1936 pp. 83–93 3 pls.

PLAGIORCHOIDEA.

Astiotrema loossi Mehra pp. 196–198 fig. 4, *rami* sp. n. pp. 199–202 fig. 5 in intestine of *Lissemys punctata*, India, BHALERAO J. Helminth. St. Albans 14 1936.

Centrovitus Bhalariao 1926 syn. of *Tremiorchis* Mehra & Negi 1926, BHALERAO J. Helminth. St. Albans 14 1936 p. 195.

Cephalogonimus lenoiri Poirier p. 121, *americanus* Stafford p. 123, *europæus* Blaizot p. 126, *vesicandus* Nickerson p. 129, *amphiumae* Chandler p. 131, *compactus* Stunkard p. 132, *emydalis* Moghe p. 135, *brevicirrus* Ingles p. 136, *mehri* Pande p. 139, *gangeticus* Pande p. 141, *japonicus* Ogata p. 144, *robustus* sp. n. p. 154 figs. in *Rana montezumae*, CABALLERO & SOKOLOFF An. Inst. Biol. Mexico 9 1936.—*C. amphiumae* (syns. *C. magnus* Sinha 1932, *C. gangeticus* Pande 1932) in intestine of turtle, *Lissemys punctata*, India, BHALERAO J. Helminth. St. Albans 14 1936 pp. 188–191 fig. 2.—

C. burmanica sp. n. intestine of *Emyda scutata*, Burma, CHATTERJI Rec. Ind. Mus. Calcutta 33 1936 pp. 84–86 fig. 3.

Cercorchis patonianus sp. n. in anurous amphibian, *Dermophis mexicanus*, Mexico, CABALLERO An. Inst. Biol. Mexico 6 1935 pp. 185–188 2 figs.—*C. kinosterni* sp. n. in intestine of mud-turtle, *Kinosternon subrubrum hippocrepsis*, Louisiana, BYRD J. Parasit. Urbana 12 1936 pp. 413–415 3 figs.—*C. cryptobranchi* sp. n. in intestine of *Cryptobranchus alleganiensis*, Iowa, McMULLEN & ROUDABUSH J. Parasit. Urbana 22 1936 pp. 516–517 1 fig.

Dasymetra nicolli sp. n. in stomach of water-snake, *Natrix sipedon*, Pennsylvania, HOLL & ALLISON Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 226–228 pl. xxxvii.—*D. villicaeaca* sp. n. in mouth and oesophagus of *Natrix sipedon*, *N. rhombifera*, and *N. cyclopion*, Louisiana, BYRD Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 208–216 pls. xxxv, xxxvi.

Encyclometra japonica Yosh. & Ozaki, metacercariae encysted in *Rana nigromaculata*, adult exper. in *Elaphe* spp., Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 p. 570 fig. 23.—*E. asymmetrica* sp. n. in oesophagus and stomach of snakes, *Natrix piscator*, *N. stolata*, *Enhydria chinensis*, *E. plumbea*, *Ptyas korros* and *P. mucosus*, China, WALLACE Lingnan Sc. J. Canton 15 1936 pp. 357–359 figs. 4–7.

Enodiotrema rugocaudatum Yoshida in *Rana rugosa*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 p. 566 fig. 20.

Glypthelmins shastoi sp. n. in intestine of *Bufo boreas*, California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 81 pl. xvi.—*G. rugocaudata* (Yoshida) in frogs, Japan, YAMASHITA Botany & Zool. Tokyo 4 1936 pp. 1359–1370 4 figs.

Gorgoderia japonica sp. n. in bladder of *Rana nigromaculata*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 pp. 563–565 figs. 18, 19.

Gorgodorina [sc. *Gorgoderina*] *aurora* sp. n. in urinary bladder of *Rana aurora* California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 77 pl. xvi.

Haematoloecus buttensis sp. n. in lungs of *Rana boylei*, California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 78–80 pl. xvi.

Laterotrema americana sp. n. in Bursa Fabricii of *Vireo olivaceus* and *Geothlypis trichas*, Washington, MCINTOSH Proc. Helminth. Soc. Washington 3 1936 pp. 34–35 fig. 13.

Lechriorchis primus Stafford in *Thamnophis sirtalis*, Quebec, PRICE Proc. Helminth. Soc. Washington 3 1936 p. 32 fig. 12a.

Mediogonimus gen. n. Plagiorchidae (Prosthogoniminae), *ovilacus* sp. n. in liver of *Microtus pennsylvanicus*, Michigan, WOODHEAD & MALEWITZ J. Parasit. Urbana 22 1936 pp. 273–275 1 fig.

Ommatobrephus lobatus Mehra (syn. *O. folium* Thapar and Ali) in intestine of *Zamenis mucosus*, India, BHALERAO J. Helminth. St. Albans 14 1936 pp. 181–184 fig. 1.

Ostiolum mehrai sp. n. in gall bladder and bile ducts of snakes, *Ptyas korros* and *P. mucosus*, Burma, GOGATE Rec. Ind. Mus. Calcutta 37 1935 pp. 455–458 1 fig.—*Ostiolum* Pratt syn. of *Pneumonoeces* Looss, *O. mehrai* Gogate 1935 prob. assignable to different genus, DOLLEUS Ann. Parasit. Paris 14 1936 p. 302.

Phyllodistomum, differential key to species, LEWIS Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 103–117 pls. xviii–xxiii.—*P. singulare* sp. n. in urinary bladder of salamander, *Dicamptodon ensatus*, United States, LYNCH J. Parasit. Urbana 22 1936 pp. 42–47 pl. i.

Plagiorchis noblei sp. n. in intestine of blackbird, *Agelaius phoeniceus*, California, PARK Trans. Amer. Micr. Soc. 55 1936 pp. 360–364 pl. xliii.

Plagitura parva Stunkard, morphology, STUNKARD J. Parasit. Urbana 22 1936 pp. 354–374 11 figs., note of correction p. 521.

Pneumonoeces sibiricus japonicus pp. 567–569 fig. 21, *nanchangensis major* p. 569 fig. 22 subsp. n. in *Rana nigromaculata*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936.

Prosthogonimus spp. in domestic birds. Formosa, SUGIMOTO J. Soc. Trop. Agric. Formosa 7 1935 pp. 361–369 6 figs.—*P. folliculus* sp. n. in American bittern, *Botaurus lentiginosus*, Kansas, REID & FREEMAN Trans. Amer. Micr. Soc. 55 1936 pp. 366–368.

Psilotrema marki sp. n. in *Arvicola terrestris*, Volga, SKEVORTZOW Rev. Microbiologie Saratov **13** 1934 pp. 317-326.

Renifer wardi sp. n. in water-snake *Natrix rhombifera*, Mississippi, BYRD J. Parasit. Urbana **22** 1936 pp. 229-231 1 fig.

Saphedera cantonensis sp. n. in lung of *Natrix piscator*, China, WALLACE Lingnan Sc. J. Canton **15** 1936 pp. 555-557 figs. 1-3.

Styphlodora nicolli sp. n. in intestine of rat-snake, *Zamenis mucosus*, India, BHALERAO J. Helminth. St. Albans **14** 1936 pp. 191-194 fig. 3.

Tremiorchis ranarum Mehra & Negi in intestine of *Rana tigrina*, India, BHALERAO J. Helminth. St. Albans **14** 1936 p. 195.

Zeugorchis Stafford 1905 syn. of *Manodistomum*, HARWOOD Proc. U.S. Nat. Mus. **81** xvii 1932 p. 1.—*Z. aequatus* Stafford in *Thamnophis sirtalis* Quebec, PRICE Proc. Helminth. Soc. Washington **3** 1936 p. 33 fig. 12b.

DICROCOELIOIDEA.

Brachycoelium lynchi sp. n. in intestine of *Rana aurora*, California, INGLES Trans. Amer. Micr. Soc. Menasha **55** 1936 p. 82 pl. xvi.

Concinnum subg. n. of *Eurytrema*, type *E. concinnum* (Brn.), to include *E. brumpti* and *E. travassosi* sp. nom. n. pro *E. parvum* Trav. nec Senoo, BHALERAO J. Helminth. St. Albans **14** 1936 p. 168.

Conspicuum subg. n. of *Eurytrema* type *E. conspicuum* Faria, to include *E. pulchrum*, BHALERAO J. Helminth. St. Albans **14** 1936 p. 168.

Dicrocoelium soricis (Dies.) in gall bladder of *Crocidura russula*, France, JOYEUX & BAER Rev. suisse Zool. Geneva **43** 1936 pp. 26-32 3 figs.—*D. indicum* Narain & Das and *D. orientale* N. & D. assigned to *Paradistomum*, BHALERAO J. Helminth. St. Albans **14** 1936 p. 173.

Eurytrema fastosum (Kossack), morphological variation, PINTO O Campo Rio de Jan. **1935** pp. 50-52 10 figs.—*E. pancreaticum* (Janson) in cows, India, with revision of genus in five new subgenera, *Pancreaticum*, *Lubens*, *Con-*

cinnum, *Conspicuum*, *Skrjabinus*, BHALERAO J. Helminth. St. Albans **14** 1936 pp. 163-170 figs. 1-5.

Exorchis oviformis Kobayashi cercaria in liver of *Stenothyra japonica*, metacercariae encysted under scales of *Carassius auratus* and other fishes, Japan, OKABE Fukuoka Acta Med. **29** 1936 pp. 211-221 9 figs.

Ganeo korkei sp. n. in intestine of *Rana tigrina*, India, BHALERAO J. Helminth. St. Albans **14** 1936 pp. 208-211 fig. 1.

Glyptoporus gen. n. Pleurogenetinae, *noctophilus* sp. n. in intestine of little brown bat, *Myotis lucifugus*, Minnesota, MACY Proc. U.S. Nat. Mus. **83** 1936 pp. 321-324 fig. 25.

Gyrabascus echinus sp. n. encysted in pairs in wall of small intestine and free in intestinal lumen of *Icteria virens*, North America, MCINTOSH Proc. Helminth. Soc. Washington **3** 1936 pp. 35-36 fig. 14.

Lecithodendrium breckenridgii sp. n. in intestine of bat, *Pipistrellus subflavus*, Minnesota, MACY Zbl. Bakt. Jena (i) **136** 1936 pp. 236-237 1 fig.

Lubens subg. n. of *Eurytrema*, type *E. lubens* (Brn.) to include *E. polymorphum*, *intermedium*, *robustum* and *cuyabai*, BHALERAO J. Helminth. St. Albans **14** 1936 p. 168.

Mehraorchis ranarum Srivastava in bile ducts and gall bladder of *Bana tigrina*, India, BHALERAO J. Helminth. St. Albans **14** 1936 pp. 211-212 figs. 2, 3.

Mesocoelium elongatum Goto & Oz. in *Rana rugosa* p. 573 fig. 25, *brevicaecum* Ochi in *Bufo vulgaris* p. 574, Japan, YAMAGUTI Jap. J. Zool. Tokyo **6** 1936.—*M. geoemydae* sp. n. in intestine of tortoise, *Geoemyda spengleri*, Loochoo Is., OZAKI J. Sci. Hiroshima Univ. Zool. **4** 1936 pp. 81-86 figs. 1-3.—*M. leiperi* sp. n. in intestine of *Tropidonotus piscator* pp. 174-177 fig. 7, *sociale* (Lühe) in *Rana tigrina* p. 177, Burma, BHALERAO J. Helminth. St. Albans **14** 1936.

Moesia chordeilesia sp. n. in intestine of night-hawk, *Chordeiles minor*, and purple martin, experimentally in canary, cercaria in *Goniobasis livescens* metacercaria in may-fly nymphs, McMULLEN J. Parasit. Urbana **22** 1936 pp. 295-298 7 figs.

Pancreaticum subg. n. of *Eurytrema* type *E. pancreaticum* (Janson), to include *E. parvum*, *ovis*, *dajii* and possibly *rebeli*, BHALERAO J. Helminth. St. Albans 14 1936 p. 167.

Paradistomum excalotes sp. n. in gall bladder of *Calotes c. marmoratus*, Philippine Is., TUBANGUI & MASILUNGAN Philipp. J. Sc. Manila 58 1935 pp. 439-441 pl. ii fig. 2.—*P. moghei* sp. n. in liver of *Calotes versicolor*, India, with discussion of genus, BHALERAO J. Helminth. St. Albans 14 1936 pp. 170-174 fig. 6.

Pleurogenes japonicus sp. n. in small intestine of *Rana nigromaculata*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 pp. 571-573 fig. 24.—*P. gastroporus* Lühe in intestine of *Rana tigrina*, India, BHALERAO J. Helminth. St. Albans 14 1936 pp. 207-208.—*P. intermedius* Issaitsch. in *Rana ridibunda*, Russia, VLASENKO Trav. Soc. Nat. Kharkov 53 1930 pp. 53-55 fig. 1.—*P. (Pleurogenosder) lacapensis* (Sonsino) nec Looss, in intestine of *Rana ridibunda*, Tunisia, CALLOT Ann. Parasit. Paris 14 1936 pp. 143-146 figs. 8, 9.

Prosthodendrium pushpai sp. n. in intestine of bat, *Nyctinomus plicatus*, Rangoon, BHALERAO J. Helminth. St. Albans 14 1936 pp. 212-218 fig. 5.—*P. macnabi* p. 353 fig. 1, *naviculum* p. 354 fig. 6, in *Eptesicus fuscus*, *swansoni* p. 353 fig. 4 in *Myotis lucifugus*, spp. n. North America, MACY Trans. Amer. Micr. Soc. 55 1936.

Skrjabinus subg. n. of *Eurytrema*, type *E. skrjabini* Issaitsch., to include *E. koschewnikowi*, BHALERAO J. Helminth. St. Albans 14 1936 p. 168.

CYCLOCOELOIDEA.

Typhlophilus gen. n. Typhlocoelinae, *shovellus* sp. n. in intestine of shoveller duck, *Spatula clypeata*, India, LAL Proc. Indian Acad. Sc. 4 1936 pp. 45-51 3 figs.

NOTOCOTYLOIDEA.

Diaschistorchis takahashii sp. n. in *Ocadia sinensis*, Japan, FUKUI & OGATA Botany & Zool. Tokyo 4 1936 pp. 1707-1710.

Neopronocephalus mekri sp. n. in turtle, *Morenia ocellata*, Burma, CHATTERJI Rec. Ind. Mus. Calcutta 38 1936 pp. 86-88 fig. 4.

Notocotylus indicus sp. n. in caeca of *Mareca penelope*, India, LAL Proc. Ind. Acad. Sc. B 2 1935 pp. 420-422 3 figs.—*N. linearis* (Rud. 1819) ? n. sp. in caeca of *Vanellus vanellus*, SZIDAT Zbl. Bakt. Jena (i) 136 1936 pp. 231-235 3 figs.—*N. ralli* sp. n. in rectum and caeca of water-rail, *Rallus aquaticus*, Britain, BAYLIS Ann. Mag. Nat. Hist. (10) 17 1936 pp. 474-477 1 fig.

Paramonostomum querquedelum in caeca of *Querquedula ciria* pp. 26-27 figs. 1, 2, *casarcum* in caeca of *Casarca rutila* pp. 27-29 figs. 3, 4 spp. n. India, LAL Proc. Indian Acad. Sc. Bangalore 3 1936.

Quinqueserialis subg. n. of *Notocotylus*, *wolgaensis* sp. n. in *Arvicola terrestris*, R. Volga, SKWORTZOW Rev. Microbiol. Saratov 13 1934 p. 317.

PARAMPHISTOMATOIDEA.

Cotylophoron okapi sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 1936 p. 949.—*C. congolense* sp. n. in intestine of okapi, *Okapia johnstoni*, Congo, BAER Rev. Zool. Bot. afr. Tervueren 28 1936 pp. 310-316 6 figs.

Diplodiscus amphichrus japonicus subsp. n. in intestine of *Rana nigromaculata*, *R. rugosa* and *Megalobatrachus japonicus*, Japan, YAMAGUTI Jap. J. Zool. Tokyo 6 1936 pp. 559-561 figs. 13-15.

Flagellotrema gen. n. Gyliachenidae, *convolutum* sp. n. in rectum of fish, *Xesurus scalprum*, Japan, OZAKI Zool. Anz. Tokyo 48 1936 pp. 951-953 1 fig.

Gastrothylax elongatus Poir. p. 333, *cobboldii* Poir. p. 335, *crumenifer* (Crepl.) p. 336, *spatiosus* Brandes p. 337 figs., *cruciformis* Leiper syn. of *spatiosus* p. 337, DAWES Parasitology Cambridge 28 1936.

Megalodiscus microphagus sp. n. in intestine, rectum and bladder of *Bufo boreas* pp. 73-76 pl. xvi, *temporatus* (Staff.) in *Rana catesbeiana* p. 76, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936.

Paramphistomum cervi (Schränk) and *P. explanatum* (Creplin) compared pp. 341-346 figs. 3, 4, *siamense* St. and Goldb. p. 346 fig. 5, *gotoi* Fukui p. 348 fig. 6 *cotylophorum* Fisch. p. 350, *orthocœlium* Fisch. p. 352 fig. 7, DAWES Parasitology Cambridge 28 1936.

Procladorchis gen. n. Cladorchinae, type *Cladorchis pangasii* MacCall., WILLEY Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 8-14 pl. ii.

Schizamphistomoides tabascensis sp. n. in intestine of turtle, *Dermatemys mawii* Mexico, CABALLERO & SOKOLOFF Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 135-137 figs.—*S. constrictus* sp. n. in large intestine of reptile, *Pelomedusa galeata*, Tanganyika, PRICE Proc. Helminth. Soc. Washington 3 1936 p. 67 fig. 18a.

Stichorchis giganteus (Dies.) in caecum of *Tajassu tajassu* (*Dicotyles labiatus* and *D. albirostris*), *Dicotyles torquatus* and *Sus scrofa* dom., Brazil, Vaz Arch. Inst. Biol. São Paulo 6 1935 pp. 45-52 7 figs.

Stunkardia dilymphosa Bhal. in rectum of turtle, *Morenia ocellata*, Burma, CHATTERJI Rec. Ind. Mus. Calcutta 38 1936 pp. 88-89 figs. 5, 6.

Larval Forms.

Cercaria cucullus p. 274, *diplocotylia* p. 276, *odiposa* p. 279, *bilabiata* p. 280, *bipunctata* p. 287, *retrosoma* p. 289, *linnaeae stagnalis* p. 298 figs. spp. n. in fresh-water molluscs, Russia, LUTTA Trav. Soc. Nat. Leningrad (Sect. Zool.) 63 1934.—*C. poconensis* Willey in *Helisoma antrosa*, WILLEY J. Parasit. Urbana 22 1936 pp. 68-75 4 figs.—*C. nefzaoui* i pp. 132-136, ii pp. 136-139 in *Bullinus contortus*, iii in *Amnicola dupstetiana* pp. 139-140, iv in *Melania tuberculata* p. 141 figs. spp. n. Tunis, CALLOT Ann. Parasit. Paris 14 1936.—*C. ubiquitoides* Stunkard (?) in *Littorina* spp., Plymouth, REES J. Mar. Biol. Ass. Plymouth 20 1936 pp. 621-624 1 fig.—*C. sphaerocerca* Miller p. 30, *mitocerca* Miller p. 33, *urbanensis* Cort p. 37, *trivolis* Cort p. 42, *mesotyphla* Miller p. 48, *cystorhysa* Miller p. 52, *meniscadena* Miller p. 54, *cyclica* sp. n. p. 57, *acanthocœla* Miller p. 60, *tricystica* Miller p. 65, *cystonchoides* Miller p. 67, *steganocœla* Miller p. 69, *pachycystata*

sp. nom. n. p. 72, *tridena* sp. n. p. 74, *Wardi* Miller p. 79, *pteractinota* Miller p. 81, *gigas* Faust p. 85, *hamata* Miller p. 86, *multicellulata* Miller, p. 88, *bessiae* Cort & Brooks p. 89, *furcalineata* sp. n. p. 91, *louisiana* p. 94 figs. in molluscs, N. America, MILLER Illinois Biol. Monog. 14 ii 1936.—*C. stagnicolae*, *physellae* spp. n. giving rise to dermatitis in man, N. America, TALBOT Amer. J. Hyg. Baltimore 23 1936 pp. 372-384.—*C. neotropicalis* p. 38 figs. 19-22, *marini* p. 40 figs. 23-25, *paucispina* p. 42 figs. 26-28 spp. n. in *Australorbis glabratus*, Porto Rico, FAUST & HOFFMAN Puerto Rico J. Publ. Health S. Juan 10 1934.—*C. catenaria* sp. n. in *Goniobasis catenaria*, Florida, SMITH J. Alabama Acad. Sc. 6 1934 p. 16 fig. 1.—*C. stephanocauda ocalana* subsp. n. in *Goniobasis catenaria*, SMITH J. Alabama Acad. Sc. 7 1935 pp. 18-19 9 figs.—*C. bessiae* Cort & Brooks (= *ambloplitis* Hunter) in *Heliosomatrivilvis* pp. 40-42, *burti* Miller in *Lymnaea stagnalis* pp. 42-43, Canada, McLEOD Trans. R. Soc. Canada (3) 30 v 1936.—*C. concavocorpa* sp. n. in snail, *Helisoma trivilvis*, Oklahoma, SIZEMORE Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 483-486 pl. lxi.—*C. elegans* Woodhead in clam, *Eurynia iris*, p. 465 figs. 1-3, *papillosus* Woodhead in *Elliptio dilatatus* p. 468 fig. 4-6, *scioti* in *Eurynia iris*, argi in *Anodonta grandis*, basi in *Lampsilis siliquoidea* spp. n. pp. 472-476 pl. lix, Michigan, WOODHEAD Trans. Amer. Micr. Soc. Menasha 55 1936.

Echinocercaria choanophila sp. n. in *Planorbis planorbis*, Rossitten, SZIDAT Zool. Anz. Leipzig 116 1936 pp. 304-310 7 figs.

CESTODA.

Amphilinidea.

Amphilina japonica sp. n. in body cavity of *Acipenser mikadoi*, Japan, GOTO & ISHII Jap. J. Exp. Med. Tokyo 14 1936 pp. 81-83.

Tetrarhynchidea.

Tentacularia musculara sp. n. in spiral valve of *Raja shina* pp. 369-374, *megabothridia* sp. n. in *Hexanchus griseus* pp. 374-379 2 pls., HART Trans. Amer. Micr. Soc. 55 1936.

Tetrarhynchus anteroporus sp. n. in dogfish, *Squalus suckleyi*, Puget Sound, HART Trans. Amer. Micr. Soc. 55 1936 pp. 380-385 pl. xlvii.

Bothriocephalidea.

Bothridium pithonis Blainv., var. *minor* Joy. & Baer 1928, note on nomenclature, JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 p. 499.

Diphyllbothrium urichi in ocelot, *Felis pardalis*, p. 26 figs. 1-3, *trinitatis* in raccoon, *Procyon cancrivora*, p. 27 figs., 4, 5, spp. n. Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936.—*D. lanceolatum* (Krabbe), syns. *D. schistochilos* Germanos, *D. coniceps* Linst., in *Phoca barbata*, Alaska, STUNKARD & SCHOENBORN Amer. Mus. Nov. 880 1936 9 pp. 2 figs.—*D. latum*, *mansoni*, *mansonoides*, comparative anatomy, MUELLER J. Parasit. Urbana 22 1936 pp. 471-478 21 figs.—*D. mansonoides* Mueller syn. of *D. erinacei* (Rud.), IWATA Zool. Mag. Tokyo 48 1936 p. 665.

Ligula intestinalis (Linn.) in fishes, India, DATTA Rec. Ind. Mus. Calcutta 38 1936 p. 226 fig. 7.

Spathebothrioidea superf. n. for *Spathebothrium*, HART & GUBERLET Trans. Amer. Micr. Soc. 55 1936 p. 200.

Spathebothrium simplex Linton in *Liparis fucensis*, Puget Sound, HART & GUBERLET Trans. Amer. Micr. Soc. 55 1936 pp. 202-207 pls. xxiv, xxv.

Phyllobothriidea.

Crepidobothrium olor sp. n. in intestine of *Rana aurora*, California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 84 pl. xvii.

Disculiceps gen. nom. n. pro *Discocephalum* Linton nec *Discocephala* Ehrh., JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 p. 499.

Disculicipitidae fam. nom. n. pro *Discocephalidae* Pintner 1928 nec Fisher 1861, JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 p. 499.

Echeneibothrium myzorhynchum sp. n. in spiral valve of *Raja binoculata*, Puget Sound, HART Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 493-495 figs. 5-8.

Onchobothrium pingucollum Sleggs 1927, transferred to *Pedibothrium*, HART Trans. Amer. Micr. Soc. Menasha 55 1936 p. 495.

Ophiotaenia nybelini in *Coronella coronata* p. 8 figs. 1, 2, *meggitti* in *Atheris chloroechis* p. 11 fig. 3 spp. n. Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936.

Pedibothrium pingucollum (Sleggs) in unidentified skate, California, HART Trans. Amer. Micr. Soc. Menasha 55 1936 p. 495.

Phyllobothrium magnum sp. n. in *Somniosus microcephalus*, Puget Sound, HART Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 489-492 figs. 1-4.

Proteocephalus manjuariphilus sp. n. in intestine of fish, *Atractosteus tristoechus*, VIGUERAS Revista Parasitol. Habana 2 1936 pp. 17-18.

Taeniidea.

Acoleinae subf. n. of Acoleidae, to include *Acoelus*, *Diplophallus*, *Gyrocoelia* and *Shipleyia*, FUHRMANN Ann. Parasit. Paris 14 1936 p. 270.

Avitellina woodlandi pp. 142-146 figs. 1-4, *tatia* pp. 148-151 figs. 5-8 spp. n. in *Capra hircus*, *chalmersi* Woodland pp. 151-155 figs. 9-14, 18, *lahorea* Woodl. pp. 155-156 figs. 15, 16, *sudanea* Woodl. pp. 156-160 figs. 17, 19-21 in sheep, India, BHALERAO J. Helminth. St. Albans 14 1936.

Catenotaenia rhombomidis sp. n. in *Rhombomys opimus*, Central Asia, SCHULZ & LANDA Rev. Microbiol. Saratow 13 1934 p. 305.

Chapmania unilateralis Skr. in *Bucorvus abyssinicus*, Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936 p. 84.

Choanotaenia littoriae sp. n. in intestine of *Athene noctua*, Italy, DE MURO Croce rossa 9 1934 xii p. 5 [n.v.].—*C. abassenae* sp. n. in *Spreo superbus* (Passeriformes), Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936 p. 87 fig. 4.—*C. infundibulum* (Bloch) in *Milvus migrans*, Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936 p. 44.

Cotugnia meleagridis sp. n. in *Numida meleagris* p. 82 fig. 1, *polyacantha* Fuhrm. var. *oligorchida* var. n. in *Stigmatopelia senegalensis* p. 83, Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936.

Cyclorchida fuhrmanni sp. n. in *Podica senegalensis*, Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936 p. 41 fig. 9.

Davainea meleagridis sp. n. in duodenum of turkey, *Meleagris gallogravo*, Washington, JONES Proc. Helminth. Soc. Washington 3 1936 pp. 49-52 fig. 15.

Dilepis undula (Schränk), morphology, DAVIES Proc. Zool. Soc. 1935 pp. 717-722.—*D. lepidocolpos* sp. n. in little cormorant, *Phalacrocorax niger*, Ceylon, BURT Spolia zeylan. Colombo B 19 1936 pp. 193-200 3 figs.—*Dilepis scolecima* Joy. et Baer 1928 nec Rud. syn. of *Paradilepis delachauxi* (Fuhrm.), *delachauxi* of Joy. & Baer 1930 renamed *Paradilepis macracantha*, JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 p. 499.

Dioicoestinae subf. n. Acoleidae, type *Dioicocestus* Fuhrmann, FUHRMANN Ann. Parasit. Paris 14 1936 p. 270.

Dipylidium otocyonis sp. n. in carnivore, *Otocyon megalotis*, Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936 pp. 88-90 figs. 5-7.

Fernandezia [Fernandezia in title] gen. n. Ophryocotylinae, *goizuetai* sp. n. in intestine of *Turdus musicus*, Spain, LÓPEZ-NEYRA Rev. Acad. Madrid 33 1936 p. 15 pl. i.

Fimbriariella gen. n. Fimbriariinae, type *Fimbriaroides falciformis*, WOLFF-HÜGEL Z. Infektiönskr. Haustiere 49 1936 pp. 257-291.

Gidhaia Johri 1934 syn. of *Taufikia* Woodland 1928, LÓPEZ-NEYRA Rev. Acad. Madrid 32 1935 p. 521.

Gynandrotænia gen. n. Progynotaeniidae, *stammeri* sp. n. in intestine of *Phoenicopterus roseus*, FUHRMANN Rev. suisse zool. 43 1936 pp. 517-518, Ann. Parasit. Paris 14 1936 pp. 261-271 11 figs.

Gynandrotæniinae subf. n. of Progynotaeniidae type *Gynandrotænia*

gen. n., FUHRMANN Rev. suisse zool. Geneva 43 1936 p. 518, Ann. Parasit. Paris 14 1936 p. 271.

Helicometra giardi var. *macilentia* in sheep, Argentine, ANTEQUEDA Reun. 8 Soc. Argentina Patol. Reg. Norte 1936 ii pp. 1019-1021.

Hydatigera krepkogorski sp. n. in cysts in *Rhombomys opimus* and *Gerbillus meridianus*, Central Asia, SCHULZ & LANDA Rev. Microbiol. Saratov 13 1934 p. 305.

Hymenolepis anthocephalus sp. n. in intestine of mole shrew, *Blarina brevicauda*, Michigan, VAN GUNDY Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 240-244 pl. xxxix.—*H. pistillum* (Duj.) in intestine of *Crocodyrus russula*, France, JOYEUX & BAER Rev. suisse Zool. Geneva 43 1936 pp. 32-42 figs. 5-11.—*H. recurvirostræ* var. *agnosacco* var. n. in *Himantopus himantopus*, Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936 p. 93.—*H. cholodkovskii* sp. nom. n. pro *H. villosa* Clerc nec Bloch p. 53, *fulleborni* p. 56 figs. 16, 17, *loossi* p. 59 fig. 18, *khalili* p. 63 figs. 19, 20, *nagaty* p. 67 figs. 23-25 spp. n. in *Crocodyrus* sp. and *Sorex* sp., Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936.—*H. chrysolampidis* sp. n. in bird, *Chrysolampis mosquitus*, Brazil, CLAPHAM J. Helminth. St. Albans 14 1936 pp. 131-134 5 figs.

Idiogenes bucorvi sp. n. in *Bucorvus abyssinicus*, Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936 pp. 85-86 figs. 2, 3.—*I. flagellum* (Goeze) in *Milvus migrans*, Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936 p. 16.

Mesocostoides ambigua Vaill. and *M. lineatus* Goeze, differentiation, JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 pp. 490-495 fig. 3.

Moniezia expansa (Rud.) in the hippopotamus, with notes on other spp., SANDGROUND Proc. Helminth. Soc. Washington 3 1936 pp. 52-53.

Nematotaenia janickii sp. n. in *Rappia concolor* and *R. fulvovittata*, Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936 p. 38 fig. 8.

Oligorchis delachauxi Fuhrm. assigned to *Paradilepis*, JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 p. 499.

Paradilepis macracantha sp. nom. n. pro *Dilepis delachauxi* Joy. et Baer 1930 nec Fuhrm., JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 p. 499.

Paruterina southwelli sp. n. in *Lophoceros semifasciatus*, Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936 p. 46 figs. 10-13.—*P. daouensis* sp. n. in *Bucorvus abyssinicus*, Somaliland, JOYEUX, BAER & MARTIN Bull. Soc. Path. Exot. Paris 29 1936 pp. 91-92 figs. 8, 9.

Porotaenis Szpotanska 1917 syn. of *Chaetophallus* and *Tetrabothrium* p.p., JOHNSTON Trans. R. Soc. S. Australia 59 1935 pp. 164-167.

Profimbriaria gen. n. Fimbriariinae, type *Chitonorecta multicanalis*, WOLFF-HÜGEL Z. Infektionskr. Haustiere 49 1936 p. 257.

Progynotaeniidae fam. n. to contain *Progynotaenia* and *Gynandrotaenia*, gen. n., FUHRMANN Rev. suisse zool. Geneva 43 1936 p. 518, Ann. Parasit. Paris 14 1936 p. 270.

Progynotaenif[i]nae subf. n. Progynotaeniidae, to include *Progynotaenia*, *Proterogynotaenia* and *Leptotaenia*, FUHRMANN Ann. Parasit. Paris 14 1936 p. 271.

Pseudhymenolepis redonica Joyeux and Baer in intestine of *Crocidura rossula*, JOYEUX & BAER Rev. suisse zool. Geneva 43 1936 pp. 42-49 figs. 12-16.

Raillictina (R.) *murium* sp. n. in *Rattus rattus*, Madagascar, JOYEUX & BAER Bull. Soc. Path. Exot. Paris 29 1936 p. 611.—*R. sinensis* sp. n. in domestic fowl, China, WINFIELD & CHANG Peking Nat. Hist. Bull. 11 1936 pp. 35-37 3 figs., renamed *R. shantungensis* sp. nom. n., WINFIELD & CHANG Peking nat. Hist. Bull. 11 1936 p. 161.—*R. celebensis* (Jan.) in *Rattus rattus* p. 18, *macrocirrosa* (Fuhrm.) in *Centropus senegalensis* p. 20 fig. 4, *khalili* sp. n. in *Turacus persa* p. 24 figs. 5, 6, *undulata* (Fuhrm.) in *Corythawia cristata* p. 28, *vogeli* sp. n. in *Vinago calva* p. 31 fig. 7, Liberia, HILMY Egypt. Univ. Fac. Med. Publ. 9 1936.

Schizotaenia spp. in porcupines, CHANDLER J. Parasit. Urbana 22 1936 p. 513.

Stilesia okapi sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 1936 p. 949.

Taenia laticollis Rud. in *Viverragenetta*, France, JOYEUX & BAER Bull. Soc. zool. Fr. 60 1936 pp. 482-490 figs. 1, 2.—*T. taeniaeformis* (Batsch) in Felidae, Brazil, PINTO O Campo Rio de Jan. 1936 pp. 26-29 6 figs.—*T. pisiformis* (Bloch) in dog, polyradiate specimens, DOBROVOLNY & DOBROVOLNY Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 22-27 pls. v, vi.

Taufikia Woodland transferred from Anoplocephalidae to Dilepididae, LÓPEZ-NEYRA Rev. Acad. Madrid 32 1935 p. 521.

NEMERTEA.

Anopla.

PALAEONEMERTIDEA.

Tubulanus borealis sp. n. North Sea, FRIEDRICH Zool. Anz. Leipzig 116 9136 pp. 101-108 5 figs.

Enopla.

HOPLONEMERTIDEA.

Amphiporus reticulatus Bürger, Arabian coast, WHEELER Sci. Repts. John Murray Exped. 4 1936 pp. 79-82 fig. 1.

Balaenemertes minor sp. n. bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 p. 109 3 figs.

Chuniella lanceolata Brinkm., bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 p. 108.

Crassonemertes robusta Brinkm. bathypelagic, Bermuda, COE Zoologica N.Y., 21 1936 p. 104 3 figs.

Nannonemertes gen. n. Polystytifera indica sp. n., Indian Ocean, WHEELER Sci. Repts. John Murray Exped. 4 1936 pp. 82-86 fig. 2.

Nectonemertes mirabilis Verrill, bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 p. 109.

Nemertellopsis typica sp. n., Kiel Bay, FRIEDRICH Tierwelt Nord. u. Ostsee 4 d 1936 p. 39 figs. 10, 11.

Oerstedtia laminariae sp. n. on laminaria, Kiel Bay, FRIEDRICH Tierwelt Nord. u. Ostsee 4 d 1936 p. 35 figs. 8, 9.

Pachynemertes gen. n. *obesa* sp. n. bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 pp. 104-105 2 figs.

Paradinonemertes Wheeleri sp. n. bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 p. 105 11 figs.

Phallonemertes Murrayi Brinkmann, bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 p. 107 3 figs.

Planonemertes labiata sp. n. bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936 p. 106 fig. 52.

Plotonemertes adhaerens Brinkm. p. 102, *aurantiaca* sp. n. p. 103 figs., bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936.

Prostomiopsis gen. n. *alba* sp. n. Kiel Bay, FRIEDRICH Tierwelt Nord. u. Ostsee 4 d 1936 pp. 39-40 figs. 12, 13.

Protopelagonemertes hubrechtii Brinkmann p. 100, *beebei* sp. n. p. 101 figs., bathypelagic, Bermuda, COE Zoologica N.Y. 21 1936.

MESOZOA.

Dicyema Schulzianum (E. v. Ben.), cytology, NOUVEL Bull. Inst. Océanogr. Monaco 664 1935 pp. 1-11 9 figs.

NEMATHELMINTHES.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Monographs.—Nematode fauna of British India, Ceylon and Burma, Ascaroidea and Strongyloidea, BAYLIS,

85; Monograph of *Dorylaimus* and allied genera, THORNE & SWANGER, 1227.

Text-books.—Text-book of medical and veterinary helminthology, NEVEU-LEMAIRE, 829; Text-book of invertebrates, PRATT, 944; Nematodes in Regan, Natural History, ROBSON, 981; Text-book of veterinary parasitology, SKRJABIN ET ALII, 1093; Text-book of nematode infections of man, Germany and Middle Europe, SZIDAT & WIGAND, 1197.

Reviews.—Relation of nematodes to public health in North America, CAMERON, 165; Nematodes in meat inspection, N. America, CAMERON, 171; H. B. Ward's services to the "Journal of Parasitology," CORT, 233; Parasites and parasitism, GRASSÉ, 434; Nematodes in relation to public health, HALL, 442; Parasitism in Hawaii, HALL, 445; Recent developments in helminthology, PETERS, 921; Recent developments in study of parasitic nematodes, THEILER, 1221; Comparative parasitology of man and animals (*Trichina*), ZUNKER, 1420.

Bibliography.—Bibliography of Nematodes, STEKHOVEN, 1143.

Nomenclature.—Synonymy of *Setaria labiato-papillosa*, BAYLIS, 86; Status of *Rhabdias* spp. in reptiles, CHU, 216; Nomenclatural note on *Cryptonchus*, FILIPJEV, 346; *Pseudofilaria* gen. nom. n. pro *Protofilaria* Sdg. nec Chandl., SANDGROUND, 1015; Nomenclatural notes on validity of *Anguina*, STILES, 1150, 1151; Identity of *Syngamus nasicola* Linst. with *S. laryngeus* Raill., VAZ, 1297; New name for *Micracanthorhynchus*, preocc., STRAND, 1163; New Acanthocephalid genus, VAN CLEAVE, 1282; *Echinorhynchus dirus* assigned to *Acanthocephalus*, VAN CLEAVE & TOWNSEND, 1284.

Taxonomy.—Revision of genus *Odontophora*, ALLGÉN, 22; Diagnosis of *Allgëniella*, ALLGÉN, 24; Systematics of nematode parasites of arthropods, ARTIGAS, 36; Classification of Tylenchinae, FILIPJEV, 347; Revision of genus *Globocephalus*, FREITAS & LENT, 374; Revision of genus *Monopetalonema*, FREITAS & LENT, 376; Synopsis of genus *Halocercus*, LINS DE ALMEIDA, 681; Classification of order Filariata,

SKRJABIN & SCHIKHOBALOVA, 1088
Revision of the Criconematinae
(Anguinidae), TAYLOR, 1209; New
order of Acanthocephalida, VAN
CLEAVE, 1281.

Technique.—Experimental methods
in study of nematode infections
FAUST, 329; Notes on helminthological
technique, LENT & FREITAS, 667;
Demonstration of nematodes in plant
tissues, GODFREY, 417; Method of
embryonating nematode eggs, LEVINE,
672; Method of cultivating and
isolating larvae of monoxenous nema-
todes, PEREIRA, 915; Culture of a
Rhabditis sp. as a source of demon-
stration material, HEWITT, 479; Media
and tissue culture of filariform larvae
of *Strongyloides*, CHUNG, 219; Tech-
nique for isolating *Ascaris* eggs from
soil, MAPLESTONE & MUKERJI, 726;
Technique of bionomic study of equine
strongyles, PARNELL, 885; Method of
collecting larval strongyles, VAN
VOLKENBERG, 1293; Methods for
study of ensheathed larvae of equine
strongyles, WENIGER, 1350; Method
of obtaining adult *Stephanofilaria*
stilesi, DIKMANS, 293; Technique of
examination of dried mosquitoes for
presence of *Microfilaria bancrofti*,
GALLIARD, 392; Laboratory diagnosis
of trichinosis, HEATHMAN, 469; Iodine-
silver impregnation of muscle trichinae,
KALWARYJSKI, 565, 566; Immuno-
biological diagnosis of trichinellosis,
THEILER & AUGUSTINE, 1222,
TRAVIŃSKI, 1241, 1243; Precipitin
reactions to nematode extracts, EISEN-
BRANDT, 319; Aceto-formation in
coprological technique, BASNUEVO &
ANIDO, 79; Parasitic egg counts in
lambs and sheep, MARSH, 738; Com-
parison of coproscopic and post-
mortem helminthological findings,
MARTORELLI, LLÍBRE & GONZALEZ,
740; Coproscopic technique for fowls,
SCHMID, 1041; Faecal examination
for nematode ova, in man, Shanghai,
WANG, 1332; Method of diagnosis of
Stephanurus dentatus in pigs, DE JESUS,
278; Diagnosis of lungworm infection,
KORKHAUS, 610.

Obituary.—R. Moniez, LAVIER, 653.

STRUCTURE.

Morphology.—Structure of *Heterakis*
gallinae, BAKER, 62; Notes on mor

phology of *Rondonia*, BAYLIS, 84;
Morphology of *Capillaria aërophila*,
CHRISTENSEN, 210; Morphology of
Strongyloides avium, CRAM, 243;
Morphology of *Contracaecum clavatum*,
KAHL, 563; Morphology of genus
Spirostrongylus, MACHIN, 713; Morphology
of *Stephanurus dentatus*, PINTO, 926;
Anatomy of *Binema binema* Trav.,
VALKANOV, 1277.

Oesophagus.—Oesophageal histology
of *Leidygnema appendiculatum*, CHIT-
WOOD, 206; Value of oesophageal
structures in nemic taxonomy, CHIT-
WOOD, 207; Histology of oesophagus in
Rhabditis, *Anguilbilina* and *Aphelen-
chus*, CHITWOOD & CHITWOOD, 208;
Oesophageal histology in Chromadorida,
CHITWOOD & CHITWOOD, 209.

Cuticle.—Structure of cuticle in
Trichostrongyles, LUCKER, 692.

Cytology.—Golgi elements in sperma-
tozoon of *Ascaris*, NATH & RAJNA,
824; Chromatin reduction in *Ascaris*
megalocephala, NAWASCHIN, 826;
Behaviour of long chromosomes in
Ascaris, SCHRADER, 1052; Cytology of
Binema binema, VALKANOV, 1277;
Chromosome cycle of *Ascaris megalo-
cephala*, WHITE, 1361.

Histology.—Histology and compara-
tive morphology of *Nectonema agile*,
FEYEL, 345.

Larval morphology.—Comparative
morphology of larvae of equine
strongyles, LUCKER, 691.

PHYSIOLOGY.

Reactions to external agents.—Action
of halogen compounds on *Heterodera*,
SMEDLEY, 1094; Effect of ergosterol
and calcium lactate on calcification of
Trichinella, WANTLAND, 1334; Effect
of irradiated ergosterol on trichinized
rats, WANTLAND, 1335.

Chemical constitution.—Glycogen
relationships in *Ascaris*, BRAND, 134;
Glycogen content of ascarids, SMORO-
DINCEV & BEBESIN, 1103; Glycogen
products of *Ascaris megalocephala*
under aerobic and anaerobic conditions,
TORYU, 1239; Antigenic fraction in
Ascaris lumbricoides, CAMPBELL, 173;
Chemical constitution of cuticle of

Ascaris lumbricoides, CHITWOOD, 204; Chemical constitution of nematodes, SMORODINZEW & BEBESCHIN, 1106.

Metabolism.—Notes on Ascarid nutrition, ACKERT & FREEMAN, 3; Aerobic and anaerobic metabolism in *Ascaris*, KRÜGER, 634.

Movements.—Movements of sheathed *Wuchereria* microfilariae, O'CONNOR, 844.

Longevity.—Potential longevity of parasitic nematodes, SANDGROUND, 1017.

Respiration.—Respiratory exchange in *Ascaris megalocephala*, TORYU, 1240.

REPRODUCTION AND DEVELOPMENT.

Ova and oviposition.—Survival of *Ascaris* eggs after centrifuging, BEAMS & KING, 88; Effect of ultracentrifuging on cleavage plane in *Ascaris*, BEAMS & KING, 89; Effect of ultracentrifuging on oxygen consumption of *Ascaris* eggs, HUFF & BOELL, 503; Physical factors in survival of eggs and larvae of *Oesophagostomum*, SPINDLER, 1117; Effect of sunlight on *Ascaris* eggs, SPINDLER, 1118; Oviposition of *Gordius* in humid environment, DORIER, 304.

Life - history.—Life - history of *Agamermis decaudata*, CHRISTIE, 212; Experiments with *Neaplectana glaseri* in Japanese beetle, GLASER & FARRELL, 415; Life-history of *Rhabdias fusco-venosa* var. *catanensis*, CHU, 217; Free-living phase of *Strongyloides* life-cycle, BEACH, 87; Developmental cycle of *Strongyloides stercoralis*, KOURI, BASNUEVO, BOCARDI & SOTOLONGO, 619; Life-history of *Contracaecum clavatum*, KAHL, 563; Life-history of *Spironoura* spp., MACKIN, 713; Life-cycle of *Ophidascaris labiatopapillosa*, WALTON, 1328; Suggested life-cycle of *Multicaecum tenuicolle*, WALTON, 1329; Life-cycle of sheep hookworm, ORTLEPP, 864; Life-history of *Crenosoma vulpis*, WETZEL & MÜLLER, 1357; Life-cycle of *Gnathostoma spinigerum*, AFRICA, REFUEZO & GARCIA, 10, PROMMAS & DAENGSVANG, 948; Life-

history of *Spiroxys contortus*, HEDRICK, 470; Life-history of *Dirofilaria immitis* SHAW, 1073.

Larval forms.—Microfilaria in blood of horse, BALLO, 65; Microfilaria in duck, N. America, BEAUDETTE, 93; Microfilaria in *Rana esculenta*, FRANCHINI, 363; Microfilariae in fowls, Malay States, KUPPUSAMY, 640; Microfilariae in ground dove, Virgin Is., O'CONNOR, 843; New microfilaria in pigeon, India, RAY & DASGUPTA, 958; Larval form of *Foleyella americana*, WALTON, 1330; Peculiar form of Guinea-worm larva, MOORTHY & SWEET, 796; Fourth stage larva of *Chabertia ovina*, GRIFFITHS, 437.

Larval development.—Larval development of *Strongyloides papillosus* and infection experiments, MATOFF, 748; Larval development of *Contracaecum clavatum*, KAHL, 563; Larval development of equine strongyles, LUCKER, 691; Preparasitic moults in *Nippostrongylus*, LUCKER, 692; Development of *Microfilaria malayi* in *Anopheles hyrcanus sinensis*, FENG, 341.

Larval bionomics.—Note on living *Microfilaria immitis* in bats, AUGUSTINE, FIELD & DRINKER, 40; Experimental infection of *Mansonella indiana* with *Microfilaria bancrofti*, GALLIARD, 391; Attempt to reverse periodicity in *Dirofilaria immitis*, HINMAN, 481; Periodicity of *Dirofilaria immitis* larvae, INOUE, 527; Penetration of larval Filariae into body cavity of mosquito, IYENGAR, 534; Filarial infection in mosquitoes and man, Hong Kong, JACKSON, 535; Viability of infective *Microfilaria bancrofti*, MENON & SEETHARAMA, 757, 758; Migration of *Microfilaria bancrofti* in *Culex*, O'CONNOR & BEATTY, 845; Ganglionic localisation of microfilariae of *Onchocerca volvulus*, RODHAIN, 986; Deep localisation of microfilariae of *Onchocerca volvulus*, RODHAIN & GAVRILOV, 987; *Microfilaria bancrofti* in abdominal cyst and hydrocoele, TEICHLER, 1212; Destruction of microfilariae in the epiploon in the philander, TISSEUIL, 1233; Resistance of infective *Strongyloides* larvae to chemicals, KAWAI, 578; Migration route of *Spirocerca sanguinolenta* experimentally, HU & HOEPLI, 501; Toxicity of

urine for sclerostome larvae, PARNELL, 886; Encystment of young Echinorhynchus, BABUDIERI, 48.

Intermediate hosts.—Crustaceans as nematode intermediaries, LEIPER, 662; Crustacean int. hosts of *Polymorphus minutus*, SCHEER, 1037; Cockroaches as vectors of nematode eggs, MARIANI & BESTA, 730; Earthworms (*Eisenia austriaca* and *Dendrobaena rubida*) as int. hosts of *Metastrongylus elongatus* and *Cherostrongylus pudendotectus*, MATOFF, 747; Earthworms as transmitters of *Capillaria annulata* to fowls, WEHR, 1346; Larvae of *Gnathostoma spinigerum* in freshwater fishes, *Glossogobius*. *Ophiocephalus* and *Therapon* spp., Philippine Is., AFRICA, REFUERZO & GARCIA, 10; Negative attempts to ascertain int. host of *Oslerus* in dog, TAYLOR, 1211.

Transmission, Mode of infection.—Transmission of nematodes by vegetables, ROBERTSON, 979; Transmission of nematode eggs by flies, TAO, 1206; Homogonic transmission of *Strongyloides ratti* in parasitic series, GRAHAM, 433; Negative results of infection experiments with *Ascaridia perspicillum* in mice, SATO, 1026; Embryonated eggs of *Ascaris* in mesentery in man; possibility of autoinfection, AFRICA, & GARCIA, 6; Infectivity of *Ascaris lumbricoides* for pigs, CLAPHAM, 221; Animals as vectors of *Ancylostoma duodenale* infection, SCADUTO, 1033; Migration route of *Dictyocaulus filaria* in ruminants, TETLEY, 1216; Experimental infection of sheep with larvae of *Ostertagia circumcincta*, THRELKELD & DOWNING, 1229; Cutaneous infection of horse with *Microfilaria* [*Onchocerca*] *reticulata*, ALICATA, 14; Experimental infection of dogs with *Dracunculus*, MOORTHY & SWEET, 797; Experimental infection of murines with *Capillaria hepatica*, LUTERMOSER, 698; Experimental trichinosis in dog and cat, MATOFF, 745; Susceptibility of pigeons to infection with trichinosis, MATOFF, 746; Experimental trichinosis in rats, NIÑO, 831; Experimental prenatal infection of guinea pigs with trichinae, ROTH, 991.

Development.—Comparative developmental history of Nematoda, Nematomorpha and Acanthocephalida, KORSCHULT, 613; Energy and food reserves

in development of nematodes, GIOVANNOLA, 411; Development of root-knot nematode galls, CHRISTIE, 213; Influence of albuminous covering on development of *Ascaris* eggs, HUFF, 502; Note on developmental cycle of *Strongyloides stercoralis*, KOURI, BASNUEVO & ARENAS, 618; Embryonic development of *Ascaris lumbricoides*, NAKATA, 823; Development of Trichinellae in abnormal environments, MCCOY, 703; Development of *Macracanthorhynchus hirudinaceus*, MEYER, 762.

Sexual forms.—Male form of *Thoracopsis barbatus*, ALLGÉN, 18; Female of *Paroncholaimus parpapilliferus*, ALLGÉN, 21; Male form of *Capillaria auritae*, FREITAS & LENT, 370.

Fertilization.—Fecundity of *Cooperia curticei*, ANDREWS, 30; Cytoplasm in fertilization of *Ascaris*, COLLIER, 227; Formation of fecundation membrane in *Ascaris megalcephala*, CORDIER, 232; Fecundity of single parasitic *Strongyloides*, GRAHAM, 432.

Spermatogenesis and oogenesis.—Spermatogenesis and oogenesis as basis of identity of human and pig *Ascaris*, RITCHIE, 970.

ETHOLOGY.

Bionomics.—Biological problems associated with plant nematodes, GOODEY, 424; Relation of parasitic nematodes to their hosts, WETZEL, 1354; Dispersion, vertical and horizontal, of nematodes in soil, KIRJANOVA, 592; Ecology of psammicolous nematodes, Wisconsin, PENNAK, 910; Biology of nematodes in relation to control, SCHMID, 1043; Free-living nematodes associated with hydrozoa, Plymouth, STEKHOVEN, 1142; Limnological notes on mountain lake nematodes, DAVOS, SUCHLANDT & SCHMASSMANN, 1175; Feeding habits of *Aphelenchus avenae* and *Aphelenchus parietinus*, CHRISTIE & ARNDT, 214; Biology of *Strongyloides avium*, CRAM, 243; Bactericidal potentiality of *Rhabditis pellio*, MORIYA, 802; Bionomics of *Heterakis gallinae*, BAKER, 63; *Aspiculuris tetraptera* and *Syphacia obvelata* as hosts of *Trichomonas muris*, THEILER & FARBER, 1223; Biology of *Ascaridia galli* in fowls, ROBERTS,

975, 976; Relation between age of host and number of Strongylid parasites, FOSTER, 360; Biology of Metastrongylids, KORKHAUS, 610; Vertical migration of strongyles in soil, LUCKER, 693; Ingestion of inflammatory exudate by lungworms in pigs, PORTER, 941; Biology of *Eustrongylus gigas*, BARTLAKOWSKI, 73; Biology of *Tetrameres crami*, SWALES, 1184; *Gordius aquaticus* as parasite of insects and meripods, biology, DERONDE, 283; Biology of *Nectonema agile*, FEYEL, 345.

Economics, Control.—Eradication or adjustment in nematode control, HALL, 443, 444; Control of *Heterodera marioni*, ANON, 32; Eelworm disease of coffee, BALLY, 66; *Anguillulina pratensis* in root-rot of raspberry, BERKELEY, 103; *Aphelenchoides fragariae* damaging strawberries in Massachusetts, BOYD, 131; List of plants attacked by *Heterodera schachtii*, CORDER, BUHRER & THORNE, 230; Natural transfer of bulb eelworm from clover to strawberry, COURTNEY, 237; *Aphelenchoides* sp. associated with disease of rice, DASTUR, 259; *Anguillulina* disease of potatoes, EDWARDS, 316; Nematodes affecting pineapple roots, GODFREY, 418; Potato stem eelworm, HODSON, 485; *Aphelenchoides hodsoni* attacking narcissus, HODSON & GIBSON, 486; Nematode affections of plants, United States, HUMPHREY & WOOD, 505; *Anguillulina* and *Heterodera* in relation to crops in the Orenburg steppe, KIRJANOVA & GURVITSH, 593; Eelworm disease in strawberries, Carolina, MECKSTROTH, 753; *Heterodera marioni* affecting cabbage and beans, Mississippi, MILLER, 780; *Anguillulina tritici* causing disease in cereals, Georgia, U.S.A., MILLER, 778; Root-knot in tobacco seedlings, MOORE & SMITH, 792; Gooseberry bud-blight related to nematode infection (*Aphelenchoides ribes*), SMITH, HANSEN & SCOTT, 1096; Gall-forming *Anguillulina* on moss, *Thuidium delicatulum*, STEINER, 1140; Nematode diseases of plants, STEINER & BUHRER, 1141; Nematode pests of plants, Glamorgan, THOMPSON, 1224; Nematode parasites of beet and shad-scale, THORNE, 1226; Nematode-resistant fruit-tree seedlings, TUFTS & DAY, 1252; Economic loss due to root-knot nematodes in cotton and

strawberries, WOOD, 1388; Nematode diseases of poultry, India, BHALERAO, 112; Conjunctivitis in birds, due to *Oxyuris mansonii*, COLMENARES, 228; Control of *Ascaridia galli* in fowls, ROBERTS, 975, 976; Capillariasis in domesticated birds, FREITAS & LINS DE ALMEIDA, 369; Spread of poultry nematodes, HORSFALL, 495; Notes on *Syngamus trachea*, KRISTENSEN, 633; Effect of ground dressings on poultry parasite control, NEWBIGIN & MORGAN, 830; Economic importance of ascariasis in swine, LÜHRS, 694; *Ascaris lumbricoides* as criterion of sanitation, WINFIELD, 1376; Ancylostomiasis problem in German coal mines, BRUNS, 142; Reduction of lungworms by ducks, DOMINIAK, 303; Investigation of hookworm incidence in S. Carolina, LEATHERS, KELLER & WYMAN, 654; Control of ovine hookworm, ORTLEPP, 864; Incidence of hookworm infection in Texas, UPTON, 1273; Survival of eggs and larvae of sclerostomes on pasture, PARNELL, 887; Control of lesser stomach worm in sheep, ROBERTSON, 977; *Trichuris affinis* enzootic in reindeer, AMBROSIONI, 26; Increasing prevalence of trichinosis in N. America, BROOKS, 137; Epidemic of trichinosis in Maine, DRAKE, HAWKES & WARREN, 305; Incidence of trichinosis, HALL & COLLINS, 446, 447; Quantitative nematode infections in equines, Panama, FOSTER, 358; Effect of salting pastures on nematode incidence in sheep, FRASER & ROBERTSON, 365; Effect of nematodes on growth of sheep, FRASER, ROBERTSON & RITCHIE, 366; Field observations on nematode diseases of sheep, GORDON, 426; Nematodes in relation to diseases in sheep, ROSS & GORDON, 990; Transmissibility of cattle nematodes to sheep, STOLL, 1155; Helminthological inspection of soldiers in camp, SMIRNOW, 1095; Helminthic conditions in Brazil, PEREIRA, 912.

Parasitism, Effects on hosts.—Effects of nematode toxins on host, GUENTHER, 439; Effects of nematode products on cardiovascular system of host, KOROPOV, 612; Effects of nematode parasitism on sheep, STOLL, 1156; Action of *Ascaris* extract on growth of fibroblasts, HOEPLI, 487; Toxic effects of *Ascaris* infection, PRUIS, 949; Effect of *Ascaris* infection on growth of

children, SUMI & KAWASAKI, 1177; Effects of *Ancylostoma* infection on the bone marrow, CRUZ, 247; Ocular effects in ancylostomiasis, UJIE, 1261; Effect of *Stephanurus dentatus* on pig, DE JESUS, 278; Effects of *Diectophyme renale* on organs of dog, JANICKI, 538; Effects of *Dirofilaria immitis* on eyes of dogs, OHASHI, 849.

Pathogenicity, Relation to Disease.—

Influence of nematode infections on suprarenal glands in dogs, BAKER & HINMAN, 64; Nematode gastroenteritis in bovines, LIMA, 675; Nematodes as factors in partridge mortality, MIDDLETON, 773; Helminthopathology of birds, REIS & NOBREGA, 963; Nematodes in causal relation to appendicitis, MAZZA & LÓPEZ, 752; NAVARINI, 825, SUWALSKI, 1178, UJIE, 1263, VANNI, 1289, WARWICK, 1337; Nematode etiology of Calcutta sore in cattle, DATTA, 261; Relation of *Strongyloides* to disease, FAUST, 331, 332, GAILLIARD, 393, NOLASCO & AFRICA, 834, PIÉRI & BOUET, 923; Salpingitis caused by *Enterobius*, WU, 1395; *Enterobius vermicularis* causing paroxysmal rectal pains, YOSHINO, 1410; *Ascaris lumbricoides* causing pulmonary lesions, PATERSON, 891, UJIE, 1262, ZWIERN, JOYEUX & ABOUGAYA, 1422; *Ascaris* associated with uncontrollable vomiting, STAREZ, 1171; *Ascaris-ileus*, SZABO, 1187; *Ascaris* in relation to tumour formation, YAMAGUCHI, 1401; New *Ophidascaris* sp. causing stomach lesions in snakes, VAZ, 1298; Tracheo-bronchitis in dog due to *Ostertus* infection, ASCOLI, 37; Cardio-pulmonary strongylosis of dogs due to *Haemostrongylus vasorum*, BISSIÈRES, 123; Fatal infection of goats with *Cooperia curticei*, EDGAR, 311; *Otostrongylus circumlitus* as cause of death in seal, KAHL, 564; Pathogenicity of *Chabertia ovina*, KAUAL, 577; Equine debility caused by *Trichostrongylus axei*, OXSPRING, 869, 870; Etiology of strongyle aneurisms in horses, PINTO & PROENÇA, 931; Equine strongylosis, SCHOENAERS, 1048; Significance of eosinophilia in ancylostomiasis, CRUZ, 248; Ancylostomiasis in United States of America, CUMMING, 251; Ancylostoma infection associated with renal disturbance, DE LANGEN & EERKENS, 279; Ancylostomiasis in Britain, MORGAN, 800; Ancylo-

stomiasis in Russia, PODIAPOLSKA 935; Ancylostomiasis in Belgium, TIMBAL, 1230; Hookworm disease in Kentucky and North Carolina, OTTO, 868; Hookworm infection in Egypt, SCOTT, 1063; Ancylostoma as cause of bradycardia, TINIO, 1232; Ancylostomiasis in Indian seamen, WALTERS, LOW & MANSON-BAHR, 1326; Penetration of kidney in dog by *Diectophyme renale*, STEFANSKI & STRANKOWSKI, 1135; Thel-aziasis in man, China, LEIPER, 659; Relation of *Gongylonema* to malignant neoplasms in rats, PASSEY, 889; Habronemiasis in horses, MOREL, 799, SCOTT, 1066, UNDERWOOD, 1272; Microfilaria associated with pathological change in wild duck, TORREY, THORP & GRAHAM, 1238; *Onchocerca volvulus* in the etiology of epidemic blindness, Sudan, CRUICKSHANK, 246; American onchocerciasis, DARRIBA, 258; Relation of *Onchocerca* to fistulous withers and poll-evil in horses, STEWARD, 1149; Onchocerciasis in cattle, Natal, STONIER, 1161; Indigenous Dirofilariasis in the dog, France, VAILLS, 1275; Filariasis in dogs, Trieste, VLACH, 1312; Pathological effects of *Dirofilaria immitis* on uterus and foetus in dogs, YAMAMOTO, 1405; Filarial etiology of hump sore in cattle, India, PANDE, 878; Filarial itch in horses, UNDERWOOD, 1271; Etiology of disease syndrome in *Wuchereria* infection, GIGLIOLI, 404; *Microfilaria caecuticus* in optic nerve, GINQUINTO MIRA, 408; Filaria as cause of keratitis punctata, MARBAIX & APPELMANS, 728; Complications of filariasis in man, RAY, 959; Filariasis in Morocco, SANZ ASTOLFI, 1022; Spread of filariasis in Indragiri, East Indies, SCHEEPE, 1036; Statistics and pathogenicity of *Filaria bancrofti* in Guiana, TISSEUIL, 1234; Endemic filarial lymphangitis and elephantiasis, TISSEUIL, 1235; Unusual cases of inguinal filariasis, YOUNG, 1411; Pathogenicity of *Capillaria* spp. in domesticated birds, FREITAS & LINS DE ALMEIDA, 369; *Capillaria* tumours in stomach of surmulots, MASSIA & ROMAN, 753; *Capillaria perforans* pathogenic in turkey, Hungary, OROSZ, 863; *Trichuris trichiurus* as cause of pernicious anaemia, BATTAGLIA & ARATA, 80; Hyperchlorhydria in *Trichouris* infection, QUINONES, 953; Trichinosis in man, Chile, APABLAZA, 34; Trichinosis in Asch, LINDAUER,

676; Cases of trichinosis in Spain MARTIN, 739; Cardiovascular complications of *Trichinella* infections, SPINK, 1119; Trichinosis in wild foxes, STROH, 1164; Haematology of trichinosis, SYLVERS, 1185; Trichinosis in swine, VISSER, 1310; Trichinosis infection in man from eating bear meat, WALKER, 1322; Fatal case of trichinosis, WILLETT & PFAU, 1367.

Immunobiology.—Immunity phenomena in nematode infections, DI AICHELBURG, 289; Immunity in nematode infections, SCHMID, 1042, SCHULZ & SCHICHOBALOWA, 1055; Age-resistance in dogs to nematode infections, HINMAN & BAKER, 482; Active acquired resistance in rat to *Strongyloides*, SHELDON, 1074; Immunity relations of *Nippostrongylus* infections in rats, CHANDLER, 189, 190, SARLES & TALIAFERRO, 1023, SPINDLER, 1116; Immunization in rats against *Trichinella*, BACHMAN & GONZALEZ, 50; Acquired immunity to *Ancylostoma caninum*, KERR, 586.

AETIOLOGY.

Variation.—Strawberry strains of *Aphelenchoides fragariae*, CHRISTIE & CROSSMAN, 215; Variations and bursal anomalies in *Viannia* spp., FREITAS & LENT, 373.

HOST DISTRIBUTION.

Plantae.—Nematode parasites of cultivated plants, Russia, KIRJANOVA, 591; Nematode parasites of garden plants, STACHELIN, 1126; New plant-parasitic nemas, North America, STEINER, 1137; Notes on plant parasitic nematodes, STEINER, 1138, Belgian Congo, STEKHOVEN, 1144; Moss nematodes, Hungary, Soós, 1111; Free-living and plant-parasitic Tylenchids, FILIPJEV, 348; *Anguillulina dipsaci* on rhubarb, JOHNSON, 544, on *Galium* and other weeds, JOHNSON, 545, on tomato, WILLIAMS, 1371, on new hosts, GODFREY & SCOTT, 419, 420; *Anguillulina oryzae* on rice roots, GOODEY, 425; Plants attacked by *Aphelenchoides fragariae*, CROSSMAN & CHRISTIE, 245; *Aphelenchus avenae* definitely a plant parasite, STEINER, 1139; *Heterodera marioni* infecting herbaceous ornamental plants,

GODFREY, 416, on alligator weed, PLAKIDAS, 932; *Heterodera schachtii* on hemp-nettle and cactus, GOFFART, 421, on tomatoes, JOHNSON & THOMPSON, 546; *Rhabditis* sp. in coniferous seedlings, WILDE, 1366; New *Xiphinema* in roots of pepper, GOODEY, 423; Nematodes in rice fields, PASHITNOWA, 888.

Invertebrata.—Nematodes in invertebrates, New York State, GATES, 400; *Anguillulina aptini* in insect, *Aptinotrips rufus*, LYSAGHT, 701; *Gordius* sp. recorded by "Challenger" expedition identified as *Nectonema agile*, parasitic in crustacean, *Amatopenaeus elegans*, PEREZ, 916.

Pisces.—*Cystidicola* spp. in Canadian fishes, EKBAUM, 320; Ascarid and Spirurid parasites of fishes, Brazil, PEREIRA, 914; New Dracunculid from fishes, America, SIMON & SIMON, 1081; Nematodes from *Plecoglossus altivelis*, Japan, KATAOKA & MOMMA, 571; Nematodes in *Gobius minutus*, Baltic, MARKOWSKI, 733; New nematode in catfish, Yucatan, PEARSE, 904; Nematode parasites of *Trachinus* and *Lophius*, Poland, STEFANSKI, 1134; Nematode parasites of trout, New Zealand, STOKELL, 1152; Nematodes in freshwater fishes, BABIĆ, 47; Gastric nematodes in fishes, Roumania, HAREGA, 450; Nematode parasites of fishes, Russia, MARKEWITSCH, 731; Nematode parasites of fishes, Siberia, SACHWATKIN, 1013; Nematode parasites of fishes, Kama river, Russia, ZACHVATKIN, 1416.—New *Neoechino-rhynchus* spp. in fish, *Catostomus*, N. America, LYNCH, 700; Acanthocephalids in fishes, Northern India, DATTA, 230; New Acanthocephalids in fish, Japan, FUKUI & MORISITA, 384; Acanthocephalids of fishes, Kama river, Russia, ZACHVATKIN, 1416.

Amphibia.—New *Zanclophorus* sp. in *Cryptobranchus*, N. America, WALTON, 1327; "*Ancylostoma*" sp. in *Bufo*, Paraguay, SCHOUTEN, 1051; New nematodes in toad, Yucatan, PEARSE, 904; Nematodes from Amphibia, California, INGLES, 526; Acanthocephala of amphibians, China, VAN CLEAVE, 1283.

Reptilia.—New *Atractis* sp. in African tortoise, BAER, 56; New *Strongyluris* in tree lizard, India, CHAKRAVORTY,

185; New *Spironoura* sp. in turtle, Burma, CHATTERJI, 193; *Multicaecum agile* (Wedl) in *Crocodilus gavialis*, Punjab, NORTHCOTT, 837; New *Tachygonetria* spp. in Indian tortoise, REES, 980; *Polydelphis attenuata* in a python, Hainan, WALLACE, 1324; Oxyuroid parasites of *Lacertilia*, Brazil, PEREIRA, 913; Acanthocephalids of reptiles, China, VAN CLEAVE, 1283.

Aves.—Notes on nematode parasites of birds, Tanganyika, BANGS & LOVE-
RIDGE, 71, Denmark, CHRISTIANSEN, 211, Queensland, ROBERTS, 971, 972, Russia, WAWILOVA, 1344; Nematodes in fowls, Afghanistan, AKHTAR, 13, China, TING, 1231, Brazil, LINS DE ALMEIDA, 682, 684; *Heterakos* infection in fowls, HUNGERFORD, 507, SAUNDERS, 1030; *Physaloptera truncata* in fowl, Cayenne, STEVENEL & BERNY, 1148; Nematode parasites in partridge, Britain, CLAPHAM, 220; Nematode parasites in ruffed grouse, CLARKE, 223; Nematode parasites of crows, KORKHAUS, 611; Nematode parasites of flamingo, Schleswig, STAMMER, 1128; New Subulurine genus in quail, Texas, CHANDLER, 188; New *Contraecum* sp. in bird, *Cochlearius*, Mexico, CABALLERO, 157; New *Amplicaeum* sp. in *Cacopus*, India, CHATTERJI, 192; New *Trichostrongylus* sp. in *Rhynchotus* (Phasianidae), Brazil, FREITAS & LENT, 371; *Amidostomum aueris* in geese, United States, America, JERSTAD, 542; *Acuaria anthuris* in a crow, BEAUDETTE & HUDSON, 94; *Tetrameres crani* in ducks, Canada, SWALES, 1183; New *Contortospiculum* sp. in *Rhea americana*, KREIS, 630; New Onchocercoid genus in a stork, West Africa, PETERS, 920; *Capillaria* spp. in birds, CRAM, 242, Brazil, FREITAS & ALMEIDA, 367, 369, OROSZ, 861, 862.—*Mediorhynchus empodius* in *Choriotis arabs*, Morocco, DOLLFUS, 300; New Acanthocephalid in bird, Japan, FUKUI & MORISITA, 384; New Acanthocephalid in Polar gull, HEINZE, 472.

Mammalia, general.—Nematodes from mammals, West Africa, BAYLIS, 81; Nematodes from post-mortems in Berlin zoo, DOBBERSTEIN, 296; Nematode parasites of domestic animals, Serbia, DSCHUNKOVSKY, 307; Records of nematodes in domestic mammals, Queensland, ROBERTS, 971, 972; Two new *Capillaria* spp. in mammals,

Brazil, FREITAS & LENT, 372; Synopsis of the Capillarine nematode parasites of mammals, FREITAS & LENT, 375; Notes on nematode fauna of Oklahoma, TROWBRIDGE & HEFLEY, 1247; *Setaria* spp. from Belgian Congo, VAN DEN BERGHE & VUYLSTEKE, 1288; Lung-worm infections in animals, VIDALLON, 1307.

Perissodactyle.—Intestinal nematodes in horses, DAVOR, 267; Nematode parasites of equines, Panama, FOSTER, 357, 359; *Strongylus vulgaris* in the horse, GILYARD, 407; Strongyle incidence in foals, WAGNER, 1320.

Artiodactyla.—Records of nematodes in sheep, Afghanistan, AKHTAR, 13; Incidence of nematodes in abomasum of lambs, DAVEY, 262; Gastro-intestinal nematodes in sheep, Queensland, ROBERTS, 974, Uruguay, RUBINO & CALZADA, 1001.—Nematode infections in pigs, ERDES, 322, China, CHEN, 196; *Ascaris* of pig, MÖNNIG, 788; *Stephanurus* infection in swine, French Guiana, BERNY & SAINT-PRIX, 104, ROUSSEAU, 999.—*Stephanofilaria* infection in goat, KRANEVELD, 626.—Incidence of nematodes in cattle, Lahore, DYAL, 309; First record in Australia, of *Capillaria* sp. in calf, ROBERTS, 973; *Metastrongylus* infection of cattle, SARTHOUS, 1024; *Dictyocaulus* infection of cattle in Russia, SKRJABINE & SCHOULTZ, 1091; Occurrence of *Neascaris vitulorum* in bovines, Brazil, VAZ, 1296; Nematode parasites of American bison, ROUDABUSH, 998; *Elaeophora poelli* in African buffalo, SANDGROUND, 1019; *Macracanthorhynchus* in calf, Kansas, WHITLOCK & MORRILL, 1362.—Nematodes from deer, Trinidad, CAMERON, 166, 169; Two new pulmonary strongyles in Virginian deer, DIKMANS, 291; *Bronchonema magna* in lungs of springbuck, DIKMANS, 294; New *Ostertiagia* sp. in reindeer, Norway, HELLESNES, 473; New *Trichuris* sp. in *Antelope cervicapra*, KREIS, 628; New *Trichostrogylid* genus in eland, LEROUX, 670; Nematode parasites of the elk, WETZEL & ENIGK, 1356; Nematode parasites from the okapi, LEIPER, 660, 661; *Dictyocaulus* spp. in ruminants, DIKMANS, 292; New *Trichostrongylid* genus in ruminants, LEROUX, 671; New records of nematodes in ruminants, Brazil, LINS DE ALMEIDA, 685.—Nematodes of stock

in Antilles, METIVER, 760; Synopsis of nematode parasites of domestic animals in Brazil, PINTO & LINS DE ALMEIDA, 930.

Rodentia.—Nematode parasites of rodents, Carolina, BRANDT, 135, HARKEMA, 451, Turkestan, SKRJABIN, 1087; Nematode parasites of rabbits, Oklahoma, WARD, 1336, Virginia, WEIMER, HEDDER & COWDERY, 1347; *Passalurus ambiguus* in rabbit, Brazil, LINS DE ALMEIDA, 683; New *Dermatoyxys* sp. in *Lepus ruficaudatus*, MIRZA, 784; Nematodes in mice, Marseilles, PALAIS, 876; Nematodes in rats, Baltimore, LUTTERMOSER, 697, St. Louis, TSUCHIYA & RECTOR, 1248; *Rictularia tani* in arts, Canton, CHEN, 197; *Trichosomoides crassicauda* in rats, Madrid, GOYANES, 430; New *Monodontus* sp. in cotton rat, *Sigmodon*, Florida, MCINTOSH, 709; New *Heteroxyema* sp. in rodent, *Galea leucoblephara*, Argentina, FREITAS & ALMEIDA, 368; New *Graphidioides* sp. in *Galea*, Argentina, LENT & FREITAS, 666; New Strongyle from agouti, LENT & FREITAS, 668; New *Subulura* sp. in palm civet *Sciurus*, India, MIRZA, 783; New *Viannella* in *Cavia aperea*, PINTO, 927; New nematodes from chipmunk, *Eutamias striatus*, Michigan, SANDGROUND, 1014; Nematode parasites of *Rhombomys opimus*, SASSUCHIN, TIFLOV & SCHULZ, 1025, SCHULZ & LANDA, 1054; Nematode parasites of the water-rat, *Arvicola terrestris*, Russia, SKWORTZOW, 1093.

Carnivora.—Nematode parasites of fur animals, ALLEN, 16; Nematode parasites of cats, Foochow, TANG, 1204; *Diectophyme renale* in thorax of cat, Poland, STEFANSKI, STRANKOWSKI & NAGORSKI, 1136; New *Physaloptera* sp. in the cat, Kansas, ACKERT, 2; *Physaloptera* infection of cats, Brazil, PINTO, 929; First record of *Gnathostoma spinigerum* in cat, Japan, YOSHIDA, ONOHARA & TOMIHA, 1409; Nematode parasites of dogs and cats transmissible to man and other domestic animals, SCHWARTZ, 1057; Nematode parasites of dogs, DAMON, 256, New Orleans, HYNMAN & BAKER, 482, Cuba, MARTORELLI, LLIBRE & GONZALEZ, 741; New cardiac *Dirofilaria* sp. in dog, India, CHAKRAVARTY, 186; Further case of *Diectophyme* in dog, N. America, PATTERSON, 892; *Molineus*

patens in stoat and weasel, LEIPER, 657; New strongylate nematodes and an acanthocephalid in raccoon and wood dogs, Trinidad, CAMERON, 167.

Insectivora.—New *Habronema* sp. in pangolin, Congo, VUYLSTEKE, 1318; New *Strongyloides* sp. from muskrat, *Crociodura coerulea*, India, MIRZA & NARAYAN, 785; Nematode parasites of musk rat, Britain, WARWICK, 1338.

Cheiroptera.—New Ascarid in fruit-bat, New Hebrides, BAYLIS, 82.

Prosimiae.—New *Ancylostoma* sp. in an African lemur, VAN DEN BERGHE, 1286.

Primates.—New Filariids in monkeys, Panama, MCCOY, 702; New Filariid genus in *Leontocebus rosalia* from Brazil, NAGATY, 822; *Loa* sp. in monkeys, Belgian Congo, SANDGROUND, 1021.

Homo.—Nematode parasites in man, Marseilles, JOYEUX, 583, Russia, MUFEL, 813, SHMELEVA & TROFIMOVA, 1077, Germany, SCHUCKMANN, 1053, WIGAND, 1365, France, VO GAN CAN, 1314, Serbia, SIMITCH, 1080, Persia, MONFORT, 787, Turkmenistan, STEPANOW, 1146, China, CHU, LIU, LING & ZEE, 218, HSÜ, 499, KOMIYA, KAWANA & TAO, 604-607, RYO, 1009, TAJIMI, 1200, Korea, YAMASAKI, 1406, Formosa, MORIOKA, IMAIZUMI & KOO, 801, South Africa, FANTHAM & PORTER, 323, United States of America, BYRD, 152, 153, FAUST & HEADLEE, 333, HEADLEE & CABLE, 468, Canada, FANTHAM & PORTER, 323, PORTER, 940, Mexico, CABALLERO, 158, Cuba, FONSECA, KOURI & BASNUEVO, 354-356, KOURI, FONSECA & BASNUEVO, 621, Venezuela, TORREALBA, 1236, Peru, IGLESIAS, 523, Argentina, DIOS, SOMMERVILLE, BONACCI, ALDAO & BARBA, 295, PARADINA, 879, 880, Accidental occurrence of *Heterodera* eggs in human faeces, BACIGALUPO, 51, 52; Sporadic case of human infection with "*Anquillula intestinalis*" in East Prussia, WIGAND, 1364; *Diploscapter coronata* (Cobb) an accidental parasite of man, YOKOGAWA, 1408; Oxyuriasis in Mexico, CABALLERO, 159; Incidence and distribution of *Ascaris* in Kentucky, KELLER & LEATHERS, 581, Venezuela, RAFAEL RISQUEZ, 954; Ancylostomiasis in

British India, RUSSELL, 1004; Association of *Ancylostoma* and *Onchocerca* infection in man, ROBIN, SICÉ & MERCIER, 980; *Thelazia californiensis* in eye of man, California, KOFOID & WILLIAMS, 598; Filariasis, Tonkin, GALLIARD, 394, Orissa, RAO, 956, Porto Rico, O'CONNOR & HULSE, 846; *Onchocerca volvulus* infection in an European, Cameroons, MÜHLENS, 814; Dracunculosis, Tanganyika, CONNELL & BUCHANAN, 229, India, LINDBERG, 677, 678, Persia, LINDBERG, 679; Trichuriasis, Copenhagen, ROTH, 992, Kentucky, KELLER & LEATHERS, 581, Mexico, CABALLERO, 159; Multiple intestinal helminth infection, POGGI, 936; *Gordius robustus* infection in man, Florida, SAYAD, JOHNSON & FAUST, 1031.

Vertebrata.—List of nematode parasites in animals, China, HSÜ, 499; Nematode parasites of vertebrates, Marseilles, JOYEUX, 553; Nematodes from vertebrates, East Africa, SANDGROUND, 1018; New nematodes in vertebrates, Brazil, VAZ & PEREIRA, 1300.

GEOGRAPHICAL DISTRIBUTION.

Europe.—Free living littoral nematodes from the Lofoten Archipelago, Norway, ALLGÉN, 17, New free-living nematodes, Norway, ALLGÉN, 19; Notes on *Desmodora* spp., Sweden, ALLGÉN, 23; *Heterodera schachtii* in new locality, Denmark, BOVIEN, 130; Freelifving nematodes, Zuider Sea, SCHUURMANS STEKHOFEN, 1056; Distribution of soil nemas, Switzerland, BEEZ, 109; Nematodes in the fauna of Gerzensee, Switzerland, BÜREN, 145; Nematodes in cavernicolous fauna Westphalia, GRIEPENBURG-SCHÉE, 436; Nematoda in the caverns of the Glatzer Schneeberg, MASCHKE, 742, STAMMER, 1129; Free-living nematodes from Tatra lakes, Poland, STEFAŃSKI, 1132; Nematode infections in man, Pugliese, LIDDO, 674; *Pelagonema* spp. in the Mediterranean, ALLGÉN, 20; New Axonolaimoid genus, Sardinia, DE CONINCK, 272; Nematodes in fauna of subterranean waters, Yugoslavia, KARAMAN, 570.—Faunal list of Nematomorpha, Outer Hebrides, FLEMING, 350; Gordians in the Brandenburger fauna, HEINZE 471; Gordian fauna of Trentino, SCICCHITANO, 1060.

Asia.—Negative investigation of occurrence of *Microfilaria malayi* in Japan, ABE, 1; New genus and species of freshwater Nematodes, India, KREIS, 629; Geographical distribution of hookworms in Philippine Is., TUBANGUI, BASACA & PASCO, 1250.

Africa.—Nematode infections in Eritraea, GIORDANO, 409.

America.—New genera and species of marine nematodes, North Carolina, CHITWOOD, 203, 205; Estuarine nematodes at Beaufort, North Carolina, PEARSE, 905; Faunistic list of nematodes and acanthocephalids in vertebrates, insects and plants, Cuba, VIGUERAS, 1308.

Generali.—Geographical distribution of *Strongyloides*, FAUST, 332.

SYSTEMATIC INDEX.

NEMATODA.

Chromadorata

CHROMADOROIDEA.

Allgèniella Strand, diagnosis, ALLGÉN Festschrift Embrik Strand Riga 2 1936 pp. 228–229.

Chromadora ocellata (Carter), Bombay, BAYLIS Nematoda of India 1 1936 p. 244.

Halichoanolaimus paramenzeli sp. n. Norway, ALLGÉN K. norske vidensk. Selsk. 8 1936 p. 48.

Microilaimus donsi sp. n. Norway, ALLGÉN K. norske vid. Selsk. 8 1936 p. 49.

Pselcionema annulatum var. *beauforti* var. n., *rigidum*, *hexalatum* spp. n. North America, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 3.

DESMODOROIDEA.

Acanthopharyngoides gen. n. Desmodorinae, *scleratum* sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 2.

Desmodora leucocephala Schulz p. 225, *eucraspedora* Schulz, *microchaetoides* Allg. p. 226, *tenuicando* Allg., male, p. 227, ALLGÉN Festschrift Embrik Strand Riga 2 1936.

Eubostrichus parasitiferus sp. n. marine, N. Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 7.

Heterodesmodora hirsuta sp. n. marine, N. Carolina, N. America, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 2.

Stilbonematinae subf. n. of Desmodoridae, to include *Stilbonema*, *Catanema*, *Leptonemella* and *Laxonema*, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 1.

Ceramonema reticulatum, *sculpturatum* spp. n. North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 3.

Dasynemella phalangida sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 5.

Dasynemoides gen. n. Ceramonematinae, *setosum* sp. n. North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 5.

Metachromadora onyxoides p. 5, *obesa* p. 6 spp. n., marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936.

Metachromadoracea trib. n. of subf. Richterssiinae, to include *Metachromadora*, *Metonyx* and *Polysigma*, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 5.

Metonyx gen. n. Richterssiinae, *horridus* sp. n. N. Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 6.

Monoposthea hexalata p. 7, *duodecimalata* p. 9, spp. n. Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936.

Richtersia beauforti sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 7.

Spirina pilosa sp. n. Norway, ALLGÉN K. norske vidensk. Selsk. 8 1936 p. 48.

Spirinacea trib. n. for *Eubostrichus*, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 7.

DESMOSCOLECOIDEA.

Desmoscolex americanus p. 13 *parvulus* p. 16 spp. n., marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936.

Tricoma adelpha var. *cylindricauda* var. n., *spinosa*, *aurita* spp. n. North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 15.

Monhysterata.

MONHYSTEROIDEA.

Cytolaimium obtusicaudatum sp. n. North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 13.

Desmolaimus zeelandicus var. *americanus* var. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 11.

Monhystra megalaima Stewart, *uria* Stewart, India, BAYLIS Nematode of India 1 1936 p. 237.

Siphonolaimus conicus sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 13.

AXONOLAIMOIDEA.

Araeolaimoides microphthalmus De Man, Sardinia, DE CONINCK Biol. Jaarb. Antwerp 3 1936 pp. 189-192 figs. 1, 2.

Araeolaimus cylindrolaimas sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 9.

Axonolaimus subsimilis, *odontophoroides* spp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 9.

Diplopeltis minor (Cobb), Ceylon, BAYLIS Nematoda of India 1 1936 p. 240.

Metaaraeolaimoides gen. n. *Araeolaimoidea*, *oxystoma* sp. n., Sardinia, DE CONINCK Biol. Jaarb. Antwerp 3 1936 pp. 183-189 figs. 3-7.

Odontophora Bütschli, review of genus and key to species, ALLGÉN Festschrift Embrik Strand Riga 2 1936 pp. 211-224.

PLECTOIDEA.

Anguinoides gen. n. *Camacolaemidae* *stylosum* sp. n., marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 pp. 10-11.

Aphanolaiminae subf. n. of Camacolaimidae, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 10.

Leptolaimus maximus sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 11.

Enoplata.

ENOPLOIDEA.

Anticoma litoris sp. n. N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936 p. 209 figs. 4-8.

Bathyonchus gen. n. near *Onchulus*, *indicus* sp. n. Madras, KREIS Rev. suisse Zool. Geneva 43 1936 pp. 643-645 fig. 2.

Deontostoma arcticum (Sav.) Lofoten Archipelago, ALLGÉN Tromsø Mus. Aarsheft 52 iii 1933 pp. 4-6 figs. 1a, b.

Ditlevsenia Micoletzky 1925 syn. of *Cryptonchus* Cobb 1913, FILIPJEV Zool. Anz. Leipzig 114 1936 p. 105.

Enoplolaimus (donsi)-tarvae sp. n. Norway, ALLGÉN K. norske vidensk. Selsk. 8 1936 p. 47.

Enoplus alatus Sav., Lofoten Archipelago, ALLGÉN Tromsø Mus. Aarsheft 52 iii 1933 p. 6.—*E. communis* var. *meridionalis* Steiner, N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936 p. 208 figs. 1-3.

Eurystomina americana sp. n. N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936 p. 212 figs. 24-26.

Fimbrilla tenuis (Cobb), Ceylon, BAYLIS Nematoda of India 1 1936 p. 238.

Halalaimus caroliniensis p. 210 figs. 20, 21, *parvus* p. 212 figs. 22, 23, spp. n. N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936.

Halanonchus macramphidus sp. n. marine, North Carolina, CHITWOOD Proc. Helminth. Soc. Washington 3 1936 p. 13.

Leptosomatum indicum Stewart 1914 assigned to *Thoracostoma*, BAYLIS Nematoda of India 1 1936 p. 245.—*L. elongatum* var. *acephalatum* var. n., N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936 p. 208 figs. 9-12.

Oncholaimus indicus Linst. p. 242 fig., *chilkenis* Stewart p. 243, BAYLIS Nematoda of India 1 1936.

Paroncholaimus vulgaris (Bast.) Lofoten Archipelago, ALLGÉN Tromsø Mus. Aarsheft 52 iii 1933 pp. 7-11 figs. 2a-c.—*P. parpapilliferus* Micol. female form, ALLGÉN Festschrift E. Strand 1 1936 pp. 272-273.

Pelagonema simplex Cobb p. 268, *obtusicauda* Fil. p. 269, *propinqua* Allg. p. 270, Mediterranean, ALLGÉN Festschrift E. Strand 1 1936.

Phanodermopsis longisetæ sp. n. N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936 p. 209 figs. 16-19.

Rhabdodemanina minima sp. n. N. Carolina, CHITWOOD Trans. Amer. Micr. Soc. 55 1936 p. 209 figs. 13, 14.

Symplocostoma murmanicum Sav., Lofoten Archipelago, ALLGÉN Tromsø Mus. Aarsheft 52 iii 1933 pp. 11-12.—*S. barbatum* (Carter), Bombay, BAYLIS Nematoda J. India 1 1936 p. 239.

Thoracostoma indicum (Stewart), BAYLIS Nematoda of India 1 1936 p. 245.

Thoracostomopsis barbatum Dittl., male form, ALLGÉN K. norske Vidensk. Selsk. Trondheim 8 xiv (1935) 1936 pp. 44-46.

DORYLAIMOIDEA

Actinolaimus neocyatholaimus sp. n. Madras, KREIS Rev. suisse Zool. Geneva 43 1936 pp. 642-643 fig. 1.

Aporcelaimus gen. n. Dorylaiminae, type *regius* De Man 1876, pp. 123-124 fig. 166, *americanus* sp. n. p. 124 fig. 167, *ourydorys* (Dittl.) p. 125 fig. 168, *spiralis* (Cobb) p. 125 fig. 169, *paraspiralis* sp. nom. n. p. 126 fig. 170, *vorax* sp. n. p. 127 fig. 171, *declinoaculeatus* Kreis p. 127 fig. 172, THORNE & SWANGER Capita Zool. 6 iv 1926.

Dorylaimoides gen. n. Dorylaiminae, *teres* sp. n. pp. 128-129 fig. 173, *elegans* (Man) p. 129 fig. 174, *rhabdotus* (Kreis) p. 130 fig. 175, *micoletzskyi* (Man) p. 131 fig. 176, *parvus* sp. n. p. 131 fig. 177, *longicaudatus* (Imamura) p. 132 fig. 178, *ditlevseni* Micol. p. 133 fig. 179, THORNE & SWANGER Capita Zool. 6 iv 1936.

Dorylaimus palustris (Carter), Bombay, BAYLIS Nematoda of India 1 1936 p. 234.—*D. oxycephaloides* Man p. 25 fig. 1, *oxycephalus* Man. p. 25 fig. 2, *denticulatus* Imamura p. 26 fig. 3, *leptus* sp. n. p. 27 fig. 4, *limnophilus*

Man p. 27 fig. 5, *fastigatus* sp. n. p. 28 fig. 6, *laevicapitatus* sp. n. p. 28 fig. 7, *longicaudatus* Bütschli p. 29 fig. 8, *paralaongicaudatus* Micol. p. 29 fig. 9, *brigdammensis* Man p. 30 fig. 10, *infecundus* sp. n. p. 31 fig. 11, *filiformis* Bast. p. 31 fig. 12, *tambo* Imamura p. 32 fig. 13, *marinus* Duj. p. 33 fig. 14, *exilis* Cobb p. 34 fig. 15, *dadayi* sp. nom. n. pro *pusillus* Daday p. 34 fig. 16, *tenellus* sp. n. p. 35 fig. 17, *hofmänneri* Menzel p. 35 fig. 18, *subtilis* sp. n. p. 36 fig. 19, *serpentinus* sp. n. p. 36 fig. 20, *iammuræ* sp. nom. n. pro *filiformis* Bast. p. 37 fig. 21, *tenuicaudatus* Bast. p. 38 fig. 22, *filicaudatus* Daday p. 38 fig. 23, *pusillus* Cobb. p. 39 fig. 24, *japonicus* sp. n. p. 39 fig. 25, *arvensis* n. p. 40 sp. fig. 26, *stagnatis* Duj. p. 40 figs. 27, 188, *helveticus* Steiner p. 42 fig. 28, *montanus* Stefanski p. 43 fig. 29, *liratus* (Schneider) p. 44 fig. 30, *striatus* Daday p. 45 fig. 31, *carinatus* sp. n. p. 45 fig. 32, *profundus* Cobb p. 47 fig. 33, *novae-zealandiæ* Cobb p. 47 fig. 34, *annulatus* Daday p. 48 fig. 35, *unipapillatus* Daday p. 48 fig. 36, *callosus* Skwarra p. 49 fig. 37, *crassus* Man p. 49 fig. 38, *prolificus* sp. n. p. 50 fig. 39, *crassoides* Jägersk. p. 51 fig. 40, *merogaster* Steiner p. 51 fig. 41, *pseudostagnalis* Micol. p. 52 fig. 42, *selangorensis* Man p. 52 fig. 43, *flexus* sp. n. p. 53 fig. 44, *cheikiangensis* Wu & Hoeppli, p. 53 fig. 45, *attenuatus* Man p. 54 fig. 46, *spengelii* Man p. 54 fig. 47, *gaussi* Steiner p. 55 fig. 48, *agilis* Man p. 55 fig. 49, *proximus* p. 56 fig. 50, *saprophilus* p. 57 fig. 51, *atratus* p. 57 fig. 52 spp. n. *thermae* Hoeppli p. 57 fig. 53, *intervallis* sp. n. p. 58 fig. 54, *secundus* Cobb p. 59 fig. 55, *flavomaculatus* Linst. p. 59 fig. 56, *incae* Steiner p. 60 fig. 57, *aquatilis* Skwarra p. 61 fig. 58, *halophilus* Daday p. 61 fig. 59, *clavicaudatus* sp. n. p. 62 fig. 60, *biroi* Daday p. 63 fig. 61, *doryuris* Dittl. p. 63 fig. 62, *africanus* Daday p. 64 fig. 63, *bastiani* Bütschli p. 64 fig. 64, *subulatus* sp. n. p. 65 fig. 65, *mesonyctius* Kreis p. 66 fig. 66, *robustus* Man p. 66 fig. 67, *bathybius* Daday p. 67, *corri* Liebermann p. 67 fig. 69, *pacificus* Cobb p. 68 fig. 70, *hyalinus* sp. n. p. 68 fig. 71, *varicaudatus* sp. n. p. 69 fig. 72, *alticola* Menzel p. 70 fig. 73, *teres* sp. n. p. 70 fig. 74, *aculeatus* sp. n. p. 71 fig. 75, *steatopygous* sp. n. p. 71 fig. 76, *holsaticus* Steiner p. 72 fig. 77, *angulosus* sp. n. p. 72 fig. 78, *humilis* sp. n. p. 73 fig. 79, *incisus* sp. n. p. 73 fig. 80, *minor* sp. n. p. 74 fig. 81,

muscorum Skwarra p. 74 fig. 82, *reisingeri* sp. n. p. 74 fig. 83, *lugdunensis* Man p. 75 fig. 84, *curvatus* sp. n. p. 75 fig. 85, *demani* Steiner p. 76 fig. 86, *graciloides* Steiner p. 76 fig. 87, *nodus* sp. n. p. 77 fig. 88, *junctus* sp. n. p. 77 fig. 89, *maritimus* Dittl. p. 78 fig. 90, *gracilis* Man p. 78 fig. 91, *iners* Bast. p. 79 fig. 92, *torpidus* Bast. p. 79 fig. 93, *consobrinus* Man p. 80, *similis* Man p. 80, *uniformis* Thorne p. 81, *diadematus* sp. n., *alpinus* Steiner p. 82, *carteri* Bast. p. 83, *leuckarti* Bütschli, *parvus* Man p. 84, *acuticauda* Man, *vestibulifer* Micoletsky p. 85, *vulvostriatus* Stef. p. 86, *luganensis* Steiner, *arcus* sp. n. p. 87, *truncatus* sp. n. *nitidus* sp. n. p. 88, *irritans* sp. n. *centrocercus* Man p. 89, *granuliferus* Cobb p. 90, *obesus* sp. n., *paraobtusicaudatus* p. 91, *pratensis* Man, *monohystera* Man p. 92, *minutus* Bütschli, *penetrans* p. 94, *productus* p. 95, *brevidens*, *diminutivus* p. 96, *miser* p. 97, *sublabiatus* p. 98, *capitatus simplex* p. 99, *efficius*, *acutus* p. 100, *cinctus*, *acrentuatus* p. 101, *tenuidens* p. 102, *opisthodelphus*, *longidens* p. 103, *textilis*, *intertextus* p. 104, *brachycephalus* p. 109, *asymmetricus* p. 110, *obscurus* p. 112, *amylovorus*, *vitrinus* p. 114, *nothus*, *propinquus* p. 115, *parvulus* p. 117 spp. n., THORNE & SWANGER *Capita Zool. Hague* 6 iv 1936.

Pungentus gen. n. *Dorylaiminae*, *pungens* sp. n. pp. 134–136 fig. 180, *monohystera* sp. n. p. 136 fig. 181, THORNE & SWANGER *Capita Zool.* 6 iv 1936.

Xiphinema radicola sp. n. from diseased pepper roots, E. Indies, GOODEY J. *Helminth. London* 14 1936 pp. 69–72 4 figs.

ERMITHOIDEA.

Mermis nigrescens Duj. p. 222, *indica* Linst. p. 225, BAYLIS *Nematoda of India* 1 1936.

Rhabditata.

ANGUINOIDEA

S. ANGUILLULINOIDEA.

Anguillulina aberrans sp. n. on shad-scale, *Atriplex confertifolia*, N. America, THORNE J. *Agric. Res. Washington* 51 1935 pp. 510–513 fig. 2.—*A. aptini* (Sharga) in *Aptinothrips rufus*, adult female, LYSAGHT *Parasitol. Cambridge*

28 1936 pp. 290-292 1 fig.—*A. tritici* (Steinbuch) p. 226 figs., *similis* (Cobb) p. 228, *angusta* (Butler) p. 229, *pratensis* (Man) p. 230, *cecidoplastes* Goodey p. 231, BAYLIS Nematoda of India 1 1936. —*A. oryzae* (de Haan) in roots of rice, GOODEY J. Helminth. London 14 1936 pp. 107-112 5 figs.—*A. askenasyi* (Bütschli) forming galls on moss, *Thuidium delicatulum*, STEINER J. Wash. Acad. Sci. 26 1936 pp. 410-414 3 figs.

Anguina Scopoli, suggested waiving of priority, STILES Nature London 138 1936 p. 34, Zool. Anz. Leipzig 115 1936 p. 110.

Aphelenchoides sp. on rice, India, DASTUR Proc. Indian Acad. Sc. 4 1936 pp. 108-121 9 figs. pl. ix.—*A. limberi* sp. n. in bulbs of *Iris tingitana*, Holland, STEINER Proc. Helminth. Soc. Washington 3 1936 p. 75 fig. 22a-c.

Aphelenchus parietinus Bast. pp. 7-8 figs. 3-6, *tenuicaudatus* Man pp. 8-10 figs. 7-10, Belgian Congo, STEKHOVEN Bull. Mus. Hist. nat. Belg. 12 ix 1936.

Bitylenchus Filipjev 1934 syn. of *Tylenchorhynchus* Cobb, FILIPJEV Proc. Helminth. Soc. Washington 3 1936 p. 81.

Criconema Hofm. & Menzel redefined, p. 397, *guernei* (Certes) p. 398 figs. 37, 38, *squamosum* Cobb p. 400 figs. 8-11, *fimbriatus* Cobb p. 400 figs. 5, 7, *menzeli* (Stefanski) p. 401 figs. 31, 32, *inaequale* sp. n., Virginia p. 401 figs. 1-4, *cobbi* (Micol.) p. 402 figs. 14, 15, *octangulare* p. 404 fig. 50, *murrayi* (Southern) p. 406 figs. 40-43, TAYLOR Trans. Amer. Micr. Soc. Menasha 55 1936.

Criconemoides gen. n. *Criconematinæ*, type *Criconema morgense* Hofm. & Menzel pp. 406-408 fig. 39, *komahensis* (Imamura) p. 408 figs. 33, 34, *sphagni* (Micol.) p. 408 figs. 16, 17, *annulatum* Cobb p. 409 figs. 25, 26, *macrodorum* sp. n. p. 409 fig. 29, *mutabile* sp. n. p. 410 figs. 20-22, *rusticum* Micol. p. 412 figs. 18, 19, *peruense* (Steiner) p. 412 figs. 47-49, *crotaloides* (Cobb) p. 213 figs. 44-46, *demani* (Micol.) p. 413 figs. 23, 24, *heideri* (Stefanski) p. 414 figs. 35, 36, *annulifer* (Man) p. 414 figs. 12, 13, *sphaerocephalum* sp. n. p. 415 figs. 27, 28, *informe* (Micol.) p. 415 fig. 30, TAYLOR Trans. Amer. Micr. Soc. Menasha 55 1936.

Diplogaster longicauda Claus, Belgian Congo, STEKHOVEN Bull. Mus. Hist. nat. Belg. 12 ix 1936 p. 12 figs. 17, 18.

Ditylenchus gen. n. *Tylenchinae*, type *Tylenchus dipsaci* (Kühn), FILIPJEV Trav. Inst. Zool. Acad. Sci. U.R.S.S. 3 1936 p. 544.

Heterodera marioni (Cornu), India, BAYLIS Nematoda of India 1 1936 p. 232 fig. 113, list of host plants, Congo, STEKHOVEN Bull. Mus. Hist. nat. Belg. 12 ix 1936 pp. 2-5.

Hoplolaimus squamosus (Cobb) on mango roots, Bangalore, BAYLIS Nematoda of India 1 1936 p. 235.

Neotylenchus latus sp. n. in roots of shadscale, *Atriplex corifestifolia*, N. America, THORNE J. Agric. Res. Washington 51 1935 pp. 513-514 fig. 3.

Paratylenchus gen. n. *Tylenchidae* [misprint for *Pratylenchus*] type *Tylenchus pratensis* Man, FILIPJEV Trav. Inst. Zool. Acad. Sci. U.R.S.S. 3 1936 p. 538.—*P. macrophallus* (Man) TAYLOR Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 415-418 figs. 51-56.

Pratylenchus gen. n. [*Paratylenchus* p. 538], *Tylenchinae*, type *Tylenchus pratensis* Man, FILIPJEV Trav. Inst. Zool. Acad. Sci. U.R.S.S. 3 1936 p. 543.

Procriconema membranifer Micol. p. 418 figs. 57-59, *thienemanni* (Schn.) p. 419 figs. 60, 61, *aquaticum* Micol. p. 419 figs. 57, 58, *straeleni* Coninck p. 419, TAYLOR Trans. Amer. Micr. Soc. Menasha 55 1936.

Rhabditolaimus (*Rhabdolitaimus*) *prodelpis* sp. n. on diseased leaves of *Iris ochroleuca*, United States, America, STEINER Proc. Helminth. Soc. Washington 3 1936 pp. 20-21 fig. 7.

Rotylenchus gen. n. *Tylenchinae*, type *Tylenchus robustus* Man, FILIPJEV Trav. Inst. Zool. Acad. Sci. U.R.S.S. 3 1936 p. 543.

Tetylenchus gen. n. *Tylenchinae*, type *Tylenchus tenuis* Micol., FILIPJEV Proc. Helminth. Soc. Washington 3 1936 p. 81.

Tylenchinae, key to genera, FILIPJEV Trav. Inst. Zool. Acad. Sci. U.R.S.S. 3 1936 pp. 537-550 17 figs.

Tylenchorhynchus robustus De Man, Belgian Congo, STEKHOVEN Bull. Mus. Hist. nat. Belg. 12 ix 1936 pp. 5-7 pl. i figs. 1, 2.

Tylenchus brachyurus Godfrey 1929 syn. of *Anguillulina pratensis* (Man), BAYLIS Nematoda of India 1 1936 p. 230.

RHABDITOIDEA.

Acrobeles variabilis sp. n. in diseased *Ixia* bulbs p. 76 fig. 23, *bodenheimeri* sp. n. on agar culture of orange seeds p. 77 fig. 24, *crossotus* Steiner, dimensions, STEINER Proc. Helminth. Soc. Washington 3 1936 p. 80.

Cephalobus persegis f. *apicatus* Maupas, Belgian Congo, STEKHOVEN Bull. Mus. Hist. nat. Belg. 12 ix 1936 p. 10.

Eucephalobus gen. n. Cephalobidae [?] type *C. oxyuroides* Man, *nannus* sp. n. on diseased leaves of *Iris ochroleuca*, United States, America, STEINER Proc. Helminth. Soc. Washington 3 1936 pp. 21–22 fig. 8.

Neocephalobus leucocephalus sp. n. on fungus in scarlet oak, *Quercus coccinea*, Virginia, STEINER Proc. Helminth. Soc. Washington 3 1936 pp. 18–20 fig. 6.

Rhabditis spiculigera sp. n. associated with strawberry root rot, Ontario, STEINER Proc. Helminth. Soc. Washington 3 1936 pp. 16–18 fig. 5.—*R. elongata* Schn. p. 11 figs. 13, 14, *monhysteri* p. 12 figs. 15, 16, Belgian Congo, STEKHOVEN Bull. Mus. Hist. nat. Belg. 12 ix 1936.

Tricephalobus gen. n. Cephalobidae, type *Cephalobus longicaudatus* (Bütschli), STEINER Proc. Helminth. Soc. Washington 3 1936 pp. 79–80 fig. 25.

RHABDIASOIDEA.

Rhabdias joaquinensis sp. n. in lungs of *Rana aurora*, California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 86 pl. xvii.—*R. fuscovenosa* var. *catanensis* (Rizzo) in *Thamnophis sirtalis*, CHU J. Parasit. Urbana 22 1936 pp. 130–139 7 figs.—*R. escheri* Baer in *Uraeotyphlus oxyurus*, BAYLIS Nematoda of India 1 1936 p. 215.

Strongyloides akbari sp. n. in small intestine of musk-rat, *Crocidura coerulea* p. 503 fig. 1, *stercoralis* var. *Eryxi* in oesophagus of reptile, *Eryx johnii* p. 504 fig. 2, var. *Vulpi* in *Vulpes alopec* p. 506 varr. n. India, MIRZA & NARAYAN Proc. Ind. Acad. Sc. B 2 1935.—*S. stercoralis* (Bavay) p. 216

figs., *felis* Chandler p. 219, *papillosus* (Wedl) p. 220, BAYLIS Nematoda of India 1 1936.—*S. avium* in fowls, Porto Rico, CRAM Rev. Parasit. Havana 2 1936 pp. 289–304.

Ascaridata.

OXYUROIDEA.

Africana varani Maplest. in *Varanus bengalensis*, India, BAYLIS Nematoda of India 1 1936 p. 149 fig. 72.

Allodapa multipapillata Chandler 1926 assigned to *Subulara*, BAYLIS Nematoda of India 1 1936 p. 156.

Ascaridia galli (Schrank) p. 133, *compar* (Schrank) p. 136, *columbae* (Gmelin) p. 137, *cristata* (Linst.) p. 139, *stroma* (Linst.) p. 140, *trilabium* (Linst.) p. 141, India, BAYLIS Nematoda of India 1 1936.

Atractis granulosa (Raill. & Henry) p. 207, *opeatura* Leidy p. 208, *kachugae* Stewart assigned to *Monhysterides* p. 213, BAYLIS Nematoda of India 1 1936.—*A. morinae* sp. n. in African tortoise, BAER Revista Parasitol. Havana 2 1936 pp. 277–281.

Aulonocephalus gen. n. Subulurinae, *lindquisti* sp. n. in "viscera" of quail, *Callioplea squamata*, Texas, CHANDLER Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 33–35 pl. viii.

Binema binema Trav. in *Gryllotalpa vulgaris*, Bulgaria, VALKANOV Trav. Soc. Bulg. Sc. Nat. Sofia 17 1936 pp. 153–167 21 figs.

Cissophyllus laverani Raill. & Henry in *Testudo emys*, BAYLIS Nematoda of India 1 1936 p. 181 fig. 97.

Cosmocercoides dukae (Holl) in *Triturus torosus*, California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 88 pl. xviii.

Crossocephalus brevicaudatus Baylis & Daubney in *Rhinoceros indicus*, BAYLIS Nematoda of India 1 1936 p. 210.

Cruzia orientalis Maplest. in pig, BAYLIS Nematoda of India 1 1936 p. 180 2 figs.—*C. morleyi* sp. n. in intestine of *Bufo marinus*, Yucatan, PEARSE Publ. Carnegie Inst. Washington 457 1936 pp. 46–48 figs. 1–5.

Dermatozys ruficaudata sp. n. in colon of *Lepus ruficaudatus*, India, MIRZA Proc. Indian Acad. Sc. B 3 1936 pp. 234–237 3 figs.

Enterobius vermicularis (L.) p. 189, *anthropopitheci* (Geddoelst) p. 191 figs., BAYLIS Nematode of India 1 1936.

Heterakis gallinae (Gmel.) in fowl, Canada, SAUNDERS Trans. Canad. Inst. Toronto 20 1935 pp. 179-215 5 figs., BAKER Trans. Canad. Inst. Toronto 21 1936 pp. 67-86 15 pls., morphology and histology, BAKER Trans. Canad. Inst. Toronto 20 1935 pp. 179-215 5 figs.—*H. gallinae* (Gmel.) p. 112, *indica* Maplest., *pavonis* Maplest. p. 115, *pusilla* Linst., *bosia* Lane p. 116, *vulvolabiata* Chandler, *parva* Maplest. p. 118, *isolonche* Linst. p. 119, *papillosa* (Bloch) p. 121, *beramporia* Lane p. 122, *hamulus* Linst., *spumosa* Schneider p. 123, *girardi* (Lane) p. 125, *govindi* (Karve) p. 126 figs., *hastata* Chandler, *lanei* Chandl., *variabilis* Chandl., syns. of *H. isolonche* Linst. p. 119, *longespiculum* Maplestone 1931 syn. of *Pseudaspidodera voluptuosa* Chandl. p. 131, *feae* Parona possibly assignable to *Zanclophorus* p. 179, BAYLIS Nematoda of India 1 1936.

Heteroxytnema wernecki sp. n. in large intestine of *Galea leucoblephara*, Argentina, FREITAS & ALMEIDA Mem. Inst. Osw. Cruz Rio de J. 31 1936 pp. 185-188 3 pls.

Kathlania leptura (Rud.) p. 159, *chiloscyllii* Thwaite p. 160, BAYLIS Nematoda of India 1 1936.

Kathlaniidae Trav. emend., BAYLIS Nematoda of India 1 1936 p. 158.

Latibuccana Patwardhan 1935 syn. of *Subulura* p. 150, *L. funambulensis* Patw. 1935 sw. of *S. andersoni* (Cobb.), p. 151, BAYLIS Nematoda of India 1 1936.

Leidynema appendiculatum (Leidy), histology of oesophagus, CHITWOOD J. Wash. Acad. Sc. 26 1936 pp. 414-419 4 figs.

Meteterakis Karve 1930 syn. of *Heterakis* Duj., BAYLIS Nematoda of India 1 1936 p. 111.

Monhysterides piscicola Baylis & Daubney p. 211 figs., *kachagae* (Stewart) p. 213, BAYLIS Nematoda of India 1 1936.

Oxysomatium macintoshii (Stewart) in frogs and toads, India and Burma, BAYLIS Nematoda of India 1 1936 p. 201 fig. 106,

Oxyuris equi (Schränk) p. 185, *poculum* Linst. p. 188 figs., *anthropopitheci* Geddoelst assigned to *Enterobius* p. 191, *megaloön* Linst. possibly assignable to *Thelandros* p. 197, BAYLIS Nematoda of India 1 1936.—(*Oxyuris*) sp. in large intestine of deer, *Mazama simplicicornis*, Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936 p. 5.

Ozolaimidae fam. n. Oxyuroidea, type *Ozolaimus* Duj., PEREIRA Arch. Inst. Biol. São Paulo 6 1935 p. 14.

Ozolaimus megatyphlon Rud. p. 15 figs. 19-27, *cirratus* Linst. p. 17 figs. 28-35, in *Iguana tuberculata*, Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935.

Parapharyngodon Chatterji 1933 syn. of *Thelandros* Wedl, BAYLIS Nematoda of India 1 1936 p. 192.

Pharyngodon travassosi in intestine of *Ameiva* sp. pp. 5-8 figs. 1-6, *cesarpintoi* in *Cnemidophorus lemniscatus* pp. 9-11 figs. 7-10 spp. n. Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935.—*P. mabuyae* sp. n. in rectum of *Mabuya varia*, Uganda, SANDGROUND Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 353-355 figs. 14-16.

Probstmayria simiae Maplest. in *Hylobates hooleck*, BAYLIS Nematoda of India 1 1936 p. 183 2 figs.

Pseudaspidodera pavonis Baylis & Daubney p. 128, *voluptuosa* Chandler p. 131, *spinosa* Maplest. p. 132, BAYLIS Nematoda of India 1 1936.

Rondonia rondoni Trav. in fish, *Doras* (*Pseudodoras*) *brunnescens*, Amazon, BAYLIS Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 606-610 2 figs.

Spinicauda amarali sp. n. in intestine of *Ameiva ameiva*, Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935 pp. 21-23 figs. 37-42.—*S. cophotis* Baylis in Agamid lizards, Ceylon, BAYLIS Nematoda of India 1 1936 pp. 147-149 fig. 72.

Spironoura pretiosa sp. n. in intestine of *Rana pretiosa* California, INGLES Trans. Amer. Micr. Soc. Menasha 55 1936 p. 89 pl. xviii.—*S. testudinis* (Baylis & Daubney) p. 164, *barbi* (B. & D.) p. 165, *leptocephala* (B. & D.) p. 167, *stewarti* (B. & D.) p. 171, *falcata* (Linst.) p. 168, *brevispiculata* Baylis

p. 170, *omama* Karve p. 173, BAYLIS Nematoda of India 1 1936.—*S. ran-goonica* sp. n. in stomach of turtle, *Morenia ocellata*, Burma, CHATTERJI Rec. Ind. Mus. Calcutta 38 1936 pp. 90–91 figs. 7, 8.—*S. chelydrae* (Harwood) pp. 7–36, *wardi* in *Chelydra serpentina* pp. 39–41, *concinnae* in *Pseudemys concinna* pp. 41–43 6 pls., spp. n. United States, MACKLIN Illinois Biol. Monogr. 14 iii 1936.

Strongyluris oscar Trav. in intestine of *Tropidurus torquatus*, Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935 pp. 23–25 figs. 47–48.—*S. chamaeleonis* Baylis & Daubney p. 142, *calotis* B. & D. p. 145, figs., BAYLIS Nematoda of India 1 1936.—*S. brevicaudata* Müller in *Heliosciurus rufobrachiat*, Uganda, SANDGROUND Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 361–364 fig. 22.—*S. bengalensis* sp. n. in rectum of tree lizard, *Calotes versicolor*, India, with emended definition of genus, CHAKRAVORTY Z. Parasitenk. Berlin 8 1936 pp. 542–545 2 figs.

Subulura hindi sp. n. in caecum of *Sciurus palmarum*, India, MIRZA Proc. Indian Acad. Sc. 3 1936 pp. 125–127 1 fig.—*S. andersoni* (Cobbold) p. 151, *sarasinorum* (Meyer) p. 153, *galloperdicis* Baylis & Daubney p. 153, *turnicis* Maplest. p. 154, *multipapillata* (Chandler) p. 156 figs., BAYLIS Nematode of India 1 1936.

Syphacia spp. in rodents, India and Ceylon, BAYLIS Nematoda of India 1 1936 pp. 198–200.—*S. obura* sp. n. in flying squirrel, *Anomalurus prateri*, Nigeria and Cameroons, BAYLIS Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 258–262 figs. 1–3.—*S. peromysci* sp. n. in caecum of white-footed mouse, *Peromyscus leucopus leucopus*, N. Carolina, HARKEMA Ecol. Monogr. Durham N.C. 6 1936 pp. 219–220 3 figs.

Syphaciella indica Maplest. in sandgrouse, BAYLIS Nematoda of India 1 1936 p. 203 fig. 107.

Tachygonetria expansa, *torticollis* spp. n. in caecum of tortoise, *Testudo horsfieldi*, REES Proc. Zool. Soc. London 1935 iii pp. 599–603.

Thelandros scleratus Trav. in intestine of *Tropidurus torquatus* and *Tapinurus scutipunctatus*, Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935 pp. 11–14 figs. 11–18.—*T.*

micruris Rauther p. 192 fig., *baylis* Chatterji, *taylori* Chatt. p. 194, *kasauli* Chatt., *maplestoni* (Chatt.) p. 195, *hemidactylus* Patwardhan p. 196, BAYLIS Nematoda of India 1 1936.—*T. seurati* sp. n. in rectum of *Acontias percivali*, Kenya, SANDGROUND Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 356–361 figs. 17–21.

Tonardua tonardua (Lane) in *Chelonia mydas*, Ceylon, BAYLIS Nematoda of India 1 1936 p. 162 fig. 81.

Zanclophorus variabilis sp. n. in *Cryptobranchus alleganiensis*, N. America, WALTON Trans. Illinois Acad. Sc. 28 1936 pp. 267–268 7 figs.—*Z. annandalei* Baylis & Daubney p. 174, *kemp* B. & D. p. 177, BAYLIS Nematoda of India 1 1936.

ASCARIDOIDEA.

Amplicaeum cacopi sp. n. in *Cacopus systoma*, India, CHATTERJI Ann. Trop. Med. Parasit. Liverpool 30 1936 pp. 41–44 4 figs.—*A. varani* Baylis & Daubney in *Varanus salvator*, India, BAYLIS Nematoda of India 1 1936 p. 105 2 figs.

Ascaris lumbricoides L. p. 36, *equorum* Goeze p. 39, *vitulorum* Goeze p. 41 figs., India, *brachycheilus* Linst. p. 52 and *rotundicata* Linst. p. 56 assigned to *Polydelphis*, *elephantis* (Rud.) assigned to *Toxocara* p. 60, *ardeae* (Frölich) to *Porrocaecum* p. 73, *plagiostomorum* Linst. and *balistis* Linst. to *Contracecum* pp. 90–92, *pastinaceae* Rud. to *Paramisakis* p. 92, *meleagrinae* Linst. and *balisticola* Linst. assigned doubtfully to *Paramisakis* p. 94, “(*Ascaris*)” *cynonycteridis* Parona, Burma, p. 108, *brachyura* Linst., Ceylon, p. 109, *tigridis* Gmel., India, p. 109, BAYLIS Nematoda of India 1 1936.

Belanisakis ibidis Maplest., India, BAYLIS Nematoda of India 1 1936 p. 67.

Belascaris lonchoptera (Dies.) syn. of *Toxocara elephantis* (Rud.), BAYLIS Nematoda of India 1 1936 p. 60.

Cerascaris Cobb 1929 syn. of *Contracecum* Raill. and Hen., BAYLIS Nematoda of India 1 1936 p. 79.

Contracecum hoffmanni sp. n. in rectum of bird, *Cochlearius cochlearius*, Mexico, CABALLERO An. Inst. Biol. Mexico 6 1935 pp. 285–289 4 figs.—

C. clavatum Rud. in marine fishes, KAHL Z. Parasitenk. Berlin 8 1936 pp. 509-520 10 figs.—*C. rigidum* (Rud.) pp. 79-82 figs. 11, 12, *lophii* Stekh. pp. 82-85 figs. 13-15 in *Lophius piscatorius*, *auctum* (Rud.) in *Trachinus draco* pp. 85-87 fig. 16, Poland, STEFANSKI Bull. Stat. Biol. Arcachon 33 1936.—*C. spiculigerum* (Rud.) p. 79, *microcephalum* (Rud.) p. 81, *rosarium* (Connal) p. 82, *haliaëti* Baylis & Daubney p. 85, *tricuspe* (Geddoelst) p. 84, *eugonium* Baylis & Daubney p. 85, *lobulatum* (Schneider) p. 87, *incurvum* (Rud.) p. 88, *plagiostomorum* (Linst.) p. 90, *trichiuri* Thwaite p. 91, *balistis* (Linst.) p. 92 figs., BAYLIS Nematoda of India 1 1936.

Dujardinia cenotae sp. n. in catfish, *Rhamdia guatemalensis*, Yucatan, PEARSE Publ. Carnegie Inst. Washington 457 1936 p. 48 figs. 12-15.—*D. helicina* (Molin) p. 96, *woodlandi* Baylis p. 97, *halicoris* (Owen) p. 99 figs., BAYLIS Nematoda of India 1 1936.

Goezia garialidis Maplest., India, BAYLIS Nematoda of India 1 1936 p. 107 fig. 51.

Iheringascaris gen. n. Goeziinae, *iheringascaris* sp. n. in stomach of „bijupira,” Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935 pp. 56-58 figs. 10-16.

Multicaecum agile (Wedl), India, BAYLIS Nematoda of India 1 1936 p. 100 fig. 46.

Neoscaris vitulorum (Goeze) in bovines, Brazil, VAZ Boletim biol. S. Paulo 2 1934 pp. 41-46 9 figs.—*Neoscaris* Travassos 1927 syn. of *Ascaris* Linn., BAYLIS Nematoda of India 1 1936 p. 35.

Ophidascaris trichuriformis sp. n. in stomach of *Liophis miliaris*, *Crotalus terrificus* and *Xenodon merremi*, Brazil, VAZ Arch. Inst. Biol. São Paulo 6 1935 pp. 41-44 5 figs. 4 pls.—*O. filaria* (Duj.) p. 44, *gestri* (Par.), *naiae* (Geddoelst.) p. 46 figs., India, BAYLIS Nematoda of India 1 1936.

Paranisakis pastinacea (Rud.) (syn. *P. taeniurae* Thwaite) India, BAYLIS Nematoda of India 1 1936 p. 92 fig. 42.

Parascaris Yorke & Maplestone 1926 syn. of *Ascaris*, BAYLIS Nematoda of India 1 1936 p. 35.

Polycaecum gangeticum Maplest., India, BAYLIS Nematoda of India 1 1936 p. 102 fig. 47.

Polydelphis attenuata (Molin) in *Python molurus*, China, WALLACE Lingnan Sc. J. 15 1936 pp. 309-310 3 figs.—*P. anoura* Duj. p. 49, *attenuata* (Molin) p. 51, *oculata* (Linst.), *brachycheilos* (Linst.) p. 52, *sewelli* Baylis & Daubney p. 54, *rotundicaudata* (Linst.) p. 56 figs., India, BAYLIS Nematoda of India 1 1936.

Porrocaecum rochalimai sp. n. in stomach of “cação panan,” Brazil, PEREIRA Arch. Inst. Biol. São Paulo 6 1935 pp. 53-56 9 figs.—*P. crassum* (Desl.) p. 69, *depressum* (Zed.) p. 70, *angusticollis* (Molin) p. 71, *ardeae* (Fröl.) p. 73, *reticulatum* (Linst.) p. 74, *pristis* Baylis & Daubney p. 75, *galeocerdonsi* Thwaite p. 77, *quadrata* Linst. p. 78 figs., BAYLIS Nematoda of India 1 1936.

Raphidascaris gigi Fujita in *Pleco-glossus altivelis*, Japan, KATAOKA & MOMMA Bull. Jap. Soc. Scient. Fisheries 3 1934 pp. 61-62 fig. 1.—*R. diodonis* Thwaite in *Diodon hystrix*, India, BAYLIS Nematoda of India 1 1936 p. 68 figs.

Toxascaris leonina (Linst.) p. 62, *transfuga* (Rud.) p. 63 figs., BAYLIS Nematoda of India 1 1936.

Toxocara pteropodis sp. n. in intestine of fruit-bat (*Pteropus geddiei*), New Hebrides, BAYLIS Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 360-365 4 figs.—*T. canis* (Werner) p. 59, *mystax* (Zeder), *elephantis* (Rud.) p. 60 figs., BAYLIS Nematoda of India 1 1936.

Typhlophoros lanellaris Linst., India, BAYLIS Nematoda of India 1 1936 p. 104 fig. 48.

Strongylata.

STRONGYLOIDEA.

Agriostomum vryburgi Raill. in *Bos indicus*, BAYLIS Nematoda of India 1 1936 p. 324 fig. 148.

Amiroides Strand 1929 syn. of *Khalilia* Nev.-Lemaire, BAYLIS Nematoda of India 1 1936 p. 282.

Ancylostoma galogoi sp. n. in an African lemur, BERGHE J. Parasit. Urbana 22 1936 pp. 224-226.—*A. duodenale* (Dub.), p. 317, *caninum* (Erc.)

p. 320, *minimum* (Linst.) *braziliense* (Faria) p. 321, *malayanum* (Aless.) p. 322 figs., BAYLIS Nematoda of India 1 1936.

"*Ankylostoma*" sp. in *Bufo*, Paraguay, SCHOUTEN Revist. Soc. Scient. Paraguay Asuncion 3 1934 p. 150.

Bathmostomum sangeri (Cobb.) in elephant, BAYLIS Nematoda of India 1 1936 p. 343.

Bosicola radiatus (Rud.) p. 306 fig., *curvatus* (Maplest.), *traguli* (Chandl.) p. 307, *tricollaris* Sandground 1929 syn. of *B. radiatus* p. 306, BAYLIS Nematoda of India 1 1936.

Bourgelatia didercta Raill., Henry & Bauche in pig, BAYLIS Nematoda of India 1 1936 p. 288 2 figs.

Bourgelatioides Chandler 1931 syn. of *Bosicola* Sandground, BAYLIS Nematoda of India 1 1936 p. 305.

Bunostomum trigonocephalum (Rud.) p. 331 figs., *cobi* Maplest. p. 333, *bovis* Maplest., *phlebotomum* (Raill.) p. 334, BAYLIS Nematoda of India 1 1936.

Chabertia ovina (Gmelin) in cattle and sheep, BAYLIS Nematoda of India 1 1936 p. 308.

Choniangium epistomum (Piana) in elephant, BAYLIS Nematoda of India 1 1936 p. 260 fig.

Cylicostomias Cram 1925 syn. of *Cylicostomum* Ihle, BAYLIS Nematoda of India 1 1936 p. 268.

Cylicostomum pileatum Raill., Hen. & Bauche assigned to *Khalilia*, BAYLIS Nematoda of India 1 1936 p. 282.

Deletrocephalus dimidiatus Dies. in *Rhea americana*, BAYLIS Nematoda of India 1 1936 p. 262.

Equinurbia sipunculiformis (Baird) in elephant, India, BAYLIS Nematoda of India 1 1936 p. 258.

Eucyathostoma longesubulatum Molin in large intestine of deer, *Mazama simplicicornis*, Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936 pp. 3-4 figs. 7, 8, p. 166 fig. 1.

Gaigeria pachyscelis Raill. & Henry, (syn. *G. smiti* Noto-Soediro 1928), BAYLIS Nematoda of India 1 1936 p. 335 fig. 154.

Galoncus perniciosus (Linst.) in leopard, Calcutta, BAYLIS Nematoda of India 1 1936 p. 323.

Globocephaloides Yorke & Maplest. 1926 syn. of *Globocephalus* Molin, FREITAS & LENT Mem. Inst. Oswaldo Cruz 31 1936 p. 70.

Globocephalus marsupialis sp. n. in intestine of *Metachirops opossum*, Brazil, pp. 76-77 pls. i, ii, with revision of genus pp. 69-76, FREITAS & LENT Mem. Inst. Oswaldo Cruz Rio de Jan. 31 1936.—*G. urosbulatus* (Aless.) p. 328, *connorfili* Lane p. 329, *samoensis* Lane p. 330 figs., BAYLIS Nematoda of India 1 1936.

Grammocephalus varedatus Lane in elephant, BAYLIS Nematoda of India 1 1936 p. 341 3 figs.

Kalicephalus willeyi Linst. p. 345, *indicus* Ortlepp p. 347, *longior* Maplest. p. 348, *elongatus* Maplest. p. 349, *brachycephalus* Maplest. p. 350, *minutus* (Baylis & Daubney) p. 351, *fimbriatus* (Ortlepp) p. 354, *ersiliae* (Stoss.) p. 355 figs., *bengalensis* Maplest. 1929 and *maplestoni* Chatterji 1935 syns. of *indicus* Ortlepp p. 347, *gongylophus* Maplest. 1931 and *radicus* Bhalariao 1931 syns. of *longior* Maplest. p. 348, *narae* Maplest. 1931 syn. of *minutus* (Baylis & Daubney) p. 351, BAYLIS Nematoda of India 1 1936.

Khalilia pileata (Raill., Henry & Bauche) in elephant, BAYLIS Nematoda of India 1 1936 p. 282 fig. 131.

Kiluluma stylosa (Linst.) in *Rhinoceros indicus*, BAYLIS Nematoda of India 1 1936 p. 287.

Monodontus floridanus sp. n. in intestine of cotton rat, *Sigmodon hispidus*, Florida, McINTOSH Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 28-32 pl. vii.

Murshidia murshida Lane p. 278, *falcifera* (Cobbold) p. 280, *indica* (Ware) p. 281 figs., BAYLIS Nematoda of India 1 1936.

Necator okapi sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 iv 1936 p. 949.—*N. urichi* sp. n. in raccoon, *Procyon cancrivora*, Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936 p. 29 figs. 7-9.—*N. americanus* (Stiles) in *Rhinoceros indicus*, BAYLIS Nematoda of India 1 1936 p. 327 fig. 149.

Oesophagodontus robustus (Giles) in equines, India, BAYLIS Nematoda of India 1 1936 p. 256 2 figs.

Oesophagostomoides Schwartz 1929 syn. of *Oesophagostomum* Molin. BAYLIS Nematoda of India 1 1936 p. 290.

Oesophagostomum okapi sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 iv 1936 p. 949.—*O. dentatum* (Rud.) p. 292, *quadrispinulatum* (Marcone), *brevicaudum* Schwartz & Alicata p. 294, *maplestonei* Schwartz p. 295, *venulosum* (Rud.) p. 296, *asperum* Raill. & Hen., *columbianum* (Curtice) p. 297, *indicum* Maplest. p. 299, *blanchardi* R. & H. p. 300, *ovatum* (Linst.) p. 302, *tridentatum* Maplest. p. 303, *traguli* (Maplest.) p. 304 figs., *longicaudum* Goodey syn. of *O. quadrispinulatum* (Marcone), *suis* Maplest. syn. of *O. brevicaudum* Schwartz & Alicata p. 294, *raillietii* Trav. & Vogelsang syn. of *O. ovatum* (Linst.) p. 302, *curvatum* Maplest. assigned to *Bosicola* p. 307, BAYLIS Nematoda J. India 1 1936.

Poteriostomum imparidentatum Quiel in horse, Punjab, BAYLIS Nematoda of India 1 1936 p. 276 2 figs.

Pterygopharynx Witenberg 1925 syn. of *Murshidea* Lane, BAYLIS Nematoda of India 1 1936 p. 278.

Quilonia renniei (Raill. & Henry) p. 284 fig. 132, *travancera* Lane p. 286 in elephant, BAYLIS Nematoda of India 1 1936.

Stephanurus dentatus Diesing in pig, Brazil, PINTO O Campo Rio de Jan. 1935 pp. 27–30 3 figs., India, BAYLIS Nematoda of India 1 1936 p. 310 fig. 143.

Strongylus equinus Müller p. 248, *edentatus* (Looss) p. 250, *vulgaris* (Looss) p. 251, *additicius* Raill., Henry & Bauche p. 252 figs., BAYLIS Nematoda of India 1 1936.—*S. catanensis* Rizzo 1902 regarded as var. of *Rhabdias fuscovenosa*, CHU J. Parasit. Urbana 22 1936 pp. 130–139.

Syngamus nasicola Linstow syn. of *S. laryngeus* Raill., in sheep, Brazil, Vaz Arch. Inst. Biol. São Paulo 6 1935 pp. 35–39 8 figs.—*S. trachea* (Mont.) p. 312 figs., *laryngeus* Raill., *indicus* Monnig p. 315, BAYLIS Nematoda of India 1 1936.

Tetragomphius procyonis Baylis & Daubney in raccoon, Calcutta, BAYLIS Nematoda of India 1 1936 pp. 339–341 4 figs.

Theileriana denticulata sp. n. in intestine of hyrax, *Procavia dorsalis*, Cameroons, BAYLIS Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 262–267 figs. 4–7.

Trichonema longibursatum (Yorke & Macfie) p. 265, *calicatum* (Lss.), *minutum* (Yorke & Macfie) p. 267, *poculatum* (Lss.), p. 268 (*Cylicostomum*) *aegyptiacum* Raill. p. 269, *coronatum* (Lss.), *labiatum* (Lss.), p. 270 (*Cylicocyclus*) *insigne* (Boulenger) p. 271, *nassatum* (Lss.) p. 272 (*Cylicocercus*) *catinatum* (Lss.) p. 273, *goldi* (Boulenger) p. 274, *pateratum* (Yorke & Macfie) p. 275 figs., BAYLIS Nematoda of India 1 1936.

Triodontophorus minor Looss, *serratus* (Lss.) p. 254, *brevicauda* Boulenger p. 255, figs., BAYLIS Nematoda of India 1 1936.

Uncinaria stenocephala (Raill.) p. 337 figs., *longespiculum* Maplest. (syn. *U. philippinensis* Chitwood) p. 338, BAYLIS Nematoda of India 1 1936.

TRICHOSTRONGYLOIDEA.

Adolpholutzia gen. n. Trichostrongylidae, *lutzi* sp. n. in intestine of *Dasypus hybridus*, Brazil, TRAVASSOS Revist. Med.-Chir. Brasil 43 1935, p. 360.

Amidostomum skrabini Boulenger (syn. *A. fuligulae* Maplest.) in teal, BAYLES Nematoda of India 1 1936 p. 357 fig. 168.

Asymmetricostrongylus gen. n. type *Trichostrongylus asymmetricus* Cameron 1926, to include *T. australis* Wood and *T. dissimilis* Wood, NAGATY Ann. Trop. Med. Liverpool 26 1932 p. 458 footnote.

Camelostrongylus Orloff 1933 syn. of *Ostertagia* Ransom, BAYLIS Nematoda of India 1 1936 p. 366.

Cooperia okapi sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 iv 1936 p. 949.

Dasypostrongylus gen. n. Trichostrongylidae, *filamentosus* sp. n. in *Dasypus novemcinctus* and *D. sexcinctus*, Brazil, TRAVASSOS Revist. Med.-Chir. Brasil. 43 1935 p. 356.

Delicata gen. n. Trichostrongylidae type *Ostertagia delicata* Trav. p. 347, *uncinata* in *Cabassus uncinatus* p. 348,

variabilis p. 349, *cameroni* p. 351 in *Dasympus novemcinctus*, *similis* in *Cabassus uncinatus* and *Dasympus novemcinctus* p. 350, **spp. n.** Brazil, TRAVASSOS Revist. Med.-Chir. Brasil. **43** 1935.

Epomidiostomum uncinatum (Lundahl) in ducks, BAYLIS Nematoda of India **1** 1936 p. 360 fig. 169.

Graphidioides mazzai **sp. n.** in stomach of rodent, *Galea leucoblephara* Argentina, LENT & FREITAS Revist. Med.-Cir. Brasil. Rio de Jan. **43** 1935 pp. 225-227 1 pl.

Haemonchus contortus (Rud.) p. 374 figs., *similis* Trav., *longistipes* Raill. & Hen. p. 378, BAYLIS Nematoda of India **1** 1936.

Heligmonella Monnig 1927 syn. of *Viannella* Trav., TEIXEIRA DE FREITAS & LENT Mem. Inst. Oswaldo Cruz Rio de J. **23** 1934 p. 583 append. i.

Longistriata brevispicula **sp. n.** in intestine of *Agouti paca*, Brazil, LENT & FREITAS Mem. Inst. Osw. Cruz. Rio de J. **31** 1936 pp. 357-359 2 pls.

Macieli **gen. n.** Trichostrongylidae, type *Cooperia macieli* Trav. 1915 p. 346, *chagasi* **sp. n.** in *Dasympus sexcinctus*, Brazil, p. 347, TRAVASSOS Revist. Med.-Chir. Brasil. **43** 1935.

Mecistocirrus digitatus (Linst.) in cattle, BAYLIS Nematoda of India **1** 1936 p. 382 fig. 180.

Minutostrongylus **gen. n.** Heligmosominae, *taurotragi* **sp. n.** in eland, *Taurotragus oryx*, S. Africa, LEROUX J. Helminth. London **14** 1936 pp. 73-76 5 figs.

Moennigia **gen. n.** Trichostrongylidae, *moennigi* **sp. n.** in intestine of *Dasympus novemcinctus*, Brazil, TRAVASSOS Revist. Med.-Chir. Brasil. **43** 1935 p. 354.

Molineus pardalis in *Felis pardalis* p. 31 figs. 10-14, *major* p. 32 figs. 15-18, *barbaris* p. 34 figs. 19, 20 in wood dog, *Tayra barbara*, **spp. n.** Trinidad, CAMERON Canad. J. Res. Ottawa D **14** 1936.—*M. patens* (Duj.) (? syn. *M. americanus* Sprehn.) in stoat and weasel, LEIPER J. Helminth. St. Albans **14** 1936 pp. 119-126 4 figs.

Nematodirus filicollis (Rud.) p. 380 figs., *mauritanicus* Maupas & Seurat p. 381, BAYLIS Nematoda of India **1** 1936.

Ornithostrongylus travassosi Maplest. in pigeon, *Chalcophaps indica*, BAYLIS Nematoda of India **1** 1936 p. 373.

Ostertagia tarandi **sp. n.** in reindeer, Norway, HELLESNES Norsk. Veter. Tidsskr. **47** 1935 pp. 117-137, 194-204.—*O. ostertagi* (Stiles) p. 366, *circumcincta* (Stadelmann) p. 367, *marshalli* Ransom p. 369, *occidentalis* Ransom (syn. *skrjabini* Kamensky) p. 370, *mentulata* Raill. & Hen. p. 372, figs., BAYLIS Nematoda of India **1** 1936.

Oswaldocruzia mazzai **sp. n.** in intestine of *Bufo* **sp.**, Argentina, TRAVASSOS Revist. Med.-Chir. Brasil. **43** 1935 p. 344.—*O. waltoni* **sp. n.** in *Rana boreas* and *R. aurora*, California, INGLES Trans. Amer. Micr. Soc. Menasha **55** 1936 p. 88 pl. xviii.—*O. loveridgei* **sp. n.** in *Siaphos kilinensis*, Kenya, SANDGROUND Bull. Mus. Comp. Zool. Harvard **79** 1936 pp. 351-353 figs. 9-13.—*O. filiformis* (Goeze) in *Bufo melanostictus*, Nicobar Is., BAYLIS Nematoda of India **1** 1936 p. 384.

Paracooperia **gen. n.** Trichostrongylidae, type *Cooperia serrata* Mönnig, TRAVASSOS Revista Med.-Chir. Brasil. **43** 1935 p. 344.

Pintonema **gen. n.** *pinto* **sp. n.** in intestine of *Dasympus novemcinctus* and *D. sexcinctus* p. 357, *intrusa* p. 357, *pulchrum* p. 359, *pseudopulchrum* p. 359 in *D. novemcinctus*, **spp. n.** Brazil, TRAVASSOS Revist. Med. Chir. Brasil. **43** 1935.

Pseudamidostomum boulengeri Maplest. in teal, egret and duck, BAYLIS Nematoda of India **1** 1936 p. 359.

Pulchrostrongylus **gen. n.** Trichostrongylidae, *complexus* **sp. n.** in *Dasympus novemcinctus* and *D. sexcinctus*, Brazil, TRAVASSOS Revist. Med.-Chir. Brasil. **43** 1935 p. 354.

Schwartziella **gen. n.** Trichostrongylidae, type *Cooperia nodulosa* Schwartz, in ruminants, LEROUX J. Helminth. London **14** 1936 pp. 113-118.

Travassostrongylus orloffii in *Didelphys aurita*, *tertius* in *Metachirops opossum*, Brazil, **spp. n.**, TRAVASSOS Revist. Med.-Chir. Brasil. **43** 1935 p. 352.

Trichostrongylus nagaty **sp. n.** in caeca and intestine of *Rhynchotus rufescens* [Phasianidae], Brazil, FREITAS & LENT Revist. Med.-Cir. Brasil,

Rio de Jan. 43 1935 pp. 180-181 1 fig.—*T. colubriformis* (Giles) p. 362, *probolurus* (Raill.) p. 364, *pigmentatus* (Linst.) p. 365 figs., BAYLIS Nematoda of India 1 1936.

Viannaia viannai Trav. p. 253 hamata p. 255 figs., bursal anomalies, FREITAS & LENT Revist. Med.-Cir. Rio de Jan. 43 1935.

Viannella Travassosi sp. n. in intestine of *Cavia aperea*, Brazil, PINTO O Campo Rio de Jan. 1935 p. 39.

METASTRONGYLOIDEA.

Dictyocaulus viviparus (Bloch) (syn. *D. hadweni* Chapin) in cattle etc., DIKMANS J. Wash. Acad. Sc. 26 1936 pp. 298-303 1 fig.—*D. filaria* (Rud.) p. 389 fig., *unequalis* Bhalerao, *viviparus* (Bloch) p. 391, *arnfieldi* (Cobbold) p. 392, BAYLIS Nematoda of India 1 1936.

Halocercus delphini Baylis & Daub. p. 154 figs. 1, 2, *lagenorhynchi* Baylis & Daub. p. 154 figs. 3, 4 *inflexocaudatus* (V. Sieb.) p. 155 fig. 5, *gymnurus* (Rud.) p. 155, *pingi* Wu p. 156 figs. 6, 7, *brasiliensis* Lins pp. 156-158 figs. 8-17 in bronchi of cetaceans, LINS DE ALMEIDA Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 10 1933.

Metastrongylus elongatus (Duj.) in pig, BAYLIS Nematoda of India 1 1936 p. 398 fig. 181.

Ostlerus ostleri (Cobbold) in dog, BAYLIS Nematoda of India 1 1936 p. 396.

Otostrongylus circumlitus in lungs of seal, *Phoca vitulina*, KAHL Zool. Garten Leipzig 8 1936 pp. 295-297 3 figs.

Pneumoststrongylus alpenae sp. n. in lungs of deer, *Odocoileus virginianus*, Michigan, DIKMANS Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 142-144 pl. xxvi.

Protostrongylidae Leiper 1926 syn. of Metastrongylidae, BAYLIS Nematoda of India 1 1936 p. 386.

Protostrongylus coburni sp. n. in lungs of deer, *Odocoileus virginianus*, Michigan, DIKMANS Trans. Amer. Micr. Soc. Menasha 54 1935 p. 138 pl. xxv.—*P. rufescens* (Leuck.) in sheep, &c., BAYLIS Nematoda of India 1 1936 p. 394.

Varestrongylus pneumonicus Bhalerao in ibex and sheep, BAYLIS Nematoda of India 1 1936 p. 393.

Eustrongylidata.

(s. Diectophymata).

EUSTRONGYLIDOIDEA.

Eustrongylides sp., larval stage in trout, adults in shags, Lake Ellesmere, New Zealand, STOKELL Trans. Proc. R. Soc. N.Z. 66 1936 pp. 85-89 figs. 3, 4.

Spirurata, Filariata.

SPIRUROIDEA.

Abreviata (*Polydelphyoptera*) *poicilometra* sp. n. in *Cercopithecus mitis kibonotensis*, Kenya, SANDGROUND Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 347-350 fig. 6-8.

Cystidicola walkeri Ekb. in swim-bladder of coho, *Oncorhynchus kisutch*, p. 8 figs. 1-6, *stigmatura* (Leidy) in *Coregonus clupeaformis* and *Leucichthys arctedi* p. 10 figs. 7-10, Pacific coast, EKBAUM Canad. Field Nat. Ottawa 50 1936.

Echinuria uncinata (Rud.) in tumours in proventriculus and oesophagus of wild duck, Afghanistan, AKHTAR Rec. Ind. Mus. Calcutta 38 1936 pp. 373-375 4 figs.

Habronema manidis sp. n. in pangolin, *Manis gigantea*, Belgian Congo, VUYLSTEKE Rev. Zool. Bot. Afr. Tervueren 29 1936 pp. 13-16 7 figs.

Hadjelia curvata sp. n. in mucosa of proventriculus and corneous tunic of gizzard of *Nothura maculosa*, Brazil, VAZ & PEREIRA Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 37-40 pl. ix figs. 11-14.

Hedruris spinigera in trout, Lake Ellesmere, N. Zealand, STOKELL Trans. Proc. R. Soc. N.Z. 66 1936 pp. 82-85 figs. 1, 2.

Parabronema okapi sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 1936 p. 949.

Paraspirura gen. n. Spiruridae, *mabuyae* sp. n. in stomach of *Mabuya brevicollis*, E. Africa, SANDGROUND Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 342-346 figs. 1-5.

Physaloptera bispiculata sp. n. in stomach of wild rat, *Nectomys squamipes* Brazil, VAZ & PEREIRA Trans. Amer. Micr. Soc. Menasha **54** 1935 p. 36 pl. ix figs. 1-7.—*P. felidis* sp. n. in stomach of cat, Kansas, ACKERT Trans. Amer. Micr. Soc. **55** 1936 pp. 250-254 pl. xxxi.—*P. praeputialis* Linst. in stomach of *Felis catus dom.*, Brazil, PINTO O Campo Rio de Jan. **1936** pp. 45-47 4 figs.

Procamallanus wrighti in *Astyanax* sp., *Hoplias malabaricus*, *Leporinus* sp. and *Pygocentrus* sp. p. 58 figs. 17-20, *barroslimai* in "sardinha" p. 60 figs. 22, 23, *fariasi* in *Leporinus* sp. and *Pygocentrus* sp. p. 61 figs. 24, 25, Brazil, PEREIRA Arch. Inst. Biol. São Paulo **6** 1935.

Pseudocystidicola Layman 1933 syn. of *Metabronema* Yorke & Maplestone, DOLLFUS Ann. Parasit. Paris **14** 1936 p. 312.

Rhabdochona kidderi sp. n. in catfish, *Rhamdia guatemalensis*, Yucatan, PEARSE Publ. Carnegie Inst. Washington **457** 1936 pp. 49-50 figs. 6-11.

Rictularia halli sp. n. in chipmunk, *Eutamias striatus*, Michigan, SANDGROUND Trans. Amer. Micr. Soc. Menasha **54** 1935 pp. 159-166 pl. xxviii figs. 5-9.—*R. tani* Hoeppli in rats, Canton, CHEN Lingnan Sc. J. **15** 1936 pp. 283-286 fig. 1.

Spiroxys contortus (Rud.), morphology HEDRICK Trans. Amer. Micr. Soc. Menasha **54** 1935 pp. 307-335 pls. xlix, 1.

Spirura michiganensis sp. n. in chipmunk, *Eutamias striatus*, Michigan, SANDGROUND Trans. Amer. Micr. Soc. Menasha **54** 1935 pp. 155-159 pl. xxviii figs. 1-4.

Tetrameres crami Swales in ducks, Canada, SWALES Canad. J. Res. Ottawa **D 14** 1936 pp. 151-164 pl. x, J. Parasit. Urbana **22** 1936 p. 528.

Thelazia californiensis Price in eye of man, California, KOFOID & WILLIAMS Arch. Ophthalm. **13** 1935 pp. 176-180 5 figs.

FILARIOIDEA.

Contortospiculum filiformis sp. n. in nandu, *Rhea americana*, KREIS Rev. suisse Zool. Geneva **43** 1936 pp. 647-652 1 fig.

Dirofilaria indica sp. n. in heart of dog, India, CHAKRAVARTY Z. Parasitenk. Berlin **9** 1936 pp. 57-60 2 figs.

Elaeophora poelli Raill. & Henry in African buffalo, taxonomic notes, SANDGROUND J. Parasit. Urbana **22** 1936 p. 528.

Loa sp. (? *loa*) in monkeys, Belgian Congo, SANDGROUND Ann. Soc. Belge Méd. Trop. Brussels **16** 1936 pp. 273-278.

Macdonaldius carinii sp. n. in heart of *Elapomorphus tricolor*, Brazil, VAZ & PEREIRA Trans. Amer. Micr. Soc. Menasha **54** 1935 p. 37 pl. ix figs. 8-10.

Microfilaria columbae sp. n. in blood of pigeon, *Columba intermedia* India, RAY & DASGUPTA Ann. Parasit. Paris **14** 1936 pp. 256-260 pls. vi, vii.—*M. panamensis* p. 394, *obtusum* p. 396 in blood of *Cebus capucinus*, and *Saimiri oerstedii* spp. n. Panama, MCCOY Amer. J. Trop. Med. Baltimore **16** 1936.

Monopetalonema alcedinis (Rud.) pp. 752-754 3 pls., *arthricola* (Skrj.), *angustispiculum* (Sandground) p. 754, FREITAS & LENT Mem. Inst. Oswaldo Cruz Rio de Jan. **31** 1936.

Onchocerca bambusicolae assigned to *Paronchocerca*, PETERS J. Helminth. London **14** 1936 p. 7.

Ornithosetaria Sandground 1933 syn. of *Monopetalonema* p. 752, *angustispiculum* Sandground assigned to *Monopetalonema* p. 754, FREITAS & LENT Mem. Inst. Oswaldo Cruz Rio de Jan. **31** 1936.

Parlitomosa gen. n. Filariinae, *zakii* sp. n. in pectoral muscles of a lion tamarin, *Leontocebus rosalia*, Zool. Gardens, Cairo (from Brazil), NAGATY J. Egypt. Med. Ass. Cairo **18** 1935 pp. 483-496 4 figs.

Paronchocerca gen. n. Onchocercinae, *ciconiarum* sp. n. in heart and pulmonary artery of saddle-billed stork, *Ephippiorhynchus senegalensis*, W. Africa, PETERS J. Helminth. London **14** 1936 pp. 1-10 7 figs.

Politospiculum Skrj. 1916 syn. of *Monopetalonema* p. 752, *arthricola* Skrj. assigned to *Monopetalonema* p. 754, FREITAS & LENT Mem. Inst. Oswaldo Cruz **31** 1936.

Protofilaria Sandground 1935 nec Chandler renamed *Pseudofilaria*, SANDGROUND Rev. Zool. Bot. afr. Tervueren 28 1936 p. 164.

Pseudofilaria gen. nom. n. pro *Protofilaria* Sandg. nec Chandler, SANDGROUND Rev. Zool. Bot. afr. Tervueren 28 1936 p. 164.

Setaria sandersoni sp. n. in peritoneal cavity of duiker, *Philantomba melano-rhea*, Cameroons, BAYLIS Ann. Mag. Nat. Hist. London (10) 17 1936 pp. 267-271 figs. 8-11.—*S. bidentata* (Molin) in omentum of deer, *Mazama simplicicornis*, Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936 pp. 1-3 figs. 1-6.—*S. hornbyi* (Boul.) p. 423, *labiato-papillosa* (Aless.), *thwaiti* (Mönnig) p. 425, *rodhaini* sp. n. in peritoneal cavity of *Potamochoerus porcus* pp. 425-430 figs., Belgian Congo, VAN DEN BERGHE & VUYLSTEKE Rev. Zool. Bot. Afric. Tervueren 28 1936.—*S. labiato-papillosa* (Aless.) syn. of *S. cervi* (Rud.), BAYLIS Ann. Trop. Med. Parasit. Liverpool 30 1936 pp. 293-298.

Tetracheilonematinae subf. n. of Filariidae, for *Tetracheilonema* and *Squamo-filaria*, SKRJABIN & SCHIKHOBALOVA Ann. Parasit. Paris 14 1936 p. 64.

Tetrapetalonema atelensis in spider monkeys, *Atelus geoffroyi* and *A. dariensis*, p. 393, *parvum* in *Cebus capucinus imitator*, *C. c. capucinus* and *Saimiri o. orstedii* pp. 393-394 spp. n. Panama, MCCOY Amer. J. Trop. Med. Baltimore 16 1936.

DRACUNCULOIDEA.

Philonema agubernaculum sp. n. in body cavity of trout, *Prospium williamsoni*, *Salvelinus fontinalis* and *Salmo shasta*, Wyoming, SIMON & SIMON Parasitology Cambridge 28 1936 pp. 440-442 5 figs.

Capillariata.

CAPILLARIOIDEA.

Capillaria spp., anatomical and critical notes, OROSZ Denkschr. Akad. Wissensch. 19 1931 pp. 189-338 15 pls.—*C. perforans* Kotlán & Orosz in turkey, Hungary, OROSZ Közlem. Őrszeh. Körtan Kőrböl. 25 1932 pp. 29-52 [n.v.].—*C. aramidesi* sp. n.

in caecum of *Aramides cayanae*, Brazil, TEIXEIRA DE FREITAS & LINS DE ALMEIDA Arch. Escol. Sup. Agric. Med. Vet. Rio de Jan. 20 1933 pp. 169-170 pl. xli.—*C. aërophila* (Crepl.) in lungs of fox, CHRISTENSEN Trans. Amer. Micr. Soc. Menasha 54 1935 pp. 145-154 pl. xxvii.—*C. auritae* Trav. in *Didelphis aurita*, male, pp. 109-111, *linsi* in *Galictis vittata* p. 301, *pereirai* in *Molossidae* p. 302 spp. n. Brazil, FREITAS & LENT Revist. Med.-Cir. Brasil. Rio de Jan. 43 1935.—*C. anatis* (Schränk) p. 319, *longicollis* (Rud.) p. 322, *columbae* (Rud.) p. 326, *contorta* (Crepl.) p. 330, *annulata* (Molin) p. 331, *collaris* (Linst.) p. 332, *perforans* Kotl. & Orosz p. 337, *bursata* Freitas & Lins de Almeida p. 338, *uropapillata* Freitas & Lins de Almeida p. 339, *cairinae* Freitas & Lins de Almeida p. 340, in domesticated birds, FREITAS & LINS DE ALMEIDA Revist. Dep. Nac. Prod. Anim. Rio 2 1935.—*C. okapi* sp. n. in okapi, LEIPER Proc. Zool. Soc. London 1935 1936 p. 949.—*C. annulata* (Molin) pp. 4-7 fig. 1, *contorta* (Creplin) p. 8-19 figs. 2-6, *corricula* (Wassilkowa) p. 19, *cylindrica* (Eberth) p. 20 fig. 7, *dispar* (Duj.) p. 20 figs. 8, 9, *laricola* (Wassilkowa) p. 21, *lophortygis* Baylis [? = *contorta*] p. 21 fig. 10, *obtusiuscula* (Rud.) p. 22 fig. 11, *perforans* Kotlán & Orosz p. 22, *triloba* (Linst.) p. 23 fig. 12 in oesophagus and crop of birds, CRAM Tech. Bull. U.S. Dept. Agric. 516 1936.

Capillariinae, parasitic in mammals, synopsis, FREITAS & LENT Mem. Inst. Osw. Cruz. Rio de Jan. 31 1936 pp. 85-160.

Eucoleus Duj., question of identity with *Capillaria* Zed., TEIXEIRA DE FREITAS & LENT Revista Med.-Cir. Brasil Rio 43 1935 pp. 110-111.

Hepaticola bakeri Mueller & Van Cleave 1932 referred to *Capillaria*, FREITAS & LENT Mem. Inst. Oswaldo Cruz Rio 30 1935 p. 256.

Trichocephalus rhombomidis sp. n. in *Rhombomys opimus* Central Asia, SCHULZ & LANDA Rev. Microbiol. Saratov 13 1934 p. 305.

Trichosomoides crassicauda Bellingh. in rats, Madrid, GOYANES Med. Paisés Calid. Madrid 9 1936 pp. 305-307.

Trichuris cervicaprae sp. n. in intestine of *Antilope cervicapra*, Basel Zool. Gard. KREIS Verh. naturf. Ges. Basel 46 1935 pp. 59-65 2 figs.

NEMATOMORPHA.

GORDIOIDEA.

Gordius sp., "Challenger" expedition, identified as *Nectonema agile* Verrill, PEREZ Bull. Soc. Zool. Fr. 60 1936 p. 467.—*G. aquaticus* L. p. 26, *setiger* Schneider p. 27, *albopunctatus* Müller p. 28, *mülleri* Heinze p. 29 *stellatus* Linst. p. 30 figs., Brandenburg, HEINZE Märk. Tierw. Berlin 2 1936.

NECTONEMATOIDEA.

Nectonema agile Verr., anatomy and histology of parasitic stage, FEYEL Arch. anat. micr. Paris 32 1936 pp. 197-234 25 figs.

ACANTHOCEPHALIDA.

Acanthocephalus bufonis (Shipley) in *Bufo melanostictus*, Tonkin, JOYEUX & BAER Ann. Mus. Hist. Nat. Marseille 27 1935 ii pp. 10-14 figs. 6-9.—*A. kashmirensis* sp. n. in *Schizopygopsis stoliczkae*, India, DATTA Rec. Ind. Mus. Calcutta 38 1936 pp. 213-216 2 figs.

Echinorhynchus sp. in intestine of *Plecoglossus altivelis*, Japan, KATAOKA & MOMMA Bull. Jap. Soc. scient. Fisheries 3 1934 p. 63 fig. 2.—*E. dirus* assigned to *Acanthocephalus*, VAN CLEAVE & TOWNSEND Proc. Helminth. Soc. Washington 3 1936 p. 63.

Empodius Travassos 1916 syn. of *Mediorhynchus* Van Cleave, DOLLFUS Mem. Mus. Hist. nat. Belg. (2) 3 1936 p. 437.

Euacanthocephala ord. n. with two new suborders Gyracanthocephala and Neoacanthocephala, VAN CLEAVE J. Parasit. Urbana 22 1936 p. 205.

Eosentis devdevi in *Schizothorax planifrons* p. 223 fig. 6, *yalei* in *S. esocinus* p. 224, India, DATTA Rec. Ind. Mus. Calcutta 38 1936.

Filisoma japonicum sp. n. in intestine of *Hexagrammos otakii*, Japan, FUKUI & MORISITA Zool. Mag. Tokyo 48 1936 p. 759 figs. 1, 2.

Gyracanthocephala subord. n. of Euacanthocephala, to comprise Pallisentidae and Quadrigyridae, VAN CLEAVE J. Parasit. Urbana 22 1936 p. 205.

Gigantorhynchus empodius Skrj. assigned to *Mediorhynchus* Van Cleave, DOLLFUS Mem. Mus. Hist. nat. Belg. (2) 3 1936 p. 437.

Mediorhynchus empodius (Skrj.) in *Choriotis arabs*, DOLLFUS Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 421-443 11 figs.

Micracanthorhynchina gen. nom. n. pro *Micracanthorhynchus* Harada 1935, preocc., STRAND Folia zool. Riga 9 1936 p. 167.

Micracanthorhynchus Harada 1935 renamed *Micracanthorhynchina*, STRAND l.c.

Neoacanthocephala subord. n. of Euacanthocephala, to comprise Neoechinorhynchidae and Hebesomidae, VAN CLEAVE J. Parasit. Urbana 22 1936 p. 305.

Neoechinorhynchus venustus p. 22, *cristatus* p. 32, spp. n. *crassus* van Cl. p. 36 figs. in *Catostomus macrocheilus* North America, LYNCH Trans. Amer. Micr. Soc. Menasha 55 1936.—*N. rutili* (Müller) in *Nemachilus* spp. p. 217 fig. 3, *hutchinsoni* sp. n. in *Diptychus maculatus* p. 219 fig. 4, India, DATTA Rec. Ind. Mus. Calcutta 38 1936

Neosentis v. Cleave syn. of *Pallisentis* v. Cl., SUBRAHMANNIAN Rec. Ind. Mus. Calcutta 38 1936 p. 315.

Pallisentis nagpurensis Bhalerao in fish, *Ophiocephalus striatus*, Burma, SUBRAHMANNIAN Rec. Ind. Mus. Calcutta 38 1936 p. 311-315 4 figs.

Paridosentis sp. in *Procyon concolor*, Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936 p. 36.

Polymorphus paucihamatus sp. n. in polar gull, *Larus glaucoides*, HEINZE Zool. Anz. Leipzig 115 1936 pp. 139-142 3 figs.

Porrorchis ogatai sp. n. in *Merula pallida*, Japan, FUKUI & MORISITA Zool. Mag. Tokyo 48 1936 p. 759 figs. 3, 4.

Prosthorrhynchus urichi sp. n. 1 intestine of raccoon, *Procyon cancrivora*, Trinidad, CAMERON Canad. J. Res. Ottawa D 14 1936 p. 35.

Tenuisentidae fam. n. of *Eoacanthocephala*, type *Tenuisentis* gen. n., VAN CLEAVE Parasitology Cambridge 28 1936 p. 450.

Tenuisentis gen. n. *Tenuisentidae*, type *Rhadinorhynchus niloticus* Meyer, VAN CLEAVE Parasitology Cambridge 28 1936 pp. 446-450 4 figs.

CHAETOGNATHA, GASTRO- TRICHA, ROTIFERA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Text-books, Monographs.—Text-book of invertebrates, PRATT, 944; Gastrotricha and Kinorhyncha in Bronn's Tierreich, REMANE, 964; Chaetognatha and Rotifera in Regan. Natural History, ROBSON, 981.

Technique.—Method of mounting rotifers in glycerin, MYERS, 819; Culture method for *Lecane inermis*, SZABÓ, 1188.

Review.—Aspects of zooplankton research, RUSSELL, 1005.

Nomenclature.—Nomenclature of *Cephalodella catellina* group, WISZNIEWSKI, 1383.

STRUCTURE.

Morphology.—Morphology of *Trochosphaera*, VALKANOV, 1278.

Mode of fixation.—Fixation of sessile rotifers, EDMONDSON, 315.

REPRODUCTION AND DEVELOPMENT.

Development.—Comparative developmental history of Rotifera and Gastrotricha, KORSCHULT, 613.

Metagenesis.—Experimental investigations of metagenesis in Rotifers, BUCHNER, 143, 144.

ETHOLOGY.

Bionomics.—*Sagitta* spp. as indicators of water movements in English Channel, RUSSELL, 1006; Biology of Rotifers, BUKOVINA, RODEWALD, 984, 985; Notes on biology of *Lecane inermis*, SZABÓ, 1188; Rotifera and Gastrotricha in rice fields, PASHITNOWA, 888.

Ecology.—Ecology of psammicolous Rotifera and Gastrotricha, Wisconsin, PENNAK, 910; Ecological distribution of Rotifera, BUKOVINA, RODEWALD, 984; Purification of streams from plankton Rotifers, SEELE, 1070; Limnological notes on mountain lake Rotifers, DAVOS, SUCHLANDT & SCHMASSMANN, 1175; Ecological notes on psammophilous rotifers, Lake Ohrid, Poland, WISZNIEWSKI, 1382.

GEOGRAPHICAL DISTRIBUTION.

General.—Faunistic list of cavernicolous Rotifers, WOLF, 1385.

Europe.—Occurrence of Chaetognatha, ROSCOFF, NOUVEL, 839; Gastrotricha in freshwater fauna Lithuania, SIVICKIS, 1084; Rotifers in cavernicolous fauna, Westphalia, GRIEPENBERG-SCHER, 436; Notes on Rotifer fauna of Germany, HAUER, 464; New Rotifer, Germany, HAUER, 465; Rotifers from the nature conservation area, Baden, HAUER, 467; Plankton Rotifers in German streams, SEELE, 1070; Rotifers in cavernous aquatic fauna of Glatzer Schneeberg, STAMMER, 1129; New Rotifers in fauna of Germany, WULFERT, 1396; Rotifers in the fauna of Gerzensee, Switzerland, BÜREN, 145; New pelagic *Collotheca* sp., Lake Balaton, Hungary, VARGA, 1294; Characteristics of plankton Rotifers, Lake Ohrida, Yugoslavia, KOZMIŃSKI, 625; Notes on Rotifer fauna, Kharkov, Russia, PURACHOV, 951; Rotifers in Lake Issyk-kul, Russia, RYLOV, 1008; Rotifera in freshwater fauna, Lithuania, SIVICKIS, 1084; Rotifer fauna of Lapland, VARGA, 1295; Notes on Rotifers, Warsaw, WISZNIEWSKI, 1384; Rotifer fauna of upland moors, Bukovina, Roumania, RODEWALD, 983; Rotifer fauna of Bukovina, RODEWALD, 984; Spring Rotifer fauna of Bessarabia, RODEWALD, 985; Rotifera in brackish water fauna, Bulgaria, VALKANOV, 1276, 1279.

Asia.—*Sagittae* in Bombay harbour, LELE & GAE, 664; New Rotifers from India, HAUER, 466; Lake plankton rotifers, Siberia, LANG, 648; List of plankton rotifers, Lake Taraika, Sakhalin, UENO, 1260.

North America.—Gastrotricha indigenous to New Hampshire, PACKARD, 875; Rotifers from National Park, Quebec, MYERS, 818; Deepwater plankton Rotifers, Lake Michigan, AHLSTROM, 11; Rotifers from Arizona, EDMONDSON, 313; New Rotifers from New England and New Brunswick, EDMONDSON, 314; New psammolittoral Rotifers, New Jersey lakes, MYERS, 817; New Rotifers, North America, MYERS, 820; List of rotifers, Actopan, Mexico, BISHOP, 122; Rotifer fauna of Mexico, CARLIN-NILSON, 175.

SYSTEMATIC INDEX.

CHAETOGNATHA.

Sagitta gardineri Donc. p. 105 fig. 1, *bedoti* Blanch. p. 107 fig. 2, *bombayensis* sp. n. p. 110 fig. 3, Bombay harbour, LELE & GAE J. Univ. Bombay 4 1936.

GASTROTRICHA.

Chitonodytes subg. n. of *Dasydytes* Gosse, REMANE Bronns Tierreich Leipzig 4 ii 1 (2) p. 205.

Haltidytes subg. n. of *Dasydytes* type *D. festinans* Voigt, REMANE op. cit. p. 206.

Lepidodermella squamata (Duj.) New Hampshire, structure and bionomics, PACKARD Trans. Amer. Micr. Soc. Menasha 55 1936 p. 423 1 fig.

ROTIFERA.

NOTOMMATOIDEA.

Ascomorpha saltans Bartsch, Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe 1 1936 p. 136 pl. ii fig. 18.

Aspelta egregia sp. n. New Jersey, MYERS Amer. Mus. Nov. 830 1936 p. 8 figs. 6, 7.

Cephalodella spp., nomenclature and synonymy, WISZNIEWSKI Zool. Polon. Lwow 1 1936 pp. 171-178 3 figs.—*C. decidua* sp. n. Roumania, RODEWALD Bul. Fac. Științ. Cernăuți 8 1934 pp. 210-211 fig. 11.—*C. gusueaci* p. 22, fig. 4, *botezati* p. 23 fig. 5 spp. n. *panarieta* Myers p. 23 fig. 6, Bessarabia, RODEWALD Bull. Mus. nat. Kichineff 6 1955.—*C. forficata* var. *macrura* var. n. pp. 179-180 fig. 1, *gibba* Ehrbg. p. 180 fig. 2, Warsaw, WISZNIEWSKI Arch. Hydrobiol. Suwalki 10 1936.

Dicranella gen. n. Dicranophoridae, *gracilis* sp. n. New Jersey, MYERS Amer. Mus. Nov. 830 1936 p. 7 4 figs.

Dicranophorus articulatus sp. n. Roumania, RODEWALD Bul. Fac. Științ. Cernăuți 8 1934 p. 213 fig. 12; *D. lepsi* sp. n. Bessarabia, RODEWALD Bull. Mus. nat. Kichineff 6 1935 p. 23 fig. 7.—*D. remanei* sp. n. p. 405, *robustus europaeus* var. n. p. 407 figs., Germany, WULFERT Arch. Hydrobiol. Stuttgart 30 1936.—*D. uncinatus* (Milne), Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe 1 1936 p. 138 fig. 15.

Diurella bidens var. *astriata* var. n. p. 216 fig. 13, *parva* sp. n. p. 217 fig. 14, Roumania, RODEWALD Bul. Fac. Științ. Cernăuți 8 1934.—*D. vernalis* sp. n. Germany, HAUER Zool. Anz. Leipzig 115 1936 pp. 334-336 1 fig.—*D. porcellus* (Gosse) p. 140 fig. 9, *musculus* sp. n. p. 141 fig. 10, Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe 1 1936.—*D. insolens* p. 12, *edmondsoni* p. 14, *tortuosa* p. 15 figs. spp. n. New Jersey, MYERS Amer. Mus. Nov. 830 1936.

Elosa worrallii Lord, Warsaw, WISZNIEWSKI Arch. Hydrobiol. Suwalki 10 1936 p. 182 fig. 3.

Encentrum insolitum sp. n. New Jersey, MYERS Amer. Mus. Nov. 830 1936 p. 10 figs. 4, 8.—*E. salsum* sp. n. New Jersey, MYERS Trans. Amer. Micr. Soc. Menasha 55 1936 p. 429 figs. 5-7.—*E. sutor* sp. n. Warsaw, WISZNIEWSKI Arch. Hydrobiol. Suwalki 10 1936 pp. 182-183 fig. 4.—*E. pachypus* p. 409, *spatiatum* p. 410, *mucronatum* p. 411, *voigti*, *gibbosum* p. 413, *eurycephalum* p. 414, *putorius* p. 416, *orthodactylum*

p. 419, *lutra* p. 420, *gulo* p. 422, *incisum* p. 423, *arvicola* p. 425, *lupus* p. 426, *tyrphus* p. 427, *glaucum* p. 428, *acrodon* p. 429, *semiplicatum* p. 430, *myersi* p. 434, *oxyodon* p. 435 figs. *spp.* n. Germany, WULFERT Arch. Hydrobiol. Stuttgart **30** 1936.

Myersinella gen. nom. n. pro *Myersina* Wiszn., preocc., WISNIEWSKI Zool. Polon. Lwow **1** 1936 p. 179.

Notommata carpatica sp. n. Roumania, RODEWALD Bul. Fac. Științ. Cernăuți **8** 1934 p. 209 fig. 10.—*N. doneta* Harr. & Myers, Bessarabia, RODEWALD Bull. Mus. nat. Kichineff **6** 1935 p. 21 fig. 1.—*N. diasema* sp. n. New Jersey, MYERS Amer. Mus. Nov. **830** 1936 p. 11 3 figs.—*N. cf. glyphura* Wulfert, Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 145 fig. 11.

Pleurotrocha constricta Ehrbg., Bessarabia, RODEWALD Bull. Mus. nat. Kichineff **6** 1935 p. 21 fig. 2.—*P. robusta* (Glascott) Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 145 fig. 20.—*P. atlantica* sp. n. New Jersey, MYERS Trans. Amer. Micr. Soc. Menasha **55** 1936 p. 428 figs. 1-4.

Trichocerca falx p. 218, *mollis* p. 219, *murchiearum*, *rossae* p. 220 figs., *spp.* n., New England, EDMONDSON Trans. Amer. Micr. Soc. **55** 1936.

BRACHIONOIDEA.

Brachionus leydigii Cohn p. 26 fig. 8, *sericus* Rouss. p. 26 fig. 9 Bessarabia, RODEWALD Bull. Mus. nat. Kichineff **6** 1935.—*B. angularis* Gosse p. 175 fig. 1, *angularis caudatus* (Barr. & Dad.) p. 175 figs. 2-5, *havanaensis* Rous. p. 176 figs., 6, 7, *westphali* p. 178 figs. 8-10, Mexico, CARLIN-NILSON K. fisiogr. Sällsk. Lund Förh. **5** 1936.

Bryceella voigtii sp. n. Roumania, RODEWALD Bul. Fac. Științ. Cernăuți **8** 1934 pp. 84-85 fig. 3, p. 207 fig. 9.

Colurella obtusa (Gosse), Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 137 fig. 8.

Dapidia calpidia Myers, Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 137 fig. 4.

Dinocharis intermedia varr. *aspinosa*, *longispina* pp. 82-83 figs. 1, 2, p. 224

figs. 16, 17, *tetractis* var. *caudata* p. 222 fig. 15, varr. n. Roumania, RODEWALD Bul. Fac. Științ. Cernăuți **8** 1934.

Dipleuchlanis paludosa sp. n. Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 139 fig. 12.

Euchlanis arenosa sp. n. New Jersey, MYERS Amer. Mus. Nov. **830** 1936 p. 16 3 figs.—*E. pellucida* Harring, Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 142 fig. 3.

Keratella serrulata varr. *aspinosa*, *ehrenbergi* varr. n. New England, EDMONDSON Trans. Amer. Micr. Soc. **55** 1936 p. 216 figs. 1, 2.

Lecane inquieta, *tenua* *spp.* n. New Jersey, MYERS Amer. Mus. Nov. **830** 1936 p. 18 figs. 21, 22.—*L. plesia* sp. n. New Jersey, MYERS Trans. Amer. Micr. Soc. Menasha **55** 1936 p. 430 fig. 8.—*L. fusilis* sp. n. Quebec, MYERS Canad. Field Nat. Ottawa **50** 1936 p. 83 fig. 1.—*L. flabellata*, *tabutifera* *spp.* n. New England, EDMONDSON Trans. Amer. Micr. Soc. **55** 1936 p. 218 figs.—*L. sola* sp. n. India, HAUER Zool. Anz. Leipzig **116** 1936 pp. 79-80 fig. 3.—*L. pumila* (Rousselet), Germany, HAUER Zool. Anz. Leipzig **113** 1936 pp. 154-157 3 figs.—*L. curvicornis* (Murray), Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 142, Mexico, CARLIN-NILSON K. fisiogr. Sällsk. Lund Förh. **5** 1936 p. 179 fig. 13.

Lepadella evaginata sp. n. Roumania, RODEWALD Bul. Fac. Științ. Cernăuți **8** 1934 p. 225.—*L. mariae* sp. n. Bessarabia, RODEWALD Bull. Mus. nat. Kichineff **6** 1935 p. 27 fig. 11.—*L. latusinus* (Hilgendorf) p. 180 fig. 14, *patella* (Müll.) p. 180 fig. 15, Mexico, CARLIN-NILSON K. fisiogr. Sällsk. Lund Förh. **5** 1936.—*L. canadaensis* sp. n. Quebec, MYERS Canad. Field Nat. Ottawa **50** 1936 p. 84 fig. 2.—*L. quadricarinata* (Stenroos) p. 143 fig. 6, *similis* Luchs p. 144 fig. 5, Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936.

Lophochoris hutchinsoni sp. n. Arizona, EDMONDSON Trans. Amer. Micr. Soc. Menasha **54** 1935 p. 304 fig. 1.—*L. lepadelloides* sp. n. Bessarabia, RODEWALD Bull. Mus. nat. Kichineff **6** 1935 p. 26 fig. 10.

Monostyla ivli sp. n. Lake Ohrid, Poland, WISZNIEWSKI Verh. Verein. Limnol. **7** 1935 p. 243 fig. 2.—*M. mitella* sp. n. New Jersey, MYERS Amer. Mus. Nov. **830** 1936 pp. 19–20 figs. 23, 24.—*M. bulla* f. *diabolica* f. n p. 77 fig. 1, *conspicua* sp. n. p. 78 fig. 2, India, HAUER Zool. Anz. Leipzig **116** 1936.—*M. perpusilla* Hauer, Warsaw, WISZNIEWSKI Arch. Hydrobiol. Ichthyol. Suwalki **10** 1936 p. 184 fig. 5.

Mytilina bisulcata (Luchs), Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 144 fig. 17.

Notholca quadraspinata sp. n. Maine and British Columbia, MYERS Trans. Amer. Micr. Soc. Menasha **55** 1936 p. 432 fig. 9.

Paracolurella gen. n. int. bet. *Colurella* and *Mytilina*, type *Colurella aemula* Myers, MYERS Amer. Mus. Nov. **830** 1936 p. 22.

Proales micropus Gosse, Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 p. 204 fig. 6.

Proalinopsis lobatus sp. n. Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 pp. 205–206 figs. 7, 8.

Squatinella cf. *tridentata* (Fres.) Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936 p. 146 fig. 14.

Xenolepadella Haueri sp. n. Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 p. 225 fig. 19.

FILINIOIDEA.

Tetramastix opoliensis var. *brevispina* Ahlstrom, Mexico, CARLIN-NILSON K. fisiogr. Sällsk. Lund Förh. **5** 1936 p. 184 fig. 20.

TESTUDINELLOIDEA.

Testudinella caeca (Parsons) p. 182 fig. 17, *patina* (Hermann) p. 184 fig. 18, var. *trilobata* (And. & Sheph.) p. 184 fig. 19, Mexico, CARLIN-NILSON K. fisiogr. Sällsk. Lund Förh. **5** 1936.—*T. caeca* (Parsons) p. 147, *patina* (Hermann), *reflexa* (Gosse) p. 148 figs., Baden, HAUER Beitr. naturh. Forsch. Südwestdeutschl. Karlsruhe **1** 1936.

TROCHOSPHAEROIDEA.

Trochorphaera solstitialis Thorpe, anatomy and morphology, VALKANOV

Trav. Soc. Bulg. Sc. Nat. Sofia **17** 1936 pp. 177–195 12 figs.

COLLOTHECOIDEA.

Collothea stephanochaeta sp. n. New England, EDMONDSON Trans. Amer. Micr. Soc. **55** 1936 p. 222 figs.—*C. balatonica* sp. n. Lake Balaton, Hungary, VARGA Arb. Ung. Biol. Forsch. Inst. **8** 1936 pp. 178–182 2 figs.

PHILODINOIDEA.

Adineta elongata sp. n. Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 p. 203 fig. 5.

Habrotracha sp. Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 p. 200 fig. 2.

Mniobia sp., Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 p. 202 fig. 4.

Philodina tridentata sp. n. Roumania, RODEWALD Bul. Fac. Ştiinţ. Cernăuţi **8** 1934 p. 301 fig. 3.

ANNELIDA, GEPHYREA, CONODONTA.

SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

Text-Books.—Text-book of invertebrates, PRATT, **944**; Annelida in Regan, Natural History, ROBSON, **931**; Text-book of palaeontology (Annelida), HENNIG, **474**; Introduction to palaeontology (Annelida), SCHMIDT, **1046**; Invertebrate palaeontology (Annelida), TWENHOFEL & SCHROCK, **1257**.

Monographs.—Monograph on Hirudinea, AUTRUM, **41**; Memoir on *Pheretima*, BAHL, **58**; Monograph of Czechoslovakian Lumbricidae, ČERNOSVITOV, **180**.

Review.—Aspects of zooplankton research, RUSSELL, **1005**.

Museum collections.—Revision of Pinto's types of Brazilian leeches, CORDERO, 231; Polychaeta collected by the Spanish Institute of Oceanography, RIOJA, 969.

Expeditions.—Polychaeta collected in "Discovery" Expedition (Antarctic, Falkland Is., W. Africa, New Zealand), MONRO, 789; Oligochaeta of the Kama Volga expedition, SVETLOV, 1180.

Nomenclature, Taxonomy.—Changes in nomenclature of some Californian polychaetes, HARTMAN, 456; Taxonomy of Chinese aquatic Oligochaetes, CHEN, 200; Synonymy of *Branchiura sowerbyi*, MICHAELSEN, 768; Diagnosis of *Lumbriculus*, YAMAGUCHI, 1400; Synonymy of two species of leeches, Poland, PAWŁOWSKI, 900.

Economics.—Polychaete worms used as bait in Japan, OKUDA & ISHIKAWA, 857; *Hirudo medicinalis* in renewed therapeutic use, MÜNCHBERG, 816.

STRUCTURE.

General.—Comparative anatomy of *Eiseniella tetradra*, POOL, 939; Morphology of *Blanchardia bykowskii* and *Herpobdella* spp., PAWŁOWSKI, 899; Anatomy of *Dendrostoma signifer*, AWATI & PRADHAN, 44.

Integument.—Histology of integument of *Siphonosoma*, SHITAMORI, 1076.

Parapodia and proboscis.—Parapodial formation in *Nereis diversicolor*, FINKE, 349; Proboscis of *Thalassema bombayensis*, AWATI, 42.

Musculature.—Formation of epidermic musculature in Lumbricidae, KREUTZ, 631.

Nervous system.—Sympathetic nervous system of an annelid, CHEN, 198; Nerve cells in *Nephthys* and *Nereis*, DEHORNE, 274; Cytology of nerve elements in *Nereis*, DEHORNE, 276; "Gland-nerve cells" in brain of *Nereis*, SCHARER, 1035; Nerve cells in *Pheretima indica*, LEONARD, 669; Enteric nerve plexus of *Lumbricus*, ROGERS, 988; Ganglion cytology in *Hirudo*, ITO, 531; Cytology of nervous system in *Hirudo nipponica*, ITO, 532.

Circulatory system.—Structure of circulatory system in *Aeolosoma tenuidorsum*, BASKIN, 78; Structure of ventral vessel in *Haemopsis* and lacunae walls in *Haementeria*, SCRIBAN, 1067.

Alimentary system.—Anatomy of digestive tract in Nais, SZARSKI, 1191, 1192; Structure of intestine in leech *Theromyzon*, PAWŁOWSKI, 896; Structure of alimentary epithelium in *Proclepsis*, SCRIBAN, 1069; Alimentary canal of *Thalassema bombayensis*, AWATI & DESHPANDE, 43.

Excretory system.—Nephridiostomes in *Hirudinaria*, BHATIA, 119; Inter-nephridial organs of *Physcosoma*, DE LERMA, 280.

Genital system.—Structure of genital system of *Chaetogaster crystallinus*, BASKIN, 77; Histological structure of male genitalia and sperms of *Myzostomum*, JÄGERSTEN, 536.

Glands.—Prostomial glands of *Hirudinaria granulosa*, BHATIA, 117; Structure of chloragone cells in leeches, SCRIBAN, 1068; Calciferous glands of Lumbricidae and their vascularisation, KREUTZ, 631.

Histology.—Histology of mesodermic structures in *Sigalion*, *Nephthys* and *Sabellaria*, DEHORNE, 275.

Abnormalities.—Abnormal specimen of *Cirratulus cirratus*, DELPHY, 281; Abnormalities in *Hirudinaria granulosa*, BHATIA, 118.

PHYSIOLOGY.

General.—Physiology of *Chaetogaster*, SZARSKI, 1190; Physiology of *Hirudinea*, HERTER, 478, SCHLEIP, HERTER & AUTRUM, 1040.

Environmental effects, Responses to stimuli.—Effect of stains on Oligochaetes, CHILD & RULON, 202; Light responses in *Pheretima*, HOWELL, 497; Earthworms as test objects for anthelmintic drugs, LAMSON & WARD, 646; Hydrogen-ion concentration of soil in relation to earthworms, NOMURA & KOBAYASHI, 836; Action of light on *Enchytraeus albidus*, STUDENTOWICZ, 1165, 1166; Phototaxis, geotaxis, etc., in Priapulids, LANGELOH, 649.

Alimentation, Metabolism.—Alimentation in *Chaetogaster*, KRASNODEBSKI, 627; Metabolism of *Chaetogaster* spp., SZARSKI, 1189; Metabolic gradient in *Lumbricus*, MALOEUF, 723; Physiology of digestive tract in Nais, SZARSKI, 1191, 1192; Metabolism of arctic marine bottom Polychaetes, THORSON, 1228; Metabolism of *Phascolosoma* in different latitudes, FOX, 362.

Respiration.—Effect of temperature on respiration in earthworm, POMERAT & ZARROW, 938; Oxygen consumption ratio in development of eggs of *Urechis caupo*, TYLER, 1259.

Circulation, Body fluids.—Reducing and fermentative substances in body fluids of *Arenicola*, FLORKIN, 353; Spectroscopic properties of haemoglobin in *Pheretima* spp., KOBAYASHI, 595; Localisation of haemoglobin and haemoglobin-derivatives in Aphroditids, RAPHAËL, 957; Reducing power of body fluids of *Arenicola* and *Sipunculus*, BERTHOUMEYRoux, 107; Urea content of blood corpuscles of *Sipunculus*, FLORKIN, 352.

Locomotion.—Thrusting power of parapodial hooks in *Sabella*, BOBIN, 125; Locomotor physiology in Priapulids, FRIEDRICH & LANGELOH, 379; Contraction potentials developed in body wall of *Lumbricus*, GALAMBOS & BROWN, 390; Neuro-locomotor mechanism in *Hirudo*, HONJO, 494.

Physiological constitution.—Relation of bacteroids to sarcocystis in Lumbricids, COUTEAUX, 238; Carotinoid pigments in annelid, *Thoracophelia*, FOX, 361; Erythrocrucorin in the nervous system of *Aphrodite*, ROCHE & RAPHAËL, 982; Vitamin C in *Lumbricus terrestris*, GIROUD & RATSI-MAMANGA, 414; Hygroscopic properties of oligochaete tissues, KOPENHAUER, 609.

Thermotropic gradients.—Apparatus in study of earthworms, EDDY & GLEIM, 310.

Luminescence.—Cause of luminescence in Carpathian worms, KOMÁREK, 600, 601.

Nephridial action.—Method of observing nephridial action in annelids, MACHADO, 706.

Ciliary movement.—Mechanism of coelomatic cilia in *Nephtys*, MEYER, 763.

Calciferous glands.—Function of calciferous glands of earthworms, ROBERTSON, 978.

Developmental physiology.—In oligochaetes, STOLTE, 1158.

REPRODUCTION AND DEVELOPMENT.

Breeding habits.—Incubation of larvae of *Spirorbis borealis*, GARBARINI, 398; Breeding habits of leeches, FRANKENBERG, 364; Rearing of eggs and larvae in haemocoel in *Urechis caupo*, MACGINITIE, 705.

Fertilization.—Relation of metabolic change to fertilization in *Chaetopterus* eggs, SHAPIRO, 1072.

Sex determination.—Sex-determination in *Dinophilus apatris*, SHEN, 1075; Sex-determination in *Ophryotrocha puerilis*, HARTMANN & HUTH, 460; Determination of somatic sexual characters in Oligochaetes, DE LERMA, 280; Sex-determinative substances in *Bonellia* larvae, HERBST, 475, 476; Sexual differentiation in *Bonellia* and the Goldschmidt theory, ZURBUCHEN & BALTZER, 1421.

Embryogeny.—Rhythm in oocyte growth in *Spinorbis borealis*, GARBARINI, 398; Osmotic diffusion in egg of *Ceratocephale*, KAMADA, 567; Formation of dictyosomes from Golgi bodies in *Lycastis*, SUBRAMANIAM & AIYAR, 1173; Effect of environment on cytoplasmic inclusions in oocytes and oögonia of *Dasychone*, SUBRAMANIAM & AIYER, 1174; Surface layer of germinal vesicle in egg of *Sabellaria*, WATERMAN, 1343; Ontogeny of Hirudinea, SCHLEIP, HERTER & AUTRUM, 1040; Embryonal adaptation in leeches, SCHMIDT, 1044; Maturation division and cleavage in eggs of *Urechis unicinctus*, HIRAIWA & KAWAMURA, 483; Effect of infra-red light on egg-cleavage in *Urechis*, NELSON & BROOKS, 827; Cleavage coefficients in eggs of *Urechis caupo*, TYLER, 1258.

Larval Forms.—Monograph on Annelid larvae in northern plankton, NOLTE, 835.

Development.—Comparative developmental history of Annelids, Sipunculida and Priapulida, KORSCHULT, 613; Post-larval development of *Diopatra variabilis*, KRISHNAN, 632; Larval development and growth of arctic marine bottom Polychaetes, THORSON, 1228; Development of *Audouinia tentaculata*, WILSON, 1373; Development of *Branchiommma vesiculosum*, WILSON, 1374; Early stages of *Nephtys hombergi* and *Pectinaria koreni*, WILSON, 1375; Development of pharyngeal gland cells in Oligochaets, BAHL, 57; Development of typhlocoel in Lumbricidae, KREUTZ, 631; Organogenesis of setigerous follicles in *Eisenia foetida*, VANDEBROEK, 1285.

Hermaphroditism.—Hermaphroditism in *Dasychone cingulata*, with list of hermaphrodite polychaets, AIYAR & SUBRAMANIAM, 12.

Parthenogenesis.—Artificial parthenogenesis in *Urechis unicinctus*, HIRAIWA & KAWAMURA, 484.

Autotomy.—Fission in *Pristina*, VAN CLEAVE, 1280; Autotomy in a peregrine oligochaete, WALTON, 1331.

Regeneration.—Origin of cell-material in regenerative processes in Annelida, STOLTE, 1157; Posterior reorganization in *Sabella*, BERRILL & MEES, 105; Influence of temperature and light on reorganization and regeneration in *Sabella*, BERRILL & MEES, 106; Transplantation of polar lobe in *Sabellaria*, NOVIKOFF, 840; Accessory tails in earthworms induced by bissection, BAILEY, 61; Anterior regeneration in Polychaete, *Clymenella torquata*, SAYLES, 1032; Regeneration in annelid, *Euratella*, STONE, 1159; Regeneration in a Cirratulid, STONE, 1160; Posterior regeneration in *Eisenia*, BAILEY, 60; Regeneration of anterior end in *Lumbricus*, HOMANN, 493; Regenerative aspects of pygidial budding and scissiparity in *Chaetogaster*, MEEWIS, 754; Differentiation of nervous system in regeneration of *Lumbriculus*, ZHINKIN, 1417; Influence of nervous system in regeneration of *Rhynchelmis limosella*, ZHINKIN, 1418.

ETHOLOGY.

Bionomics.—Bionomics of shore and shallow-water annelids, WILSON, 1372;

Significance of the Drobah spring for the bottom fauna of Garnelen, BROCH, 136; Bionomic notes on estuarine Polychaeta, Brittany, CAZALET, 179; Notes on *Nereis succinea* and *N. lamellosa*, FAUVEL, 339; Experimental naturalisation of *Lycastis ranarumensis*, FEUERBORN, 344; Swarming of *Nereis longissima* on Boulogne coast, GALLIEN, 397; Choice of resting place by larvae of *Spirorbis borealis*, GARBARINI, 399; Notes on the catching of "pumpun" (Polychaetes), JARRETT, 539; Polychaetes as food of cod, MESCHKAT, 761; Ecological notes on shallow water Polychaetes, THAMDRUP, 1219; Faunal relationships of aquatic Oligochaetes, China, CHEN, 200; Vertical and horizontal dispersion of Oligochaetes in earth layers in Tashkend region, KIRJANOVA, 592; Behaviour of *Eisenia foetida*, NIWA, 832; Oligochaeta in rice fields, PASHITNOWA, 888; Ecology of psammicolous oligochaetes, Wisconsin, PENNAK, 910; Ecology of littoral oligochaetes, Poland, RZOSKA, 1010; Bionomic notes on the leeches of the Donetz basin, Russia, LOUKINE, 690; Phases of leech behaviour under electric stimuli, MILLER, 776; Association of conodonts with petroleum, GUNNELL, 441.

Parasitism.—Earthworms as int. hosts of strongylate nematodes, MATOFF, 747; Earthworms as vectors of *Capillaria annulata* to fowls, WEHR, 1346; New Annelid parasites on coral, OKULITCH, 858; Leech parasites of fishes, Siberia, SACHWATKIN, 1013; *Acanthobdella peledina* on salmon, Sweden, LÖNNBERG, 687; Question of *Hirudo medicinalis* attacking fishes, ROUX, 1000; Leech in rectum of man, DE BOER, 271; Leech infection in man, Algeria, DREYFUSS, 306; *Limnatis javanica* in nasal fossa of man, ENGELN, 321; Leech infection in man, East Indies, HANIFAH, 448; Leech infection of nose in boy, East Indies, TAN PING IE, 1205.

Commensalism.—Two Polychaetes inhabiting Holothurian burrows, Japan, OKUDA, 853; Commensal Polynoids, Japan, OKUDA, 854.

VARIATION.

Variation.—Alleged varieties of *Haemopsis sanguisuga*, PAWŁOWSKI, 895.

GEOGRAPHICAL DISTRIBUTION.

General.—Faunistic list of cavernicolous Annelida, WOLF, 1385.

Europe.—Annelida in fauna of subterranean waters, Jugoslavia, KARAMAN, 570; Notes on Annelid fauna of Brittany, PESSON, 919; Annelida in freshwater fauna, Lithuania, SIVICKIS, 1084; Annelida in brackish water fauna of Bulgaria, VALKANOV, 1279.—Archannelida in cavernous aquatic fauna, Glatzer Schneeberg, STAMMER, 1129.—Two Polychaetes in faunistic list, Port Erin, BRUCE, 138; Distribution of benthic Polychaeta in Polish Baltic, DEMEL, 282; Faunal list of Polychaeta, Outer Hebrides, FLEMING, 351; Note on Polychaeta in the cavernicolous fauna of the Karst, STAMMER, 1127; Additional specimens of *Eunice aphroditois* collected in Toulon Bay, BONNET & JULLIEN, 128; *Tomopteris* sp. in pelagic fauna, Denmark, USSING, 1274; Occurrence of *Magelona rosea* in the Black Sea, WINOGRADOW, 1379.—Oligochaeta in profundal and sublittoral fauna, Windermere, HUMPHRIES, 506; Oligochaete fauna of Outer Hebrides, SOMEREN, 1108; Cavernicolous oligochaetes of Belgium, ČERNOSVITOV, 183; Cave Oligochaetes, north-eastern France, ČERNOSVITOV, 182; Faunistic note on an oligochaete, Brittany, PESSON, 918; Pond Oligochaetes, Alsace Lorraine, TÉTRY, 1217; New *Eisenia* sp., France, TÉTRY, 1218; Oligochaeta in cavernicolous fauna, Westphalia, GRIEPENBURG-SCHÉE, 436; Oligochaeta in caverns of the Glatzer Schneeberg, MASCHKE, 742, PAX & MASCHKE, 932, STAMMER, 1129; New cavernicolous Lumbricolid, Istria, HRABÉ, 498; New opisthopore oligochaete, Vienna, MICHAELSEN, 769; Cavernicolous oligochaetes, Italy, SCIACCHITANO, 1061; Oligochaeta in brackish water fauna, Bulgaria, VALKANOV, 1276; Oligochaetes of Polish Pomerania, MOSZYŃSKI, 805, 806; Distribution of oligochaetes in Wigry lakes, Poland, MOSZYŃSKI, 807; Oligochaeta in the littoral fauna of Polish lakes, RZÓSKA, 1011; Limicolous Oligochaetes, River Donetz, Russia, BASKIN, 76; New form of *Lamprodrilus isoporus*, Lakes Ladoga and Onega, Russia, SVETLOV, 1179; Oligochaeta in fauna of Lake Dikroye, Russia, TAUSON,

1208.—Hirudinea in profundal and sublittoral fauna, Windermere, HUMPHRIES, 506; Leech fauna of Outer Hebrides, SOMEREN, 1109; Pond leeches, Alsace Lorraine, TÉTRY, 1217; Cavernicolous leeches, Italy, SCIACCHITANO, 1061; Ecological notes on the leeches of Lake Wigry, Poland, PAWŁOWSKI, 897; Notes on leeches of Lake Ohrida, PAWŁOWSKI, 901; Hirudinea in the littoral fauna of Polish lakes, RZÓSKA, 1011; Hirudinea from Lake Issyk-kul, Russia, ANNENKOVA, 31; Hirudinea in fauna of Lake Dikroye, Russia, TAUSON, 1208; Hirudinea in brackish water fauna, Bulgaria, VALKANOV, 1276; Hirudinea of North Sea and Baltic, general account, HERTER, 477.

Asia.—Polychaetes from Annam, FAUVEL, 336; *Phyllodoce* sp. in Siam, GILES, 406; Polychaeta from Japan, FAUVEL, 340; Polychaetes from Japan, OKUDA, 851, 855, 856; New *Thoracophelia* sp., Sea of Okhotsk, OKUDA, 852; Polychaeta from Amoy, TREADWELL, 1245.—Oligochaetes from Siberia, BUROV, 147; New *Pheretima* spp., Nanking, CHEN, 199; Earthworms from Hongkong, CHEN, 201; Distribution of *Pheretima carnosa* in Korea, KOBAYASHI, 598; Earthworms from Korea, KOBAYASHI, 597; New *Pheretima* sp., Japan, HATAI & OHFUCHI, 462; Nais from waterworks, Japan, KONDÔ, 608; *Microscoclex phosphoreus* in Japan, YAMAGUCHI, 1398; Lumbriculids from Hokkaido, Japan, YAMAGUCHI, 1399; *Pheretima* spp. from Pahang, Malay Peninsula, GATES, 401; *Eutyphoeus masoni*, Burma, KYAW & GATES, 641; Oligochaetes of Burma, GATES, 402.—Hirudinea from northern India, MOORE, 793.—Sipunculoidea from Indian waters, PRASHAD, 943.

Africa.—Polychaete fauna of Morocco, FAUVEL, 338; Polychaeta from Congo coast, MONRO, 790.—New Oligochaetes from Belgian Congo, MICHAELSEN, 766, 767, 770.—Hirudinea from German South West Africa, AUGENER, 39; Hirudinea from Abyssinia and East Africa, HARANT & VERNIÈRES, 449; New leeches from Belgian Congo, SCIACCHITANO, 1062.

North America.—Estuarine annelids at Beaufort, North Carolina, PEARSE,

905.—Occurrence of Archiannelid, *Saccocirrus*, on Pacific coast of Canada, BERKELEY, 101.—Plankton Polychaetes, Bermuda, BERKELEY, 102; New Spionids, California, HARTMAN, 457; New Nereids from California, HARTMAN, 458; Phyllodocidae of Californian coast, HARTMAN, 459; New Polychaeta from Bermuda, TREADWELL, 1244; Faunistic notes on polychaetes, Puget Sound, San Juan, WEESE, 1345; New Polychaetes, Florida, WINTERNITZ, 1380.—New *Fridericia* spp., California, BELL, 95; Earthworms from Missouri, OLSON, 859.—Hirudinea from Yucatan, MOORE, 794; Leeches of Lake Nipissing, Canada, MOORE, 795.

South America.—Polychaetes from Bonaire, AUGENER, 38.—Oligochaeta from South America, with new genus, ČERNOSVITOV, 181; Oligochaeta from Chile and Easter Is., MICHAELSEN, 765; New opisthopore oligochaeta, Chile, MICHAELSEN, 769; New *Andiorrhinus* sp., Venezuela, MICHAELSEN, 766.

Australia.—Earthworms from West Australia, MICHAELSEN, 764.

South Sea Islands.—Gephyrea of South Sea Islands, SATO, 1027.

Arctic.—Tomopterids and Typhloscolecids from the Danish Ingolf Expedition, WESENBERG-LUND, 1351; Tomopterids and Typhloscolecids collected by Godthaab Exped., W. Greenland, WESENBERG-LUND, 1352.

GEOLOGICAL DISTRIBUTION.

Annelida.—List of fossil worm genera from the Jura, DACQUÉ, 255; Fossil annelids in London clay at Sheppey, DAVIS, 264; Fossil annelid burrows and trails, Ordovician, Esthonia, ÖPIK, 860; Fossil Arenicola (?) in Flysch de la Costa Cantabrica, Spain, MOROS, 803; Fossil *Spirorbis valvata*, Germany, SCHMIDT, 1047; Fossil *Spirorbis* on plants and shells, Houiller basin, France, WATERLOT, 1342; New fossil Serpulid genus, N. America, CLARKE, 224; Fossil Serpulids in upper Bajocian, France, DARESTE DE LA CHAVANNE, 257; Fossil Serpulids in Lias, Franken, KUHN, 639; Serpulids in the clay schist, Longlier, Belgium, MAIL-

LEUX, 722; *Serpula* sp. in Cretaceous, Georges Bank, N. America, STEPHENSON, 1147.

Conodonta.—Sedimentary conodonts, Oklahoma, BUSH, 149; Conodonts in Niagara of Illinois, CRONEIS & SCOTT, 244; Two conodonts from Ordovician, Oklahoma, HARRIS, 452; New *Gnathodus* sp., palaeozoic, Germany, SCHMIDT, 1045; Conodonts from the Decorah shale, Ordovician, N. America, STAUFFER, 1130.

SYSTEMATIC INDEX.

ANNELIDA.

ARCHIANNELIDA.

[No records.]

POLYCHAETA

Errantia.

NEREIMORPHA.

Anaitides williamsi sp. n. Californian coast, HARTMAN Univ. Calif. Publ. Zool. 41 1936 p. 126 figs. 33–35.

Aphrodite longirostris Kbg. p. 81 fig. 2, *talfa* Quatfg. p. 82 fig. 3, MONRO Discovery Reports 12 1936.

Autolytus charcoti Grav., MONRO Discovery Reports 12 1936 p. 131 fig. 22.—*A. brevicirrata* sp. n. Florida, WINTERNITZ Amer. Mus. Nov. 888 1936 p. 1 figs. 1, 2.

Clavadoce gen. n. Phyllodocidae, *splendida* sp. n. Californian coast, HARTMAN Univ. Calif. Publ. Zool. 41 1936 pp. 123–126 figs. 13, 14.

Drieschia atlantica sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 52 figs. 7–9.

Eteone pacifica sp. nom. n. pro *E. maculata* Treadwell 1922 nee Oersted, HARTMAN J. Wash. Acad. Sci. 26 1936 p. 31.—*E. lighti* p. 127 figs. 36–39, *dilatata* p. 130 figs. 40–42, *californica* p. 131 figs. 43–46, *balboensis* p. 131 figs. 49–51 spp. n. California coast, HARTMAN Univ. Calif. Publ. Zool. 41 1936.

Eucranta villosa var. *notialis* var. n. MONRO Discovery Reports 12 1936 p. 101 fig. 11.

Eutalia ariculisetata sp. n. Californian coast, HARTMAN Univ. Calif. Publ. Zool. 41 1936 p. 122 figs. 1-6.

Eunice schizobranchna Clap., RIOJA Trab. Inst. españ. Oceanogr. Madrid 13 1935 p. 31 figs. 46-49.—*E. aphroditois* (Pallas), Toulon Bay, BONNET & JULLIEN Bull. Soc. Zool. Fr. 61 1936 pp. 447-450 pl. vii.—*E. ovalifera* sp. n. Japan, FAUVEL Mem. Coll. Sci. Kyoto B 12 1936 pp. 67-69 fig. 1.

Eunoë purpurea sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 51 figs. 1-6.

Euphionella gen. n. Polynoidae, *patagonica* sp. n., MONRO Discovery Reports 12 1936 pp. 97-100 fig. 10.

Eupholoe nuda sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 53 figs. 10-14.—*E. globosa* sp. n. Florida, WINTERNITZ Amer. Mus. Nov. 888 1936 p. 3 figs. 6-12.

Euthalenessa dendrolepis (Clap.) Atlantic, RIOJA Trab. Inst. españ. Oceanogr. Madrid 13 1935 pp. 18-22 figs. 27-36.

Glycinde armata (Kbg.), MONRO Discovery Reports 12 1936 p. 143 fig. 26.

Goniada eximia Ehl., Falkland Is., MONRO Discovery Reports 12 1936 p. 141 fig. 25.—*G. norvegica* Oersted, Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 45 fig. 2.

Halosydna (Alentia) annamita Fauvel, Annam, FAUVEL Mem. Acad. Nuovi Lincei (3) 2 1935 p. 288 fig. 1.

Halosydnoidea vittata (Grube) commensal with *Cryptochiton*, *Leucapira*, *Asterias*, *Haliotis* and *Patelloida* spp., Japan, OKUDA Annot. Zool. Jap. 15 1936 pp. 565-568 figs. 4, 5.

Harmothoe exanthema var. *bergströmi* p. 85, *brevipalpa* var. *ciliata* p. 87 figs., varr. n., *ernesti* Aug. p. 88 fig. 7, MONRO Discovery Reports 12 1936.—*H. haliastri* McInt., Atlantic, RIOJA Trab. Inst. españ. Oceanogr. Madrid 13 1935 p. 8 figs. 1-4.

Hololepida australis sp. n., MONRO Discovery Reports 12 1936 p. 93 fig. 9.

Hyalinoecia bilineata var. *ornata* Fauvel, Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 51 fig. 3.

Leanira quatrefagei Kbg., MONRO Discovery Reports 12 1936 p. 105 fig. 13.

Lepidometria gigas (Johns.), MONRO Discovery Reports 12 1936 p. 92 fig. 8.

Lepidasthenia elegans (Grube) Atlantic, RIOJA Trab. Inst. españ. Oceanogr. Madrid 13 1935 pp. 15-17 figs. 21-26.—*L. longissima* (Izuka), Japan, FAUVEL Mem. Coll. Sci. Kyoto B 12 1936 p. 51.—*L. ohshimai* sp. n. in burrow of holothurian, Japan, OKUDA Annot. Zool. Jap. 15 1936 pp. 410-412 figs. 1-3.—*L. ohshimai* Okuda commensal with *Protankyra bidentata* p. 568, *longissima* (Izuka) with *Thelepus setosus* pp. 568-570 figs. 6, 7, Japan, OKUDA Annot. Zool. Jap. 15 1936.—*L. ocellata* sp. n. China, TREADWELL Proc. U.S. Nat. Mus. 83 1936 pp. 264-265.

Lepidonotus minutus sp. n. China, TREADWELL Proc. U.S. Nat. Mus. 83 1936 p. 262 fig. 18.—*L. elongatus* Marenz. commensal with *Thelepus setosus*, Japan, OKUDA Annot. Zool. Jap. 15 1936 pp. 562-563 figs. 1, 2.

Leptonereis glauca Clap., Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 33 fig. 1, vide etiam *Nereis*.

Loandalia gen. n. *aberrans* sp. n. Angola coast, MONRO Discovery Reports 12 1936 p. 193 fig. 34.

Lycastopsis beumeri Aug., Bonaire, AUGENER Zool. Jahrb. Jena Syst. 67 1936 p. 346.

Marphysa orientalis sp. n. China, TREADWELL Proc. U.S. Nat. Mus. 83 1936 pp. 206-208.—*M. dartevillei* sp. n. Congo coast, MONRO Rev. Zool. Bot. afr. Tervueren 28 1936 pp. 246-248 6 figs.

Neanthes vide *Nereis*.

Nereis trifasciata Grube, p. 306 fig. 2, *torta* Fauvel p. 311 figs. 3, 4, *oxypoda* Marenz. p. 314 fig. 5, Annam, FAUVEL Mem. Accad. Nuovi Lincei (3) 2 1935.—*N. ezoensis* Izuka, Japan, FAUVEL Mem. Coll. Sci. Kyoto B 12 1936 p. 61.—*N. diversicolor* O.F.M., parapodial formation, FINKE Zool. Jahrb. Jena Anat. 61 1936 pp. 239-342 16 figs.—*N. succinea* Leuckart p. 312

lamellosa Ehlers p. 313, notes on structure, FAUVEL Bull. Soc. Zool. Fr. **61** 1936.—*N. rara* Ehlers pp. 24–26 figs. 37–43 (*Ceratoneis*) *hircinicola* Eisig pp. 26–27 fig. 45, *costae* Gr. p. 26 fig. 44, Atlantic, RIOJA Trab. Inst. españ. Oceanogr. Madrid **13** 1935.—*N. (N.) eucapitis* p. 468 fig. 46, *pseudoneanthes* p. 470 fig. 47, *neonigripes* p. 471 fig. 48, *eakini* p. 472 fig. 49, *nutans* p. 474 fig. 50 (*Ceratoneis*) *tunicatae* p. 476 fig. 51 (*Neanthes*) *saltoni* p. 477 fig. 52 (*Eunereis*) *longipes* p. 479 fig. 53 spp. n. California, HARTMAN Proc. U.S. Nat. Mus. **83** 1936.—*N. (Neanthes) linea* p. 268, *orientalis* p. 270, *amoyensis* p. 272 fig. 19 (*Leptonereis*) *distorta* p. 273 fig. 20 spp. n. China, TREADWELL Proc. U.S. Nat. Mus. **83** 1936.

Ninoë falklandica sp. n., MONRO Discovery Reports **12** 1936 p. 156 fig. 28.

Perinereis bairdii (Webster), Congo coast, MONRO Rev. Zool. Bot. afr. Tervueren **28** 1936 p. 245.

Phyllodoce unicirrata sp. n. Florida, WINTERNITZ Amer. Mus. Nov. **888** 1936 p. 1 figs. 3–5.

Pionosyllis comosa Grav. p. 128 fig. 20, *nutrix* sp. n. p. 128 fig. 21, MONRO Discovery Reports **12** (10) **13** 1936 pp 380–383 3 figs.

Platynereis magalhaensis Kbg., MONRO Discovery Reports **12** 1936 p. 137 fig. 24. *P. pulchella* Grav., heteronereid, MONRO Ann. Mag. Nat. Hist. London.

Podarke pugettensis Johnson in burrow of holothurian, Japan, OKUDA Annot. Zool. Jap. **15** 1936 pp. 413–415 fig. 4.

Polybostrichus sp., MONRO Discovery Reports **12** 1936 p. 133 fig. 23.

Polynoë scolopendrina Sav. Atlantic, RIOJA Trab. Inst. españ. Oceanogr. Madrid **13** 1935 pp. 12–14 figs. 14–20.

Psammolyce semiglabra sp. n. New Zealand, MONRO Discovery Reports **12** 1936 p. 106 fig. 14.

Rhamphobrachium ehlersi MONRO, MONRO Discovery Reports **12** 1936 p. 148 fig. 27.

Sagittella lobifera Ehl., MONRO Discovery Reports **12** 1936 p. 122 fig. 16.

Scalissetosus assimilis (McInt.) Atlantic, RIOJA Trab. Inst. españ. Oceanogr.

Madrid **13** 1935 p. 10 figs. 7, 8.—*S. crinoidicola* (Potts) commensal with a Crinoid, Japan, OKUDA Annot. Zool. Jap. **15** 1936 pp. 564–565 fig. 3.

Sigalion ovigerum MONRO, New Zealand, MONRO Discovery Reports **12** 1936 p. 103 fig. 12.

Sige montereyensis sp. n., Californian coast, HARTMAN Univ. Calif. Publ. Zool. **41** 1936 p. 126 figs. 27–29.

Sphaerosyllis erinaceus Clap., Bonaire AUGENER Zool. Jahrb. Jena Syst. **67** 1936 p. 344.

Steggoa californiensis sp. n. Californian coast, HARTMAN Univ. Calif. Publ. Zool. **41** 1936 p. 122 figs. 18–22.

Sthenelais limicola (Ehlers) var. *novae-zealandiae* var. n. New Zealand, MONRO Discovery Reports **12** 1936 p. 108 fig. 15.

Streptindytes chaetetae sp. n. parasitic on coral, *Chaetetes radians*, N. America, OKULITSCH Amer. Midl. Nat. Notre Dame **17** 1936 pp 983–984 2 figs.

Syllis (Typosyllis) corallicoidea Aug., *brachychaeta* Schm. p. 342, (*Ehlersia*) *sexoculata* Ehl. p. 343, Bonaire, AUGENER Zool. Jahrb. Jena Syst. **67** 1936.

Tomopteris longisetis sp. n. Bermuda, TREADWELL Zoologica N.Y. **21** 1936 p. 58 figs. 18–21.—*T. septentrionalis* Quatr. p. 4, *Cavallii* Rosa p. 7, *Krampi* sp. n. p. 8 figs. 1–3, Greenland, WESENBERG-LUND. Medd. Grønland **80** iii 1936.—*T. (Johnstonella) helgolandica* Greef pp. 5–6, (*T.*) *Nisseni* Eschsch. pp. 6–9, *Cavallii* Rosa p. 9, *septentrionalis* Quatref. pp. 9–12, *Kefersteini* Greeff p. 12, figs., WERENBERG-LUND Danish Ingolf Exped. **4** xi 1935.

Travisipsis lanceolata Southern p. 14, *Levinsoni* Southern pp. 14–15, WESENBERG-LUND Danish Ingolf Exped. **4** xi 1935.—*T. benhami* sp. n., MONRO Discovery Reports **12** 1936 p. 123 fig. 17.—*T. atlantica* sp. n. Bermuda, TREADWELL Zoologica N.Y. **21** 1936 p. 62 figs. 30–33.—*T. Levinsoni* Southern, Queensland, WESENBERG-LUND Medd. Grønland **80** iii 1936 p. 12 figs. 4, 5.

Trypanosyllis gigantea (McInt.) p. 126 fig. 18, *taeniaeformis* (Hasw.) p. 127 fig. 19, MONRO Discovery Reports **12** 1936.

AMPHINOMIMORPHA.

Euphrosyne maorica Aug. New Zealand, MONRO Discovery Reports 12 1936 p. 79 fig. 1.

Myzostomatida.

Myzostomum cirriferum F. S. Leuck., male genitalia, JÄGERSTEN Zool. Bidr. Uppsala 15 1934 pp. 1-22 2 pls.

Sedentaria.

SPIONIMORPHA.

Aricidea fragilis Webster, Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 65 figs. 6, 7.

Magelona rosea Moore, Black Sea, WINOGRADOW Trav. Stat. Biol. Karadagh 3 1930 pp. 39-40 1 fig. Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 63 fig. 5.

Phyllochaetopterus Claparedii McInt., Annam, FAUVEL Mem. Accad. Nuovi Lincei (3) 2 1935 p. 335 figs. 7, 8.

Polydora brachycephala p. 48, *amarincola* p. 49, *truncata* pp. 49-50 figs. spp. n. California coast, HARTMAN Univ. Calif. Pub. Zool. 41 1936.

Prionospio japonicus sp. n. brackish water, Japan, OKUDA Annot. zool. jap. 15 1935 pp. 241-243 fig. 1.—*P. Ehlersi* Fauvel, Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 61 fig. 4.

Pygospio californica sp. n. California coast, HARTMAN Univ. Calif. Pub. Zool. 41 1936 p. 50 3 figs.

Rhynchospio gen. n. Spionidae, *arenincola* sp. n. California, HARTMAN Univ. Calif. Pub. Zool. 41 1936 p. 51 figs. 20-22.

CAPITELLIMORPHA

(S. DRILOMORPHA).

Ambo Dollfusi Fauvel, Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 70 fig. 8.

Ammotrypane bermudiensis sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 60 figs. 24-26.

Asychis amphiglypta (Ehl.), MONRO Discovery Reports 12 1936 p. 169 fig. 31.

Audouinia pygidia sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 64 figs. 22, 23.

Axiothelia antarctica MONRO, MONRO Discovery Reports 12 1936 p. 168 fig. 30.

Cirrattulus multicirratus sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 63 figs. 34, 35.—*C. branchiatus* sp. n. China, TREADWELL Proc. U.S. Nat. Mus. 83 1936 p. 276 fig. 20g.—*C. cirratus*, abnormal specimen, DELPHY Bull. Soc. Zool. Fr. 61 1936 pp. 453-457 2 figs.

Cirriformia gen. nom. n. pro *Audouinia* Qfg. 1865 nec Costa, HARTMAN J. Wash. Acad. Sci. 26 1936 p. 31.

Cirrineris incertus sp. n. Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 72 fig. 9.

Mastobranchus Dollfusi sp. n. Morocco FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 81 fig. 11.

Notomastus profundus Eisig, Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 79 fig. 10.

Ophelia bipartita sp. n., MONRO Discovery Reports 12 1936 p. 166 fig. 29.

Polyophthalmus incertus sp. n. Bermuda, TREADWELL Zoologica N.Y. 21 1936 p. 61 figs. 27-29.

Streblospio laticincta sp. n. California coast, HARTMAN Univ. Calif. Pub. Zool. 41 1936 p. 45 figs. 1, 2.

Stylarioides dimissus sp. nom. n. pro *S. minuta* Treadwell 1914 nee Qfg., HARTMAN J. Wash. Acad. Sci. 26 1936 p. 31.

Thoracophelia ezoensis sp. n. Okhotsk Sea, OKUDA Proc. Imp. Acad. Tokyo 12 1936 pp. 201-202 2 figs.

Travisia japonica Fujiwara, Japan, FAUVEL Mem. Coll. Sci. Kyoto B 12 1936 pp. 75-78.

TEREBELLIMORPHA.

Amphitrite affinis Malmgr. var. *antarctica* var. n., MONRO Discovery Reports 12 1936 p. 177.

Lysippe Vanelli sp. n. Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 96 fig. 13.

Melinna monoceroides sp. n., Morocco, FAUVEL Mém. Soc. Sci. nat. Maroc 43 1936 p. 93 fig. 12.

Octobranchus antarcticus sp. n.,
MONRO Discovery Reports 12 1936
p. 185 fig. 33.

Streblosoma bairdi var. *antarctica*,
var. n., MONRO Discovery Reports 12
1936 p. 182 fig. 32.

Thelepus triserialis (Gr.), Balearic
Islands, RIOJA Trab. Inst. españ.
Oceanogr. Madrid 13 1935 p. 37 figs.
50-53.

SERPULIMORPHA.

Apometus ampulliferus Filippi, Mal-
lorca, RIOJA Trab. Inst. españ.
Oceanogr. Madrid 13 1935 p. 41 figs.
54-57.

†*Hicetes* [gen. n. Serpulidae] *innexus*
sp. n., CLARKE New York State Mus.
Bull. 121 1908 p. 155 pls. iii, iv.,
MAILLEUX Mem. Mus. Hist. Nat. Belg.
73 1936 p. 43.

Hicetinae subf. n. of Serpulidae, for
Hicetes J. M. Clarke, MAILLEUX Mém.
Mus. Hist. Nat. Belg. 72 1936 p. 43.

Hydroides sp. ind., Morocco, FAUVEL
Mém. Soc. Sci. nat. Maroc 43 1936 p. 110
fig. 14.

Pomatocropsis Holly 1935 nee
Gravier renamed *Pseudopomatoceros*,
HOLLY Zool. Anz. Leipzig 114 1936
p. 223.

Pseudopomatoceros gen. nom. n. pro
Pomatocropsis Holly 1935 nee Gravier,
HOLLY Zool. Anz. Leipzig 114 1936
p. 223.

Spirobranchus giganteus (Pallas),
Japan, FAUVEL Mem. Coll. Sci. Kyoto
B 12 1936 pp. 87-89.

Spirorbis (*Leodora*) *laevis* Quatr.
Bonaire, AUGENER Zool. Jahrb. Jena
Syst. 67 1936 p. 351 fig. 1.

Vermilia glandulata sp. n. Bermuda,
TREADWELL Zoologica N.Y. 21 1936
p. 65 figs. 36-39.

INCERTAE SEDIS.

Talehsapia annandalei Fauvel, An-
nam, FAUVEL Mem. Accad. Nuori
Lincei (3) 2 1935 p. 333 fig. 6.

OLIGOCHAETA.

Archioligochaeta.

NAIDINA.

Aeolosoma tenuidorsum Baskin, cir-
culatory system, BASKIN Trav. Soc.

Nat. Kharkov 55 1930 pp. 149-163
5 figs.—*A. hemprichi* Ehrb. p. 382 fig. 1,
niveum Leydig. p. 383 fig. 2, Japan,
KONDÔ Annot. Zool. Jap. 15 1936.

Chztogaster crystallinus Vejd., struc-
ture of genital system, BASKIN Trav.
Soc. Nat. Kharkov 55 1930 pp. 5-6.—
C. limnaei Baer, Japan, KONDÔ Annot.
Zool. Jap. 15 1936 p. 383 fig. 3.

Dero limosa Leidy p. 385 fig. 13,
kawamurai p. 385 fig. 14, *tanimotoi*
p. 386 fig. 15 spp. n. Japan, KONDÔ
Annot. Zool. Jap. 15 1936.

Nais variabilis Pig. p. 384 fig. 10,
elinguis Müller & Oerst. p. 385 fig. 11,
japonica sp. n. p. 385 fig. 12, Japan,
KONDÔ Annot. Zool. Jap. 15 1936.

Opistocysta gen. n. Opistocystidae
fam. n. type *Pristina flagellum* Leidy,
ČERNOSVITOV Zool. Anz. Leipzig 113
1936 pp. 75-84 19 figs.

Osaka gen. n. Naididae, *shimasakii*
sp. n., Osaka, Japan, KONDÔ Annot.
Zool. Jap. 15 1936 p. 383 pl. xxiii
fig. 5.

Paranais setosus sp. n. Poland,
RZOSKA Verh. int. Verein. Limnol.
Beograd 7 1935 p. 508 [sine descr.].—
P. naidina Brecher p. 384 fig. 6,
litoralis Müll. & Oerst. p. 384 fig. 7,
heteroseta sp. n. p. 384 fig. 8 Japan,
KONDÔ Annot. Zool. Jap. 15 1936.

Pristina rosea Piguet p. 386 fig. 16,
pinniseta sp. n. p. 387 fig. 17, *longiseta*
Ehrb. p. 388 fig. 18, *capiliseta* p. 388
fig. 19, *nasalis* p. 388 fig. 20 spp. n.
Japan, KONDÔ Annot. Zool. Jap. 15
1936.—*P. flagellum* Leidy type of
Opistocysta gen. n., ČERNOSVITOV Zool.
Anz. Leipzig 113 1936 p. 75.

Schmardaella filiformis (Schmarda)
Japan, KONDÔ Annot. Zool. Jap. 15
1936 p. 383 fig. 4.

Stylaria lacustris L., Japan, KONDÔ
Annot. Zool. Jap. 15 1936 p. 384 fig. 9.

ENCHYTRAEINA.

Fridericia belgica sp. n. Belgium pp.
8-9 figs. 1-3, *uniglandula* Steph.,
England, pp. 9-11 figs. 4-6, ČERNOSVI-
TOV Bull. Mus. Hist. nat. Belg. 12 xxi
1936.—*F. sacculata* pp. 145-147 pl. x
figs. 1-16, *berkeleyensis* pp. 147-150
text-figs. 1-8, *losangelensis* pp. 150-152
pl. xi figs. 17-31 spp. n. California, with
key to genus, BELL Univ. Calif. Pub.
Zool. 41 1936.

Mesenchytraeus gaudens Cogn. var. *pelicensis* Issel, ČERNOSVITOV Bull. Mus. Hist. nat. Belg. **12** xxi 1936 pp. 11–12 fig. 7.

TUBIFICINA.

Branchiura sowerbyi Bedd., synonymy, MICHAELSEN Rec. Ind. Mus. Calcutta **38** 1936 pp. 95–96 1 fig.

Clitellio spp., Siberia, systematics and biology, BUROV Bull. Inst. Sci. Biol. Géogr. Irkutsk **7** 1936 pp. 17–29.

Kawamuraia japonica Steph. 1917 syn. of *Branchiura sowerbyi* Bedd., MICHAELSEN Rec. Ind. Mus. Calcutta **38** 1936 pp. 95–96 1 fig.

Limnodrilus pacificus sp. n., aquatic, China, CHEN Abst. Pap. Sci. Conf. Nanking 1935 p. 49.

Neoligochaeta.

LUMBRICULINA.

Hrabea gen. n. Lumbriculidae, *ogumai* sp. n. Japan, YAMAGUCHI J. Fac. Sci. Hokkaido Univ. Zool. **5** 1936 pp. 89–92 6 figs.

Lamprodrilus isoporus Mich. f. *variabilis* form. n., Lakes Ladoga and Onega, Russia, SVETLOV Zool. Anz. Leipzig **113** 1936 pp. 87–93 2 figs.

Lumbriculus Gr., diagnosis of genus, YAMAGUCHI Zool. Mag. Tokyo **48** 1936 pp. 791–795.—*L. japonicus* sp. n. Japan, YAMAGUCHI J. Fac. Sci. Hokkaido Univ. Zool. **5** 1936 pp. 78–86 pls. iv, v, 8 figs.

Rhynchelmis orientalis sp. n. Japan, YAMAGUCHI J. Fac. Sci. Hokkaido Univ. Zool. **5** 1936 pp. 86–88 7 figs.

Trichodrilus Strandii sp. n. Istria, HRABE Festschrift Embrik Strand **1** 1936 pp. 404–407 4 figs.

PHREORYCTINA.

Alluroides portagei subsp. *congius* subsp. n. Belgian Congo, MICHAELSEN Rev. Zool. Bot. Afr. Tervueren **29** 1936 pp. 37–38.

Drawida nemora sp. n. Korea, KOBAYASHI Sc. Rep. Tôhoku Univ. (4) **11** 1936 pp. 141–146 fig. 1.

LUMBRICINA.

Allolobophora limicola Mich., ČERNOSVITOV Bull. Mus. Hist. nat. Belg. **12** xxi 1936 p. 12 figs. 8, 9.

Andiorrhinus decidanus sp. n. Venezuela, MICHAELSEN Amer. Mus. Nov. **843** 1936 pp. 1–4 figs. 2.

Bimastus vejdvoskyi sp. n. Czechoslovakia, ČERNOSVITOV Arch. přírodov. Vyzk. Čech. **19** 1935 pp. 66–67 figs. 52–55.—*B. tenuis* (Eisen) in grottos, north-eastern France, ČERNOSVITOV Arch. Zool. exp. gén. Paris Notes et Revue **78** 1936 p. 3 4 figs.

Eisenia metallorum sp. n. Lorraine, France, TETRY C.R. Acad. Sci. Paris **202** 1936 pp. 1531–1533.—*E. austriaca* sp. n. Vienna, MICHAELSEN Festschrift E. Strand Riga **1** 1936 pp. 35–36.

Eiseniella tetraedra (Sav.), with notes on comparative anatomy and systematics of Lumbricidae, POOL Vjschr. naturf. Ges. Zurich **81** 1936 pp. 199–216.

Eophila antipae (Mich.) var. *tuberculata* var. n. p. 58 figs. 40, 41, *hraběi* sp. n. p. 59 figs. 44–46, *mrázeki* p. 61 figs. 47, 48, ČERNOSVITOV Arch. přírod. Vyzk. Čech. **19** 1935.—*E. obscuricola* sp. n. in grottos, northeastern France, ČERNOSVITOV Arch. Zool. exp. gén. Paris Notes et Revue **78** 1936 p. 5 figs. 5–8.

Lumbricus rubellos Hoffm., ČERNOSVITOV Bull. Mus. Hist. nat. Belg. **12** xxi 1936 p. 13.

MEGASCOLECINA.

Chilota Strandii sp. n. Chile, MICHAELSEN Festschrift E. Strand Riga **1** 1936 pp. 31–35 3 figs.

Dichogaster chapini pp. 4–6, figs. 5, 9, *navana* pp. 6–8 figs. 3, 8 spp. n. Belgian Congo, *godeffroyi* Mich., Haiti, p. 8, *jaculatrix* Baylis syn. of *italiensis* Mich. p. 9, MICHAELSEN Amer. Mus. Nov. **843** 1936.—*D. flandria* p. 213, *tenuiseta* pp. 216–222 figs. spp. n. Belgian Congo, MICHAELSEN Rev. Zool. Bot. afr. Tervueren **28** 1936.—*D. sandoa* sp. n. pp. 41 45 4 figs., *kwidschwiensis* Mich. p. 45, *saliens* Bedd. p. 46, Belgian Congo, MICHAELSEN Rev. Zool. Bot. Afr. Tervueren **29** 1936.

Eminoscolex navanus pp. 14–16 figs. 11, 12, *langi* pp. 16–19 figs. 1, 10, spp. n. Belgian Congo, MICHAELSEN Amer. Mus. Nov. **843** 1936.—*E. kisanuanus* f. *tinanti* form. n. Belgian Congo, MICHAELSEN Rev. Zool. Bot. Afr. Tervueren **29** 1936 pp. 57–58.

Eupolytoreutus rossignoli sp. n. pp. 58-63, var. *tinnatae* var. n. pp. 63-65 figs., Belgian Congo, MICHAELSEN Rev. Zool. Bot. Afr. Tervueren 29 1936.

Eutyphoeus masoni (Bourne), Burma, KYAW & GATES Rec. Ind. Mus. Calcutta 38 1936 pp. 513-317.

Gordiodrilus robustus subsp. *congricus* subsp. n. pp. 47-52, *johneni* pp. 52-55 fig. 3, *overlaeti* pp. 55-57 spp. n. Belgian Congo, MICHAELSEN Rev. Zool. Bot. Afr. Tervueren 29 1936.

Ilyogenia africana Bedd. var. *pretoriana* Steph. Easter Island, MICHAELSEN Zool. Anz. Leipzig 113 1936 pp. 199-200.

Megascolex mauritii (Kinberg), Burma, GATES Rec. Ind. Mus. Calcutta 38 1936 pp. 388-389.

Perionyx arboricola Rosa p. 465, *excavatus* E. Perr. p. 466, spp. indet. p. 476, Burma, GATES Rec. Ind. Mus. Calcutta 38 1936.

Pheretima, memoir on Indian spp., BAHL Ind. Zool. Mem. Lucknow 1 1936 x + 85 pp.—*P. vulgaris* pp. 12-18, var. *agricola* pp. 18-23, *kiangsuensis* pp. 24-28, *obscuritopora* pp. 28-32 figs. spp. n., China, CHEN Sci. Rep. Nat. Centr. Univ. Nanking 1 1930.—*P. morrisi* (Bedd.) p. 33, *heterochaeta* (Mich.) p. 34, *robusta* (Perr.) p. 36, *sheni* sp. n. pp. 38-42 fig. 1, *ultoria* sp. n. pp. 42-47 fig. 2, *directa* sp. n. pp. 47-51 fig. 3, *flavarundoida* sp. n. pp. 51-56 fig. 4, Hongkong, CHEN Bull. Fan Mem. Inst. Biol. Peiping 6 1935.—*P. kikuchii* sp. n. Japan, HATAI & OHFUCHI Science Rep. Tôhoku Imp. Univ. Sendai 10 1936 pp. 767-772 10 figs.—*P. carnosa* (Goto & Hatai), Korea, KOBAYASHI Sc. Rep. Tôhoku Univ. (4) 11 1936 pp. 115-138 3 figs.—*P. koryoensis* sp. n. pp. 146-159 figs. 2-7, *fibula* sp. n. *typica*, *ranunculus* varr. n. pp. 159-165 figs. 8, 9, *serrata* sp. n. pp. 165-168 fig. 10, *monstrifera* sp. n. pp. 168-171 fig. 11, *susakii* sp. n. varr. *typica* p. 171 fig. 12, *patina* p. 175 fig. 13 varr. n., *vallis* sp. n. p. 176 fig. 14, *bitheca* sp. n. p. 179 fig. 15, Korea, KOBAYASHI Sc. Rep. Tôhoku Univ. (4) 11 1936.—*P. brinchangensis* Steph. pp. 92-96, *cameroni* Steph. pp. 96-99, *eluta* pp. 99-101 fig. 1, *miniata* pp. 101-104 figs. 2, 3, *ralla* pp. 104-106 fig. 4, *rallida* pp. 106-108 fig. 5, *rubella* pp. 108-111 fig. 6, *rutida* pp. 111-113 fig. 7,

serena pp. 113-115 figs. 8, 9, *sigillata* pp. 115-117 fig. 10 spp. n. Malay Peninsula, GATES Bull. Raffles Mus. Singapore 12 1936.—*P. aculeata* sp. n. p. 390, *analecta* Gates p. 392, *andamanensis* Mich. p. 393, *andersoni* Mich. p. 395 fig. 2, *anomala* Mich. p. 396, *arboricola* sp. n. p. 399, *austrina* Gates p. 400, *balteolata* Gates p. 402, *bellatula* Gates p. 403, *californica* Kinberg p. 404, *campanulata* (Rosa) p. 406 fig. 3, *canaliculata* Gates p. 410, *diffringens* Baird p. 412, *elongata* (E. Perr.) p. 413, *exigua* Gates p. 415, *hawayana* (Rosa) p. 417, *houileti* (E. Perr.) p. 419, *inclara* Gates p. 422, *longicauliculata* Gates p. 423, *lorella* sp. n. p. 425, *luzia* sp. n. p. 427, *malaca* sp. nom. n. pro *maculosa* Gates nee Hatai p. 429, *mamillana* Gates p. 430, *manicata* Gates p. 432, *meridiana* Gates p. 434, *morrisi* (Bedd.) p. 437, *nugalis* Gates p. 439 fig. 4, *pannosa* sp. n. p. 441, *pauxillula* sp. n. p. 442, *peguana* (Rosa) p. 444, *planata* Gates p. 446, *posthuma* (L. Vaill.) p. 448, *promota* Gates p. 451, *rimosa* Gates p. 453, *robusta* (E. Perr.) p. 454, *scitula* sp. n. p. 457, *sonella* sp. n. p. 458, *suctoria* Mich. p. 461, *vieta* sp. n. p. 462 figs. 5, 6, Burma, GATES Rec. Ind. Mus. Calcutta 38 1936.

Platydrilus Mich. syn. of *Stuhlmannia*, *P. inermis* Mich. renamed *S. mayiliensis*, MICHAELSEN Amer. Mus. Nov. 843 1936 p. 10.

Plutellus (Pl.) *whistleri* sp. n. S.W. Australia, MICHAELSEN J. Roy. Soc. W. Australia 21 1935 pp. 39-43 1 fig.

Pygmaeodrilus ngomanus sp. n. Belgian Congo, MICHAELSEN Rev. zool. bot. afr. Tervueren 28 1936 pp. 222-225 figs. 39, 40.

Schoutedenia gen. n. Pareudrilinae, *filum* sp. n. Belgian Congo, MICHAELSEN Rev. Zool. Bot. Afr. Tervueren 29 1936 pp. 66-70 3 figs.

Stuhlmannia, emend. p. 10, *congica* sp. n. Belgian Congo, pp. 11-14 3 figs., *mayiliensis* sp. nom. n. pro *Platydrilus inermis* Mich. p. 10, MICHAELSEN Amer. Mus. Nov. 843 1936.

Tonoscolex depressus (Gates) p. 379, *lunatus* (Gates) p. 380, *montanus* sp. n. p. 381, *oneili* (Steph.) p. 383 fig. 1, *parvus* sp. n. p. 386, Burma, GATES Rec. Ind. Mus. Calcutta 38 1936.

Yagansia rahmi sp. n. pp. 194-196 figs. 1-3, *spatulifera* (Mich.) pp. 196-199 figs. 4, 5, *grisea* (Mich.) p. 199 fig. 6, MICHAELSEN Zool. Anz. Leipzig 113 1936.

HIRUDINEA.

Hirudinea of North Sea and Baltic Ocean, general account, HERTER Grimpe & Wagler, Die Tierwelt der Nord. und Ostsee 6 c 2 (Lief. 29) 1936 pp. 45-106 36 figs.

Rhynchobdellae.

Boreobdella verrucata (Müller). Lake Wigry, Poland, PAWŁOWSKI Arch. Hydrobiol. Ichthyol. Suwalki 10 1936 pp. 11-15 pl. i figs. 3, 4.

Cystobranchus sp. on gills of catfish, *Rhamdia guatemalensis*, Yucatan, MOORE Publ. Carnegie Inst. Washington 457 1936 pp. 42-43.—*C. fasciatus* (Kollar) Lake Ohrida, PAWŁOWSKI Ann. Mus. Zool. polon. 11 1936 pp. 372-374 figs. 1, 2.

Clepsine namaquaensis sp. n. S.W. Africa, AUGENER Sitz.Ber. Ges. naturf. Fr. Berlin 1935 1936 p. 388.

Clepsinides windhukensis sp. n. S.W. Africa, AUGENER Sitz.Ber. Ges. naturf. Fr. Berlin 1935 1936 pp. 389-392 fig. 2.

Glossiphonia complanata, concolor Linn., Lake Wigry, Poland, PAWŁOWSKI Arch. Hydrobiol. Ichthyol. Suwalki 10 1936 pp. 19-21 pl. i figs. 5, 6.—*G. Chappuisi* sp. n. Kenya, HARANT & VERNIERES Mém. Hist. nat. Paris 4 1936 p. 222 fig. 2. [*Vide etiam Glossosiphonia.*]

Glossosiphonia complanata (L.) p. 46, *octoserialis* Stsch., *concolor* (Apáthy) p. 47, *heteroclita* (L.) p. 48, *paludosa* (Carena) p. 49, R. Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929.—*G. octoserialis* Stschegolow syn. of *Boreobdella verrucata* (F. M.), PAWŁOWSKI Ann. Mus. zool. polon. 11 1936 pp. 339-345 fig. 1. [*Vide etiam Glossiphonia.*]

Haementeria costata (Müller), R. Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 53, Lake Wigry, Poland, PAWŁOWSKI Arch.

Hydrobiol. Ichthyol. Suwalki 10 1936 pp. 15-19 pl. ii figs. 5-8.—*H. multi-striata* L. Johan. S.W. Africa, AUGENER Sitz.Ber. Ges. naturf. Fr. Berlin 1935 1936 pp. 392-395 3 figs.—*H. lutzi* Pinto, Brazil, CORDERO Ann. Acad. Brasil. Sci. Rio 8 1936 pp. 225-227.—*H. omoensis* sp. n. Abyssinia, HARANT & VERNIERES Mém. Mus. Hist. Nat. Paris 4 1936 p. 223.

Helobdella stagnalis (L.), R. Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 51.—*H. lineata* (Verr.), Yucatan, MOORE Publ. Carnegie Inst. Washington 457 1936 pp. 41-42.—*H. scutifera* R. Bl. syn. of *H. stagnalis* (L.), PAWŁOWSKI Ann. Mus. Zool. polon. 11 1936 pp. 365-368.—*H. Jeanneli* sp. n. Africa, HARANT & VERNIERES Mém. Mus. Hist. nat. Paris 4 1936 pp. 221-222.

Hemiclepsis marginata (O. F. M.) R. Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 44.

Oculobdella gen. n. Haementeriinae type *Glossiphonia socimulcensis* Caballero, AUTRUM Bronns Klassen Leipzig 4 1936 p. 53.

Parabdella subg. n. of *Haementeria*, type *Placobdella quadrioculata* Moore, AUTRUM Bronns Klassen Leipzig 4 1936 p. 80.

Paraclepsis Harding 1924, AUTRUM Bronns Klassen Leipzig 4 1936 p. 1.

Piscicola geometra (Linn.), R. Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 41.

Placobdella bistriata (Pinto) Brazil, CORDERO Ann. Acad. Brasil. Sci. Rio 8 1926 pp. 221-225.—*P. roszkowskii* Oka 1932 syn. of *Haementeria costata* (F. M.), PAWŁOWSKI Ann. Mus. Zool. polon. 11 1936 pp. 359-365 fig. 1.

Protoclepsis tessellata (O. F. M.) R. Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 45.

Theromyzon tessellata (Müll.), intestinal structure, PAWŁOWSKI, Folia Morphol. Warsaw 6 1936 pp. 87-91 2 figs.—*T. sexoculata* (Moore), Kashmir, MOORE Mem. Connecticut Acad. Arts Sc. 10 1936 p. 191.—*T. maculosa* (Rathke) Lake Wigry, Poland, PAWŁOWSKI Arch. Hydrobiol. Ichthyol. Suwalki 10 1936 pp. 7-11 pl. i fig. 1, pl. ii figs. 1-4.

Trachelobdella lüderitzi sp. n. S.W. Africa, AUGENER Sitz.Ber. Ges. naturf. Fr. Berlin 1935 1936 pp. 395-397 fig. 4.

Trachybdella bistriata Pinto transferred to *Placobdella*, CORDERO Ann. Acad. Brasil. Sci. Rio 8 1936 p. 221.

Gnathobdellae.

Diplobdella brasiliensis (Pinto), Brazil CORDERO Ann. Acad. Brasil. Sci. Rio 8 1936 pp. 227-231.

Haemopsis sanguisuga (L.) Lake Wigry, Poland, PAWŁOWSKI Arch. Hydrobiol. Ichthyol. Suwalki 10 1936 pp. 22-23 pl. i fig. 2, river Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 56, varieties, PAWŁOWSKI Ann. Mus. Zool. Polon. 11 1936 pp. 161-169 pl. xxvi.

Hirudo medicinalis L., river Donetz, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 p. 55.—*H. buluvensis* sp. n. Belgian Congo, SCIACCHITANO Rev. Zool. Bot. afr. Tervueren 28 1936 p. 162.—*H. michaelsoni* sp. n. German S.W. Africa, AUGENER Sitz.Ber. Ges. naturf. Fr. Berlin 1935 1936 pp. 382-385 fig. 1.—*H. Granviki* sp. n. Omo, HARANT & VERNIÈRES Mém. Mus. Hist. nat. Paris 4 1936 p. 220.

Limnobdella brasiliensis Pinto transferred to *Diplobdella*, CORDERO Ann. Acad. Brasil. Sci. Rio 8 1936 p. 227.

Pharyngobdellae.

Blanchardia Gedroyé syn. of *Trocheta* Dutrochet, PAWŁOWSKI Ann. Mus. zool. polon. 11 1936 pp. 347-353 figs. 1-3.

Dina apathyi Gedroyé syn. of *Herpobdella lineata* f. *apathyi* (Ged.), PAWŁOWSKI Ann. Mus. zool. polon. 11 1936 pp. 353-355 figs. 4, 5.

Erpobdella octoculata (Linn.), Kashmir MOORE Mem. Connecticut Acad. Arts Sc. 10 1936 p. 192. [Vide etiam *Herpobdella*.]

Foraminobdella heptamerata Kaburaki Madras, MOORE Mem. Connecticut Acad. Arts Sc. 10 1936 p. 192.

Herpobdella octoculata (L.) p. 57, *nigricollis* (Brandes) p. 58, *testacea* (Sav.) p. 60, *lineata* (O. F. M.) p. 61,

Donetz region, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929.—*H. vilnensis* Lisk. syn. of *octoculata* f. *monostriata* (Gedr.) pp. 355-357 fig. 6, *octoculata* [sc. *octoculata*] Lake Ohrida p. 375 fig. 3, PAWŁOWSKI Ann. Mus. Zool. Polon. 11 1936. [Vide etiam *Erpobdella*.]

Hylacobdella grisea sp. n. Belgian Congo, SCIACCHITANO Rev. Zool. Bot. afr. Tervueren 28 1936 p. 163.

Salifa perspicax R. Blanch., S.W. Africa, AUGENER Sitz. Ber. Ges. naturf. Fr. Berlin 1935 1936 pp. 385-388.

Trocheta quinqueannulata sp. n., Donetz basin, Russia, LOUKINE Trav. Soc. Nat. Kharkov 52 1929 pp. 62-64 1 fig.

Incertae sedis.

Granelia gen. n. *naivashae* sp. n. Kenya, HARANT & VERNIÈRES Mém. Mus. Hist. nat. Paris 4 1936 p. 225.

ECHIURIDA.

Dendrostoma seignifer Selenka and De Man, structure, AWATI & PRADHAN J. Univ. Bombay 4 1936 pp. 114-131 11 figs.

Thalassema bombayensis (Prashad & Awati), proboscis, AWATI J. Univ. Bombay 4 1936 pp. 96-104 8 figs., alimentary system, AWATI & DESHPANDE J. Univ. Bombay 4 1936 pp. 68-85 10 figs.

SIPUNCULIDA.

Siphonosoma australe (Keferst.) in Indian waters, PRASHAD Rec. Ind. Mus. Calcutta 38 1936 p. 237 3 figs.

Sipunculus nudus Linn. p. 232, *robustus* Keferst. p. 233, *porrectus* Selenka p. 235, *aequalis* Sluiter p. 236 figs., Indian waters, PRASHAD Rec. Ind. Mus. Calcutta 38 1936.

CONODONTA

†*Acontiodus alveolaris* sp. n. Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 601 fig.

†*Barbarodina* **gen. n.** p. 602, *grandis*, *typicala* p. 603 figs., **spp. n.**, Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Belodus grandis* p. 603, *wyckoffensis* p. 604 figs., **spp. n.**, Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Cyrtoniodus apicalis* **sp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 604 figs.

†*Dichognathus variabilis* **sp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 604 figs.

†*Euprioniodina dubia* **sp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 605 fig.

†*Gnathodus integer* **sp. n.**, palaeozoic, Germany, SCHMIDT Paläont. Z. Berlin 16 1934 p. 82 12 figs.

†*Gyrogathus planus* **sp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 606 figs.

†*Heterognathus* **gen. n.** p. 606, *brevis*, *idoneus*, *simplex* **spp. n.** p. 607 figs. Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Oistodus brevis*, *erectus* p. 609, *excelsus*, *fornicalis*, *giganteus* p. 610 figs. **spp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Ozarkodina pauperata* p. 611, *robusta* p. 612 figs., **spp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Paltodus arcuatus*, *cornutus*, *elegans* p. 612, *striatus* p. 613 figs., **spp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Polycaulodus chatfieldensis* p. 613, *irregularis* p. 614 figs. **spp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Polyplacognathus* **gen. n.** *expansus*, *ramosus* p. 615 **spp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

†*Scyphiodus* **gen. n.** *primus* **sp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 617 figs.

†*Subcordylodus* (?) *inaequalis* **sp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935 p. 618 figs.

†*Trichognathus gyroides*, *minnesotensis* p. 619, *symmetricus* p. 620 figs. **spp. n.** Ordovician, N. America, STAUFFER J. Paleont. Sharon 9 1935.

VII. BRACHIOPODA AND BRYOZOA

(a) BRACHIOPODA

BY

J. K. S. ST-JOSEPH, B.A., Ph.D.

CONTENTS

| | PAGE |
|------------------------------|------|
| I. TITLES | 1 |
| II. SUBJECT INDEX | 10 |
| III. SYSTEMATIC INDEX | 12 |

I.—TITLES.

1.—Alexander, F. E. S. The Aymestry Limestone of the Main Outcrop. Quart. J. geol. Soc. London **92** 1936 pp. 103–114 figs. 1–2 pl. viii.

2.—Alferov, B. A. Geological investigations in the region of Kosten Strait (Southern island of Novaya Zemlya). Trans. Arctic Inst. Lenin-grad **26** 1935 pp. 1–98. [Summary in English at p. 93.]

3.—Allan, R. S. New Records of the genus *Lingula* (Brachiopoda) from Tertiary strata in New Zealand. Trans. Proc. Roy. Soc. N.Z. **65** 1936 pp. 383–385.

4.—Alvarado, A. de. Macizo del Maestrazgo (Zona Este): Algunas notas referentes a su estratigrafia y tectónica. Bol. Inst. geol. Esp. **53** 1933 pp. 97–136 pls. i–ix.

5.—Anderson, E. M. Catalogue of Types and Figured Specimens of Fossils in the Geological Survey Collections now exhibited in the Royal Scot-tish Museum Edinburgh 1936 pp. 1–77.

6.—Arcelin, F. & Roché, P. Les Brachiopodes siliceux de la zone à *A. niortensis* de la carrière du Monsard à La Roche-Vineuse (S. et L.). C.R. Soc. géol. Fr. 1936 pp. 189–190.

7.—Asselberghs, E. Le Dévonien du bord nord du bassin de Namur. Mém. Inst. géol. Univ. Louvain **10** 1936 pp. 229–327 pls. xxi–xxii.

8.—Avnimelech, M. Über Ptero-poden von Syrien und Palästina. Ecl. geol. helv. **29** 1936 pp. 209–211.

9.—Baker, A. A. Geology of the Monument Valley—Navajo Mountain region, San Juan County, Utah. Bull. U.S. geol. Surv. **865** 1936 pp. 1–106 figs. 1–3 pls. i–xvii.

Barragy, E. J. *vide* Furnish, W. M.

10.—Bataller, J. R. Las Spiriferina de las colecciones paleontológicas del Instituto Geológico y Minero de España. Bol. Inst. geol. Esp. **52** 1931 pp. 225–250 pls. i–iii.

11.—Benson, F. M. The Brachiopods of the Greenbriar Limestone near Uniontown, Pennsylvania. Proc. Penn. Acad. Sci. **8** 1934 pp. 62–65.

12.—Besairie, H. Recherches géo-logiques à Madagascar. 1. La géologie du Nord-Ouest. Mém. Acad. Malgache **21** 1936 pp. 1–259 pls. i–xxiv.

13.—Bigot, A. Les Récifs Bathoniens de Normandie. Bull. Soc. géol. Fr. (5) **4** 1935 pp. 697–736 figs. 1–4 pls. xxxvii–xliii.

- 14.—Bigot, A. Les Brachiopodes du Bathonien des Monts d'Eraines (Calva-dos). Bull. Soc. géol. Fr. (5) 5 1936 pp. 591-603 pls. xxv-xxvi.
- 15.—Bigot, A. Brachiopodes du Bathonien des Monts d'Eraines. Bull. Soc. linn. Normandie Caen (8) 8 1936 pp. 54-55.
- 16.—Blanchet, F. Étude géologique des Montagnes d'Escreins (Hautes-Alpes et Basses-Alpes). Trav. Lab. Géol. Univ. Grenoble 19 1936 pp. 1-183 figs. 1-8 pls. i-xx.
- 17.—Bogatschew, J. T. Einige neue Daten zur Stratigraphie und Fauna der Zechsteinformationen in Gebiet der N. Dwina. Bull. Soc. Nat. Moscou Sect. Géol. 44 1936 pp. 406-428. [Summary in German at p. 4 7.]
- Born, K. E. *vide* Greger, D. K.
- 18.—Bouček, B. Die Planktonfauna der böhmischen Graptolithenschiefer. Centralb. Min. Geol. Paläont. Stuttgart 1936 B pp. 291-296.
- 19.—Branson, C. C. Paleontology and Stratigraphy of the Phosphoria formation. Univ. Missouri Stud. 5 1930 pp. 1-99 pls. i-xvi.
- 20.—Breistroffer, M. Étude de l'étage Albien dans le massif de la Chartreuse (Isère et Savoie). Trav. Lab. Géol. Univ. Grenoble 17 1933 3 pp. 1-50.
- 21.—Breistroffer, M. Révision de la faune Hauterivienne du Néron en Chartreuse (Isère). Bull. Soc. sci. Dauphiné 55 1935 pp. 531-555.
- 22.—Breistroffer, M. Sur la stratigraphie du Crétacé moyen en Chartreuse C.R. Acad. Sci. Paris 202 1936 pp. 1691-1693.
- 23.—Breistroffer, M. Révision de la faune Hauterivienne du Néron en Chartreuse. Trav. Lab. Géol. Univ. Grenoble 18 1936 pp. 131-155.
- 24.—Brichant, A. L. Contribution à la connaissance de la stratigraphie et de la tectonique des terrains antéhercyniens du Maroc oriental. Bull. Soc. géol. Fr. (5) 5 1936 pp. 541-557.
- 25.—Brill, K. G. *Productella waynensis*, a new Brachiopod from the Providence Shale of Kentucky. Contr. Mus. Pal. Univ. Michigan 5 1936 pp. 67-68 pl. i.
- Brousse, M. *vide* Brun, P. de.
- 26.—Brown, J. C. Contributions to the Geology of the Province of Yunnan in Western China. 9. The Brachiopod Beds of Liu-Wun and related formations in the Shan States and Indo-China. Rec. geol. Surv. Ind. 71 1936 pp. 170-216 pls. xxvi-xxvii.
- 27.—Brun, P. de & Brousse, M. Le Lias de Valz près Alès (Gard). Trav. Lab. Géol. Univ. Lyon 27 1936 pp. 1-68 figs. 1-9 pls. i-vi.
- 28.—Bryn-Davies, D. A. The Ordovician rocks of the Trefriw district (North Wales). Quart. J. geol. Soc. London 92 1936 pp. 62-90 figs. 1-5 pl. vii.
- 29.—Bullard, F. M. & Cuyler, R. H. The Upper Pennsylvanian and Lower Permian section of the Colorado River valley, Texas. Univ. Texas Bull. 3501 1935 pp. 191-258 figs. 31-32.
- 30.—Carman, J. E. Sylvania Sandstone of Northwestern Ohio. Bull. geol. Soc. Amer. Washington 47 1936 pp. 253-265.
- 31.—Carrington da Costa, J. O problema das Bilobites. Anais Fac. Ciênc. Pôrto 19 1935 pp. 152-176 pls. i-ii.
- 32.—Chapman, F. & Crespin, I. The Palaeontology of the Plantagenet Beds of Western Australia. J. Roy. Soc. W. Aust. 20 1934 pp. 103-130 pls. vi-xi.
- 33.—Chappars, M. S. Catalog of the type specimens of fossils in the University of Cincinnati Museum. Ohio J. Sci. 36 1936 pp. 1-45.
- 34.—Clark, T. H. & McGerrigle, H. W. Lacolle conglomerate: A new Ordovician formation in Southern Quebec. Bull. geol. Soc. Amer. Washington 47 1936 pp. 665-674.
- 35.—Comte, P. La série devonienne du Léon (Espagne). C.R. Acad. Sci. Paris 202 1936 pp. 337-339.
- 36.—Comte, P. Le Dévonien inférieur du Léon (Espagne). C.R. Acad. Sci. Paris 202 1936 pp. 771-773.
- 37.—Comte, P. Le Dévonien moyen et supérieur du Léon (Espagne). C.R. Acad. Sci. Paris 202 1936 pp. 1198-1200.
- 38.—Condit, D. D., Raggatt, H. G. & Rudd, E. A. Geology of Northwest Basin, Western Australia. Bull. Amer. Assoc. Petrol. Geol. Oklahoma 20 1936 pp. 1028-1070 figs. 1-7.

39.—Cooper, G. A. New Cambrian Brachiopods from Alaska. *J. Paleont. Menasha, Wis.* 10 1936 pp. 210-214 pl. xxvi.

40.—Cooper, G. A. & Kindle, C. H. New Brachiopods and Trilobites from the Upper Ordovician of Percé, Quebec. *J. Paleont. Menasha, Wis.* 10 1936 pp. 348-372 figs. 1-10 pls. li-liii.

Cooper, G. A. *vide* Ulrich, E. O.

41.—Cope, F. W. The Lower Carboniferous succession in the Wye Valley region of north Derbyshire. *J. Manchester Geol. Assoc.* 1 3 1936 pp. 125-145 figs. 1-6.

42.—Cope, F. W. On *Daviesiella carinata* (Garwood). *Proc. Yorks. geol. Soc. Leeds* 23 1936 pp. 79-90 figs. 1-4 pl. iii.

43.—Cope, F. W. The *Cyrtina septosa* band in the Lower Carboniferous Succession of North Derbyshire. *Summ. Prog. geol. Surv. Gt. Britain London* for 1934 2 1936 pp. 48-51.

44.—Corroy, G. & Denizot, G. Guide Géologique de la Provence Occidentale. *Ann. Fac. Sci. Marseille* (2) 8 1935 pp. 5-72 figs. 1-34.

Crespin, I. *vide* Chapman, F.

Cayler, R. H. *vide* Bullard, F. M.

45.—Dahmer, G. Die fauna der Siegener Schichten in der umgebung des Laacher Sees. *Jb. preuss. geol. Landesanst.* 55 1935 pp. 122-141 fig. 1.

46.—Dahmer, G. Die Fauna der obersten Siegener Schichten von der Unkelmühle bei Eitorf a.d. Sieg. *Abh. preuss. geol. LdAnst.* 168 1936 pp. 1-36 figs. 1-2 pls. i-vi.

47.—Dahmer, G. Oberste Koblenzschichten bei Miellen a.d. Lahn. *Jb. preuss. geol. Landesanst.* 56 1 1936 pp. 264-265.

48.—Dahmer, G. Die Fauna der Siegener Schichten von Unkel (Bl. Königswinter). *Jb. preuss. geol. Landesanst.* 56 1 1936 pp. 633-671 1 fig. pls. xlv-xlviii.

49.—Dahmer, G. Zwei Spiriferen aus dem Paläozoicum Nordspaniens. *Z. deuts. geol. Ges. Berlin* 88 1936 pp. 268-272 pl. xxxiv.

50.—Dane, C. H. Geology of the Salt Valley Anticline and adjacent areas Grand County, Utah. *Bull. U.S. geol.*

Surv. 863 1935 pp. 1-184 figs. 1-4 pls. i-xxi.

51.—Dareste de la Chavanne, J. Étude sur la Faune du Bajocien supérieur du Mont d'Or Lyonnais. *Brachiopodes. Trav. Lab. Géol. Univ. Lyon* 28 (9) 1936 pp. 111-119 pl. xii figs. 13-36.

52.—Davis, A. G. The London Clay of Sheppey and the location of its fossils. *Proc. Geol. Ass. London* 47 1936 pp. 328-345 fig. 57.

Denizot, G. *vide* Corroy, G.

53.—Deiss, C. Revision of type Cambrian formations and sections of Montana and Yellowstone National Park. *Bull. geol. Soc. Amer. Washington* 47 1936 pp. 1257-1342 figs. 1-10 pls. i-ii.

54.—Delépine, G. Contribution à l'étude de la faune du Dinantien des Pyrénées. *Bull. Soc. géol. Fr.* (5) 5 1935 pp. 171-191 pls. vii-viii.

55.—Desio, A. Riassunto sulla costituzione geologica del Fezzan. *Boll. Soc. geol. ital.* 55 1936 pp. 319-356 figs. 1-3 pl. xix.

56.—Dimitrow, Z. Die westliche-verbinding zwischen Balkan und Sredna-Gora. *Annu. Univ. Sofia* 32 (3) 1936 pp. 175-208. [Summary in German at p. 204.]

57.—Douglas, J. A. A Permo-Carboniferous fauna from South-West Persia (Iran). *Palaeont. indica* 22 6 1936 pp. 1-59 pls. i-v.

58.—Dubar, G. Sur le Lias supérieur du Haut Atlas de Midelt (Maroc). *Ann. Soc. géol. Nord, Lille* 59 1934 pp. 82-91.

59.—Dubar, G. Sur les genres de Térébratulidés rhétiens. *Ann. Soc. géol. Nord, Lille* 59 1934 pp. 173-175.

60.—Eastwood, T. British Regional Geology: Northern England. 1935 pp. 1-76 figs. 1-26 pls. i-viii.

61.—Edmunds, F. H. British Regional Geology: The Wealden District. 1935 pp. 1-85 figs. 1-21 pls. i-xiii.

62.—Edmunds, F. H. & Oakley, K. P. British Regional Geology: The central England District. 1936 pp. 1-88 figs. 1-16 pls. i-viii.

63.—Fenton, C. L. & Fenton, M. A. Walcott's "Pre-Cambrian Algonkian Algal Flora" and Associated Animals. Bull. geol. Soc. Amer. Washington 47 1936 pp. 609-620 pls. i-iii.

Ferguson, M. G. *vide* Muller, S. W.

64.—Fowler, A. The Geology of the Country around Rothbury, Amble and Ashington. Mem. geol. Surv. U.K. 1936 pp. 1-159 figs. 1-4 pls. i-iv.

65.—Fredericks, G. N. Mouvements de l'écorce terrestre et la stratigraphie du palaeozoïque supérieur de l'Oural. Mém. Soc. russe Mineral 59 1930 pp. 151-156. [In Russian.]

66.—Frentzen, K. Der Lias Delta (Amaltheen-Schichten) im Gebiete zwischen Aselfingen and Aalen. Sitz-Ber. heidelberg Akad. Wiss. 1934 2 pp. 1-73.

67.—Furnish, W. M., Barragy, E. J. & Miller, A. K. Ordovician fossils from the Upper part of type section of Deadwood Formation, South Dakota. Bull. Amer. Assoc. Petrol. Geol. Oklahoma 20 1936 pp. 1329-1341 pls. i-ii.

68.—Gaertner, H. R. von. Ober-silurische Faunen aus den spanischen Pyrenäen. Nachr. Ges. Wiss. Göttingen (IV) 1930 pp. 179-188 figs. 1-7.

69.—Gardner, J. The Molluscan fauna of the Alum Bluff Group of Florida, Part V. Prof. Pap. U.S. geol. Surv. 142 1928.

70.—Garretson, M. W. The Cardinal Spines of *Spirifer mucronatus*. Hobbies, Buffalo N.Y. 17 1936 pp. 12-13 1 fig.

George, T. N. *vide* Smith, B.

71.—Girty, G. H. *Pleurotomaria pseudostrigillata* nom. nov. and *Chonetes acanthophorus* nom. nov. J. Wash. Acad. Sci. 24 1934 p. 541.

72.—Goldring, W. Geology of the Berne Quadrangle. Bull. New York St. Mus. Albany 303 1935 pp. 1-238 figs. 1-72.

73.—Gossling, F. Report of field meeting at Oxted and Godstone. Proc. Geol. Ass. London 47 1936 pp. 322-327 pl. xxxvi.

74.—Greco, B. A proposito di una critica all' opera scientifica di Gaetano Giorgio Gemmellaro. Boll. Soc. geol. ital. 54 1935 pp. 301-312.

75.—Greco, B. La fauna Permiana del Sosio conservata nei Musei di Pisa, di Firenze e di Padova. Parte Prima. Palaeontogr. ital. Siena 35 1935 pp. 101-190 pls. xii-xv.

76.—Greger, D. K. On the occurrence of the genus *Gruenewaldtia* in the Devonian of Central Missouri. Washington Univ. Stud. St. Louis N.S. 9 1936 pp. 93-97 pl. i.

77.—Greger, D. K. & Born, K. E. Stratigraphy and Fauna of the Fernvale Formation. Washington Univ. Stud. St. Louis N.S. 9 1936 pp. 67-77 pls. i-ii.

78.—Guenther, E. Der geologische Aufbau der Freiburger Bucht. Bad. geol. Abh. 7 1936 pp. 10-64 5 figs.

79.—Gugenberger, O. Beiträge zur Kenntnis der Trias von Eberstein (Kärnten). Anz. Akad. Wiss. Wien 73 1936 pp. 39-42.

80.—Halfeen, L. L. Materials on Stratigraphy of Devonian Deposits of Altai. Rec. Geol. West-Siberian Region 20 1935 pp. 1-41 pls. i-viii. [Summary in English at p. 34.]

81.—Halicki, B. Materjały do znajomości budowy podłoża Polski pn.-wschodniej. 1. Sekwan i cenoman pn. Polesia. Roczn. Pol. Tow. Geol. Kraków 11 1935 pp. 26-82 figs. 1-7. [Summary in French at p. 75.]

82.—Haller, W. Einige biostratigraphische Untersuchungen in der Rohrer Mulde unter besonderer Berücksichtigung der Keriophyllen. Jb. preuss. geol. Landesanst. 56 1 1936 pp. 590-632 pls. xxxii-xliii.

83.—Hatai, K. A synopsis of the Recent and Fossil Rhynchonellid Brachiopoda. Bull. biogeogr. Soc. Tokyo 6 1936 pp. 197-205.

84.—Hatai, K. Fossil Brachiopoda from the Ninohe District, Mutu Province. Japan. J. Geol. Geogr. Tokyo 13 1936 pp. 71-83 pl. xiv.

85.—Hatai, K. Neogene Brachiopoda from Japan. Japan. J. Geol. Geogr. Tokyo 13 1936 pp. 283-324 pls. xxxiv-xxxv.

86.—Hatai, K. A Preliminary Note on the Tertiary Brachiopod Fauna of Japan. Proc. Imp. Acad. Tokyo 12 1936 pp. 100-102.

87.—**Hatai, K.** A list of the Recent Brachiopoda dredged from the Littoral sea of the Pacific side of Bôshô Peninsula, Central Japan. Rec. oceanogr. Works Japan 8 1936 pp. 191–207 1 fig.

88.—**Hatai, K.** A note on a Recent Brachiopod, *Fremulina sanguinolenta* (Gmelin), with remarks on the Subfamily Dalliniinae Beecher. Venus, Kyoto 6 1936 pp. 1–14 figs. 1a–i pls. i–ii.

89.—**Hatai, K.** A note on a Brachiopod, *Tegulorhynchia döderleini* (Davidson). Venus, Kyoto 6 1936 pp. 96–104.

Hatai, K. *vide* Yabe, H.

90.—**Hayasaka, I.** The Japanese Carboniferous. Rept. Int. Geol. Congr. 16 1936 pp. 585–592.

91.—**Hazard, J. C. & Mason, J. F.** Middle Cambrian formations of the Providence and Marble Mountains, California. Bull. geol. Soc. Amer. Washington 47 1936 pp. 229–240.

92.—**Heritsch, F.** Oberstes Unterdevon und unteres Mitteldevon bei Graz. SitzBer. Akad. Wiss. Wien. (1) 144 1935 pp. 187–197.

93.—**Heritsch, F.** Neue Versteinerungen aus den Nassfeldschichten der Karnischen Alpen. SitzBer. Akad. Wiss. Wien (1) 144 1935 pp. 349–375 pls. 1–2.

94.—**Heritsch, F. & Wolsegger, H.** Eospiriferen aus dem Devon der Ostalpen. Carinthia II 125 1935 pp. 57–64 1 pl.

95.—**Hewitt, H. D.** Further notes on the Chalk of the Thetford district, Norfolk. Proc. Geol. Ass. London 46 1935 pp. 18–37.

Hornberger, Jnr., J. *vide* Plummer, F. B.

96.—**Hosking, L.** Correlation of Carboniferous and Permian rocks of Western Australia. Rep. Aust. Ass. Adv. Sci. 21 1933 pp. 456–459.

97.—**Huang, T. K.** On the occurrence of *Lyttonia* in the Wolfcamp Series of the Glass Mountains of Texas with notes on *Lyttonids* from South-Western China. Bull. geol. Soc. China Peiping 15 1936 pp. 489–496 figs. 1–2 pl. i.

98.—**Kellum, L. B.** Evolution of the Coahuila Peninsula, Mexico. Part III. Geology of the mountains west of the

Laguna District. Bull. Geol. Soc. Amer. Washington 47 1936 pp. 1039–1089 figs. 1–2 pls. i–xiv.

Khodolevich, A. N. *vide* Moldavantzev., E. P.

99.—**Khomenko, I. P.** New data on the stratigraphy of the Tertiary Beds of the Eastern Sakhalin. The stratigraphy of the Tertiary Beds of the southwestern coast of the Schmidt peninsula (Northern Sakhalin). Trans. geol. Oil Inst. Moscou 40 1934 pp. 1–87 pls. i–xviii.

Kindle, C. H. *vide* Cooper, G. A.

100.—**Kobayashi, T.** Cambrian and Lower Ordovician Trilobites from Northwestern Canada. J. Paleont. Menasha, Wis. 10 1936 pp. 157–167 pl. xxi.

101.—**Kobayashi, T.** Three contributions to the Cambro-Ordovician Faunas. Japan. J. Geol. Geogr. Tokyo 13 1936 pp. 163–184 pls. xx–xxi. [Brachiopoda at pp. 181–183.]

102.—**Kongiel, R.** W sprawie wieku “siwaka” w okolicach Puław. (Contribution à l'étude du “siwak” dans les environs de Pulawy; plateau de Lublin.) Trav. Soc. Sci. Lett. Wilno 9 1935 pp. 171–227 figs. 1–3 pls. iv–xi. [Résumé in French at p. 217.]

103.—**Korschelt, E.** Vergleichende Entwicklungsgeschichte der Tiere 2 vols. pp. 1–1340 figs. 1–1312. Jena 1936. [Brachiopoda at pp. 448–458, figs. 484–495.]

104.—**Krištofovič, L. V.** On the Brachiopoda from the Tertiary sediments of the western coast of Kamchatka. C.R. Acad. Sci. Leningrad N.S. 3 1936 pp. 33–35.

105.—**Krumbeck, L.** Stratigraphie und Faunenkunde des Lias γ in Nordbayern. Z. deuts. geol. Ges. Berlin 88 1936 pp. 129–222 pls. xxvii–xxxi.

106.—**Kuhn, O.** Weitere Beiträge zur Fauna des untersten Lias in Schwaben und Franken. Jh. Ver. vaterl. Naturk. Württemb. 91 1935 pp. 2–18 pls. i–iii.

107.—**Kuhn, O.** Revision der Opalinuston—(Dogger Alpha)—Fauna in Franken, mit Ausschluss der Cephalopoden. Paläont. Z. Berlin 17 1935 pp. 109–158 pls. viii–x.

108.—Kuhn, O. Die Fauna des Amaltheentons (Lias δ) in Franken. N. Jahrb. Min. Geol. Paläont. Stuttgart **75** 2 B 1936 pp. 231–306 pls. viii–xiii.

109.—Kutscher, F. Die Throner Quarzite des hinteren Hunsrückgebietes. Jb. preuss. geol. Landesanst. **55** 1935 pp. 213–218.

110.—Lafitte, R. Le Jurassique et le Berriasien dans l'Aurès (Algérie). C.R. Acad. Sci. Paris **202** 1936 pp. 773–776.

111.—Lamont, A. The Drummuck Group, Girvan; A Stratigraphical Revision, with Descriptions of New Fossils from the Lower Part of the Group. Trans. geol. Soc. Glasgow **19** 1935 pp. 288–334 figs. 1–4 pls. vii–ix.

112.—Leblanc, E. L'Éodévonien de la bordure occidentale de l'anticlinal de Halleux. Mém. Inst. géol. Univ. Louvain **10** 1936 pp. 329–358 fig. 1 pl. xxiii.

113.—Lecompte, M. Contribution à la connaissance des "Récifs" du Frasnien de l'Ardenne. Étude lithologique du "récif" exploité à la nouvelle carrière du Château Gaillard à Trélon (France). Mém. Inst. géol. Univ. Louvain **10** 1936 pp. 31–112 figs. 1–7 pls. vi–xi.

114.—Lermontova, E. V. & Razumovsky, N. C. On the most ancient deposits of the Urals (Lower Silurian and Cambrian in the environs of the village Kidriasovo in the South Urals). Mém. C. russe Mineral **62** 1933 pp. 185–217 figs. 1–5 pls. i–ii. [Summary in English at p. 214.]

115.—Lhoest, M. A. Sur la présence de "*Lingulella* cf. *insons*" dans le Salmien supérieur et nouveaux gîtes à "*Dictyonema flabelliforme*" dans la vallée de la Lienne. Ann. Soc. géol. Belg. **58** 1935 Bulletin pp. B151–152.

116.—Licharew, B. Materials to the study of the Upper Carboniferous of Ferghana. Trans. geol. prospect. Inst. U.S.S.R. **31** 1935 pp. 1–47. [Summary in English at p. 35.]

117.—Licharew, B. The Interior Structure of *Camarophoria* King. Amer. J. Sci. New Haven **32** 1936 pp. 55–69 figs. 1–6.

118.—Licharew, B. Some uncommon upper Palaeozoic Brachiopods. Bull.

Soc. Nat. Moscou Sect. Géol. **44** 1936 pp. 133–158 figs. 1–2 pls. A–C. [Summary in English at p. 155.]

119.—Macar, P. L'Anticlinal de Givonne et le flanc sud du synclinal de l'Eifel entre la vallée de la Meuse et le méridien de Corbion (Ardennes française et belge). Ann. Soc. géol. Belg. **59** 1936 Mémoires pp. M51–M131 pls. i–ii.

McGerrigle, H. W. *vide* Clark, T. H.

120.—Maillieux, E. La Faune et l'Âge des Quartzophyllades Siegeniens de Longlier. Mem. Mus. Hist. nat. Belg. **73** 1936 pp. 1–140 pls. i–iii. [Brachiopoda at pp. 46–114 pls. i–ii.]

121.—Maillieux, E. La Faune des Schistes de Matagne (Frasnien supérieur). Mem. Mus. Hist. nat. Belg. **77** 1936 pp. 1–74 pl. i. [Brachiopoda at pp. 16–30.]

122.—Makarenko, F. Paleozoï bien-aksu v dzhungharskom Ala-tau. Trav. Inst. géol. Acad. Sci. U.R.S.S. **5** 1936 pp. 67–78 1 fig.

Mason, J. F. *vide* Hazzard, J. C.

123.—Mathieu, G. Sur l'Age Givétien des Marbres de la Ville-Dé-d'Ardin (Deux-Sèvres). C.R. Acad. Sci. Paris **202** 1936 pp. 1523–1525.

124.—Mazarovich, A. La stratigraphie et la tectonique du pays entre les fleuves Volga et Ural. Bull. Soc. Nat. Moscou Sect. Géol. **44** 1936 pp. 487–549 figs. 1–6. [Resumé in French at p. 548.]

125.—Menchikoff, N. Recherches géologiques et morphologiques dans le nord du Sahara occidental. Rev. Géogr. phys. Paris **3** 1930 pp. 103–247 figs. 1–15 pls. xiii–xx.

126.—Menchikoff, N. & Monod, T. Coupe géologique du Hank à Taoudeni (Sahara occidental). C.R. Acad. Sci. Paris **202** 1936 pp. 230–232.

127.—Mercier, J. Un nouveau gisement de *Goniorhynchia boueti* (Dav.). Bull. Soc. linn. Normandie Caen (8) **8** 1936 pp. 35–36.

128.—Mercier, J. & Onfray, J. Note sur la présence d'un niveau à *Rhynchonella decorata* Schloth. dans le Bathonien de l'Orne. Bull. Soc. linn. Normandie Caen (8) **8** 1936 pp. 37–38.

129.—Merriam, C. W. Devonian Section in Central Nevada (Abstract). Proc. geol. Soc. Amer. (1935) 1936 p. 92 (cf. also pp. 377-378).

130.—Mezneries, I. Steiermärkische Schlierfauna und ihre neuen formen. Mag. K. földt. Int. Évk. Pest. 65 1935 pp. 332-341 pl. xii.

Miller, A. K. *vide* Furnish, W. M.

131.—Miloradovich, B. V. Fauna of the Lower Permian of the Mezhdusharsky Island (Southern Island of Novaya Zemlya). Trans. arctic Inst. Leningrad. 37 1936 pp. 37-82 pls. i-iv. [Summary in English at p. 69.]

132.—Milosavljevič, M. Le Trias moyen du Plateau Žare près de Sjenica (Stara Raška). Ann. géol. Pén. balkan Belgrade 12 2 1935 pp. 270-274 1 pl. [Résumé in French at p. 274.]

133.—Mirčink, M. Some new data on the study of the Spirifer horizon (Kasanian stage) and the development of the groups of *Spirifer rugulatus* Kut. and *Sp. schrenki* Keys. Bull. Soc. Nat. Moscou Sect. Géol. 43 1935 pp. 357-383 figs. 1-10 pl. i. [Summary in English at p. 380.]

134.—Moldavantzev, E. P. & Khoda-levich, A. N. Contributions to the stratigraphy and geology of the Eastern slope of the North Ural. (The Ivdal Region.) Trans. geol. prosp. Inst. U.S.S.R. 85 1936 pp. 1-22. [English summary at p. 21.]

Monod, T. *vide* Menchikoff, N.

135.—Moore, H. B. Faunistic Records of the Manx Region. Rep. Lancs. Sea-Fish. Labs. 40 1932 pp. 152-159.

136.—Muir-Wood, H. M. On the Liassic Brachiopod Genera *Orthoidea* and *Orthotoma*. Ann. Mag. nat. Hist. (10) 17 1936 pp. 221-242 figs. 1-18.

137.—Muir-Wood, H. M. The Brachiopoda of the British Great Oolite Series. 1. The Brachiopoda of the Fuller's Earth. Palaeontogr. Soc. (Monog.) London 89 1936 pp. 1-144 figs. 1-34 pls. i-v.

138.—Muir-Wood, H. M. Brachiopoda from the Lower Lias, Green Ammonite Beds, of Dorset. Quart. J. geol. Soc. London 92 1936 pp. 472-485 figs. 1-11.

139.—Muller, S. W. & Ferguson, H. G. Triassic and Lower Jurassic formations of West Central Nevada. Bull. geol. Soc. Amer. Washington 47 1936 pp. 241-251.

140.—Nalivkin, D. Major divisions of the Paleozoic of the Union of Soviet Socialist Republics. Rept. Int. Geol. Congr. 16 1936 pp. 573-583.

141.—Neumann-Permiakowa, O. F. & Permiakow, V. V. Zur geologie des Tscherdynskischen Ural. Mém. Soc. russe Mineral. 59 1930 pp. 197-240. [Summary in German at p. 237.]

142.—Nicholls, G. E. The composition and biogeographical Relations of the fauna of Western Australia. Rep. Aust. Ass. Adv. Sci. 21 1933 pp. 93-138.

143.—Ohuye, T. On the coelomic Corpuscles in the body fluid of some invertebrates. vi. A note on the formed elements in the coelomic fluid of a Brachiopod, *Terebratalia coreanica*. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 231-238 fig. 1 pl. iv.

144.—Olagüe, I. Notas para el estudio del Jurásico en la Rioja. Bol. Soc. esp. Hist. nat. 36 1936 pp. 101-123 figs. 1-6.

Onfray, J. *vide* Mercier, J.

145.—Parent, H. Successions fossili-fères comparées du Bathonien du Var et du Bassin de Paris. C.R. Soc. géol. Fr. 1935 pp. 119-121.

146.—Parkinson, D. The Carboniferous Succession in the Slaidburn District, Yorkshire. Quart. J. geol. Soc. London 92 1936 pp. 294-331 pls. xxiv-xxvi.

147.—Péneau, J. Contribution à la Faune du Dévonien inférieur du Massif Armoricaïn. Bull. Soc. géol. Fr. (5) 4 1935 pp. 545-561 figs. 1-4 pl. xxx.

148.—Péneau, J. Contribution à la Faune du Dévonien inférieur du Massif Armoricaïn (2^e article). Bull. Soc. géol. Fr. (5) 5 1936 pp. 483-488 pl. xxiv.

Permiakow, V. V. *vide* Neumann-Permiakowa, O. F.

149.—Plummer, F. B. & Hornberger, Jr., J. Geology of Palo Pinto County, Texas. Univ. Texas Bull. 3534 1935 pp. 1-240 figs. 1-28 pls. i-vii.

150.—Pocock, R. W. and Whitehead, T. H. British Regional Geology: The Welsh Borderland. 1935 pp. 1-84 figs. 1-39 pls. i-xi.

Raggatt, H. G. *vide* Condit, D. D.

151.—Ramaccioni, G. Il Lias Medio di Monte Cucco nell'Appennino Centrale. Boll. Soc. geol. ital. **55** 1936 pp. 169-190 pl. vii.

Razumovsky, N. C. *vide* Lermontova, E. V.

152.—Reed, F. R. C. The Lower Palaeozoic faunas of the Southern Shan States. Palaeont. indica **21** 3 1936 pp. 1-130 pls. i-vii.

153.—Reed, F. R. C. Some Fossils from the Eurydesma and Conularia Beds (Punjabian) of the Salt Range. Palaeont. indica **23** 1 1936 pp. 1-36 pls. i-v.

154.—Richardson, L. Report of week-end field meeting in the Whitney district. Proc. Geol. Ass. London **46** 1935 pp. 403-411.

155.—Robson, G. C. Invertebrates (other than insects), in Regan, Natural History, London 1936. [Brachiopoda at p. 46.]

Roché, P. *vide* Arcelin, F.

156.—Roman, F. Geology of the Rhône valley (Lyons-Crussol). Proc. Geol. Ass. London **47** 1936 pp. 153-183 figs. 38-48 pl. xiii.

157.—Roquefort, C. Contribution à l'étude de l'Infra-Lias et du Lias inférieur des Causses Cévennols. Bull. Soc. géol. Fr. (5) **4** 1935 pp. 573-594 1 fig.

158.—Roquefort, C. Monographie du Lias et du Jurrassique de la région de Fouzilhon (Hérault). Bull. Soc. Étud. Sci. nat. Béziers **39** 1936 pp. 68-84 pls. i-ii.

Rudd, E. A. *vide* Condit, D. D.

159.—Sahni, M. R. *Fermoria minima*: A revised classification of the Organic Remains from the Vindhya of India. Rec. Geol. Surv. Ind. **69** 1936 pp. 458-468 pl. xliii.

160.—Sahni, M. R. On the Geological Age of the Namyau, Liu-wun and Napeng Beds and of certain other Formations in Indo-China. Rec. geol. Surv. Ind. **71** 1936 pp. 217-230.

161.—Saito, K. Older Cambrian Brachiopoda, Gastropoda, etc., from North-western Korea. J. Fac. Sci. Univ. Tokyo, Geol. **4** 1936 pp. 345-367 pls. i-iii.

162.—Saurin, E. Études Géologiques sur l'Indochine du Sud-Est. Bull. Serv. géol. Indochine **22** 1 1935 pp. 1-419 figs. 1-50 pls. i-xv.

163.—Schmidt, M. Fossilien der spanischen Trias. Abh. heidelberg. Akad. Wiss. **22** 1936 pp. 18-140 figs. 1-66 pls. i-vi.

164.—Schmidt, W. E. Die Schichtenfolge des Devons bei Soetenich in der Eifel. Jb. preuss. geol. Landesanst. **56** 1 1936 pp. 292-323 pl. xxv.

165.—Schréter, Z. *Lyttonia* aus dem Bükk-gebirge. Mag. K. földt. Int. Évk. Pest. **66** 1936 pp. 113-121 pl. iv.

166.—Segebart, D. K. Über die geologische Untersuchung des Paläozoicums und des Mesozoicums des Gebietes zwischen Lena, Unteren Tunguska und Tschona. Bull. Soc. Nat. Moscou Sect. Géol. **43** 1935 pp. 193-231 figs. 1-14. [Summary in German at p. 229.]

167.—Semichatov, S. V. Upper and Lower Boundary of the Middle Carboniferous Moscovian Stage. Amer. J. Sci. New Haven **32** 1936 pp. 222-233.

168.—Semichatov, S. V. Contributions to the stratigraphy of the middle carboniferous of the European part of U.S.S.R. Bull. Soc. Nat. Moscou Sect. Géol. **44** 1936 pp. 191-224 figs. 1-4 pls. i-iii. [Summary in English at p. 223.]

169.—Siemiradzki, J. Fauna Utworów Liasowych i Jurajskich. Tatr i Podhala. Arch. Tow. nauk Lwow (3) **3** 1923 pp. 1-52 pls. i-viii.

170.—Slinger, F. C. The Succession in the Rough Rock Series North of Leeds. Trans. Leeds geol. Ass. **5** 1936 pp. 188-196 figs. 1-2.

171.—Smith, B. Geology and Mineral Resources of the Skaneateles Quadrangle. Bull. New York St. Mus. Albany **300** 1935 pp. 1-120 figs. 1-64.

172.—Smith, B. The Mynydd Cricor inlier. Proc. Geol. Ass. London **46** 1935 pp. 187-192 fig. 24.

173.—Smith, B. & George, T. N. British Regional Geology: North Wales. 1935 pp. 1-92 figs. 1-30 pls. i-xii.

174.—Sos, V. Sobre unos moldes de Braquiopodos paleozoicos de la Sierra de Cameros (Logroño). Bol. Soc. esp. Hist. nat. 36 1936 pp. 124-126 fig. 7.

Spain, E. L. *vide* Wilson, C. W.

175.—Spath, L. F. The Upper Jurassic Invertebrate faunas of Cape-Leslie, Milne Land. II. Upper Kimmeridgian and Portlandian. Medd. Grönland 99 3 1936 pp. 1-180 pls. i-l. [Brachiopoda at pp. 136-141.]

176.—Spriestersbach, J. Beitrag zur Kenntnis der Fauna des rheinischen Devon. Jb. preuss. geol. Landesanst. 55 1 1935 pp. 475-525 figs. 1-3 pls. xli-l.

177.—Sselivanovski, B. W. Zur Geologie der jurassischen Ablagerungen des Bergrückens Ssarygul. Mém. Soc. russe Mineral. 62 1933 pp. 178-184. [In Russian.]

178.—Stoyanow, A. A. Correlation of Arizona Paleozoic Formations. Bull. geol. Soc. Amer. Washington 47 1936 pp. 459-540 figs. 1-5 pl. i.

179.—Sussmilch, C. A. The Carboniferous Period in Eastern Australia. Rep. Aust. Ass. Adv. Sci. 22 1935 pp. 83-118.

180.—Thomas, H. D. The Brachiopod *Punctospirifer pulchra* (Meek). Amer. Midl. Nat. Notre Dame 16 1935 pp. 203-207 pl. vii.

181.—Thorslund, P. Siljansområdets brännkalkstenar och kalkindustri. Sverig. geol. Undersökn. Arsb. C 30 1936 pp. 1-64 figs. 1-29 pls. i-iii.

182.—Ting, T. H. Zur Kenntniss der gattungen *Bornhardtina* Schulz und *Stringocephalus* Deufr. Bull. geol. Soc. China, Peiping 15 1936 pp. 343-359 figs. 1-2 pls. i-iii.

183.—Tishnoff, A. W. Materials on the stratigraphy and tectonic of the Devonian of the N.W. extremity of the Kouznets Coal basin. Bull. Geol. Prosp. Serv. West Siberia 11 1 1931 pp. 1-31. [Summary in English at p. 31.]

184.—Tolstikhina, M. Carboniferous deposits of the central part of the Ufa Plateau. Trans. Central Geol. Prosp. Inst. U.S.S.R. 65 1935 pp. 1-40 figs. 1-8. [Summary in English at p. 30.]

185.—Tolstikhina, M. Geological Map of the Lower-Jurezan region. Trans. Central Geol. Prosp. Inst. U.S.S.R. 68 1935 pp. 1-24 pl. i. [Summary in English at p. 23.]

186.—Ulrich, E. O. & Cooper, G. A. New Silurian Brachiopods of the Family Triplesiaidae. J. Paleont. Menasha, Wis. 10 1936 pp. 331-347 fig. 1 pls. xlviii-l.

187.—Ulrich, E. O. & Cooper, G. A. New genera and species of Ozarkian and Canadian Brachiopods. J. Paleont. Menasha, Wis. 10 1936 pp. 616-631.

188.—Vaughan, A. The Carboniferous Limestone Series (Avonian) of the Avon Gorge (Revised with certain additional sections by S. H. Reynolds). Proc. Bristol. Nat. Soc. (4) 8 1936 pp. 29-90 pls. i-xv.

189.—Voinova, E. V. Geological explorations of the Synia-Yu river basin (North Ural). Trans. Geol. Prosp. Inst. U.S.S.R. 69 1936 pp. 1-32. [Summary in English at p. 29.]

190.—Voisey, A. H. The Upper Palaeozoic rocks in the neighbourhood of Boorook and Drake, N.S.W. Proc. Linn. Soc. N.S.W. 61 1936 pp. 155-168 pl. viii.

191.—Voronetz, N. S. Mesozoic fauna of the Kharaulakh Mountain range. Trans. arctic Inst. Leningrad 37 1936 pp. 7-36 pls. i-iv. [Summary in English at p. 30.]

192.—Wandel, G. Beiträge zur Paläontologie des Ostindischen Archipels. XIII. Beiträge zur Kenntnis der jurassischen Molluskenfauna von Misol, Ost-Celebes, Buton, Seran und Jamdena. N. Jahrb. Min. Geol. Paläont. Stuttgart 75 (2) B 1936 pp. 447-526 figs. 1-6 pls. xv-xx.

193.—Warren, P. S. New Coloradoan species from Upper Peace River, British Columbia. Trans. roy. Soc. Can. (3) 27 1933 pp. 109-119 pls. i-ii.

194.—Westergård, A. H. *Paradoxides oelandicus* Beds of Öland. Sverig. geol. Undersökn. Arsb. C30 1936 pp. 1-66 figs. 1-12 pls. i-xii.

Whitehead, T. H. *vide* Pocock, R. W.

195.—Willard, B. Continental Upper Devonian of Northeastern Pennsylvania. Bull. geol. Soc. Amer. Washington 47 1936 pp. 565-607 figs. 1-3 pls. i-iii.

196.—Willard, B. The Onondaga Formation in Pennsylvania. *J. Geol. Chicago* 44 1936 pp. 578-603.

197.—Willard, B. *Spirifer divaricatus* Hall in Pennsylvania. *J. Paleont. Menasha, Wis.* 10 1936 pp. 67-69 figs. 1-3.

198.—Willard, B. A Tully Limestone outcrop in Pennsylvania. *Proc. Penn. Acad. Sci.* 8 1934 pp. 57-62.

199.—Wilson, C. W. & Spain, E. L. Age of Mississippian "Ridgetop Shale" of Central Tennessee. *Bull. Amer. Assoc. Petrol. Geol. Oklahoma* 20 1936 pp. 805-809.

200.—Wirth, E. Beiträge zur Kenntnis der Trias in der Provinz Szechuan, West-China. *N. Jahrb. Min. Geol. Paläont. Stuttgart* 75 (2) B 1936 pp. 412-446 figs. 1-14 pl. xiv.

201.—Wirth, E. Über "*Clitambonites*" *giralddii* Martelli und *Yangtzeella poloi* Martelli aus dem Ordoviz Chinas. *Paläont. Z. Berlin* 18 1936 pp. 292-302 pl. xx.

Wolsegger, H. *vide* Heritsch, F.

202.—Yabe, H. & Hatai, K. The Recent Brachiopod Fauna of Japan. *Proc. Imp. Acad. Tokyo* 12 1936 pp. 44-46 figs. 1-14.

203.—Yermolaev, M. M. Notes on the stratigraphy of the Novaya Zemlya. *Trans. arctic Inst. Leningrad* 27 1935 pp. 1-63. [Summary in English at p. 53.]

II.—SUBJECT INDEX.

GENERAL.

Museums and Collections.—ANDERSON, 5; Type Specimens in Cincinnati Museum [Many Brachiopoda, chiefly Ordovician, Devonian and Carboniferous], CHAPPARS, 33.

Classification and Nomenclature.—Rhaetic Terebratulids, DUBAR, 59; List of Brachiopod synonyms (Carboniferous species), GRECO, 74; Rhynchonellids, HATAI, 83; Synonymies of certain Recent Brachiopoda of Japan,

HATAI, 87; Classification of subfamily Dalliniinae Beecher 1893, HATAI, 88; Brachiopod Terminology, MUIR-WOOD, 137; Rectification of Nomenclature of some Discinidae, MUIR-WOOD, 138; Classification of certain new families and genera belonging to the Protremata, ULRICH & COOPER, 187; List of some Lower Carboniferous Brachiopod synonyms, MUIR-WOOD in VAUGHAN, 188 p. 43.

Technique.—Treatment of silicified specimens, ARCELIN & ROCHÉ, 6; MUIR-WOOD, 137.

General Treatises and Popular Works.—Systematic Discussion (Text-book), KORSCHULT, 103; Popular work, ROBSON, 155.

STRUCTURE.

General Accounts.—KORSCHULT, 103.

Muscle-impressions.—*Daviesiella carinata*, COPE, 42.

Umbonal Characters.—MUIR-WOOD, 137.

Deltidial Plates.—*Bornhardtina* and *Stringocephalus*, TING, 182.

Septum and Spondylium.—*Camarophoria*, LICHAREW, 117.

Skeletal Anatomy.—*Daviesiella carinata*, COPE, 42; *Frenulina sanguinolenta*, HATAI, 88; *Camarophoria* (serial sections), LICHAREW, 117; Internal structure of *Spiriferella parryana*, MILOKADOVICH, 131 pp. 54-58; *Orthotoma liasina*, *quensstedti*, *solidorostris* (serial sections), MUIR-WOOD, 136; *Acanthothyris midfordensis*, *powerstockensis*; *Kalli rhynchia platiloba*, *superba*; *Rhynchonelloidella alhamensis*, *smithi*, *wattonensis*; *Dictyothyris subreticulata*; *Sphaeroidothyris doulingensis*, *lenthayensis*; "*Terebratula*" *linguifera*; *Tubithyris globata*; *Wattonithyris fulonica*, *midfordensis*, *nunneyensis*, *wattonensis*; *Onithella haydonensis*, *pupa*; *Rugitella bullata*, *cadomensis*, *emarginata* (serial sections), MUIR-WOOD, 137; *Scalpellirhynchia scalpellum* (serial sections), MUIR-WOOD, 138; *Lyttonia nobilis*, SCHRÉTER, 165; Brachidium in *Bornhardtina*, TING, 182; Silurian Tripletsidae, ULRICH & COOPER, 186; *Martellia giralddii*, WIRTH, 201.

PHYSIOLOGY AND DEVELOPMENT.

Formed elements in the coelomic fluid of *Terebratalia coreanica*, OHUYE, 143.

Development and systematic position, KORSCHULT, 103.

Larva of *Terebratula* sp. ?, SCHMIDT, 163.

Development of deltidial plates in *Bornhardtina* and *Stringocephalus*, TING, 182.

ETHOLOGY.

Habitat.—BIGOT, 13; *Lingula comes*, BOUČEK, 18; HATAI, 85, 88-89.

Lingula as a Paleic Indicator, ALLAN, 3.

VARIATION AND AETIOLOGY.

Variation in Form.—*Goniorhynchia boueti*, *Rhynchonella arenaemontis*, BIGOT, 14.

Variation, Statistical.—BIGOT, 14; WIRTH, 201.

Homoeomorphy.—HATAI, 89; MUIR-WOOD, 137.

Phylogeny and Relationship.—Phylogeny of certain austral Rhynchonellacea, HATAI, 89; Evolution of *Spirifer* in Devonian of Germany, SPIESTERSBACH, 176.

DISTRIBUTION.

RECENT.

General, HATAI, 83; HATAI, 88; Irish Sea, MOORE, 135; Japan, HATAI, 85; YABE & HATAI, 202; Pacific (Japan), HATAI, 87; Indo-Pacific region, HATAI, 89; Australia, NICHOLLS, 142.

FOSSIL.

Precambrian.—India, SAHNI, 159; U.S.A., FENTON & FENTON, 63.

Palaeozoic.—Spain, SOS, 174; Russia, NALIVKIN, 140; U.S.A. (Arizona) (Faunal lists), STOYANOW, 178.

Cambrian.—Sweden, WESTERGÅRD, 194; Karakorum, KOBAYASHI, 101;

Korea, SAITO, 161; N. America, ULRICH & COOPER, 187; U.S.A. (Arizona), STOYANOW, 178; U.S.A. (California), HAZZARD & MASON, 91; U.S.A. (Montana), DEISS, 53; Canada, KOBAYASHI, 100; Alaska, COOPER, 39.

Ordovician.—Wales, BRYN-DAVIES, 28; SMITH, 172; Scotland, LAMONT, 111; Belgium, LHOEST, 115; Karakorum, KOBAYASHI, 101; Burma, REED, 152; China, WIRTH, 201; N. America, ULRICH & COOPER, 187; U.S.A. (Arizona), STOYANOW, 178; U.S.A., GREGER & BORN, 77; U.S.A. (N.Y.), GOLDRING, 72; U.S.A. (South Dakota), FURNISH, BARRAGY & MILLER, 67; Canada, CLARK & MCGERRIGLE, 34; Canada (Quebec), COOPER & KINDLE, 40.

Silurian.—England (Aymestry Limestone of the type area), ALEXANDER, 1; EDMUNDS & OAKLEY, 62; POCOCK & WHITEHEAD, 150; Spain, GAERTNER, 68; Bohemia, BOUČEK, 18; Estonia, ULRICH & COOPER, 186; Russia, MAKARENKO, 122; MOLDAVANTZEV & KHODALEVICH, 134; SEGEBAERT, 166; Urals, LERMONTOVA & RAZUMOVSKY, 114; NEUMANN-PERMIKOWA & PERMIKOW, 141; Novaya Zemlya, ALFEROV, 2; YERMOLAEV, 203; Burma, REED, 152; U.S.A., ULRICH & COOPER, 186; U.S.A. (N.Y.), GOLDRING, 72; U.S.A. (N.Y.), SMITH, 171.

Devonian.—France, LECOMPTE, 113; MATHIEU, 123; PÉNEAU, 147-148; Belgium (Upper Devonian of Namur basin; faunal lists), ASSELBERGS, 7; LEBLANC, 112; MACAR, 119; MAILLIEUX, 120-121; Spain, COMTE, 35-37; DAHMER, 49; Germany, DAHMER, 45-48; HALLER, 82; KUTSCHER, 109; SCHMIDT, 164; SPIESTERSBACH, 176; Austria, HERITSCH, 92; HERITSCH & WOLSEGGER, 94; Russia, HALFEEN, 80; MOLDAVANTZEV & KHODALEVICH, 134; TISHNOFF, 183; Novaya Zemlya, ALFEROV, 2; YERMOLAEV, 203; Fezzan, DESIO, 55; Sahara, MENCHIKOFF, 125; MENCHIKOFF & MONOD, 126; U.S.A. (Arizona), STOYANOW, 178; U.S.A. (Missouri), GREGER, 76; U.S.A. (Nevada), MERRIAM, 129; U.S.A. (N.Y.), GOLDRING, 72; U.S.A. (N.Y.), SMITH, 171; U.S.A. (Ohio), CARMAN, 30; U.S.A. (Pennsylvania), WILLARD, 195-198; Western Australia, HOSKING, 96,

Carboniferous.—England, COPE, 41-43; EASTWOOD, 60; FOWLER, 64; PARKINSON, 146; SLINGER, 170; (Zonal distribution of Brachiopoda in the Avonian of the type section), VAUGHAN, 188; France, DELÉPINE, 54; Spain, DAHMER, 49; Austria, HERITSCH, 93; Russia, LICHAREW, 116, 118; MAZAROVICH, 124; SEMICHATOV, 167, 168; (Zonal distribution of Brachiopoda in the Uralian of the Ufa Plateau), TOLSTIKHINA, 184; TOLSTIKHINA, 185; VOINOVA, 189; Urals, NEUMANN-PERMIKOWA & PERMIKOW, 141; Novaya Zemlya, ALFEROV, 2; YERMOLAEV, 203; India, REED, 153; Japan, HAYASAKA, 90; Morocco, BRICHANT, 24; Fezzan, DESIO, 55; Sahara, MENCHIKOFF, 125; MENCHIKOFF & MONOD, 126; U.S.A., BRANSON, 19; U.S.A. (Arizona), STOYANOW, 178; U.S.A. (Kentucky), BRILL, 25; U.S.A. (Pennsylvania), BENSON, 11; U.S.A. (Tennessee), WILSON & SPAIN, 199; U.S.A. (Texas), BULLARD & CUYLER, 29; PLUMMER & HORNBERGER, 149; U.S.A. (Utah), BAKER, 9; DANF, 50; Australia, SUSSMILCH, 179; Western Australia, HOSKING, 96.

Permo - Carboniferous. — Urals, FREDERICKS, 65; Persia, DOUGLAS, 57; Australia, CONNIT, RAGGATT & RUDD, 38.

Permian.—Italy, GRECO, 75; Roumania, SCHRETER, 165; Russia, BOGATSCHEW, 17; LICHAREW, 117; MAZAROVICH, 124; MIRČINK, 133; Novaya Zemlya, ALFEROV, 2; MILORADOVICH, 131; China, HUANG, 97; Madagascar, BESAIRIE, 12; U.S.A., BRANSON, 19; THOMAS, 180; U.S.A. (Arizona), STOYANOW, 178; U.S.A. (Texas), BULLARD & CUYLER, 29; HUANG, 97; New South Wales, VOISEY, 190.

Trias.—Spain, SCHMIDT, 163; Austria, GUGENBERGER, 79; Balkans, MILOSAVLJEVIĆ, 132; Indochina, SAURIN, 162; China, BROWN, 26; China, WIRTH, 200; U.S.A. (Nevada), MULLER & FERGUSON, 139.

Rhaetic.—General, DUBAR, 59.

Jurassic.—England (Lias), MUIR-WOOD, 136, 138; (Fuller's Earth), MUIR-WOOD, 137; (Bajocian-Bathonian), RICHARDSON, 154; France, BLANCHET, 16; (Bathonian), BIGOT,

13, 15; (Pliensbachien), BRUN & BRUSSE, 27; CORROY & DENIZOT, 44; (Bajocian), DARESTE DE LA CHAVANNE, 51; KUHN, 107; (Lias), KUHN, 108; (Bathonian), MERCIER, 127; (Bathonian), MERCIER & ONFRAY, 128; (Bathonian), PARENT, 145; ROMAN, 156; (Lias), ROQUEFORT, 157, 158; Spain (Lias), BATALLER, 10; (Bathonian), BIGOT, 14; OLAGÜE, 144; Italy (Lias), RAMACCIONI, 151; Germany (Lias), FRENTZEN, 66; GUENTER, 78; (Lias), KRUMBECK, 105; (Lias), KUHN, 106; Poland, (Sequanian), HALICKI, 81; SIEMIRADZKI, 169; Balkans, DIMITROW, 56; Russia, SSELIVANOVSKI, 177; VORONETZ, 191; (Kimmeridgian-Portlandian), East Greenland, SPATH, 175; Indo-China, SAHNI, 160; China, BROWN, 26; East-Indies, WANDEL, 192; Morocco (Lias), DUBAR, 58; Algeria (Tithonian), LAFFITTE, 110; Madagascar (Bajocian), BESAIRIE, 12.

Cretaceous.—England, EDMUNDS, 61; GOSSLING, 73; HEWITT, 95; France, BREISTROFFER, 20-23; CORROY & DENIZOT, 44; Spain, ALVARADO, 4; Poland, HALICKI, 81; KONGIEL, 102; Palestine, AVNIMELECH, 8; Canada, WARREN, 193; Mexico, KELLUM, 98.

Tertiary.—General, HATAI, 83; Yugoslavia, MEZNERICS, 130; Russia, KHOMENKO, 99; Kamchatka, KRISTOFVIĆ, 104; Japan, HATAI, 84; Japan (sequence of Neogene faunas), HATAI, 86; New Zealand, ALLAN, 3.

Eocene.—England, DAVIS, 52.

Miocene.—Japan, HATAI, 85; U.S.A. (Florida), GARDNER, 69; Australia, CHAPMAN & CRESPIN, 32.

Pliocene.—Japan, HATAI, 85.

III.—SYSTEMATIC INDEX.

NOTE.—Classification according to C. Schuchert and C. M. Le Vene in Fossilium Catalogus 1 42 Brachiopoda 1929; and as emended by Schuchert & Cooper, Mem. Peabody Mus. Yale, 4 1 1932.

Full references are given only in the case of new genera or species. In other cases the numeral in "Large bold Clarendon" refers to the list of titles where the full reference will be found. In the case where a reference is given in the Systematic Part, the volume number is printed in "Small bold clarendon."

ORDER PALÆOTREMATA.

Vacant.

ORDER ATREMATA.

OBOLACEA.

MICROMITRIDAE.

†*Micromitra* (*Iphidella*) sp., SAITO 161 p. 355 pl. i figs. 18-21.—*M. (I.) ornatella princeps* var. n. Cambrian Sweden, WESTERGÅRD Sverig. geol. Undersökn. Ars. C30 1936 pp. 22-23 pl. viii figs. 8-10.

OBOLIDAE.

†*Leptobolus insignis*, GOLDRING 72 fig. 15j.

†*Lingulella montana* sp. n. Precambrian U.S.A., FENTON & FENTON Bull. geol. Soc. Amer. Washington 47 1936 pp. 616-617 pl. iii figs. 4-5.—*L. cf. insons*, LHOEST 115 p. B151.—*L. davisii*, SMITH & GEORGE 173 fig. 7C.—*L. ferruginea*, sp., WESTERGÅRD 194 p. 23.

†*Obolopsis* gen. n. p. 349 for type *O. margaritae* sp. n. pp. 350-351 pl. i figs. 1-12, Lower Cambrian Korea, SAITO J. Fac. Sci. Univ. Tokyo, Geol. 4 1936.

†*Obolus razumovskii* sp. n. Silurian Urals, LERMONTOVA & RAZUMOVSKY Mém. Soc. russe Mineral. 62 1933 pp. 205-211 pl. ii figs. 14-18.—*O. cf. detritus* p. 351 pl. i figs. 14-15, sp. p. 352 pl. i figs. 16-17, SAITO 161.—*O. sp.*, Sos 174 p. 125 fig. 7, 3-5.

LINGULACEA.

LINGULIDAE.

†*Dignomia alveata*, GOLDRING 72 fig. 62Q.

†*Lingula arctica* sp. n. Permian Novaya Zemlya, MILOKADOVICH Trans. arctic Inst. Leningrad 37 1936 pp. 37-

40 pl. ii figs. 4 A-B, pl. iii figs. 1-3.—*L. exornata* sp. n. Silurian Burma, REED Palaeont. indica 21 3 1936 pp. 108-109 pl. iv figs. 26-26a.—*L. subcircularis* sp. n. p. 428 pl. xiv fig. 2, *tenuissima* var. *sinensis* var. n. pp. 427-428 pl. xiv figs. 1a-b Trias China, WIRTH N. Jahrb. Min. Geol. Paläont. Stuttgart 75 (2) B 1936.—*L. comes*, BOUČEK 18 p. 293.—*L. carbonaria*?, BRANSON 19 pl. ii fig. 1.—*L. cornea*, DAHMER 46 p. 32 pl. vi fig. 11.—*L. hunsrückiana*, DAHMER 48 p. 664 pl. xlviii fig. 9.—*L. rectilateralis* fig. 15 i, *rectilatera* fig. 37f, GOLDRING 72.—*L. p. 448*, *anatina* figs. 492-493, 495, KORSCHOLT 103.—*L. sp.*, KUHN 106 p. 2 pl. iii fig. 4.—*L. subparallela*, MAILLIEUX 121 p. 16 pl. i fig. 2.—*L. tenuissima* var. *zenkeri*, SCHMIDT 163 p. 38 fig. 3 pl. iv fig. 1.—*L. zeta*, SPATH 175 p. 136 pl. xlv fig. 5.—*L. polaris*, VORONETZ 191 p. 8 pl. iv figs. 42-44.—*L. subspatulata*, WARREN 193 p. 111.

ELKANIIDAE.

†*Elkania alaskensis* sp. n. Cambrian Alaska, ULRICH & COOPER J. Paleont. Menasha, Wis. 10 1936 p. 618.

ORDER NEOTREMATA.

SIPHONOTRETACEA.

OBOLELLIDAE.

†*Botsfordia granulata*, SAITO 161 p. 354 pl. ii figs. 6-11.

†*Obolella lunaris* sp. n. Lower Cambrian, Korea, SAITO J. Fac. Sci. Univ. Tokyo, Geol. 4 1936 pp. 353-354 pl. ii figs. 1-5.

SIPHONOTRETIDAE.

†*Schizambon australis* sp. n. Cambrian South America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 619.

†*Siphonotreta uralensis* sp. n. Silurian Urals, LERMONTOVA & RAZUMOVSKY Mém. Soc. russe Mineral. 62 1933 pp. 202-205 pl. i figs. 7-13.

ACROTRETACEA.

ACROTRETIDAE.

†*Acrothele* (*Redlichella*) *granulata*, WESTERGÅRD 194 p. 24.

†*Acrothyra chabakovi* sp. n. pp. 197-201 fig. 5₁ pl. i figs. 1-6 Silurian Urals, comleyensis p. 197 fig. 5₂, sera figs. 5₁, 3,

signata fig. 54, *proava* fig. 55, sp. p. 201, LERMONTOVA & RAZUMOVSKY Mém. Soc. russe Mineral 62 1933.

†*Acrotreta coreanica* sp. n. pp. 356–357 pl. ii figs. 12–19 Lower Cambrian Korea, SAITO J. Fac. Sci. Univ. Tokyo, Geol. 4 1936.—*A. schmalenseeii* p. 24, *socialis* p. 25, WESTERGÅRD 194.

†*Conodiscus* gen. n. for type *Acrothele burlingi* Kobayashi 1935, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 619.

†*Conotreta* sp., COOPER & KINDLE 40 p. 352.

†*Discotreta* gen. n. for type *Acrothele levisensis* Walcott 1908, Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 619.

DISCINACEA.

TREMATIDAE.

†*Lingulodiscina missouriensis*? p. 25 pl. ii figs. 2–3, sp. pl. ii figs. 4–5, BRANSON 19.

†*Oxlosia* nom. n. for *Eunoa* Clarke 1902 (non Malmgren 1867), Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 619.

DISCINIDAE.

†*Discina papyracea*, KUHN 107 p. 116 pl. viii figs. 34a–b.—*D. papyracea*, KUHN 108 p. 244.

†*Disciniscia aldrichi* sp. n. pp. 239–240 pl. xxxvi figs. 21–22 Miocene Florida U.S.A., *lugubris* p. 240 pl. xxxvi figs. 17–20, GARDNER Prof. Pap. U.S. geol. Surv. 142 1928.—*D. langi* sp. n. pp. 474–476 fig. 2 Jurassic (Lias) England, *sowerbyi* nom. n. pp. 476–477 fig. 3 for *Discina laevis* G. B. Sowerby 1822 Recent Chile, *holdeni* p. 473 fig. 1, *reflexa* p. 476, MUIR-WOOD Quart. J. geol. Soc. London 92 1936.—*D. (atlantica)*?, KORSCHOLT 103 fig. 494.—*D. warthi*, REED 153 p. 35.

†*Roemerella grandis*, GOLDRING 72 figs. 62A, B.

†*Discina (Orbiculoidea) inaequalis* sp. n. p. 665 pl. xlviii fig. 10 Devonian Germany, *arduennensis* p. 665, DAHMER Jb. preuss. geol. Landesanst. 56 1 1936.—*O. utahensis* p. 25 pl. ii figs. 8–11, sp. p. 26 pl. ii figs. 6–7, BRANSON 19.—*O. discus*, GOLDRING 72 fig. 37H.—*O. aff. latissima*, SEATH 175 p. 137 pl. xlv figs. 3a–f.—? *O. sp.*, WIRTH 200 p. 428.

CRANIACEA.

CRANIIDAE.

Crania anomala, MOORE 135 p. 152.

†*Craniella*? *obscura* sp. n. Devonian Germany, SPRIESTERSBACH Jb. preuss. geol. Landesanst. 55 1 1935 pp. 489–490 pl. xlvii fig. 10.

†*Craniiscus japonicus*, HATAI 85 p. 294 pl. xxxv fig. 26.—*C. japonicus*, HATAI 87 p. 196.

†*Philhedra* genus discussed p. 46, cf. *schwerdi* p. 47 pl. i fig. 7, MAILLIEUX 120.

†*Petrocrania* sp., MAILLIEUX 120 p. 46.

ORDER PROTREMATA.

SUBORDER ORTHOIDEA.

ORTHACEA.

NISUSIIDAE.

†*Nisusia* genus discussed p. 212, *borealis* sp. n. p. 214 pl. xxvi figs. 22–50 (in part) Cambrian Alaska, *festinata* p. 214 pl. xxvi figs. 33, 39–42, 47, sp. p. 214 pl. xxvi figs. 24, 36, 45, COOPER J. Paleont. Menasha Wis. 10 1936.

PROTORTHIDAE.

†*Arctohedra* gen. n. pp. 210–211 for type *A. minima* sp. n. p. 211 pl. xxvi figs. 1–5, 10, 12, 14–15, *mertiei* sp. n. p. 212 pl. xxvi figs. 6–9, 11, 13, 16–21 Cambrian Alaska, COOPER J. Paleont. Menasha Wis. 10 1936.

BILLINGSSELLIDAE.

†*Apheoörthis* gen. n. for type *Eoörthis lineocosta* Walcott 1924, *A. bella*, *emmonsii*, *ornata* spp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 620.

†*Billingsella corrugata*, *perfecta* spp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 619.—*B. gigantea*, KOBAYASHI 101 p. 181 pl. xx figs. 5–10.

†*Xenorthis* gen. n. for type *Strophomena stosei* Bassler 1919, *X. jonasae* sp. n. Cambrian-Ordovician U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 620.

FINKELNBURGIIDAE.

†*Diparelasma* gen. n. p. 623 for type *D. typicum* sp. n. pp. 623–624 Cambrian U.S.A. (Oklahoma), ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Finkelburgia bellatula* pp. 622–623, *buttsi*, *cullisoni*, *missourienis*, *scenidioides*, *subaequiradiata*, *virginica* p. 623 spp. n. Cambrian N. America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

PLECTORTHIDAE.

†*Desmorthis* gen. n. for type *D. nevadensis* sp. n., Cambrian U.S.A. (Nevada), ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 624.

†*Hebertella insculpta*, GREGER & BORN 77 pl. i figs. 7–9.

†*Oligorthis* gen. n. for type *O. arbutclensis* sp. n. Cambrian U.S.A. (Oklahoma), ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 624.

†*Platystrophia foerstei*, GREGER & BORN 77 pl. ii figs. 10–11.—*Orthis* (P. ?) *praetor*, REED 152 p. 29.

†*Plectorthis magna* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 p. 352 pl. li figs. 11, 24, 33, 37.—*Orthis* (P.) cf. *dichotoma* p. 21 pl. i fig. 23, *chaungzonensis* p. 86, REED 152.

SKENIDIIDAE.

†*Skenidioides impressus* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 p. 353 fig. 7 pl. li figs. 18, 32.—*S.* cf. *billingsi* p. 68 pl. ii figs. 8, 8a, 16–17, cf. *oelandicus* p. 30 pl. ii figs. 18–21, REED 152.

ANOMALORTHIDAE.

†*Anomalorthidae* fam. n. with *Anomalorthis* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 622.

†*Anomalorthis* gen. n. for type *A. utahensis* sp. n. p. 622, *oklahomensis* sp. n. p. 622, Cambrian U.S.A. (Utah and Oklahoma), ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

HESPERONOMIIDAE.

†*Hesperonomiidae* fam. n. with *Hesperonomia* gen. n. and *Hesperonomiella* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 621.

†*Hesperonomia* gen. n. for type *H. planidorsalis* sp. n. p. 621, *antelopensis* p. 622, *crassa* pp. 621–622, *louisensis* p. 622 spp. n. Cambrian N. America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Hesperonomiella* gen. n. for type *Protorthis porcias* Walcott 1924, Cambrian-Ordovician U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 622.

ORTHIDIELLIDAE.

†*Orthidiellidae* fam. n. with *Orthidiella* gen. n. and *Orthidium* Hall & Clarke 1892, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 621.

†*Orthidiella* gen. n. for type *O. longwelli* sp. n. Cambrian U.S.A. (Nevada), ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 621.

ORTHIDAE.

†*Archaeorthis canadensis* p. 620, *elongata* pp. 620–621, *glomerata* p. 621 spp. n. Cambrian-Ordovician N. America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Orthis* (*Eridorthis*) *liberalis* pp. 22–23 pl. i figs. 3–4, *kalavensis* pp. 23–24 pl. i figs. 1–2 spp. n. Ordovician Burma, REED Palaeont. indica 21 3 1936.

†*Orthis* (*Glossorthis*) *sylvatica* sp. n. Ordovician Burma, REED Palaeont. indica 21 3 1936 pp. 21–22 pl. ii figs. 1–2.

†*Orthis* (*Glyptorthis*) *taungtalensis* sp. n. pp. 24–25 pl. ii figs. 10–11 Ordovician Burma, sp. pp. 25–26 pl. i fig. 24, REED Palaeont. indica 21 3 1936.

†*Hesperorthis tricenaria*, GREGER & BORN 77 pl. i figs. 1–3.—*Orthis* (*H.*) cf. *laurentina* p. 20 pl. i fig. 15, sp. p. 20 pl. i fig. 19, cf. *tricenaria* p. 68 pl. i fig. 22, REED 152.

†*Nanorthis* gen. n. for type *Orthis hamburgensis* Walcott 1884, Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 621.

†*Orthis* (*Nicolella*) cf. *actoniae*, REED 152 p. 29 pl. ii fig. 9.

†*Orthis pustulifera* sp. n. Ordovician Burma, REED Palaeont. indica 21 3 1936 pp. 18–19 pl. i figs. 7–14, pl. ii fig. 3.—*O. personata*, DAHMER 48 p. 646 pl. xlviii fig. 1.—*O.* sp., Sos 174 p. 125 fig. 7 1–2.

†*Orthis (Paurorthis) hehoensis* sp. n. Ordovician Burma, REED Palaeont. indica **21** 3 1936 pp. 81–2 pl. ii figs. 22–24.

†*Orthis (Ptychopleurella) pinea* sp. n. pp. 26–27 pl. i figs. 18, 18a, Ordovician Burma, cf. *lapworthi* p. 27 pl. ii fig. 4, REED Palaeont. indica **21** 3 1936.

†*Yeosinella consignata*, REED **152** p. 30 pl. iv fig. 11.

DINORTHIDAE.

†*Dinorthis proavitus*, GREGER & BORN **77** pl. i figs. 4–6.—*Orthis (D.) flabellulum* POCOCK & WHITEHEAD **150** fig. 20G.—*Orthis (D.) cf. porcata*, REED **152** p. 67.—*Orthis (D.) flabellulum*, SMITH & GEORGE **173** fig. 12L.

†*Plaesiomys subquadratus*, GREGER & BORN **77** pl. i figs. 13–14.

PORAMBONITIDAE.

†*Porambonites cf. acutiplicata* p. 48 pl. iii figs. 1–2a, cf. *wahli* p. 49 pl. iii fig. 15, REED **152**.

†*Porambonites (Isorhynchus) canadensis* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. **10** 1936 p. 353 figs. 5–6 pl. li fig. 5.

CLITAMBONACEA.

TRITOECHIIDAE.

†*Tritoechiidae* nom. n. for *Deltatretridae* Schuchert & Cooper 1931, ULRICH & COOPER J. Paleont. Menasha Wis. **10** 1936 p. 624.

†*Tritoechiinae* subfam. n. of *Tritoechiidae*, with *Tritoechia* gen. n. and *Pomatotrema* Ulrich & Cooper 1932 Lower Palaeozoic, ULRICH & COOPER J. Paleont. Menasha Wis. **10** 1936 p. 624.

†*Pomatotrema oklahomense* sp. n., Cambrian U.S.A. (Oklahoma), ULRICH & COOPER J. Paleont. Menasha Wis. **10** 1936 p. 624.

†*Tritoechia* gen. n. pp. 624–625 for type *Deltatretra typica* Ulrich in Schuchert & Cooper 1932, *T. delicatula*, *hemipyramidata*, *quebecensis* spp. n. p. 625 Cambrian North America, ULRICH & COOPER J. Paleont. Menasha Wis. **10** 1936.

CLITAMBONITIDAE.

†*Gonambonites (Antigonambonites) emancipatus*, REED **152** p. 67 pl. i fig. 25.

†*Clitambonites cf. ascendens*, REED **152** p. 31 pl. iii fig. 14.

†“*Clitambonites*” *giraldii* see *Martellia giraldii*.

†*Hemipronites (Estlandia ?)* sp., REED **152** p. 33.

†*Kullervo pyramidata* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. **10** 1936 pp. 353–355 fig. 10 pl. li figs. 1–4.

†*Martellia* gen. n. for type *Orthisina giraldii* Martelli 1901 Ordovician China pp. 300–301, *M. giraldii* pp. 292–301 pl. xx figs. 1–19, WIRTH Palaeont. Z. Berlin **18** 1936.

†*Vellamo nemoralis* sp. n. pp. 31–32 pl. i figs. 5–6 Ordovician Burma, cf. *simplex* ? p. 32 pl. i fig. 21, REED Palaeont. indica **21** 3 1936.—*V. americanus*, GREGER & BORN **77** pl. ii figs. 8–9.

DALMANELLACEA.

DALMANELLIDAE.

†*Orthis (Dalmanella) sinchaungensis* sp. n. pp. 28–29 pl. ii figs. 12–15a Ordovician Burma, sp. p. 109 pl. iv fig. 21, REED Palaeont. indica **21** 3 1936.—*D. multisecta* fig. 21H, *perelegans* figs. 36E, F, *rogata* fig. 15H, *subcarinata* figs. 41H, I, GOLDRING **72**.—*D. cf. verneuilli*, PÉNEAU **147** p. 554 pl. xxx figs. 14–16.

†*Proschizophoria personata*, MAILLIEUX **120** p. 48.

WATSELLIDAE.

†*Orthis (Parmorthis) elegantula*, POCOCK & WHITEHEAD **150** fig. 27D.—*O. (P.) elegantula*, EDMUNDS & OARLEY **62** fig. 43.

†*Orthis (Wattella ?) pontilis* sp. n. pp. 27–28 pl. ii figs. 5–7, Ordovician Burma, REED Palaeont. indica **21** 3 1936.

BILOBITIDAE.

†*Bilobites varicus*, GOLDRING **72** fig. 36D.

MYSTROPHORIDAE.

†*Mystrophora deshayesi*, MAILLIEUX **121** p. 17.

RHIPIDOMELLIDAE.

†*Platyorthis circularis*, MAILLIEUX **120** p. 49.

†*Rhipidomella alsa* fig. 48A, *musculosa* figs. 44E, F, *oblata* figs. 38C, D., GOLDRING 72.—*R. tersa*, GREGER & BORN 77 pl. i figs. 10–12.—*R. ?* sp., MILORADOVICH 131 p. 40.

SCHIZOPHORIIDAE.

†*Enteletella nikschtschi*, LICHAREW 117 fig. 6.

†*Isorthis subvulvaria*, MAILLIEUX 120 p. 56 pl. i figs. 8, 8a.

†*Schizophoria juresanensis*, DOUGLAS 57 p. 38 pl. iv fig. 16.—*O. (S.) provulvaria*, DAHMER 49 p. 270 pl. xxxiv fig. 7.—*S. multistriata* figs. 41j, k, *striatula* fig. 62k, GOLDRING 72.—*S. striatula*, HALFEEN 80 pl. viii fig. 9.—*S. juresanensis*, HERITSCH 93 p. 352.—*S. provulvaria*, MAILLIEUX 120 p. 53.—*S.* sp., MILORADOVICH 131 p. 41.

SUBORDER PENTAMEROIDEA.

†Syntrophioidea suborder n. with Syntrophidae Schuchert 1896, Eostrophidae fam. n., Syntrophopsidae fam. n., Tetralobulidae fam. n., Camorellidae Hall & Clarke 1894, Clarkellidae and Huenellidae Schuchert & Cooper 1931, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

SYNTROPHIACEA.

EOSTROPHIIDAE.

†Eostrophidae fam. n. with *Eostrophia* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†*Eostrophia* gen. n. for type *Syntrophia cambria* Walcott 1912, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

CLARKELLIDAE.

†*Clarkella mcgerriglei* sp. n. Cambrian Canada, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 628.

†*Diaphelamsa* gen. n. for type *D. pennsylvanicum* sp. n., *breviseptatum*, *complanatum*, *quebecense* spp. n., Cambrian North America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 629.

†*Syntrophina carinifera* pp. 628–629, *gibbosa* p. 629, *missouriensis* p. 629 spp. n., Cambrian North America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.—*S.* cf. *affinis*, REED 152 p. 49 pl. i fig. 17.

(N-3598 p)

†*Yangtzeella poloi*, WIRTH 201 p. 301 pl. xx figs. 20–22.

HUENELLIDAE.

†Mesonomiinae subfam. n. of Huenellidae with *Mesonomia* gen. n. and *Glyptotrophia* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†*Glyptotrophia* gen. n. for type *G. imbricata* sp. n. Cambrian Canada, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†*Mesonomia* gen. n. for type *Eoorthis iophon* Walcott 1924, Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†Palaeostrophinae subfam. n. of Huenellidae, with *Palaeostrophia* gen. n., *Plectotrophia* gen. n., *Huenella* Walcott 1908, *Huenellina* Schuchert & Cooper 1931, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†*Palaeostrophia* gen. n. for type *Syntrophia orthia* Walcott 1905, Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†*Plectotrophia* gen. n. for type *P. bridgei* sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

SYNTROPHIIDAE.

†Syntrophinae subfam. n. of Syntrophidae with *Syntrophia* Hall & Clarke 1891, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 631.

†*Syntrophia longaeva* sp. n. Cambrian Canada, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 631.

†Xenelasminae subfam. n. of Syntrophidae with *Xenelasma* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 631.

†*Xenelasma* gen. n. for type *X. syntrophioides* sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 631.

SYNTROPHOPSIDAE.

†Syntrophopsidae fam. n. with *Syntrophopsis* gen. n. *Hesperotrophia* gen. n., *Rhysotrophia* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 630.

†*Hesperotrophia* gen. n. for type *H. obscura* sp. n., Cambrian Canada, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 630.

†*Rhysostrophia* gen. n. for type *R. nevadensis* sp. n., *occidentalis*, *transversa* spp. n., Cambrian North America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 630.

†*Syntrophopsis* gen. n. for type *S. magna* sp. n., *cassinensis* sp. n., Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 630.

TETRALOBULIDAE.

†*Tetralobulidae* fam. n. with *Tetralobula* gen. n. and *Punctolira* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 627.

†*Punctolira* gen. n. for type *P. punctolira* sp. n., Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha, Wis. 10 1936 p. 628.

†*Tetralobula* gen. n. for type *T. delicatula* sp. n., *imbricata*, *quadrata*, *transversa* spp. n., Cambrian North America, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 628.

CAMERELLIDAE.

†*Anastrophia verneuxi*, GOLDRING 72 figs. 33J, K.

†*Idiostrophia* gen. n. for type *I. perfecta* sp. n. Cambrian Canada, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 631.

†*Liostrophia* gen. n. p. 355 for type *L. glabra* sp. n. pp. 355-356 figs. 1-4 pl. li figs. 38, 42, Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936.

†*Neostrophia* gen. n. for type *N. subcostata* sp. n. Cambrian Canada, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 631.

†*Parastrophinella* cf. *reversa*, REED 152 p. 111 pl. v fig. 11.

PENTAMERACEA.

PENTAMERIDAE.

†*Camarophoria* with *Camarophorinella* subgen. n. for type, *C. (C.) caucasica* sp. n. p. 63 fig. 4, *pauciconvexa* sp. n. fig. 5 Permian Caucasus, LICHAREW Amer. J. Sci. New Haven 32 1936.—*C. biplicatifformis* sp. n. p. 63 fig. 3, *robsoni* sp. n. [nom nud.] p. 60 Permian

Caucasus, *superstes* p. 56 fig. 2, *schlotheimi* p. 63, LICHAREW Amer. J. Sci. New Haven 32 1936.—*C. cf. biplicata* p. 355 pl. ii figs. 11-14, *crumena* p. 354 pl. ii figs. 7-10, cf. *mutabilis* p. 355 pl. ii fig. 15, HERITSCH 93.

†*Camarophorinella* subgen. n. see *Camarophoria*.

†*Pentamerus (Conchidium) knighti*, POCKOCK & WHITEHEAD 150 fig. 32E.

†*Pentamerella arata*, GOLDRING 72 figs. 48B, C.

†*Pentamerus oblongus*, POCKOCK & WHITEHEAD 150 fig. 27A.

†*Sieberella coeymanensis* (= *Gypidula galeata*) figs. 33P-R, *pseudogaleata* figs. 41N-O, GOLDRING 72.—*S. costata*, MAILLIEUX 120 p. 59.

STRICKLANDIDAE.

†*Stricklandia* cf. *lirata*, EDMUNDS & OAKLEY 62 pl. iii fig. 4.

STROPHOMENACEA.

STROPHOMENIDAE.

†*Ahtiella* ? sp., REED 152 p. 47 pl. i fig. 20.

†*Bekkerella* subgen. n. see *Rafinesquina*.

†*Brachymimulus aculeatus* p. 358 pl. li fig. 8, *triplicatus* pp. 357-358 pl. li figs. 7, 23 spp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936.—*B. americanus* pp. 334-335 fig. 1a pl. xlviii figs. 1-2, 7-8, 17-18, *elongatus* p. 335 pl. xlviii fig. 27 spp. n. Silurian U.S.A., *perversus* p. 335 pl. xlviii figs. 3, 6, 12, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Brachyprion matutinum* sp. n. Ashgillian Scotland, LAMONT Trans. geol. Soc. Glasgow 19 1935 pp. 308-311 fig. 2 pl. vii figs. 8-11, pl. viii fig. 12.

†*Chonetoidea (Ægiria) yeosinensis*, REED 152 p. 45.

†*Cliftonia (Cliftonia)* p. 335 with *C. (C.) bellula* sp. n. p. 337 pl. xlviii figs. 14-16, 19 Silurian U.S.A., *striata* p. 335 pl. xlviii figs. 25, 31, *tubulistriata* pl. xlviii figs. 20, 24, 29, 33, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Cliftonia* with *Plectotreta* subgen. n. p. 339 for type *C. (P.) lindströmi* nom. n.

for *Strophomena nasuta* Lindström 1861, p. 339 pl. xviii fig. 36 Silurian Gotland, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Cliftonia (Oxoplectia) perfecta* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 pp. 358–359 pl. li figs. 25–29.—*C. (O.)* p. 337 with *C. (O.) gouldi* pp. 338–339 pl. l figs. 8, 15, 18–19, 23, 28, 32, 36, *infrequens* p. 339 pl. l. fig. 12 spp. n. Silurian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Derbyia* cf. *buchi*, DOUGLAS 57 p. 38 pl. iv fig. 12.—*D. (?)* sp., HERITSCH 93 p. 353.

†*Diambonia* gen. n. p. 356 for type *Plectambonites gibbosa* (Winchell & Schuchert) 1895 Ordovician U.S.A., *D. septata* p. 356 pl. li fig. 6, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936.

†*Fardenia* gen. n. p. 310 for type *F. scotica* sp. n. pp. 311–312 pl. vii figs. 1–7 Ordovician Scotland, Trans. geol. Soc. Glasgow 19 1935.—*F. costatula* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 p. 357 pl. li fig. 39.

†*Goniotrema* gen. n. for type *G. perplexa* sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 626.

†*Hipparionyx proximus*, GOLDRING 72 fig. 44k.

†*Hirnantia* gen. n. for type *Orthis sagittifera* McCoy 1851, Ordovician Scotland, LAMONT Trans. geol. Soc. Glasgow 19 1935 p. 313 pl. vii figs. 20–22.

†*Holtehdahlina sulcata parva*, COOPER & KINDLE 40 p. 357 pl. li fig. 30.

†*Ingria ?* sp., REED 152 p. 47 pl. iv fig. 2.

†*Leangella discuneata* sp. n. Ordovician Scotland, LAMONT Trans. geol. Soc. Glasgow 19 1935 pp. 315–317 pl. vii figs. 17–19.

†*Leptelloidea (Leangella) lamellata* sp. n. pp. 44–45 pl. iv figs. 22–23a Ordovician Burma, cf. *derfelensis* p. 43 pl. iv figs. 24–25, cf. *segmentum* p. 110, cf. *sholeshookensis* p. 43 pl. iv fig. 28, REED Palaeont. indica 21 3 1936.

†*Leptaena spectata* sp. n. p. 34 pl. iii fig. 12 Ordovician Burma, cf. *juvenalis*

p. 33 pl. iii fig. 3, cf. *richmondensis* p. 34 pl. iii fig. 11, REED Palaeont. indica 21 3 1936.—*L. rhomboidalis*, EDMUNDS & OAKLEY 62 fig. 4₁.—*L. rhomboidalis*, GOLDRING 72 figs. 37 s–u.—*L. unicos-tata*, GREGER & BORN 77 pl. ii figs. 6–7.—*L. bouei*, HALFEEN 80 pl. vii figs. 1–2.—*L. bouei*, MAILLIEUX 120 p. 71.—*L. rhomboidalis*, POCOCK & WHITEHEAD 150 fig. 27H.—*L. ? apenninica*, RAMAC-CIONI 151 p. 187 pl. vii figs. 18–19.—*L. rhomboidalis*, SMITH & GEORGE 173 fig. 18M.—*L. sp.*, THORSLUND 181 pl. i fig. 11, pl. ii figs. 12–13.

†*Leptaena* cf. *nubigena* see *Rafines-quina* (or *Leptaena*) cf. *nubigena*.

†*Leptellininae subfam. n.* of *Plectambonitidae*, with *Leptellina* gen. n. and *Leptella* Hall & Clarke 1892, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 626.

†*Leptella nevadensis* sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha, Wis. 10 1936 p. 626.

†*Leptellina* gen. n. p. 626 for type *L. tennesseensis* pp. 626–627 sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha, Wis. 10 1936.

†*Leptelloidea campestris* sp. n. pp. 42–43 pl. iii figs. 16–17 Ordovician Burma, cf. *leptelloides* p. 73 pl. iv fig. 9, REED Palaeont. indica 21 3 1936.

†*Leptestia* cf. *musculosa* p. 45 pl. iii fig. 8, sp. p. 46 pl. iii fig. 4, REED 152.

†*Meekella rotunda* sp. n. Permian U.S.A., BRANSON Univ. Missouri Stud. 5 1930 pp. 28–29 pl. v figs. 1–6 pl. vii figs. 1–7.—*M. bashkirica*, HERITSCH 93 p. 353.

†*Onychotreta* gen. n. pp. 339–340 for type *O. mesleri* sp. n. pp. 340–341 figs. 1c–e pl. xlix figs. 9–12, 14–17, 23–24, 26, 28–30, 32–34, and var. *angustata* var. n. p. 341 pl. xlix figs. 6, 18, 31, *miseri* pp. 343–344 pl. xlix figs. 20–22, 27, *multiplicata* p. 343 pl. xlix fig. 7, *plicata* p. 343 pl. xlix figs. 1, 8, 13 spp. n. Silurian U.S.A., *lenta* p. 342 pl. xlix figs. 2–5, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Orthotetes magnus* pp. 26–27 pl. iv figs. 1–5, *sulcus* pp. 27–28 pl. ii fig. 20 pl. iii figs. 1–4 spp. n. Permo-Carboniferous U.S.A., BRANSON Univ. Missouri Stud. 5 1930.—*O. kaskaskiensis*, BENSON 11 p. 63.

†*Plectambonites centricarinatus*, GOLD-RING 72 fig. 21F.

†*Plectodonta loilemensis* sp. n. Silurian Burma, REED Palaeont. indica 21 3 1936 pp. 113-114 pl. iv figs. 16-20.

†*Plectotreta* subgen. n. see *Cliftonia*.

†*Ptychoglyptus shanensis*, REED 152 p. 37.

†*Rafinesquina percensis* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 pp. 356-357 pl. li figs. 31, 34, 36, 41.—*R. ulrichi*, GOLDRING 72 fig. 21G.—*R. cf. alternata* p. 69 pl. iii fig. 6, *cf. jaervensis* p. 71 pl. iii figs. 13-13a, *cf. richardsoni* p. 37 pl. iii fig. 9, *cf. semiglobosina* p. 70 pl. iii fig. 7, REED 152.

†*Rafinesquina* with *Bekkerella* subgen. n. pp. 38-39. for type *Orthis subcrateroides* Reed 1906, *R. (B.) gentilis* sp. n. pp. 38-39 pl. iv fig. 14. Ordovician Burma, REED Palaeont. indica 21 3 1936.

†*Rafinesquina (Kjaerina) cf. felix* p. 37 pl. iv fig. 1, *cf. praecursor* p. 71 pl. iii fig. 18, REED 152.

†*Rafinesquina* (or *Leptaena*) *cf. nubi-gena*, REED 152 p. 72 pl. i fig. 16.

†*Schellwienella septirecta*, MAILLIEUX 120 p. 73.

†*Schuchertella altaica* sp. n. Devonian Altai, HALFEEN Rec. Geol. West Siberian Region 20 1935 p. 20 pl. viii fig. 1.—*S. interstriata* fig. 22I, *wool-worthana* figs. 38 G, H, GOLDRING 72.—*S. ingens*, MAILLIEUX 120 p. 74.

†*Sowerbyella wilsoni* sp. n. pp. 41-42 pl. iv figs. 4-8 Ordovician Burma, *cf. cylindrica* p. 40 pl. iv fig. 15, *cf. himalensis* p. 40 pl. iv fig. 3, *cf. liliifera* var. *triangulum* p. 39 pl. iv fig. 10, *cf. quinquecostata*, REED Palaeont. indica 21 3 1936.—*S. sazeus*, GREGER & BORN 77 pl. ii figs. 3-5.—*S. sericea*, POCOCK & WHITEHEAD 150 fig. 20K.—*S. schmidtii*, THORSLUND 181 pl. ii fig. 14.

†*Streptis* p. 344, with *S. glomerata* sp. n. pp. 344-345 fig. 1b pl. i figs. 4-5, 9, 31, Silurian U.S.A., *incompta* sp. n. p. 345 pl. i figs. 13, 25-27, 29-30, 33-35 Silurian Estonia, *grayii* p. 344 pl. i figs. 1-2, 6-7, *monilifera altosinuata* pl. i fig. 10, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Streptorhynchus cf. triangularis*, MILORADOVIC 131 p. 42 pl. iii fig. 8.

†*Stropheodonta bilix* sp. n. Ordovician Scotland, LAMONT Trans. geol. Soc. Glasgow 19 1935 pp. 313-315 pl. vii figs. 12-16.—*S. lata* p. 17 pl. v fig. 1, *nativikini* p. 17 pl. iv figs. 9-10 spp. n. Devonian Altai, HALFEEN Rec. Geol. West-Siberian Region 20 1935.—*S. demissa* fig. 62R, *hemispherica* figs. 53M, N, *inaequiradiata* fig. 53I, *varistriata* figs. 33E, F, GOLDRING 72.—*S. (Stropheodonta) gigas* p. 62, *herculea* p. 64, *murchisoni* p. 60, *sedgwicki* p. 61, MAILLIEUX 120.

†*Stropheodonta (Leptostrophia) explanata*, MAILLIEUX 120 p. 66.

†*Leptostrophia (Stropheodonta) becki*, GOLDRING 72 figs. 38A, B.

†*Strophomena* sp., COOPER & KINDLE 40 p. 357 pl. li figs. 35, 40.—*S. odessae*, GREGER & BORN 77 pl. ii figs. 1-2.—*S. cf. subtenta*, REED 152 p. 35 pl. iii fig. 10.—*S. cf. corrugatella*, THORSLUND 181 pl. i fig. 10.

†*Strophomena (Actinomena) cf. sub-arachnoidea*, REED 152 p. 36 pl. iii fig. 5.

†*Strophonella sigana* sp. n. Devonian Germany, DAHMER Abh. preuss. geol. LdAnst. 168 1936 p. 29 pl. vi figs. 5-10.—*S. planuscula* sp. n. Devonian Altai, HALFEEN Rec. Geol. West-Siberian Region 20 1935 p. 20 pl. iii figs. 1-7 pl. v fig. 2 pl. vii fig. 3.—*S. ampla* figs. 48F, G, *punctulifera* figs. 36K, L, GOLDRING 72.

†*Triplexia biplicata* p. 358 pl. li figs. 14, 16-17, 22, *uniplicata* p. 358 pl. li figs. 15, 19-21 spp. n. Ordovician Canada COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936.—*T. p. 345* with *T. alata* p. 346 pl. xlviii fig. 23, pl. i figs. 11, 14, 16-17, 20-21, 24, *juvenis* p. 347 pl. xlviii figs. 4-5, *praecipta* pp. 346-347 pl. xlviii figs. 10-11, pl. i fig. 3, *rostellata* p. 347 pl. xlviii figs. 9, 13 spp. n. Silurian U.S.A., *anticostiensis* pl. i fig. 22, *cf. extans* pl. xlviii figs. 22, 26, *ortoni* pl. xlviii figs. 21, 28, 32, 34-35, *waldronensis* p. 346, ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.—“*T.*” *uncata*, KOBAYASHI 101 p. 183 pl. xx figs. 1-4.—*T. cf. woodlandensis*, REED 152 p. 110 pl. v fig. 12.

†*Tropidoleptus carinatus*, GOLDRING 72 fig. 62H.

TAFFIIDAE.

†*Taffiidae* fam. n. with *Taffia* Butts 1926, *Aporthophyla* gen. n., *Palinorthis*

gen. n., *Toquimia* gen. n., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 625.

†*Aporthophyla* gen. n. for type *A. typa* sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 625.

†*Palinorthis* gen. n. p. 625 for type *P. cloudi* sp. n. p. 626 Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936.

†*Taffia westgatei* sp. n. Cambrian U.S.A. (Nevada), ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 625.

†*Toquimia* gen. n. for type *T. kirki* sp. n. Cambrian U.S.A., ULRICH & COOPER J. Paleont. Menasha Wis. 10 1936 p. 626.

THECIDEIDAE.

†“*Thecidea*” sp., MUIR-WOOD 137 p. 27.

CHONETIDAE.

†*Chonetes phosphoriensis* sp. n. p. 29 pl. v figs. 8–11 Permo-Carboniferous U.S.A., *ostiolatus* pl. v fig. 7, BRANSON Univ. Missouri Stud. 5 1930.—*C. (Chonetes) unkelensis* sp. n. Devonian Germany, DAHMER Jb. preuss. geol. Landesanst. 56 1 1936 pp. 663–664 pl. xlviii fig. 5–8.—*C. dereimsii* sp. n. Permo-Carboniferous Persia, DOUGLAS Palaeont. indica 22 6 1936 pp. 36–37 pl. iv fig. 14.—*C. acanthophorus* nom. nov. for *Chonetes granulifer* var. *armatus* Girty 1915 non *Chonetes armatus* Norwood & Pratten 1854, Girty J. Wash. Acad. Sci. 24 1934 p. 541.—*C. alata* sp. n. p. 20 pl. iv fig. 8 Devonian Altai, *bohemia* pl. iv fig. 7, *extensa* pl. iv fig. 6, HALFEEN Rec. Geol. West-Siberian Region 20 1935.—*C. cf. sarcinulata*, DAHMER 45 p. 139.—*C. laguessiana*, DELÉPINE 54 p. 183 pl. viii fig. 16.—*C. striatellus*, EASTWOOD 60 fig. 9P.—*C. coronatus* fig. 62L, *jerseyensis* fig. 22J, *mucronatus* fig. 57C, *scitulus* fig. 62W, GOLDRING 72.—*C. sarcinulatus*, MAILLIEUX 120 p. 78.—*C. (C.) armatus*, MAILLIEUX 121 p. 18.—*C. novozemliensis*, MILORADOVICH 131 p. 42.—*C. tenuicostata*, PÉNEAU 148 p. 486 pl. xxiv fig. 7–12.—*C. striatellus*, POCKOCK & WHITEHEAD 150 fig. 32H.

†*Chonetes (Plicochonetes) plebejus*, MAILLIEUX 120 p. 79.

†*Daviesiella carinata*, COPE 42 p. 80 figs. 1–4 pl. iii.

†*Eodevonaria dilatata* p. 81, *extensa* p. 80, MAILLIEUX 120.

PRODUCTIDAE.

†*Aulosteges hispidus*, BRANSON 19 p. 32 pl. iv figs. 6–8 pl. vi figs. 1–5.

†*Eomarginifera sapojnikovi* sp. n. and var. *longa* var. n. [nom. nud. ?] p. 202, *lobata* var. *juresanensis* var. n. [nom. nud. ?] p. 202 Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936.

†*Marginifera samarensis* sp. n. [nom. nud. ?] Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936 p. 198.—*M. excavata* p. 36, *ovalis* p. 35, aff. *spinosocostata* p. 34 pl. iv figs. 7, 7b, DOUGLAS 57.—*M. timanica*, HERITSCH 93 p. 354.—*Productus (M.)* sp., MILORADOVICH 131 p. 48 pl. iii fig. 7.

†*Productella waynensis* sp. n. Carboniferous U.S.A. (Kentucky), BRILL Contr. Mus. Pal. Univ. Michigan 5 1936 pp. 67–68 pl. i.—*P. dumosa*, GOLDRING 72 figs. 62I, J.—*P. productoides*, *subaculeata*, MENCHIKOFF 125 p. 182.

†*Productus jojugensis* sp. n. [nom. nud.] p. 408, *cancrini* var. *spiralis* var. nov. [nom. nud.] p. 409 Permian Russia, BOGATSCHEW Bull. Soc. Nat. Moscou Sect. Géol. 44 1936.—*P. abichi* var. *ankitokazo* pl. iv figs. 13–14, *gallatinensis* var. *madagascariensis* p. 107 pl. iv figs. 11–12, BESAIRIE 12.—*P. geniculatus* pl. vii fig. 10, *multistriatus* p. 30 pl. vii figs. 11–12, *phosphaticus* p. 30 pl. vii figs. 8–9, *semireticulatus* p. 30 pl. vii figs. 13–14, BRANSON 19.—*P. lobatus* var., HERITSCH 93 p. 372.—*P. auritus* p. 192 pl. xiv fig. 1, *cinnuncus* p. 189, *cora* p. 191 pl. xiii fig. 1, *costatus* p. 190, *deshayesianus* p. 191, *edelburgensis* p. 193, *giganteus* p. 192, *hemisphaericus* p. 192 pl. xiii fig. 2, *latissimus* p. 193, *longispinus* p. 191, *martini* p. 189, *maximus* p. 192 pl. xiii figs. 3–4, *praelongus* p. 182, *pugilis*, *sulcatus*, *vaughani* p. 190, MENCHIKOFF 125.

†*Productus (Avonia) echidniformis*, HERITSCH 93 p. 372 pl. ii fig. 37.

†*Productus (Buxtonia) cf. juresanensis*, DOUGLAS 57 p. 33 pl. iv figs. 5, 17.

†*Productus* (*Dictyoclostus*) *densicostatus* sp. n. [nom. nud. ?] Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936 p. 198.—*P. (D.) inca* p. 27 pl. iv figs. 1-2, *transversalis* p. 28 pl. iv fig. 3, DOUGLAS 57.

†*Productus* (*Echinoconchus*) *punctatus*, DOUGLAS 57 p. 32 pl. iv fig. 8.—*P. (E.) fasciatus*, HERITSCH 93 p. 353.

†*Productus* (*Gigantella*) *latissimus*, SMITH & GEORGE 173 fig. 22D.

†*Pustula* (*Juresania*) *chaoi*, HERTSCH 93 p. 371 pl. ii fig. 38.

†*Productus* (*Linoproductus* ?) *alferovii* sp. n. pp. 46-48 pl. iii figs. 4-6, 9 Permian Novaya Zemlya, cf. *cora* p. 43, *weyprechtii* p. 44, MILORADOVICH Trans. arctic Inst. Leningrad 37 1936.—*P. (L.) syzranensis* sp. n. [nom. nud. ?] Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936 p. 198.—*P. (L.) cancriniformis* p. 30 pl. iv fig. 13, *lineatus* p. 28 pl. iv fig. 11, DOUGLAS 57.—*P. (L.) paulus* p. 372 pl. ii fig. 21, *tenuistriatus* p. 372 pl. ii fig. 36, HERITSCH 93.

†*Productus* (*Proboscidea*) subgenus discussed p. 133, *P. (P.) librovitchi* sp. n. pp. 142-143 pl. A figs. 5-6 Lower Carboniferous Urals, *proboscideus* p. 141 fig. 2 pl. A figs. 1-4, LICHAREW Bull. Soc. Nat. Moscou Sect. Géol. 44 1936.

†*Productus* (*Striatifera*) p. 30 and *P. (S.) cf. kayseri* p. 31 pl. iv fig. 9, DOUGLAS 57.

†*Pustula nevadensis* p. 31 pl. viii figs. 1-8, *montpelierensis* p. 32 pl. vii figs. 15-17, *subhorrida* p. 32 pl. viii figs. 9-11, BRANSON 19.—*Productus* (*P.*) *punctatus*, MENCHIKOFF 125 p. 191.

†*Strophalosia* aff. *excavata* p. 37 pl. iv fig. 6, aff. *horrescens* p. 37, DOUGLAS 57.—*S. cf. wilczeki*, MILORADOVICH 131 p. 50.

OLDHAMINIDAE.

†*Leptodus* (= *Lyttonia*) aff. *tenuis* †, DOUGLAS 57 p. 39 pl. iv fig. 4.

†*Lyttonia* cf. *nobilis* p. 493 pl. i fig. 5, cf. *tenuis* p. 493 pl. i fig. 6, sp. p. 489 pl. i figs. 1-1a, HUANG 97.—*L. richthofeni* forma *lopingensis*, LICHAREW 118 p. 152 pl. C fig. 4.—*L. nobilis*, SCHRÉTER 165 p. 115 pl. iv.

†*Oldhamina hoshanensis* sp. n. Permian China, HUANG Bull. geol. Soc.

China, Peiping 15 1936 pp. 491-492 fig. 2 pl. i figs. 2-4.—*O. transkaukasica*, LICHAREW 118 p. 150 pl. C figs. 1-3, 5.

ISOGRAMMIDAE.

†*Isogramma* genus discussed p. 144, *I. millepunctata* p. 145 pl. B figs. 2-4, *paotekhowensis* p. 144 pl. B figs. 1, 5-7, pl. C fig. 6, LICHAREW 118.

ORDER TELOTREMATA.

RHYNCHONELLACEA.

CAMAROTOECHIIDAE.

†*Camarotoechia* ? *ingens* sp. n. pp. 88-89 pl. i fig. 6 Devonian Belgium, *daleidensis* p. 87, MAILLIEUX Mem. Mus. Hist. nat. Belg. 73 1936.—*Rhynchonella* (*C.*) *nucula*, EASTWOOD 60 fig. 9Q.—*C. congregata* figs. 62M, N, *lamellata* fig. 22F, *litchfieldensis* figs. 22G, H, *semiplicata* figs. 33G-I, GOLDRING 72.—*R. (C.) nucula*, POCOCK & WHITEHEAD 150 fig. 32G.—*C. nucula*, SMITH & GEORGE 173 fig. 18U.

†*Dinapophysis papilio* var., DAHMER 48 p. 663.

†*Eatonia medialis* figs. 37J, K, *peculiaris* figs. 44G, H, GOLDRING 72.

†*Hypothyridina cuboides*, MAILLIEUX 121 p. 20.

†*Leiorhynchus laura* figs. 62O, P, *limitaris* fig. 57D, *mysia* fig. 57E, GOLDRING 72.—*L. subreniformis* p. 24, pl. i fig. 3, *tumidus* p. 22 with var. *quadriscostata* p. 24 and var. *triscostata* p. 23, MAILLIEUX 121.

†*Pugnax weeksi*, BRANSON 19 pl. ii figs. 15-16.—*P. uta osagensis* p. 356 pl. i fig. 16, *uta swallowiana* p. 355 pl. i figs. 20, 22, HERITSCH 93.—*P. le meslii*, MAILLIEUX 121 p. 19.

†*Pugnoides osagensis*, BRANSON 19 p. 34 pl. iii figs. 10-11.

†*Rhynchocamara* cf. *bella*, REED 152 p. 50.

†*Rhynchopora taylori*, BRANSON 19 p. 34 pl. ii figs. 17-19, pl. iii figs. 5-9.—*R. variabilis*, HERITSCH 93 p. 356 pl. ii figs. 34, 46.—*R. geinitziana*, MILORADOVICH 131 p. 51.

†*Rhynchotrema plicata* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 p. 359 pl. lii figs. 2-3, 5-6.—*R. capax* pl. ii

figs. 12-14, 16-18, *manniense* pl. ii fig. 15, GREGER & BORN 77.—*R.* ? sp., REED 152 p. 86.

†*Stenoschisma formosum*, GOLDRING 72 fig. 37D, E.

†*Straelenia dunensis*, MAILLIEUX 120 p. 90.

†*Terebratuloides* cf. *triplicata*, HERITSCH 93 p. 357 pl. ii figs. 1-5.

†*Uncinulus abruptus* figs. 36a, H, *campbellianus* figs. 41c, D, *mutabilis* figs. 33L, M, *nobilis* figs. 41L, M, *nucleolatus* figs. 36I, J, GOLDRING 72.—*U.* genus discussed p. 84, *frontecostatus* p. 85 pl. ii figs. 9-11, *modicus* p. 86 pl. ii figs. 4-6, MAILLIEUX 120.

†*Rhynchonella (Wilsonia) wilsoni*, EDMUNDS & OAKLEY 62 fig. 4₂.—*W. ventricosa*, GOLDRING 72 fig. 41E.—*W. fallaciosa*, HALFEEN 80 pl. vi figs. 5-6.—*R. (W.) wilsoni*, POCKOCK & WHITEHEAD 150 fig. 32F.

RHYNCHONELLIDAE.

†*Acanthothyris senticosa* p. 119 pl. xii figs. 35-36, *spinosa* p. 118 pl. xii figs. 33-34, DARESTE DE LA CHAVANNE 51.—*A.* genus discussed p. 27, *doulingensis* p. 28 pl. ii figs. 7a-c, *midfordensis* p. 30 fig. 9 pl. ii figs. 11a-c, *powerstockensis* p. 32 figs. 6c, 10 pl. i figs. 17a-c, MUIR-WOOD 137.

†*Goniorhynchia* genus discussed p. 594, G. *boueti* pp. 594-598 pl. xxv figs. 1-2, 4-12, BIGOT 14.

†*Hemithyris* (?) *kovatchensis*, *peariformis* spp. n. [nom. nud.] p. 35 Oligocene Kamchatka, *triangularis* sp. n. [nom. nud.] p. 34 Pliocene Kamchatka, KRISTOFOROVIC C.R. Acad. Sci. Leningrad (2) 3 1936.—*H. psittacea*, HATAI 84 p. 74 pl. xiv figs. 17, 22-24.—*H. braunsi*, HATAI 85 p. 295 pl. xxxv figs. 15, 20.—*H. psittacea woodwardi*, HATAI 87 p. 196.—*H. psittacea*, KHOMENKO 99 p. 29 pl. i figs. 3-4.

†*Kallirhynchia egfordensis* pp. 35-36 fig. 3b pl. i figs. 16a-c, *platiloba* pp. 40-42 figs. 1d, 1l pl. i figs. 8a-c spp. n. Fuller's Earth England, *bella* p. 34 pl. i figs. 14a-c, *expansa* p. 36 pl. ii figs. 10a-c, *lauta* p. 38 pl. i figs. 13a-c, *orbis* p. 39 fig. 3a pl. i figs. 11a-c, *superba* p. 42 fig. 12 pl. i figs. 15a-c, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.

†*Rhactorhynchia plateia* p. 45 fig. 3c pl. ii figs. 8a-c, *voluta* p. 46 pl. ii figs. 12a-b, MUIR-WOOD 137.

†*Rhynchonella arenæmontis* sp. n. pp. 598-601 pl. xxvi figs. 1-13, Jurassic (Bathonian) Spain, sp. ? pl. xxv fig. 3, BIGOT Bull. Soc. géol. Fr. (5) 5 1935.—*R. fageae* sp. n. Jurassic (Bajocian) Madagascar, BESATRIE Mém. Acad. Malgache 21 1936 p. 116 pl. vi figs. 29-32.—“*R.*” *richardsoni* nom. n. for *R. walkeri* Richardson 1907 non Davidson 1874 Fuller's Earth England, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936 pp. 47-48 fig. 3d pl. i figs. 1a-3.—*R.* cf. *dumortieri* pl. xxxvii figs. 2-3, sp. A pl. xxxvii fig. 1, sp. B pl. xxxvii fig. 4, sp. C pl. xxxvii fig. 5, BIGOT 13.—*R. deluci* p. 33, *pecten* p. 34, cf. *polygona* p. 34, *sulcata* p. 34, BREISTROFFER 20.—*R. multiformis*, *lineolata* var. aff. *dollfussi*, BREISTROFFER 23 p. 150.—*R. briseis*, BRUN & BRUSSE 27 p. 44.—*R.* aff. *bouchardi* p. 112 pl. xii figs. 15a-16b, *lotharingica* p. 113 pl. xii figs. 17-18, *quadruplicata* p. 111 pl. xii figs. 13-14, DARESTE DE LA CHAVANNE 51.—*R. cuvieri*, EDMUNDS 61 pl. vi figs. 7a, b.—*R. granulum* p. 357 pl. ii fig. 39, aff. *hofmanni* p. 358 pl. ii fig. 35, HERITSCH 93.—*R. limbata* p. 208 pl. viii fig. 5 with var. *undulata* p. 209 pl. viii fig. 6, *plicatilis* var. *octoplicata* p. 208 pl. viii fig. 4, KONGIEL 102.—*R.* cf. *jurensis*, KUHN 107 p. 116.—*R. decurtata* var. *vivida* p. 270 pl. i fig. 1, *juvavica* p. 271 pl. i figs. 4-4b, *mentzelii* p. 271 pl. i figs. 2-2a, MILOSAVLJEVIĆ 132.—*R. thebaulti*, PÉNEAU 147 p. 553 pl. xxx figs. 9-13.—*R. cognata*, PÉNEAU 148 p. 484.—*R.* cf. *glycinna* p. 186, *variabilis* p. 185 pl. vii figs. 15-15a, var. *plicata* p. 185 pl. vii figs. 16-16b, RAMACCIONI 151.—*R.* cf. *plicatissima*, ROQUEFORT, 158 p. 81.—*R. attilina* p. 117 pl. xi fig. 7, *bambanagensis* p. 118 pl. xii fig. 4, SAURIN 162.—*R.* sp., SCHMIDT 163 p. 39 pl. iv fig. 2.—*R. austriaca* p. 40 pl. vi fig. 28, *beneckeii* p. 40, *rimosa* p. 40 pl. vi fig. 30, SIEMIRADSKI 169.—*R.* aff. *grossesulcata*, SPATH 175 p. 138 pl. xlvi fig. 10.—*R.* aff. *corradii* p. 453, cf. *jurensis* p. 451, WANDEL 192.

†*Rhynchonelloidella* gen. n. for type *Rhynchonella varians* var. *smithi* Davidson 1878 pp. 49-51, *R. alhamensis* pp. 51-52 figs. 1b-c, 14 pl. i figs. 4a-c, *globosa* pp. 52-53 pl. i figs. 5, 7, *mesoloba* pp. 53-54 fig. 3e pl. i figs. 9a-c, *trigonalis*

pp. 59-61 pl. i figs. 2a-c, *tutcheri* pp. 61-62 pl. i figs. 3a-c, *wattonensis* p. 62-63 fig. 17 pl. i figs. 6a-c, spp. n. Fuller's Earth England, *smithi* p. 55 figs. 6d, 8, 15-16 pl. i figs. 10a-c and var. *crassa* var. n. pp. 58-59 figs. 1a, g-h pl. i figs. 12a-c, *ruthenensis* fig. 13, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.

†*Scalpellirhynchia* gen. n. p. 477 for type *Terebratula scalpellum* Quenstedt 1851 Jurassic (Lias) England, *S. scalpellum* p. 478 figs. 4-9, MUIR-WOOD Quart. J. geol. Soc. London 92 1936.

†*Sphenorhynchia* sp., BESAIRIE 12 p. 116 pl. vi figs. 27-28.

Tegulorhynchia genus discussed p. 96, *döderleini* p. 98 HATAI 89.

†*Tetrarhynchia tetrahedra*, EDMUNDS & OAKLEY 62 pl. vi figs. 1a, b.

DIMERELLIDAE.

†*Rhynchonellina pygmaea*, RAMACIONI 151 p. 186 pl. vii figs. 24-24b.

ATRYPACEA.

ATRYPIDAE.

†*Atrypa reticularis*, EDMUNDS & OAKLEY 62 fig. 4a.—*A. reticularis* figs. 33N, o, *spinosa* fig. 53H, GOLDRING 72. —*A. reticularis*, HALFEEN 80 pl. vii figs. 4-5 pl. viii fig. 3.—*A. reticularis*, POCOCK & WHITEHEAD 150 fig. 27g.—*A. reticularis*, SMITH & GEORGE 173 fig. 18s.—*A. expansa*, THORSUND 181 pl. ii figs. 15-16.

†*Atrypina imbricata* GOLDRING 72 fig. 37a.—*A. cf. disparilis* REED 152 p. 112 pl. v figs. 14-15.

†*Catazyga cartieri* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 pp. 359-361 pl. lii figs. 8-13, 18.

†*Glossia drevermanni* nom. n. for *Glossia*? nov. sp. Drevermann 1901, MAILLIEUX Mem. Mus. Hist. nat. Belg. 77 p. 25.

†*Gruenewaldtia gregeri* p. 94 pl. i figs. 1-13, *latilinguis* p. 94 pl. i figs. 14-16, GREGER 76.

†*Loilemia* gen. n. for type *L. proxima* sp. n. Silurian Burma, REED Palaeont. indica 21 3 1936 p. 115 pl. v figs. 1-8.

†*Protozyga haydeni* sp. n. pp. 51-52 pl. iv fig. 12 Ordovician Burma, cf. *obsoleta* p. 52 pl. v figs. 9-10, REED Paleont. indica 21 3 1936.

COELOSPIRIDAE.

†*Anoplothea* cf. *lepida*, MAILLIEUX 120 p. 91 pl. ii fig. 1.

†*Leptocoelia flabellites*, GOLDRING 72 fig. 44i.

SPIRIFERACEA.

SPIRIFERIDAE.

†*Ambocoelia arcuata*, BRANSON 19 p. 36 pl. ii figs. 12-14.—*A. praecox*, GAERTNER 68 p. 187 figs. 7a-b.—*A. umbonata*, GOLDRING 72 fig. 62e.

†*Cyclospira glansfagea* sp. n. Ordovician Canada, COOPER & KINDLE J. Paleont. Menasha Wis. 10 1936 p. 359 pl. lii figs. 1, 4, 7.—*C. ?* sp., REED 152 p. 52 pl. iv fig. 13.

†*Eospirifer secans* p. 58 pl. i figs. 2-7, *togatus* p. 61 pl. i fig. 1, HERITSCH & WOLSEGGER 94.

†*Martinia parvula* p. 363 pl. i figs. 8-9, *triquetra* p. 363 pl. i figs. 1, 10 and var. *sinuosa* var. n. p. 364 pl. i figs. 2-3 Carboniferous Austria, HERITSCH Sitzber. Akad. Wiss. Wien 144 (1) 1935.—*M. inflata*, MAILLIEUX 121 p. 27.

†*Spiriferina* (*Mentzelia*) *paleotipus*, MILOSAVLJEVIĆ 132 p. 272 pl. i fig. 7.—*S. (M.) cf. köveskaliensis* p. 39 fig. 4, *mentzeli* p. 40 fig. 5, SCHMIDT 163.

†*Spirelytha magna* sp. n. Permian Novaya Zemlya, MILORADOVICH Trans. arctic Inst. Leningrad 37 1936 pp. 58-59 pl. ii figs. 3a-b, iv figs. 10a-b.

†*Spirifer* (*Spirifer*) *wakoniggi* sp. n. Devonian Spain, DAHMER Z. deuts. geol. Ges. Berlin 88 1936 pp. 268-270 pl. xxxiv figs. 1-5.—*S. korovini* p. 18 pl. v figs. 3-4, *paucicostatus* p. 18 pl. v figs. 5-6, *pseudofallax* p. 18 pl. v fig. 8 spp. n. Devonian Altai, *cheehiel* var. pl. iv fig. 1, and var. *mesoloba* pl. viii fig. 7, *martianoffi* pl. viii figs. 5-6, cf. *mischkei* p. 18 pl. v fig. 7, *subsinnuatus* pl. viii fig. 4, HALFEEN Rec. Geol. West-Siberian Region 20 1935.—*S. boswelli* sp. n. pp. 370-371 pl. i figs. 11-15 Carboniferous Austria, *cameratus* p. 358 pl. i fig. 36, *elegantulus* p. 370 pl. i figs. 4, 5, 7, *fasciger* p. 360 pl. ii fig. 17, *interplicatus* p. 370 pl. i figs. 24, 28 and var. *baschkirica* p. 359 pl. i fig. 35,

neostriatus p. 360 pl. i fig. 25, 32, cf. *ravana* p. 360 pl. i fig. 33, *rectangulus* p. 361 pl. i figs. 17-19, *wynnei* p. 359 pl. i figs. 26-27, HERITSCHE SitzBer. Akad. Wiss. Wien 144 (1) 1935.—*S. striatus* var. *fascicostatus* var. n. pp. 194-196 pl. xiv figs. 2-9 Carboniferous Sahara, *bisulcatus* p. 196, *bouchardi* p. 183, *crassus*, *tornacensis* p. 196, *verneuili* p. 182, sp. p. 183 pl. xiii figs. 5-9, MENCHIKOFF Rev. Géogr. phys. 3 1930.—*S. furcatoides* p. 196, *lujkensis* p. 195, *pinguisformis* p. 196, *prae-bisulcatus* p. 193, *sarytchewi*, *tarussaensis* p. 196, *vassaensis* p. 194 spp. n. [nom. nud. ?], *pellaensis* var. *rotaii* var. n. [nom. nud. ?] p. 194, *subrotundus* var. *ustaensis* var. n. [nom. nud. ?] p. 193, *trigonalis* mut. B. mut. n. [nom. nud. ?] p. 194 Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936.—*S. ascendens* pp. 498-500 pl. xlv figs. 1-2, *descendens* p. 497 pl. xlv figs. 3-4 spp. n., *intermedius* mut. *matura* mut. n. pp. 505-507 pl. xlv figs. 4-6 Devonian Germany, *crassifolius* p. 501, *tenuicosta* p. 500 pl. xlv fig. 9, SPRIESTERSBACH Jb. preuss. geol. Landesanst. 55 1 1935.—*S. pseudocameratus*, BRANSON 19 p. 35 pl. vi figs. 6-8.—*S. assimilis* p. 27 pl. vi figs. 3-4, *hystericus* pl. vi fig. 12, *primaevus* p. 25 fig. 2 pl. vi figs. 1-2, DAHMER 46.—*S. affinis* pl. xlviii fig. 2, *hystericus* p. 645 fig. 1, DAHMER 48.—*S. (S.) strangwaysi* var. *lata*, DAHMER 49 p. 270 pl. xxxiv figs. 8-10.—*S. mucronatus*, GARRETSON 70 p. 12 1 fig.—*S. acuminatus* figs. 53J, K, *arenosus* figs. 44C, D, *concinus* fig. 41P, *corallinensis* fig. 22C, *cyclopterus* figs. 36B, C, *duodenarius* figs. 53E, F, *eriensis* fig. 22E, *granulosus* figs. 62S, T, *macropleura* figs. 37N-O, *mucronatus* figs. 62U, V, *murchisoni* figs. 44 A, B, *perlamellosus* fig. 37I, *rarecostatus* figs. 48D, E, *vanuxemi* figs. 27B, C, GOLDRING 72.—*S. (S.) bischofi* p. 103, *trigiri* p. 101, MAILLIEUX 120.—*S. curvirostris* p. 358 figs. 1, 2, 4A, 6A, aff. *curvirostris* p. 358 figs. 2, 3A, 6A, *latiareatus* p. 358 figs. 9-10, *rugulatus* p. 358 figs. 1-6, *schrenki* p. 358 fig. 8, *sokensis* p. 358 figs. 6-7A, *stuckenbergi* p. 358 figs. 5, 7-7B, MIRČINK 133.—*S. excavatus* p. 484, *hystericus* p. 483, PÉNEAU 148.—*S. divaricatus*, WILLARD 197 pp. 67-68 figs. 1-3.

†*Spirifer* (*Anelasma*) *condor* p. 361 pl. ii fig. 33, aff. *ufensis* p. 361 pl. ii fig. 16, HERITSCHE 93.

†*Spirifer* (*Acrospirifer*) *arduennensis* p. 100, *pellico* p. 99 pl. i fig. 4, *primaevus* p. 98 pl. i fig. 5, MAILLIEUX 120.

†*Spirifer* (*Choristites*) *praepavlovi* sp. n. p. 214 pl. i figs. 1, 7 Carboniferous Russia, *syzranensis* sp. n. [nom. nud. ?] p. 198, *priscus* pl. ii figs. 11-12, sp. pl. i fig. 2, pl. iii fig. 17, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936.

†*Spirifer* (*Cyrtospirifer*) *verneuili* var. *subarchiaci*, MAILLIEUX 121 p. 25.

†*Spirifer* (*Hysteroilites*) *fuchsi* sp. n. pp. 503-505 pl. xlv figs. 1-3 Devonian Germany, *affinis* p. 491, *subcuspidatus* p. 490, SPRIESTERSBACH Jb. preuss. geol. Landesanst. 55 1 1935.—*S. (H.) carinatus* p. 95, *excavatus* p. 94 pl. i fig. 9, *hystericus* p. 93, MAILLIEUX 120.

†*Spiriferella* gen. emend. pp. 51-53, *parryana* p. 53 pl. i figs. 1-3 pl. ii figs. 1-2 pl. iv figs. 1-9, MILORADOVICH Trans. arctic Inst. Leningrad 37 1936.—*S. keilhavi*, HERITSCHE 93 p. 365 pl. ii fig. 6.

†*Squamularia perplexa*?, BRANSON 19 p. 36 pl. iii figs. 12-13.—*S. rostrata perplexa*, HERITSCHE 93 p. 363 pl. ii fig. 19.—*S. sp.*, MILORADOVICH 131 p. 59.

†*Syringothyris cuspidata*, MENCHIKOFF 125 p. 196.

†*Yatsengina* gen. n. pp. 216-219 for type *Y. plana* sp. n. pp. 220-221 pl. i fig. 6, pl. iii fig. 14, *bashkirica* pp. 219-220 pl. i figs. 4A-C, pl. ii fig. 13, *samarensis* p. 221 pl. i fig. 5, pl. ii fig. 9, pl. iii fig. 16, spp. n. Carboniferous Russia, sp. pl. i figs. 3, 8, pl. ii fig. 10, pl. iii fig. 15, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936.

SPIRIFERINIDAE.

†*Cyrtina ivanovi* sp. n. [nom. nud. ?] Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936 p. 194.—*C. hamiltonensis*, GOLDRING 72 figs. 62C, D.—*C. latesinuata*, MAILLIEUX 120 p. 104.

†*Punctospirifer* genus discussed p. 204, *pulchra* p. 203 pl. vii figs. 1-7, THOMAS 180.

†*Spiriferellina cristata*, HERITSCHE 93 p. 364 pl. ii fig. 22.

†*Spiriferina sampelayoi* sp. n. pp. 21-22 pl. iii figs. 5-6 Lias (Toarcian) Spain, *alpina* p. 7 pl. i figs. 1-10, var. *falloti* p. 9 pl. i figs. 11-15, pl. iii figs. 7-8,

hartmanni p. 17 pl. iii fig. 3, *nicklesi* p. 13 pl. ii figs. 7-10, *oxyptera* p. 23 pl. iii figs. 10-14, *rostrata* p. 10 pl. ii figs. 1-6, *tumida* p. 13 pl. ii figs. 11-15, var. *ascendens* p. 15, var. *haueri* p. 16 pl. iii fig. 1 var. *rupestris* p. 16, *verrucosa* p. 18 pl. iii fig. 2, *villosa* p. 12, *walcotti* p. 19, var. *betacalcis* p. 20 pl. iii fig. 4, var. aff. *munsteri* p. 21 pl. iii fig. 9, BATAILLER Bol. Inst. geol. Esp. 52 1931. —*S. venevi* sp. n. [nom. nud. ?] Carboniferous Russia, SEMICHATOV Bull. Soc. Nat. Moscou Sect. Géol. 44 1936 p. 194. —*S. kentuckyensis* p. 37 pl. iii figs. 14-16, *pulchra* p. 36 pl. vi figs. 9-11, pl. ix fig. 1, BRANSON 19.—*S. octoplicata*, DOUGLAS 57 p. 40 pl. iv fig. 10.—*S. laminosa*, *octoplicata*, MENCHIKOFF 125 p. 197.—*S. quenstedti* p. 81, *walcotti* p. 79, ROQUEFORT 158.—*S. hartmanni* p. 41 pl. vi figs. 26 and 31, *haueri* p. 40 pl. vi fig. 27, SIEMIRADSKI 169.

†*Spiriferina* (Maya) *holzapfeli*, HERITSCH 93 p. 362 pl. i fig. 21.

ROSTROSPIRACEA.

MERISTELLIDAE.

†*Merista* sp., GAERTNER 68 p. 186 figs. 6a-c.—*M.* sp. a p. 114 pl. iv fig. 30, sp. b p. 115 pl. iv fig. 29, REED 152.

†*Meristella arcuata* figs. 41F, G, *laevis* figs. 37P, Q, *lata* fig. 44J, *nasuta* fig. 53L, *princeps* fig. 37R, GOLDRING 72.—*M. aliena*, MAILLIEUX 120 p. 105.

†*Nucleospira concinna* fig. 57B, *ventricosa* figs. 38E, F, GOLDRING 72.—*N. maillieuxi*, MAILLIEUX 120 p. 105 pl. ii figs. 7-8.—*N. lens*, MAILLIEUX 121 p. 29.—*N.* cf. *pisum*, REED 152 p. 115 pl. iv fig. 27.

†*Pentagonia unisulcata*, GOLDRING 72 figs. 53B-D.

†*Whitfieldella nucleolata*, GOLDRING 72 fig. 22D.

RHYNCHOSPIRINIDAE.

†*Hustedia phosphoriensis* sp. n. Permo-Carboniferous U.S.A., BRANSON Univ. Missouri Stud. 5 1930 pp. 37-38 pl. ix figs. 2-7.—*H. mormoni*, HERITSCH 93 p. 365 pl. ii fig. 20.

†*Parazyga deweyi*, GOLDRING 72 figs. 37L, M.

†*Trematospira multistriata*, GOLDRING 72 fig. 37C.

ATHYRIDAE.

†*Anathyris peetzi* pl. iv fig. 5, *phalaena* pl. iv fig. 4, HALFEEN 80.

†*Athyris amansharuseri* sp. n. Devonian Germany, SPRIESTERSBACH Jb. preuss. geol. Landesanst. 55 1 1935 pp. 507-508 pl. xlvii figs. 1-4.—*A. cora*, GOLDRING 72 figs. 62F, G.—*A. concentrica*, HALFEEN 80 pl. viii fig. 8.—*A. pectinifera* p. 365 pl. i figs. 29-31, 34, *planosulcata* p. 366 pl. i fig. 23, HERITSCH 93.—*A. avirostris*, MAILLIEUX 120 p. 107.—*A. lamellosa*, MENCHIKOFF 125 p. 197.

†*Composita gigantea* p. 39 pl. ix fig. 17, *parva* p. 40 pl. ii fig. 26, pl. ix figs. 12-16, *plana* p. 40 pl. x figs. 25-27, *quadricostata* p. 39 pl. iii figs. 17-20 spp. n. Permo-Carboniferous U.S.A., *subtilita* p. 38 pl. ix figs. 8-11, BRANSON Univ. Missouri Stud. 5 1930.

†*Spirigera stromayeri*, MILOSAVLJEVIĆ 132 p. 273 pl. i figs. 6-6c.

KONINCKINIDAE.

†*Koninckina* cf. *styriaca*, RAMACIONI 151 p. 188 pl. vii figs. 20-20b.

THECOSPIRIDAE.

†*Thecospira* sp., WIRTH 200 p. 428 fig. 4.

TEREBRATULACEA.

CENTRONELLIDAE.

†*Amphigenia elongata*, GOLDRING 72 fig. 53G.

†*Rensselaeria ovoides*, GOLDRING 72 figs. 44L, M.

†*Rhenorensselaeria crassicosta*, DAHMER 46 pl. vi fig. 13.—*R. crassicosta*, DAHMER 48 p. 645 pl. xlii fig. 5.—*R. strigiceps*, MAILLIEUX 120 p. 110.

†*Trigieria carinatella* p. 108 pl. ii figs. 2-3, *guerangeri* p. 109, MAILLIEUX 120.—*T.* ? sp., PÉNEAU 147 p. 556 fig. 4.

STRINGOCEPHALIDAE.

†*Bornhardtina* genus discussed p. 343, *ahüttensis* p. 348 pl. i figs. 2a-b, *laevis* p. 349 pl. ii figs. 4a-b, *ovalis* p. 349 pl. ii figs. 3a-b, *rugosa* p. 349 pl. i figs. 4-5, *sulcata* p. 349 pl. i figs. 3a-b, 7, pl. iii fig. 2, *triangularis* p. 349 fig. 2 pl. ii figs. 1-2, pl. iii figs. 1 and 4, *uncitoides* p. 348 pl. i figs. 1a-c, sp. pl. i fig. 6, pl. ii fig. 5, TING 182.

†*Stringocephalus* genus discussed p. 349, *burtini* p. iii figs. 7-8, TING 182.

MEGANTERIDAE.

†*Cryptonella minor*, MAILLIEUX 120 p. 113.

†*Meganteris drevermanni*, DAHMER 48 p. 663 pl. xlviii figs. 3-4.—*M. ovata ovata*, MAILLIEUX 120 p. 111.

DIELASMATIDAE.

†*Dielasma phosphoriensis* sp. n. Permo-Carboniferous U.S.A., BRANSON Univ. Missouri Stud. 5 1930 pp. 34-35 pl. ii figs. 21-25.—*D. dadanense* sp. n. Upper Carboniferous India, REED Palaeont. indica 23 1 1936 pp. 5-6 pl. v figs. 16-16b.—*D. hochstetteri*, DOUGLAS 57 p. 39 pl. iv fig. 15.—*D. bovidens* p. 366 pl. i fig. 6, *elongatum* p. 366 pl. ii figs. 27-32, *globosa* p. 369 pl. ii fig. 23, *plica* p. 369, HERITSCH 93.—*D. sp.*, MILORADOVICH 131 p. 60 pl. iv fig. 11.

†*Eunella lincklaeni*, GOLDRING 72 figs. 62x, y.

TEREBRATULIDAE.

†*Dictyothyris subreticulata*, MUIR-WOOD 137 p. 64 figs. 2i, 3f, 18 pl. ii, figs. 18a-c.

†*Epithyris* genus discussed p. 67, *maxillata* p. 68 fig. 2j pl. ii fig. 14, pl. iii figs. 10a-c, MUIR-WOOD 137.

†*Gryphus radiata* sp. n. p. 305 pl. xxxv fig. 14 Pliocene Japan, *angularis* p. 304 pl. xxxiv figs. 19-20, 22-23, HATAI Japan J. Geol. Geogr. 13 1936.

†*Ptyctothyris* genus discussed p. 70, *arkelli* sp. n. pp. 70-71 figs. 3g, 5n pl. iv figs. 10a-c Fuller's Earth England, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.

†*Pygope aspasia* p. 175 pl. vii figs. 22-22a, var. *acuta* p. 176, var. *lata* p. 177 pl. vii figs. 23-23a, var. *minor* p. 176 pl. vii figs. 25-25a, RAMACCIONI 151.

†*Sphaeroidothyris* genus emended pp. 71-73, *pentagonalis* sp. n. pp. 77-78 fig. 5k pl. iii figs. 2a-b Fuller's Earth England, *doultingensis* p. 73 figs. 3h, 20 pl. iii figs. 3a-b, *globisphaeroidalis* fig. 19, *lenthayensis* p. 75 figs. 2b, 5l, 21 pl. iv figs. 9a-c, aff. *sphaeroidalis* p. 78, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.

†*Terebratula mazetieri* sp. n. Jurassic (Bathonian) France, BIGOT Bull. Soc.

géol. Fr. (5) 4 1935 p. 708 pl. xxxvii figs. 6-7.—*T. cf. abrupta* p. 212 pl. xi figs. 1-2, *carnea* p. 209 pl. viii figs. 10-11, pl. ix figs. 1-3, var. *incisa* p. 210 pl. ix figs. 4-6, *elongata* p. 210 pl. ix figs. 7-8, *fallax* p. 212 pl. xi figs. 4-6, cf. *longirostris* var. *lundensis* p. 213 p. xi fig. 7, *mobergi* p. 211 pl. x figs. 5-6, pl. xi fig. 3, *obesa* p. 211 pl. x figs. 2-3, var. *striata* var. n. p. 211 pl. x fig. 4 Cretaceous Poland, *subrotunda* p. 210 pl. ix fig. 9, pl. x fig. 1, KONGIEL Trav. Soc. Sci. Lett. Wilno 9 1935.—“*T.*” *pseudoglobata* pp. 81-82 pl. iv figs. 3a-c, *richardsoni* p. 83 figs. 4e, 5i pl. iii figs. 11a-c spp. n. Fuller's Earth England, *linguifera* p. 79 figs. 5m, 22 pl. iii figs. 12a-c, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.—*T. intermedia*, BIGOT 14 p. 598 pl. xxvi figs. 17-18.—*T. dutempleana*, BREISTROFFER 20 p. 33.—*T. aff. moutoniana*, BREISTROFFER 21 p. 548.—*T. aff. moutoniana*, BREISTROFFER 23 p. 148.—*T. aldingae*, *tateana*, CHAPMAN & CRESPIN 32 p. 119.—*T. decipiens* p. 115 pl. xii figs. 25-27, *ovoides* p. 114 pl. xii figs. 19-23, *sphaeroidalis* p. 114 pl. xii fig. 24, DARESTE DE LA CHAVANNE 51.—*T. beyrichi* p. 178 pl. vii figs. 7-7b, *de lorenzoi* p. 178 pl. vii figs. 13-13b, *nepos* p. 177, RAMACCIONI 151.—*T. gregaria* p. 39, *grestenensis* p. 40 pl. vi fig. 24, *subpunctata* p. 40 pl. vi figs. 25 and 29, SIEMIRADSKI 169.—*T. aff. ventricosa*, WANDEL 192 p. 450.

†*Terebratula (Rhaetina) gregaria, pyriformis*, DUBAR 59 p. 174.

†*Terebratula (Rugithyris) rosenkrantzii* sp. n. pp. 139-141 pl. xlix figs. 1a-h Portlandian East Greenland, sp. p. 141 pl. xlix fig. 2, SPATH Medd. Grønland 99 3 1936.

†*Terebratulina hashimotoi* p. 303 pl. xxxiv figs. 16-18, *iduenensis* pp. 298-300 pl. xxxv figs. 19, 21-23, *moniwaensis* pp. 301-302 pl. xxxiv figs. 26-29 spp. n. Neogene Japan, *callinome* p. 298 pl. xxxv fig. 29, *crossei* p. 302, *kiensis* p. 300, *retusa* p. 296, HATAI Japan J. Geol. Geogr. 13 1936.—*T. lata*, EDMUNDS 61 pl. vi figs. 5a, b.—*T. japonica*, HATAI 84 p. 74 pl. xiv figs. 27-28.—*T. japonica*, *pacifica* p. 198 sp. p. 199, HATAI 87.—*T. p.* 448, *septentrionalis* figs. 484, 486, 491, KORSCHOLT 103.

†*Tubithyris* genus discussed p. 84, *powerstockensis* sp. n. p. 89 pl. iv figs. 7a-c Fuller's Earth England, *globata*

p. 85 figs. 4f, g, 5h, 6b, 24 pl. iv figs. 1a-b, 5a-c, 6a-c, *whatleyensis* p. 90 pl. iv figs. 8a-c, *wrighti* fig. 23, MUIR-WOOD Paleontogr. Soc. (Monog.) London 89 1936.—*T. cf. globata*, BESAIKIE 12 p. 116 pl. vi figs. 24-26.

†*Wattonithyris* gen. n. p. 91 for type *W. wattonensis* sp. n. pp. 102-104 figs. 5g, 6a, 28 pl. iii figs. 4a-c, 5a-b, *fullonica* pp. 92-94 figs. 5f, 25 pl. iii figs. 7a-c, pl. iv figs. 4a-c, *midfordensis* pp. 94-96 figs. 2c, 26 pl. ii figs. 3, 5a-b, 15a-c, *parva* pp. 98-99 pl. ii figs. 2a-b, 4, ? *pseudomaxillata* p. 100 pl. iii figs. 8a-b, 9a-c, *tutcheri* pp. 101-102 pl. iv figs. 11a-c, spp. n. Fuller's Earth England, *nunneyensis* p. 96 figs. 2d, 4d, 7, 27, pl. iii figs. 6a-c, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.

ORTHOTOMIDAE.

†*Orthotomidae* fam. n. with *Orthotoma* Quenstedt 1869 (= *Orthoidea* Friren 1876), MUIR-WOOD Ann. Mag. nat. Hist. 17 1936 p. 224.

†*Orthotoma liasina* p. 231 figs. 2, 10, 16, *quenstedti* p. 233 figs. 3-6, 11, 17, *solidorostri* p. 236 figs. 1, 12, 18, *spinati* p. 238 figs. 9, 13-15, MUIR-WOOD Ann. Mag. nat. Hist. 17 1936.

TEREBRATELLIDAE.

Argiope p. 448 figs. 485, 488-490, *A. (C.) neapolitana* fig. 487, KORSCHOLT 103.

†*Aulacothyris carinata* p. 710 pl. xxxviii figs. 7-8 with var. *mandelslohi* p. 710 pl. xxxviii fig. 9, BIGOT 13.—*A. carinata* p. 117 pl. xii figs. 29-31, *meriani* p. 118 pl. xii fig. 32, DARESTE DE LA CHAVENNE 51.—*A. cucullata* p. 105 fig. 4c pl. ii fig. 1, cf. *mandelslohi* p. 107 fig. 2e pl. ii fig. 6, MUIR-WOOD 137.

Campages basilanica, HATAI 87 p. 203.

†*Terebratula (Coenothyris) vulgaris*, SCHMIDT 163 p. 40 pl. iv figs. 3-4.

†*Coptothyris ovalis* sp. n. [nom. nud.] Pliocene Kamchatka, KRISTOFVIĆ C.R. Acad. Sci. Leningrad (2) 3 1936 p. 34.—*C. grayi*, HATAI 84 p. 81 pl. xiv figs. 11-14, 18-19.—*C. grayi*, HATAI 85 p. 311.—*C. grayi*, HATAI 87 p. 201.

†*Dallina miyatokoense* sp. n. pp. 315-316 pl. xxxiv figs. 1-7 Miocene Japan,

raphaelis p. 315 pl. xxxv fig. 28, HATAI Japan J. Geol. Geogr. 13 1936.—*D. raphaelis*, HATAI 87 p. 204.

†*Dallinella ? smithi*, HATAI 84 p. 78 pl. xiv figs. 20-21, 25-26.

Dalliniinae subfamily discussed, HATAI 88 p. 10.

†*Diestothyris ochotensis* sp. n. [nom. nud.] Pliocene Kamchatka, KRISTOFVIĆ C.R. Acad. Sci. Leningrad (2) 3 1936 p. 34.

†*Eudesia* aff. *ebrodunensis*, BREISTROFFER 21 p. 549.—*E. aff. ebrodunensis*, BREISTROFFER 23 p. 149.

Frenulina genus discussed p. 2, *sanguinolenta* p. 3 figs. 1a-h pls. i-ii, HATAI 88.

†*Jolonica* with *Kamoica* subgen. n. for type *J. (K.) iduensis* sp. n. Miocene Japan, HATAI Japan J. Geol. Geogr. 13 1936 pp. 313-314 pl. xxxv figs. 10-13, 16-18.

Jolonica nipponica, HATAI 87 p. 203.—*J.*, HATAI 88 p. 9.

†*Kamoica* subgen. n. see *Jolonica*.

†*Kingena lima*, KONGIEL 102 p. 209 pl. viii figs. 7-9.

†*Laqueus kosibensis* sp. n. pp. 319-320 pl. xxxiv figs. 10-12 Pliocene Japan, *blanfordi* p. 316, *quadratus* p. 318 pl. xxxv fig. 25, *rubellus* p. 318 pl. xxxv fig. 24, HATAI Japan, J. Geol. Geogr. 13 1936.

Laqueus pacificus sp. n. pp. 205-206 fig. Recent Japan, *quadratus* p. 205, *rubellus* p. 204, HATAI Rec. oceanogr. Works Japan 8 1936.—*L.* genus discussed p. 45, *concentricus* sp. n. p. 44 figs. 11-14 Recent Japan, *rubellus* subsp. *obessus* subsp. n. p. 45 figs. 7-10 Recent Japan, YABE & HATAI Proc. Imp. Acad. Tokyo 12 1936.—*L. rubellus*, HATAI 88 fig. li.

†*Macandrevia delicatula* sp. n. Tertiary Japan, HATAI Japan J. Geol. Geogr. Tokyo 13 pp. 75-76 pl. xiv figs. 1-2, 5-6.

†*Magallania lemaniensis*, BREISTROFFER 20 p. 33.—*M. insolita, pectoralis*, CHAPMAN & CRESPIN 32 p. 120.

†*Mergelina* (?) *puchliana* sp. n. [nom. nud.] Miocene Kamchatka, KRISTOFVIĆ C.R. Acad. Sci. Leningrad (2) 3 1936 p. 34.

†*Nipponithyris subovata* sp. n. Miocene Japan, HATAI Japan J. Geol. Geogr. 13 1936 pp. 321-322 pl. xxxiv figs. 8-9, 13-15, 21.

†*Ornithella* genus emended p. 108, *boxensis* pp. 112-113 pl. v figs. 10a-b, *brutonensis* pp. 113-114 figs. 1e-f, 2a pl. v figs. 12a-c, *cinctaeformis* pp. 114-115 pl. v figs. 9a-b, *constricta* pp. 115-116 pl. v figs. 8a-b, *cordiformis* pp. 116-117 pl. v figs. 6a-c, *haydonensis* pp. 117-119 fig. 29 pl. v figs. 1a-c, 2, *pupa* pp. 119-121 fig. 30 pl. v figs. 4a-c, 5 spp. n. Fuller's Earth England, *bathonica* emended p. 109 pl. v figs. 3, 7 with var. *bathiensis* emended p. 111 fig. 4a pl. v fig. 11, *subtriquetra* p. 121, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.—*O. digona*, EDMUNDS & OAKLEY 62 pl. vi figs. 8a, b.

Pictothyris genus discussed p. 45, *elegans* p. 44 figs. 1-4, *laqueaeformis* p. 44 figs. 5-6 spp. n. Recent Japan, YABE & HATAI Proc. Imp. Acad. Tokyo 12 1936.—? *P. picta*, HATAI 85 p. 320.—*P. picta*, HATAI 87 p. 206.

†*Rugitela* gen. n. p. 121 for type *Terebratula bullata* J. de C. Sowerby 1823, p. 123 figs. 2h, 4b, 5a-b, 6e, 32 pl. ii fig. 13, *kingscotensis* pp. 132-134 pl. ii figs. 9a-c, *powerstockensis* pp. 134-135 pl. iv figs. 2a-c spp. n. Fuller's Earth England, *cadomensis* p. 126 figs. 5e, 33 pl. ii fig. 17, *emarginata* p. 130 figs. 2f-g, 5e-d, 34 pl. ii fig. 16, *ranvilliana* fig. 31, MUIR-WOOD Palaeontogr. Soc. (Monog.) London 89 1936.

†*Tanakura* gen. n. p. 322 for type *Magasella fibula* Hayasaka 1921 (non Reeve), *T. tanakura* sp. n. pp. 322-324 pl. xxxv figs. 1-9 Miocene Japan, HATAI Japan. J. Geol. Geogr. 13 1936.

†*Terebratalia pacifica* pp. 76-77 pl. xiv figs. 7-10, 15-16, *radiata* pp. 77-78 pl. xiv figs. 3-4, 29, spp. n. Tertiary Japan, HATAI Japan J. Geol. Geogr. Tokyo 13.—*T. sendaica* sp. n. pp. 307-309 pl. xxxiv figs. 24-25 Miocene Japan, *coreanica* p. 309, *gouldii* p. 305, *tenuis* p. 310, HATAI Japan. J. Geol. Geogr. 13 1936.—*T. transversa* var. *elegans* and var. *coarse* vars. nov. [nom. nud.]

Pliocene Kamchatka, KRIŠTOFOVIĆ C.R. Acad. Sci. Leningrad (2) 3 1936 p. 34.

Terebratalia coreanica p. 119, *gouldii* p. 201, HATAI 87.—*T. coreanica*, ОНУХ 143 p. 231.

†*Terebratella coreanica*, KHOMENKO 99 p. 29 pl. i figs. 5-6.

†*Terebrirostra lyra*, ULRICH & COOPER 186 pl. xlix figs. 19, 25.

†*Waldheimia angustaeformis* p. 272 pl. i figs. 3-3b, *raumsaueri* p. 272 pl. i figs. 5-5b, MILOSAVLJEVIĆ 132.—*W. ampezzana* p. 183 pl. vii figs. 17-17b, *amygdaloides* p. 182 pl. vii figs. 9-10a, *apenninica* p. 181, *furlana* var. *abbreviata* p. 181 pl. vii figs. 8-8b, var. *angustata* p. 182 pl. vii figs. 14-14a, *meneghinii* p. 179 pl. vii figs. 11-12, *oenana* p. 184 pl. vii figs. 21-21a, RAMACCIONI 151.

†*Zeilleria antonii* pp. 708-709 pl. xxxix figs. 9-10, *calvadosi* p. 709 pl. xxxviii figs. 5-6, *moutieri* pp. 709-710 pl. xxxviii figs. 1-4, spp. n. Jurassic (Bathonian) France, BIGOT Bull. Soc. géol. Fr. (5) 4 1935.—*Z. ranvilliana*, BIGOT 14 p. 598 pl. xxvi figs. 15-16.—*Magellania* (Z.) *faba*, aff. *pseudo-jurensis*, BREISTROFFER 21 p. 549.—*M.* (Z.) "*faba*," aff. *pseudo-jurensis*, BREISTROFFER 23 p. 149.—*Z. sub-buculenta*, DARESTE DE LA CHAVANNE 51 p. 116 pl. xii figs. 28a-b.—"*Z.*" cf. *lingulata*, MUIR-WOOD 137 p. 135.

†*Zellania globata*, MUIR-WOOD 137 p. 104.

INCERTAE SEDIS.

†*Fermoriidae* fam. n. p. 465 with *Fermoria* Chapman 1934 genus emended pp. 465-466 Precambrian India, *F. minima* p. 461 pl. xliii figs. 1-4, SAHNI Rec. geol. Surv. Ind. 69 1936.

†*Uralina* (= *Uralia* Licharew 1925), LICHAREW 118. [The type specimen of this genus reidentified as the pygidium of a trilobite.]

†*Vindhyanella* gen. n. p. 467 for type *V. jonesi* sp. n. p. 467 Precambrian India, SAHNI Rec. geol. Surv. Ind. 69 1936.

(b) BRYOZOA

BY

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CONTENTS

| | PAGE |
|------------------------------|------|
| I. TITLES | 31 |
| II. SUBJECT INDEX | 34 |
| III. SYSTEMATIC INDEX | 34 |

I.—TITLES.

1.—Allan, R. S. The Fauna of the Reefton Beds (Devonian) New Zealand ; with Notes on Lower Devonian Animal Communities in relation to the Base of the Devonian System. *Palaeont. Bull. N.Z.* **14** 1935 pp. 1-72 5 pls.

2.—Allégre, R. Les Bryozoaires du Conacien des Charentes (*sensu lato*). *Bull. Soc. géol. Fr.* **6** 1936 pp. 87-107.

3.—André, M. & Lamy, E. Colonies d'Hydres ou de Bryozoaires fixées sur des Coquilles à Pagures. *Bull. Soc. zool. Fr.* **61** pp. 94-99 4 text-figs.

4.—Arndt, W. Spongillidenvorkommen im Telezker See (Altai). *Arch. Hydrobiol. Stuttgart* **29** 1936 pp. 687-690.

5.—Bassler, R. S. Geology and Paleontology of the Georges Bank Canyons. III. Cretaceous Bryozoan from Georges Bank. *Bull. Geol. Soc. Amer. Washington* **47** 1936 pp. 411-412 1 fig.

6.—Bassler, R. S. Nomenclatorial notes on fossil and recent Bryozoa. *J. Wash. Acad. Sci.* **26** 4 1936 pp. 156-162 12 figs.

7.—Beauchamp, P. de. Turbellariés et Bryozoaires. Mission scientifique de l'Omo, III (Zoologie). *Mém. Mus. Hist. nat. Paris* **4** 1936 pp. 141-153.

8.—Behning, A. Materialien zur Hydrofauna des Flusses Jeruslan. *Arb. biol. Wolga-Stat. Saratow* **5** 1921 pp. 257-325. [Summary in German.]

9.—Borg, F. Sur quelques Bryozoaires d'eau douce Nord-Africains. *Bull. Soc. Hist. nat. Alger.* **27** 1936 pp. 271-283 1 pl. 3 text-figs.

10.—Borg, F. Über die Süßwasser-Bryozoen Afrikas. *Senckenbergiana, Frankfurt* **18** 1936 pp. 20-36 6 text-figs.

11.—Borg, F. Einige Bemerkungen über Brackwasser-bryozoen. *Zool. Anz. Leipzig* **113** 1936 pp. 188-193 3 text-figs.

12.—Brien, P. Contribution à l'étude de la reproduction asexuée des

Phylactolémates. (Origine des bourgeons polypodiaux et des cystigènes statoblastiques.) *Mém. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 569-625 28 text-figs.

Bronn, H. G. *vide* Cori, C. I.

13.—Bronstein, G. & Prenant, M. Texture cristalline du calcaire dans la paroi basale chez les Bryozoaires Chilostomes. *Bull. Soc. zool. Fr.* **61** 1936 pp. 411-420 1 text-fig.

14.—Brown, C. J. D. Polyzoa, in The Cenotes of Yucatan. A Zoological and Hydrographic Survey. *Pub. Carnegie Instn. Washington* **457** 1936 p. 39.

15.—Brydone, R. M. Further Notes on New or Imperfectly Known Chalk Polyzoa. III (*Semieschara*, *Micropora*, *Cryptostoma*). *Dulau, London* 1936 pp. 61-90 13 pls.

Cant, C. *vide* Forrest, J. E.

16.—Chapman, F. & Crespín, I. The Paleontology of the Plantagenet Beds of Western Australia. *J. Roy. Soc. W. Aust.* **20** 1934 pp. 103-130 6 pls.

17.—Coates, V. *Plumatella punctata* Hancock, a Freshwater Polyzoon, new to Berwickshire. *Scot. Nat. Edinb.* **218** 1936 p. 59.

18.—Cori, —. Kamptozoa (Entoprocta). *Tab. Biol. Berlin* **6** 1930 pp. 327-329.

19.—Cori, C. I. Kamptozoa in Bronn, H. G. *Klassen und Ordnungen des Tierreichs* **4** abt. 2 buch 4 *Leipzig* 1936 pp. 1-119 105 text-figs.

Crespín, I. *vide* Chapman, F.

20.—Davies, A. M. Tertiary Faunas. A textbook for Oilfield Palaeontologists and Students of Geology. I. The Composition of Tertiary Faunas. *London* 1935.

21.—Davis, A. G. The London Clay at Bracknell, Berks. *Proc. Geol. Ass. London* **47** 1936 pp. 140-144.

22.—Davis, A. G. The London Clay of Sheppey and the Location of its Fossils. *Proc. Geol. Ass. London* **47** 1936 pp. 328-345 1 text-fig.

- 23.—Eriksson, S. Från Värmlands Naturhistoriska Förenings Sammanträden och Exkursioner 1931-1935. Medd. Värml. Naturh. För. Karlstad 9 1936 pp. 1-27 9 text-figs. [*Bryozoa* p. 20.]
- 24.—Fadeeff, N. N. Quelques mots au sujet du travail de G. G. Abricossoff "Contribution à l'étude des bryozoaires du Caucase." Trav. Soc. Nat. Charkow 50 2 1927 pp. 156-158. [In Russian.]
- 25.—Forrest, J. E., Waterston, A. R. & Watson, E. V. The Natural History of Barra, Outer Hebrides. Proc. phys. Soc. Edinb. 22 1936 pp. 241-296 1 map.
- 26.—Gillard, P. A. Note préliminaire sur les Bryozoaires des Faluns de la Vienne. C.R. Séan. Soc. géol. Fr. 11 1936 pp. 190-191.
- 27.—Gregorio, A. de. Fossil triassici delle Cave di Billiemi presso Palermo. Ann. Géol. Paléont. Palermo 54 1930 pp. 1-40 7 pls.
- 28.—Jenkin, P. M. Reports on the Percy Sladen Expedition to some Rift Valley Lakes in Kenya.—VII. Summary of the Ecological Results. . . Ann. Mag. Nat. Hist. 18 1936 pp. 133-181 1 pl. 2 text-figs. 11 tables.
- 29.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere, 1 Jena 1936 [chapters 18 and 19].
- 30.—Krasnopayeva, P. S. Bryozoa of the Middle and Upper Devonian of Altai. Rec. Geol. West Siberian Region 20 1935 pp. 43-84 21 pls. [Summary in English.]
- 31.—Kühn, O. Revision der Opalinuston—(Dogger Alpha)—Fauna in Franken mit Ausschluss der Cephalopoden. Paläont. Z. Berlin 17 1935 pp. 109-158 3 pls. [*Bryozoa* p. 115.]
- 32.—Kühn, O. Eine mittelmiocäne Zwergfauna aus Kreta und die Entstehung mariner Zwergfaunen. Zentralb. Min. Geol. Paläont. Stuttgart B 6 1936 pp. 255-270 3 text-figs.
- Lamy, E. *vide* André, M.
- 33.—Lecompte, M. Contribution à la Connaissance des "Récifs" due Frasnien de l'Ardenne. Mém. Inst. géol. Univ. Louvain 10 1936 pp. 31-103. [*Bryozoa* p. 103.]
- 34.—Lepneva, S. Einige Ergebnisse der Erforschung des Teletskoje-Sees. Arch. Hydrobiol. Stuttgart 23 1931 pp. 101-116 2 pls.
- 35.—Lepneva, S. G. Die Bodenfauna der Gebirgseen in der Umgebung des Teletskoje-Sees. Explorations des Lacs de l'U.R.S.S. 8 1933 pp. 135-168, 1 text-fig. [Summary in German.]
- 36.—McGuirt, J. H. Fossil Bryozoa of Louisiana. Proc. Louisiana Acad. Sci. 2 1 1935 pp. 60-61.
- 37.—Mailleux, E. La Faune et l'Âge des Quartzophyllades Siegeniens de Longlier. Mém. Mus. Hist. nat. Belg. 73 1936 pp. 1-140 3 pls.
- 38.—Marcus, E. Sobre o systema natural dos Bryozoarios. Bol. biol. S. Paulo 2 4 1936 pp. 129-135 2 text-figs.
- Matley, C. A. *vide* Smith, B.
- Mawatari, S. *vide* Okada, Y.
- 39.—Newmarch, E. R. Notes on the Freshwater Polyzoa. J. Quekett Micr. Cl. 1 1935 pp. 110-119 2 pls.
- 40.—Nicolaescu, V. N. Contributions à l'étude des Bryozoaires sarmatiens de Bessarabie. Bull. Soc. Române geol. Bucarest 1 1932 pp. 229-241 14 text-figs.
- 41.—Nikiforova, A. Boundary between the Permian and the Carboniferous in the Reef Limestones of the Urals Established on the Basis of the Bryozoa Enclosed therein. C.R. Acad. Sci. Leningrad 3 1933 pp. 435-438.
- 42.—Nikiforova, A. I. Some Lower Permian Bryozoa from Novaya Zemlya and Spitzbergen. Trans. Arctic Inst. Leningrad 58 1936 pp. 113-141 3 pls. 2 text-figs. [Summary in English.]
- 43.—Oakley, K. P. On the Wenlock Coral *Coenites seriatopora* (H. M. Edwards and J. Haime). Summ. Prog. Geol. Surv. 1934 1936 pp. 20-27 1 pl.
- O'Donoghue, C. H. & de Watteville, D. *vide* Forrest, J. E.
- 44.—Okada, Y. & Mawatari, S. Bryozoa Fauna collected by the "Misago" during the Zoological Survey around Izu Peninsular. I. Sci. Rep. Tokyo Bun. Daig. 2 35 1935 pp. 127-147 2 pls.
- 45.—Parker, W. N. Sponges in Waterworks. Proc. Zool. Soc. London 1913 1913 pp. 973-976. [Polyzoa, footnote p. 976.]

46.—Pesson, P. Notes de faunistique armoricaine, I and III. Bull. Soc. sci. Bretagne 11 1934 pp. 52-59 1 text-fig.; 13 1936 pp. 83-89.

47.—Poljak, J. Prilog poznavanju familije Chaetetida iz titona Velike Kapele. Glasnik hrv. prirodosl. Dr. Zagreb 41-48 1936 pp. 105-117 3 pls. [Summary in German.]

48.—Prantl, F. Carboniferous Bryozoa from Dobšiná (Slovakia). Bull. int. Acad. Prague 35 1934 pp. 225-241 2 pls.

49.—Prantl, F. O mechovkách dobšinského karbonu. Rozpr. české. Akad. Praha 44 31 1935 pp. 1-21 2 pls. [see 48].

50.—Precht, H. Epizoen der Kieler Bucht. Nova Acta Leop. Carol. Halle 3 15 1935 pp. 405-474 44 text-figs. 1 table. [Bryozoa as hosts.]

Prenant, M. vide Bronstein, G.

Rees, W. J. vide Russell, F. S.

51.—Remane, A. *Monobryozoon ambulans* n.g., n. sp., ein eigenartiges Bryozoon des Meeressandes. Zool. Anz. Leipzig 113 1936 pp. 161-167 2 text-figs.

52.—Rogick, M. D. Studies on Freshwater Bryozoa. III. The Development of *Lophopodella carteri* var. *typica*. Ohio J. Sci. 35 6 1935 pp. 457-464 2 pls. 1 table.

53.—Rogick, M. D. *op. cit.* IV. On the Variation of Statoblasts of *Lophopodella carteri*. Trans. Amer. Micr. Soc. Menasha 55 1936 pp. 327-333 2 pls.

54.—Russell, F. S. & Rees, W. J. On Rearing the Hydroid *Zanclaea implexa* (Alder) and its medusa *Zanclaea gemmosa* McCrady, with a Review of the Genus *Zanclaea*. J. Mar. Biol. Ass. Plymouth 21 1936 pp. 107-129 12 text-figs.

55.—Sakakura, K. Stratigraphie du bassin d'Obitugawa, Préfecture de Tiba, Japon. J. geol. Soc. Tokyo 42 1935 pp. 753-784. [Résumé in French.]

56.—Sakakura, K. On *Microporina articulata* (Fabricius), a Chilostomatous Bryozoa. J. geol. Soc. Tokyo 43 1936 pp. 259-267 1 pl. [Résumé in English.]

57.—Sakakura, K. Studies on Fossil Bryozoa from the Bôso Peninsular

(Prel. Report). J. geol. Soc. Tokyo 43 1936 pp. 422-423. [In Japanese.]

58.—Sardeson, F. W. Behavior of *Dekayella* of Decorah Shales. Pan-Amer. Geol. 65 1936 pp. 19-30 1 pl.

59.—Sardeson, F. W. Bryozoan *Hallopora* Behavior. Pan-Amer. Geol. 65 1936 pp. 97-112 1 pl.

60.—Sardeson, F. W. Early *Batostoma* Behaviour and *Hemiphragma*. Pan-Amer. Geol. 66 1936 pp. 95-111 1 pl.

61.—Sardeson, F. W. Early Bryozoans: *Monotrypa* to *Eridotrypa*. Pan-Amer. Geol. 66 1936 pp. 179-190 1 pl.

62.—Sartory, P. K. Notes on the Marine Zoophytes of South Devon. J. Quekett micr. Cl. 1 1936 pp. 217-224 2 pls.

63.—Scotti, P. Briozoi fossili del miocene della Collina di Torino (Collezione Rovasenda). Atti Acc. Torino 71 1936 pp. 402-431 2 pls.

64.—Silen, L. Bryozoa from the Skager Rack . . . Ark. Zool. Stockholm 28A no. 16 1936. [Erroneously included in Zool. Rec. for 1935.]

65.—Smith, B. Geology and Mineral Resources of the Skaneateles Quadrangle. Bull. New York St. Mus. Albany 300 1935 pp. 1-120 64 figs. 2 maps.

66.—Smith, B. Quart. J. Geol. Soc. London 92 pp. 197-198. [Postscript to paper by Matley & Smith.]

67.—Souche, G. Sur les animaux rencontrés chez les *Eschara fascialis* L. Bull. Sta. biol. Arcachon 32 1 1935 pp. 45-47.

68.—Stach, L. W. Correlation of Zoarial Form with Habitat. J. Geol. Chicago 44 1 1936 pp. 60-65 1 text-fig.

69.—Stach, L. W. An Upper Oligocene Bryozoan Faunule. Proc. Roy. Soc. Vict. 49 1 1936 pp. 62-71 1 pl. 7 text-figs.

70.—Stach, L. W. Studies on Recent Petraliidae (Bryozoa). Rec. Aust. Mus. Sydney 19 1936 pp. 355-379 19 text-figs.

71.—Välikangas, I. Über die Biologie der Ostsee als Brackwassergebiet. Verh. int. Vereinig. Limnol. Stuttgart 6 1 1933 pp. 61-112 6 text-figs.

72.—Valkanov, A. Notizen über die Brackwässer Bulgariens. I. Ann. Univ. Sofia 31 3 1935 pp. 249–293 26 text-figs. 2 tables; II. Op. cit. 32 3 1936 pp. 209–341 31 text-figs. 1 pl. [Summaries in German.]

Waterston, A. R. *vide* Forrest, J. E.

Watson, E. V. *vide* Forrest, J. E.

II.—SUBJECT INDEX.

GENERAL.

Bryozoa as hosts of epizoic Ciliates, PRECHT, 50; Hydroid associated with Polyzoa, RUSSELL & REES, 54; Animals found with *Eschara fascialis*, SOUCHE, 67; Sand-dwelling Ctenostome, REMANE, 51.

Correlation zoarial form with habitat, STACH, 68; Form of colony in Trepostomata, SARDESON, 58 to 61.

Crystalline structure of calcareous wall, BRONSTEIN & PRENANT, 13.

Embryology, metamorphosis, budding, development of statoblasts, KORSCHOLT, 29; Development, *Lophopodella*, ROGICK, 52; Asexual reproduction Phylactolaemata, BRIEN, 12.

Statistics Kamptozoa, CORI, 18; Structure, development, habits, distribution Kamptozoa, CORI, 19.

Systematic position of Ectoprocta and Entoprocta, MARCUS, 38; Tabulate corals confused with Polyzoa, OAKLEY, 43.

Narcotisation and mounting, SARTORY, 62.

DISTRIBUTION.

(a) RECENT.

Europe, BORG, 11; Sweden, ERIKSSON, 23; Britain, COATES, 17; FORREST, WATERSTON & WATSON, 25; PARKER, 45; Heligoland, REMANE, 51; Baltic, VÄLIKANGAS, 71; France, PESSON, 46; Bulgaria, VALKANOV, 72; Russia, BEHNING, 8; FADEEFF, 24; LEPNEVA, 35; Africa, BORG, 10; N. Africa, BORG, 9; Kenya, BEAU-

CHAMP, 7; JENKIN, 28; Mongolia, ARNDT, 4; LEPNEVA, 34; Japan, OKADA & MAWATABI, 44; SAKAKURA, 56; Yucatan, BROWN, 14.

(b) FOSSIL.

Tertiary.—DAVIES, 20 (bibliography).

Pleistocene.—Japan, SAKAKURA, 55.

Miocene.—France, GILLARD, 26; Italy, SCOTTI, 63; Bessarabia, NICOLAESCU, 40; Crete, KÜHN, 32; W. Australia, CHAPMAN & CRESPIAN, 16; U.S.A., MCGUIRT, 36.

Oligocene.—Australia, STACH, 69; U.S.A., MCGUIRT, 36.

Eocene.—England, DAVIS, 21, 22; U.S.A., MCGUIRT, 36.

Cretaceous.—Britain, BRYDONE, 15; France, ALLÈGRE, 2; U.S.A., BASSLER, 5.

Jurassic.—Germany, KÜHN, 31; Jugoslavia, POLJAK, 47.

Triassic.—Sicily, GREGORIO, 27.

Permian.—Arctic, NIKIFOROVA, 42; Russia, NIKIFOROVA, 41.

Carboniferous.—Slovakia, PRANTL, 48, 49; Russia, NIKIFOROVA, 41.

Devonian.—France, LECOMPTE, 33; Belgium, MAILLIEUX, 37; Siberia, KRASNOPAYEVA, 30; New Zealand, ALLAN, 1; U.S.A., SMITH, 65.

Pre-Ordovician.—Wales, SMITH, 66.

III.—SYSTEMATIC INDEX.

Full references are given only in the case of new species, the volume number being given in "small bold clarendon." In other cases the numeral in "large bold clarendon" refers to the list of titles where the full reference is to be found.

ECTOPROCTA.

GYMNOLAEMATA.

CTENOSTOMATA.

Monobryozoon gen. n. (Ctenostomata Stoloniifera) type *M. ambulans* sp. n.,

Recent Heligoland, REMANE Zool. Anz. Leipzig **113** p. 161.

Victorella pavida, VALKANOV **71**.

CYCLOSTOMATA.

†*Bolopora undosa*, SMITH **66**.

†*Ceripora globosa*, SCOTTI **63** p. 420.

†*Diastopora corrugata, congesta*, NICOLAESCU **40** pp. 231, 232.

Entalophora raripora, OKADA & MAWATARI **44** p. 143.

†*Fistulipora* cf. *trifoliata*, ALLAN **1** p. 8.

†*Haplotrypa* gen. n. Ceramoporidae type *H. typica* sp. n. Ordovician to Devonian U.S.A., BASSLER J. Wash. Acad. Sci. **26** 1936 p. 157.

†*Heteropora conifera*, SCOTTI **63** p. 421.

†*Hexagonella ishimbaica* sp. n. Permian Russia, NIKIFOROVA C.R. Acad. Sci. Leningrad **3** 1933 p. 436.

†*Hornera striata*, SCOTTI **63** p. 425.

†*Idmonea cancellata* var. *distans* var. n. *I. subcancellata*, SCOTTI Atti Acc. Torino **71** pp. 424, 425.

†*Lichenopora goldfussi*, SCOTTI **63** p. 427.

†*Mecynocia pulchella, proboscidea*, SCOTTI **63** p. 422.

†*Plethopora americana* sp. n. Cretaceous U.S.A., BASSLER Bull. geol. Ass. Amer. **47** p. 411.

†*Ramia* subgen. n. [*Rumia* in description of species and explanation of plate] for *Ceripora elegantula* sp. n. Triassic Sicily, GREGORIO Ann. Géol. Paléont. Palermo **54** 1930 p. 27.

Tubulipora pulcherrima, OKADA & MAWATARI **44** p. 145.

TREPOSTOMATA.

†*Batostoma magnopora, fertile*, SARDESON **60**.

†*Batostomella* sp., NIKIFOROVA **42** p. 130.

†*Bauneia chablaisensis*, POLJAK **47** pp. 110, 114.

†*Blastochaetetes capilliformis*, POLJAK **47** pp. 106, 113.

†*Dekayella*, SARDESON **58**.—*D. prae-nuntia*, SARDESON **61**.

†*Diplotrypa limitaris*, SARDESON **61**.

†*Eridotrypa edulis*, SARDESON **61**.

†*Hallopora*, SARDESON **59**.

†*Hemiphragma ottawaense*, SARDESON **60**.

†*Lioclema reeftonensis* sp. n. Devonian New Zealand, ALLAN Palaeont. Bull. N.Z. **14** 1935 p. 8.

†*Monotrypa magna*, SARDESON **61**

†*Stenoporella* gen. n. type *S. romingeri* sp. n. Mississippian Arkansas, BASSLER J. Wash. Acad. Sci. **26** 1936 p. 157.

CRYPTOSTOMATA.

†*Ascopora nodosa* var. *sterilitamakensis* var. n. Carboniferous Russia, NIKIFOROVA C.R. Acad. Sci. Leningrad **3** 1933 p. 436.

†*Cliotrypa* gen. n. Ulrich & Bassler Fistuliporidae type *C. ramosa* sp. n. U. & B. Mississippian and Permian U.S.A., BASSLER J. Wash. Acad. Sci. **26** 1936 p. 160.

†*Dendricopora* sp., PRANTL **48** p. 238, **49** p. 13.

†*Fenestella* (*Nebrodensia*?) *panormensis*, *F. cucurbina*, *mirula* spp. n. Triassic Sicily, GREGORIO Ann. Géol. Paléont. Palermo **54** 1930 p. 28.—*F. pioneri* sp. n. pp. 47, 73, *F. maxima* sp. n. p. 47, *F. elongata* sp. n. pp. 48, 74, *F. buratinensis* sp. n. p. 73, Devonian Siberia, KRASNOPAYEVA Rec. Geol. W. Siber. **20** 1935.—*F. foraminosaeformis*, *greenharbournensis*, *spitzbergensis* spp. n., *F. c. f. tschernovi* nom. msc., *F.* sp. ex. gr. *basileocensis* var. *magna forma* nom. msc., *F.* aff. *pulcherrima* nom. msc. Permian Arctic, NIKIFOROVA Trans. Arctic Inst. Leningrad **58** pp. 117–120, 134–135.—*F. michaeli* sp. n. *F. angusta*, aff. *plebeja*, aff. *tenax*, cf. *triserialis*, Carboniferous Slovakia, PRANTL Bull. Int. Acad. Prague **35** pp. 226–232, and Rozpr. české. Akad. Praha **44** 31 pp. 3–8.

†*Hemitrypa gornostaevi* sp. n. pp. 50, 74, *H. devonica* var. *altaica* var. n. pp. 49, 74, Devonian Siberia, KRASNOPAYEVA Rec. Geol. W. Siber. **20** 1935.—*H. tenella*, MAILLIEUX p. 44.

†*Isotrypa sibirica* sp. n. pp. 61, 76, *I. nekhoroshevi* sp. n. pp. 62, 77 [*nekhoroshevi* p. 77], Devonian Siberia, KRASNOPAYEVA Rec. Geol. W. Siber. **20** 1935.

†*Nebrodensia* gen. n. Fenestellidae, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 28.

†*Polypora timorensis* var. *greenharborensis* var. n. *P. reteporidraeformis* sp. n. Permian Arctic, NIKIFOROVA Trans. Arctic Inst. Leningrad 58 pp. 121, 122, 136.—*P. kolvae*, c.f. *elegantissima*, PRANTL 48 pp. 235–236, 49 pp. 10–12.

†*Ptilopora* sp., NIKIFOROVA 41 pp. 123, 136.

†*Ramipora hochstetteri*, NIKIFOROVA 41 pp. 127, 138.

†*Reteporidra korgonskiensis* sp. n. pp. 63, 77, *R. stellata* sp. n. pp. 64, 77, *R. simplex* sp. n. pp. 65, 77, *R. justidensis* sp. n. pp. 66, 67 [*justidensis* p. 77], Devonian Siberia, KRASNOPAYEVA Rec. Geol. W. Siber. 20 1935.

†*Reteporina grandiformis* sp. n. pp. 51, 74, *R. natalia* sp. n. pp. 52, 74, *R. carinata* sp. n. pp. 53, 75 [*carinata* p. 75] Devonian Siberia, KRASNOPAYEVA Rec. Geol. W. Siber. 20 1935.

†*Rhabdomeson* sp., PRANTL 48 p. 240, 49 p. 16.

†*Rhomboporella* gen. n. Rhabdomeson-tidae type *R. typica* sp. n. Carboniferous Bolivia, BASSLER J. Wash. Acad. Sci. 26 1936 p. 159.

†*Semicosciniun dentatum* sp. n. pp. 54, 76, *S. planiformis* sp. n. pp. 56, 75, *S. rhombicum* var. *altaicum* var. n., pp. 58, 75, *S. robustum* sp. n. pp. 58, 75, *S. robustum* var. *rhombiformis* var. n. pp. 59, 76, *S. subquadratum* sp. n. p. 59, *S. delicatum* sp. n. pp. 60, 76, Devonian Siberia, KRASNOPAYEVA Rec. Geol. W. Siber. 20 1935.

†*Septopora synocladiaeformis* sp. n. Permian Arctic, NIKIFOROVA Trans. Arctic Inst. Leningrad 58 pp. 123, 136.

†*Timanodictya* gen. n., genotype *Cosciniun dichotomum* Stuck., NIKIFOROVA C.R. Acad. Sci. Leningrad 3 1933 p. 436.

CHEILOSTOMATA.

Adeona joloensis nom. n. for *A. porosa* Canu & Bassler 1929 preocc., *A. porosa* C. & B. 1923, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

Adeonella japonica, OKADA & MAWATARI 44 p. 140.

†*Adeonellopsis coscinophora*, SCOTTI 63 p. 415.

Amastigia rudis, OKADA & MAWATARI 44 p. 137.

Bugula vectifera, OKADA & MAWATARI 44 p. 133.

Caberea lata, OKADA & MAWATARI 44 p. 136.

†*Callopora horniana* nom. n. for *C. crassospina* Canu & Bassler 1923 preocc. by *C. crassospina* C. & B. 1920, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

Cellaria elongatoides nom. n. for *C. elongata* Canu & Bassler 1928 preocc. *C. elongata* C. & B. 1908, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

†*Cellepora accumulata* var. *bellicosa* var. n. Cretaceous Britain, BRYDONE Notes Chalk Polyzoa 1936 p. 88.

Cheiloporinidae fam. n. for genera of Hippopodiniidae Levinsen 1909 with endozoecial ovicell, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

†*Cryptostoma woolianum*, sub-*batheri*, *compactum*, *corallinum* p. 86, *globidecus*, *sheringense*, *lagenale*, *aviculigerum*, *eleonorae* p. 87, *bifrons*, *carinatum* p. 88, spp. n. Cretaceous Britain, BRYDONE Notes Chalk Polyzoa 1936.

†*Cucullipora tetrasticha*, STACH 69 p. 68.

†*Dacryonella minuta* nom. n. for *D. minor* Canu & Bassler 1920 preocc. by *D. (Membranipora) minor* Hincks 1885, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

†*Dakaria bessarabica* sp. n. Miocene Bessarabia, NICOLAESCU Bull. Soc. Române Geol. 1 1932 p. 237.

†*Escharoides erectoides* nom. n. for *Peristomella erecta* Canu & Bassler 1930 preocc. by *Peristomella (Escharoides) erecta* C. & B. 1920, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

Euthyrisella nom. n. for *Euthyris* Hincks 1882 preocc. *Euthyris* Quenstedt 1869, BASSLER J. Wash. Acad. Sci. 26 1936 p. 161.

†*Figularia duvergieri* **nom. n.** for *F. carinata* Duvergier 1924 preocc. by *F. (Figulina) carinata* Waters 1923, BASSLER J. Wash. Acad. Sci. **26** 1936 p. 162.

Figularia figularis, OKADA & MAWATARI **44** p. 138.

†*Floridina voighti* **nom. n.** for *F. bifoliata* Voigt 1930 preocc. *F. bifoliata* Canu & Bassler 1920, BASSLER J. Wash. Acad. Sci. **26** 1936 p. 161.

Gemelliporina **gen. n.** type *Gemellipora glabra* Smitt 1872, BASSLER J. Wash. Acad. Sci. **26** 1936 p. 161.

†*Hemieschara variabilis*, NICOLAESCU **40** p. 236.

†*Herpetopora comptoniensis* **sp. n.** Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936.

†*Hippomenella mitzopoulozi* **sp. n.** Miocene Crete, KÜHN Zbl. Min. Geol. Pal. Stuttgart **6** p. 260.

Hippopetraliella **gen. n.** type *Lepralia dorsiporosa* Busk 1884, STACH Rec. Aust. Mus. Sydney **19** p. 369.

†*Homalostega hartfordensis* p. 84, *punctilla, sussexiensis* **spp. n.**, *H. clathrata* p. 85, Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936.

Iodictyum axilare, OKADA & MAWATARI **44** p. 139.

†*Lateschara proboscidea* var. *expansa* **var. n.** Cretaceous Britain, BRYDENE Notes Chalk, Polyzoa 1936 p. 62.

†*Lepralia ansata* var. *tetragona*, NICOLAESCU **40** p. 239.

†*Membranipora eleanorae, suffolcia, shavensis, perincerta* **spp. n.** Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936 p. 61.

Membranipora crustulenta var. *spiculata*, BORG **9** p. 275.

†*Micropora bedensis, multicrescens, monticula* **spp. n.** Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936 p. 83.

†*Microporella terebrata*, NICOLAESCU **40** p. 238.

Microporina articulata, SAKAKURA **56**.

Mucropetraliella **gen. n.** type *Lepralia ellerii* MacGillivray 1869, *M. ligulata, nodulosa* **spp. n.** Recent Australia p. 377, *M. vultur, halei* pp. 374, 376, STACH Rec. Aust. Mus. Sydney **19**.

†*Myrizozoum truncatum*, SCOTTI **63** p. 418.

Myrizozoum marionensis irregulatum, OKADA & MAWATARI **44** p. 142.

†*Onychocella devoniensis* p. 68, *intro-versa, testudinaria* p. 69, *hantonien-sis, norfolcia, quadraticola* p. 70, *alticollis, eleanorae, bassleri, brightoniensis, cuck-meriensis* p. 71, *alrensis, longaeva, incrustata, trimensis, punctula* p. 72, *parallela, sheringensis, advena, roborata* p. 73, **spp. n.** Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936.

†*Otionella cupula*, *O. cupula* var. *spiralis*, STACH **69** p. 63.

Peripetraliella **subgen. n.** of *Mucro petraliella* type *Lepralia tuberosa* Busk 1884, STACH Rec. Aust. Mus. Sydney **19** p. 378.

Petralia livingstonei **sp. n.** Recent Australia, *P. undata*, STACH Rec. Aust. Mus. Sydney **19** pp. 366, 364.

Petraliella buski **sp. n.** for *Mucronella bisinuata* Busk 1884, *P. arafurensis* **sp. n.** Recent N.E. Australia, *P. bisinuata*, STACH Rec. Aust. Mus. Sydney **19** p. 368.

Petraliidae, STACH **70**.

†*Porella cervicornis*, SCOTTI **63** p. 412.

†*Puncturiella norviciensis* **sp. n.** p. 83, *norviciensis* varr. *ordinata, spinulata* varr. *n. P. superba* **sp. n.** p. 84, Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936.

†*Retepora alveolaris, granulata*, SCOTTI **63** pp. 413, 414.

†*Rhagasostoma inelegans* varr. *angliae minuens* varr. *n. R. graveense, gibbosulum, vectense, precursor* p. 74, *calceolum* **spp. n. R. calceolum** var. *attoceanum* var. *n. R. gimense, procurrens, marsupitium, irrostratum* p. 75, *pendens, anglicum* p. 76, **spp. n.** Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936.

†*Schismopora coronopus*, SCOTTI 63 p. 416.

†*Schizoporella variabilis*, *teres*, NICOLAESCU 40 pp. 233, 235.

Scrupocellaria californica, OKADA & MAWATARI 44 p. 134.

†*Semieschara tridentula*, *rottingensis* p. 76, *acuum*, *clausula* p. 77, *quadriconvexa*, *cattoniana*, spp. n. *S. cattoniana* var. *gimense* var. n. *S. norvicia* sp. n. *S. norvicia* var. *carisiana* var. n. p. 78, *S. latepatens*, *manicosa*, *scopulorum*, *hartfordensis*, *glavensis*, *accrescens* p. 79, *globator æquipartita*, *peneclausa*, *inclinata*, *arrensensis* p. 80, *tumefacta*, *tertia*, *tuftonensis*, *walthamensis* p. 81, *alumenensis*, *henrici*, *subpunctulata*, *peropaca* spp. n. *S. microporina* p. 83, Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936.

Serripetraliella subgen. n. of *Hippopetraliella*, type *H. chuakensis* (Waters 1913), *H. (Serripetraliella) chuakensis* var. *hastingsi* var. n. Recent Australia, *H. (S.) marginata*, STACH Rec. Aust. Mus. Sydney 19 pp. 371, 372.

Sinupetraliella gen. n. type *Petralia litoralis* Livingstone 1932, STACH Rec. Aust. Mus. Sydney 19 p. 378.

†*Terebripora robusta* sp. n. Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936 p. 88.

Thalamoporella granulata, OKADA & MAWATARI 44 p. 131.

†*Tylopora lorea* var. *hantoniensis* var. n. Cretaceous Britain, BRYDENE Notes Chalk Polyzoa 1936 p. 82.

Urceoliporidae nom. n. for Euthyridae Levinsen 1909, BASSLER J. Wash. Acad. Sci. 26 1936 p. 160.

†*Volviplustrellaria* gen. n. for Membraniporidae with zoarial structure of *M. taverensis*, BRYDENE Notes Chalk Polyzoa 1936 p. 62.

PHYLACTOLAEMATA.

Fredericella lepnevae, *F. sultana* var. *grandigemmis*, ABRICOSOFF C.R. Acad. Sci. U.R.S.S. 19 1927 p. 308 [not indicated as new, may be nomm. nud. Omitted from Zool. Rec. LXV].—*F. sultana*, BORG 9 p. 272.

Lophopodella carteri, ROGICK 53.

Lophopus crystallinus, PESSON 46.

Plumatella emarginata, BORG 10.—*P. sp.*, BROWN 14.

ENTOPROCTA.

General, CORI 18, 19.

VIII. MOLLUSCA

BY

A. E. SALISBURY.

CONTENTS.

| | PAGE |
|--------------------------------------|------|
| I. TITLES | 2 |
| II. SUBJECT INDEX | 47 |
| III. SYSTEMATIC INDEX:— | |
| Amphineura | 71 |
| Gastropoda... .. | 72 |
| Opisthobranchia | 91 |
| Pulmonata | 94 |
| Scaphopoda | 104 |
| Pelecypoda or Lamellibranchia | 104 |
| Cephalopoda | 126 |
| Incertae Sedis | 143 |

I.—TITLES.

1.—Abrard, R. Note sur le Callovien des Causses. Bull. Soc. géol. Fr. 5 VI 1-3 1936 pp. 7-10.

2.—Abrard, R. A propos de *Venericardia densata* Conrad. C.R. Séances géol. Fr. 8-9 1936 p. 135.

3.—Adam, W. Notes sur les Gastéropodes. III. Sur la présence de l'*Arion intermedius* (Normand 1852) en Belgique. Bull. Mus. Hist. nat. Belg. 11 No. 30 1935 pp. 1-5.

4.—Adam, W. Notes sur les Gastéropodes. IV. Sur la présence de *Helicella virgata* (da Costa 1778) en Belgique. Bull. Mus. Hist. nat. Belg. 11 No. 38 1935 pp. 1-2.

5.—Adam, W. & Leloup, E. Les *Crepidula* de la Côte occidentale de l'Afrique. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 349-367 pls. i, ii.

6.—Agalède, H. Note préliminaire sur la base du Jurassique moyen dans la partie méridionale de la feuille de Saint-Affrique. C.R. Séances Soc. géol. Fr. 1-2 1936 pp. 31-32.

7.—Aguayo, C. G. & Jaume, M. L. Sobre algunos moluscos marinos de Cuba. Mem. Soc. Cubana Hist. nat. 10 2 1936 pp. 115-122 text-figs.

8.—Aguayo, C. G. Nuevo molusco fluviatil cubano. Mem. Soc. cubana Hist. nat. 10 3 1936 pp. 169-171 text-figs.

Aguayo, C. J. *vide* Clench, W. J.

9.—Aguayo, C. G. & Rehder, H. A. New marine mollusks from Cuba. Mem. Soc. cubana Hist. nat. 9 1936 pp. 263-268 pl. xxiv.

10.—Airaghi, C. I Fossili della Dolonica Triasica della Rasa (Varese). Rend. Ist. Lombardo (2) 63 1-5 1935 pp. 191-196.

11.—Alberici, E. & Tamini, E. Contributo allo studio dei Molluschi del Quaternario marino di Rodi (Egeo). Rend. Ist. Lombardo (2) 68 1-5 1935 pp. 213-228 pl. iii.

12.—Aldrich, T. H. Description of a few Alabama Eocene species and re-

marks on varieties. Mus. Pap. Alabama Mus. Nat. Hist. 12 1931 pp. 5-20 pls. i-vi.

13.—Allan, J. Australian shells. Strombs, Scorpion, or Spider shells, sea butterflies and ladder shells. Aust. Mus. Mag. Sydney 6 4 1936 pp. 121-126 text-figs.

14.—Allan, J. Australian shells. Screw, Blind, hairy-keeled and worm shells, violet snails, carrier shells and others. Aust. Mus. Mag. Sydney 6 2 1936 pp. 64-69 text-figs.

15.—Allan, J. Australian shells. The slipper, cup-and-saucer, cap and horse-hoof limpets, horse shells and triphoras. Aust. Mus. Mag. Sydney 6 1 1936 pp. 26-31 text-figs.

16.—Allan, R. S. The fauna of the Reefton beds (Devonian), New Zealand, with notes on Lower Devonian animal communities in relation to the base of the Devonian system. Palaeont. Bull. N.Z. 14 1935 pp. 1-72 [Moll. pp. 24-27] pls. i-v map.

17.—Altena, C. O. van R. Remarks on the generic position of *Hydrobia steinii* von Martens and *Paludestrina taylori* E. A. Smith, with the description of a new genus. Basteria 1 4 1936 pp. 64-73 text-figs.

18.—Altena, C. O. van R. De Gastropoden van het Naardermeer. Jaarb. Vereen. Natuurmonumenten Ned. 1929-35 1936 pp. 172-176 map.

19.—Altena, C. O. van R. Aanteekeningen over Jeugdvormen van Nederlandsche Schelpen. II. De ontwikkeling van de Schelp van *Petricola pholadiformis* Lam. Levende Nat. Amsterdam 41 4 1936 pp. 113-114 text-figs. 1, 2.

20.—Amemiya, I. Effect of gill excision upon the sexual differentiation of the oyster, *Ostrea gigas* Thunberg (Japanese) [English abstract]. Nippone Gakuzyutu Kyōkai Hōkoku 10 1935 pp. 1023-1026. [Abstract in Japan. J. Zool. 6 1936 p. (84).]

21.—Altoff, W. *Trigonia (Clavotr.) interrupticosta* n. sp. aus dem unteren Dogger von Bielefeld. Cbl. Min. Geol. Paläont. Stuttgart 4 1936 pp. 154-157 text-figs.

22.—Anderson, C. Charles Hedley 1862-1926 Memorial Series No. 5. Proc. Linn. Soc. N.S.W. **61** 3-4 1936 pp. 209-220, portrait (pl. x).

23.—Andrews, E. A. Spermatophores of the snail *Neritina reclivata*. J. Morph. Philadelphia **60** 1936 pp. 191-209 pl. i.

24.—Andrews, E. A. Notes on growth of a Jamaican slug. Nautilus Philad. **49** 4 1936 pp. 107-109.

25.—Ankel, W. E. Prosobranchia. Grimpe & Wagler. Die Tierwelt der Nord u. Ostsee hfg. **29** (Teil 9 b1) pp. 1-240 text-figs. 1-222 Leipzig 1936.

26.—Ankel, W. E. Die Netz-Rensschnecke, ein Aasfresser im Watt. Natur u. Volk **66** 7 1936 pp. 341-345 text-figs. 1-5.

27.—Ankel, W. E. Die Pantoffel-Schnecke auf deutschen Austernbänken. Natur u. Volk **66** 1 1936 pp. 11-13.

28.—Ankel, W. E. Die Frasssparen von *Helcion* und *Littorina* und die Funktion der Radula. Verh. Deutsch. zool. Ges. Leipzig **38** 1936 pp. 174-186.

29.—Anon.—Enkele soorten van Molluscen, nieuw voor de Belgische fauna. Biol. Jb. Antwerp **3** 1936 pp. 49-50.

30.—Anon.—Excursion géologique dans la région de Thionville. Bull. Soc. Hist. nat. Metz (3) **34** 1935 pp. 387-400.

31.—Anon.—Molluscs of Northern Asia. [Note of paper by A. Mozley Tec. Rep. Soc. Edin. **58** 3 (24) 1935-36.] Nature London **138** 3490 1936 p. 517.

32.—Anon.—*Succinea* carried by a bird. Nautilus Philad. **50** 1 1936 p. 31.

33.—Anon.—Wilhelm A. Lindholm 1874-1935. Nautilus Philad. **50** 2 1936 p. 69.

34.—Anon.—Opinions rendered by the International Commission on Zoological Nomenclature. Smithson. misc. Coll. **73** 8 1936 pp. 1-44.

35.—Antonine, A. Sur les *Hypurites* de Provence et, en particulier, sur une nouvelle *Orbignya* du Santonien d'Auriol. C.R. Séances Soc. géol. Fr. **7** 1937 pp. 118-120 text-fig.

36.—Aphlin, T. A. Shell movement of five common bivalves. J. Ent. Zool. Claremont Cal. **28** 1936 pp. 41-46 text-figs.

37.—Arambourg, C. Nouvelles observations sur les faunes et la stratigraphie des phosphates du Maroc. C.R. Séances Soc. Géol. Fr. Paris **12** 1936 pp. 211-212.

38.—Archer, A. F. The land mollusca of Cheboygan County Michigan. Occ. Pap. Mus. Zool. Univ. Mich. **340** 1936 pp. 1-15.

Archer, A. F. *vide* Clench, W. J.

39.—Arey, L. B. The repugnatorial glands of *Onchidium*. Anat. Rec. Philadelphia **67** Suppl. 1 1936 (Abstract 161) p. 98.

40.—Arey, L. B. Two types of respiration in *Onchidium*. Anat. Rec. Philadelphia **67** Suppl. 1 1936 (Abstract 198) p. 116.

41.—Arkell, W. J. Ammonites of the English Corallian Beds, pt. II. Mon. Pal. Soc. Nov. 1936 part II pp. xxxiii-xlvi, 31-42, pls. C, D, vii-x.

42.—Arkell, W. J. The Corallian Lamellibranchia, part IX. Mon. Pal. Soc. Nov. 1936 pp. 351-376, xvii-xxii, pls. 1-lvi.

43.—Arkell, W. J. The Corallian beds of Dorset. Proc. Dorset nat. Hist. F. Cl. **57** 1936 pp. 59-93 text-figs. pls. i-iv map.

44.—Arkell, W. J. The ammonite zones of the Upper Oxfordian of Oxford, and the horizons of Sowerby's and Buckman's types. Quart. J. Geol. Soc. London **92** 2 1936 pp. 146-187 text map pls. x, xi.

Arkell, W. J. *vide* Cox, L. R.

45.—Arvanitaki, A., Fessard, A. and Kruta, V. Analyse du potentiel d'action des nerfs viscéraux. C.R. Soc. Biol. Paris **122** 25 1936 pp. 1204-1206 text-figs. 1-2.

46.—Arvanitaki, A., Fessard, A. and Kruta, V. Mode répétitif de la réponse électrique des nerfs viscéraux et étoilés chez *Sepia officinalis*. C.R. Soc. Biol. Paris **122** 25 1936 pp. 1203-1204 text-fig.

47.—Ashby, E. Reviews of a monograph on Australian Loricates. Proc. Malac. Soc. London **22** 1 1936 p. 7.

48.—Ashby, E. & Cotton, C. New species of Chitons from Broome, Western Australia. J. Roy. Soc. W. Aust. **20** 1934 pp. 213-219 pl. xiii.

- 49.—Ashby, E. & Cotton, B. C. Descriptions of fossil Chitons from Europe in the Ashby Collection at the South Australian Museum. Rec. S. Aust. Mus. Adelaide 5 3 1935 pp. 389-394.
- 50.—Asklund, B. Die marine Schalentragende Fauna und die Spätglazialen Niveauränderungen mit besonderer Berücksichtigung der gotiglazialen Abschmelzzone in Holland. Sverig. geol. Undersökn. Arab. C29 8 1936 pp. 1-103 pl. i.
- 51.—Asselberghs, E. Les Poudigues dévoniens et les facies du givetien sur le bord nord du synclinal de Namur. C.R. Congr. Sci. Bruxelles 1930 pp. 626-631 text-fig.
- 52.—Astre, G. Sur un Hippurite de Palestine. Bull. Soc. Hist. nat. Toulouse 67 1 1935 pp. 69-73 text-figs.
- 53.—Astre, G. *Pleurotomaria* du Maestricht des Pyrénées. Bull. Soc. Hist. nat. Toulouse 67 2 1935 pp. 159-162 pl. i.
- 54.—Atkins, D. On the ciliary mechanisms and interrelationships of Lamellibranchs. Part I. New observations on sorting mechanisms. Quart. J. micr. Sci. London N.S. 79 2 1936 pp. 181-308 text-figs. 1-43 pls. x, xi.
- 55.—Augusta, J., & Remes, M. Úvod do Všeobecné Paleontologie. Prague 1936 pp. 1-321 [Moll. p. 22] text-figs.
- 56.—Austin, F. O. & Fox, D. L. Food, method of capture, and rate of digestion. The organs of feeding and digestion. [*Mytilus edulis* and *californianus*.] Bull. Scripps Instn. Oceanogr. Tech. Ser. 4 1 1936 pp. 13-15.
- 57.—Avnimelech, M. Notes sur les Calcaires d'el Kubab en Palestine. Bull. Soc. Hist. nat. Toulouse 67 1 1935 pp. 74-75.
- 58.—Avnimelech, M. Über Pteropoden von Syrien und Palästina. Ecl. geol. helv. 29 1 1936 pp. 209-211.
- 59.—Azzi, R. Inimigos do Fumo. Bol. Agric. S. Paulo 36 1935 pp. 375-294 text-figs. [Moll. pp. 375-380.]
- Baas, J. vide Werth, E.
- 60.—Baba, K. The fauna of Akkeslie Bay. I. Opisthobranchia. J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 pp. 115-125 pl. vii.
- 61.—Baba, K. Opisthobranchia of the Ryûkyû (Okinawa) Islands. J. Dept. Agr. Kyushu Univ. 5 1 1936 pp. 1-49 pls. i-iii text-figs. 1-26.
- 62.—Babnoff, S. von. Tubellen zur Einführung in die Palaeontologie der Wirbellosen für Anfänger. Mitt. Geol. palaeont. Griefswald 10 1935 pp. 1-98 [Moll. pp. 64-88].
- 63.—Babor, J. F. Contributions to the knowledge of palaeozoic Planorbis. *Choanomphalus* [*Palaeorbis* P. I. van Beneden ex E. Coemans] Fričii sp. n. Nýřan v Čecháck. [English summary p. 114.] Sborn. Kl. přír. Praze 1913 2 1914 pp. 1-14 text-fig.
- 64.—Baker, F. C. The freshwater mollusc *Helisoma corpulentum* and its relatives in Canada. Bull. nat. Mus. Ottawa 79 1936 pp. 1-37 text-figs. pls. i-v.
- 65.—Baker, F. C. Quantitative examination of molluscan fossils in two sections of Pleistocene loess in Illinois. J. Paleont. Menasha Wis. 10 1 1936 pp. 72-76.
- 66.—Baker, F. C. The relationship of *Parapholys*. Nautilus Philad. 50 1 1936 pp. 30, 31.
- 67.—Baker, F. C. The generic position of *Planorbis obstructus* Morelet. Nautilus Philad. 49 3 1936 p. 104.
- 68.—Baker, F. C. New Lymnaeidae from the United States and Canada. II. Michigan, Minnesota, and Montana. Nautilus Philad. 49 4 1936 pp. 127-130 pl. vii f. 7-9.
- 69.—B[aker], H. B. Exact dates of the Nautilus. Nautilus Philad. 50 1 1936 p. 28.
- 70.—Baker, H. B. *Xesta* and *Naninia*. Nautilus Philad. 50 1 1936 p. 30.
- 71.—B[aker], H. B. *Trochonanina* and *Diastole*. Nautilus Philad. 50 2 1936 p. 70.
- 72.—Baker, H. B. *Hojeda inaguensis* (Weinland). Nautilus Philad. 50 2 1936 pp. 70-71.
- 73.—Balli, A. La cellule a granuli cromaffini dell' intestino di *Patella vulgata*. Boll. Zool. Torino 7 1936 pp. 25-32.
- 74.—Banzhaf, W. Kriechspuren von Kugelmuscheln (*Sphaerium*). Natur. u. Volk. 66 5 1936 p. 253.

75.—Bartsch, P. Two new shells from the Philippine Islands. *J. Wash. Acad. Sci.* **26** 2 1936 pp. 64–66 text-figs. 1, 2.

76.—Bartsch, P. A new intermediate host of the Asiatic blood fluke, *Schistosoma japonicum*. *Proc. biol. Soc. Washington* **49** 1936 pp. 139–141.

77.—Basse, É. Sur la fauna malacologique du Crétacé moyen de la Cordillère andine. *C.R. Séances Soc. géol. Fr.* **5** 1936 pp. 87–88.

78.—Baumberger, E. Vorläufige Mitteilung über die stampische Molluskenfauna von Bilten und deren geologische Auswertung (*Eclogae geol. Helv.* 1935). *Verh. schweiz. naturf. Ges.* **116** 1935 pp. 336–337.

79.—Bayer, C. Sur une difformité du *Cassis cornuta* (L.) causée par des Balanes. *Mém. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 41–42 text-figs. 1, 2.

80.—Beams, H. W., Gatenby, J. B. & Muliyl, J. A. Ultra-centrifuging the spermatocytes of *Helix aspersa*. *Quart. J. micr. Sci. London N.S.* **78** 3 1936 pp. 387–395 text-figs. 1–6 pls. xix.

81.—Behrmann, R. B. Die Faltenbögen des Apennins und ihre paläogeographische Entwicklung. *Abh. Ger. Wiss. Göttingen* (3) **15** 1936 pp. 1–125, pls. i–viii [maps] 9, 10 tables, text-figs. 1–45.

82.—Benoit, A. Note sur un mollusque fossile du genre *Lithodomus*. *Bull. Soc. Hist. nat. Ardennes* **30** 1935 pp. 146–147.

83.—Bequaert, J. & Clench, W. S. An unusually thick-shelled *Achatina* from the Kivu region, Belgian Congo. *Bull. Mus. roy. Hist. nat. Belg.* **12** 3 ; 1936 pp. 1–4 figs.

84.—Bequaert, J. & Clench, W. S. Studies of African land and freshwater Mollusks. *J. Conch. London* **20** 7 1936 pp. 204–216 pl. viii.

85.—Bequaert, J. & Clench, W. J. Studies of African Land and Freshwater Mollusks: Notes on *Gonaxis* Taylor with description of a new species. *J. Conch. London* **20** 9 1936 pp. 263–273 text-figs.

86.—Bequaert, J. & Clench, W. J. Rheophilous mollusks of the Estuary of the Congo River (Studies of African

Land and Fresh-water mollusks). *Mém. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 161–168 text-figs. 1–2 pl. i.

87.—Bequaert, J. & Clench, W. J. Studies of African Land and Fresh-water Mollusks. X. *Gulella pumilio* (Gould) and two species confused with it. *Nautilus Philad.* **49** 3 pp. 93–97 pl. vi.

88.—Bequaert, J. & Clench, W. J. A. second contribution to the molluscan fauna of Yucatan. *Pub. Carnegie Instn. Washington* **457** 1936 pp. 61–75 pls. i, ii.

89.—Bequaert, J. & Clench, W. J. Studies of African Land and Fresh-water Mollusks. VII. A revision of the genus *Archachatina* Albers. *Rev. Zool. Bot. afr. Tervueren* **29** 1936 pp. 73–96 pls. i, ii.

90.—Bequaert, J. & Clench, W. J. New species of land operculates, with descriptions of a new genus and two new subgenera. *Rev. Zool. Bot. afr. Tervueren* **29** 1936 pp. 97–104 pls. i, ii.

91.—Berghe, L. v. d. Notes Oecologiques sur quelques Mollusques d'eau douce du Katanga (Congo Belge). *Mém. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 457–468 text-figs. 1, 2.

92.—Berner, L. La Glande salivaire de la moule de Provence (*Mytilus galloprovincialis* Lmk.). *C.R. Soc. Biol. Paris* **123** 26 1936 pp. 15–17 text-fig.

93.—Bernhard, H. Central Queensland, Easter, 1935. A shell collecting trip in Keppel Bay. *Queensl. Nat. Brisbane* **9** 6 1936 pp. 109–111.

94.—Berry, C. T. A Miocene pearl. *Amer. Midl. Nat. Notre Dame* **17** 2 1936 pp. 464–470 figs. 1–3.

95.—Berry, S. S. A new *Dimya* from California. *Proc. Malac. Soc. London* **22** 3 1936 pp. 126–128 pl. xiiiB.

96.—Berthoumeyroux, M. Recherches sur le pouvoir réducteur des Liquides du milieu intérieur de quelques Invertébrés marins. *Bull. Sta. biol. Arcachon* **32** 2 1935 pp. 111–153 [Moll. pp. 142–147].

97.—Bessler, J. Doggerfossilien aus dem oligozänen konglomerat der Zongrube von Rot-Malsch. *Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i. B.* **1** 1936 pp. 43–48.

- 98.—Bestel, A. Le Lias au Nord-Est de Charleville. Bull. Soc. Hist. nat. Ardennes 30 1935 pp. 124-127.
- 99.—Beyenburg, E. Neue Fossilfunde aus dem Untersenon der westfälischen Kreide. Z. deuts. geol. Ges. Berlin 88 2 1936 pp. 104-115 pls. xxv, xxvi.
- 100.—Bialaszewicz, K. & Kupfer, C. De la composition minérale des Muscles des animaux marins. Arch. int. Physiol. 42 1936 pp. 398-404 tables.
- 101.—Biggs, H. E. J. A new *Clausilia* from Asia Minor. J. Conch. London 20 8 1936 p. 253 text-fig.
- 102.—Biggs, H. E. J. Collecting mollusca on the Iranian plateau. Nautilus Philad. 50 1 1936 pp. 8-13.
- 103.—Bigot, A. Les Récifs bathoniens de Normandie. Bull. Soc. géol. Fr. 5 IV 8-9 1935 pp. 697-736 pls. xxxix-xliii.
- 104.—Bigot, A. & Fortin, E. Le soudage d'Incarville, pres de Louviers (Eure). C.R. Acad. Sci. Paris 202 4 1936 pp. 264-265.
- 105.—Birstem, I. A. The growth and propagation of *Cardium edule* of Mertoy Kultuk and Kaidak in Caspian Sea in connection with salinity. C.R. Acad. Sci. Moscou (N.S.) 1936 4 4 pp. 195-199 graphs and map.
- 106.—Bisat, W. S. The faunal stratigraphy and goniatite phylogeny of the Carboniferous of western Europe, with notes on the connecting links with North America. Rept. Int. Geol. Congr. XVI 1 1936 pp. 529-537.
- 107.—Blanc, A. C. Stratigrafia del canale Mussolini nell' Agro Pontino. Proc.-verb. Soc. tosc. Sci. nat. 44 2 1935 pp. 52-56.
- 108.—Blanc, A. C. Una spiaggia pleistocenica a "*Strombus bubonius*" presso Palidoro (Roma). Rend. Acc. Lincei (6) 23 3 1936 pp. 200-204.
- 109.—Blanc, A. C. Giacimento sottomarino a "*Cyprina islandica* L." nei golfo di Terranova Pausania (Sardegna) Rend. Acc. Lincei (6) 23 9 1936 pp. 695-698.
- 110.—Blanc, A. C. & Tavani, G. Una fauna marina nelle breccie ossifere dei Monti d'oltre Serchio. Proc.-verb. Soc. tosc. Sci. nat. 44 2 1935 pp. 49-51.
- 111.—Blanchet, F. Sur l'extension du Bathonien dans les zones intra-alpines au Sud de la Guisane. C.R. Acad. Sci. Paris 202 3 1936 pp. 232-234.
- 112.—Blanchet, F. Étude géologique des Montagnes d'Escreins (Hautes-Alpes et Basses-Alpes). Trav. Lab. Géol. Univ. Grenoble 19 1936 pp. 1-183 Moll. p. 65 text-figs. pls. i-xx maps.
- 113.—Blondet, H. Les *Hecticoceras* de Trept et Optevoz. Bull. Soc. Hist. nat. Savoie (3) 23 1935 pp. 203-208.
- 114.—Blondet, H. Les *Oekotraustes* du Bathonien de Cheanaz. Bull. Soc. Hist. nat. Savoie (4) 23 1935 pp. 209-211.
- 115.—Blondet, H. L'Hauterivien de la région de Chambéry. Bull. Soc. Hist. nat. Savoie (4) 23 1935 pp. 213-219.
- 116.—Blondet, H. Sur quelques *Ammonites* rares de la région de Crémieu. Bull. Soc. Hist. nat. Savoie (4) 23 1935 pp. 221-229 2 text-figs. pl. i.
- 117.—Bloomer, H. H. The sex of *Anodonta anatina*. Proc. Malac. Soc. London 22 3 1936 pp. 129-134 pl. xiv.
- 118.—Bodylevskij, V. I. Concerning traces of the Upper Volgian stage in the West Siberian lowlands. C.R. Acad. Sci. Moscou N.S. 1936 1 1 pp. 31-32.
- 119.—Boerman, D. J. Schelpgruisonderzoek. Basteria. Tijds. ned. malac. Ver. Lisse 1 No. 2 pp. 23-30.
- 120.—Boettger, C. R. Das Vorkommen der Landschnecke *Vertigo* (*Vertigo*) *mouliniana* Dup. in Deutschland und ihre zoogeographische Bedeutung. SitzBer. Ges. naturf. Fr. Berl. 1936 1-3 pp. 101-113.
- Boñev, E. vide Tzankov, Y.
- 121.—Borde, F. Observations sur la production du naissain dans le bassin d'Arcachon en 1935. Rev. Trav. Pêches marit. Paris 9 1936 pp. 97-100.
- 122.—Bouxin, J. & Legendre, R. La Faune pélagique de l'Atlantique recueillie dans des estomacs de Germons au large du Golfe de Gascogne—Deuxième Partie: Céphalopodes. Ann. Inst. océanogr. Paris 16 1 1936 pp. 1-99 maps in text.
- 123.—Bogdanov, A. New data on the stratigraphy of the Lower Volga region in connection with deep boring

in the town of Astrakhan. [In Russian, English summary pp. 224-225.] Trav. Soc. Nat. (Séct. Géol.) **63** 1934 pp. 210-225.

124.—Boghachev, V. V. New data on the Transcaucasian Miocene. [In Russian, English Summary p. 31.] Trudy Azerbaidjan Neft. Elmitad. Inst. 1936 pp. 5-31 pls. i, ii.

125.—Bogsch, L. Das Alter der Fauna des tuffigen Mergels von Nógrádszakál. Math. term. Ért. Budapest **53** 1935 pp. 719-733. (Germ. summ. p. 733.)

126.—Bondartschuk, W. G. Zur Charakteristik der fossilen Mollusken aus den Quartärablagerungen in der Ukraine. [In Russian, German summary pp. 47-53.] Ukrainische Akad. Wiss. "Die Quartärperiode" **5** 1933 pp. 15-53.

127.—Bondartschuk, V. G. On *Paludina diluviana* Kunth. [In Russian, English summary pp. 128-129.] Ukrainische Akad. Wiss. "Die Quartärperiode" **8** 1935 pp. 117-129 text-figs. pl. i.

128.—Bonilla, A. M. Estudio comparativo de *Zachrysia trinitaria* y *Z. scabrosa*. Mem. Soc. cubana Hist. nat. **10** 1 1936 pp. 33-38 pl. i.

129.—Bouxin, H. Technique d'élevage de deux palourdes comestibles (*Tapes decussatus* L. et *Tapes pullastra* Wood). Rev. Trav. Pêches marit. Paris **9** 1936 pp. 101-112 pls. i, ii.

130.—Bowman, T. S. Report on boring for oil in Egypt Mines and Quarries Department.—Cairo 1931.

131.—Boycott, A. E. The habitats of Freshwater Mollusca in Britain. J. Animal Ecol. **5** 1936 pp. 116-186 pls. iii, iv text-figs. graphs tables.

132.—Boycott, A. E. *Neritina fluviatilis* in Orkney. J. Conch. London **20** 7 1936 pp. 199-200 text-fig.

133.—Boycott, A. E. Colonization of Land Shells. J. Conch. London **20** 7 1936 p. 224.

134.—Boycott, A. E. The habits of young *Helix pomatia*. J. Conch. London **20** 7 1936 p. 224.

135.—Boycott, A. E. & Oldham, C. The Mollusca of the Western parts of the Shropshire Union Canal. North

Western Nat. Arbroath **11** 3 1936 pp. 217-227 map.

136.—Boyer, J. Mollusques perliers de France. Nature Paris **296** 1936 pp. 78-80 text-figs. 1-3.

137.—Brakman, C. *Cardium edule* L. var *lamarcki* Reeve. Basteria: Tijds. ned. malac. Ver. Lisse **1** No 3. 1936 pp. 39-43 figs.

Bramlette, M. N. vide Woodring, W. P. & others.

138.—Brandt, A. v. Kohlsäureschäden an Mollusken in kleinen sauren Waldgewässern. Archiv. Molluskenk. **68** 3 1936 pp. 120-127 pl. v.

139.—Breistroffer, M. Les subdivisions du Vraconien dans le Sud-Est de la France. Bull. Soc. géol. Fr. **5** VI 1-3 1936 pp. 63-68.

140.—Breistroffer, M. Revision de la Faune hauterivienne du Néron en Chartreuse. Bull. Soc. sci. Dauphiné **55** 1935 pp. 531-555.

141.—Breistroffer, M. Sur la stratigraphie du Crétacé moyen en Chartreuse. C.R. Acad. Sci. Paris **202** 20 1936 pp. 1691-1693.

142.—Breistroffer, M. Sur quelques Ammonites rares du Vraconien de France. C.R. Séances Soc. géol. Fr. **1-2** 1936 pp. 23-25.

143.—Breistroffer, M. Sur quelques Céphalopodes du Crétacé de Colombie. C.R. Séances Soc. géol. Fr. **8-9** 1936 pp. 155-157.

144.—Breistroffer, M. Étude de l'étage albien dans le massif de la Chartreuse (Isère et Savoie). Trav. Lab. Géol. Univ. Grenoble **17** 3 1933 pp. 1-50.

145.—Breistroffer, M. Révision de la Faune hauterivienne du Néron en Chartreuse. Trav. Lab. Géol. Univ. Grenoble **18** 1936 pp. 131-155.

Bridge, J. vide Williams, J. S.

146.—Brock, F. Suche Aufnahme und enzymatische Spaltung der Nahrung durch die Weilhornschncke *Buccinum undatum* L. Zoologica Stuttgart **34** (Hft. 92) 1936 pp. 1-136 text-figs. 1-27 tables and pl. i.

147.—Brooks, S. T. Exploration of Southampton Island, Hudson Bay. Zoology. I. Echinodermata and Mollusca. Mem. Carnegie Mus. **12** II Sect. 5 1935 pp. 1, 2.

- 148.—Brooks, S. T. Some molluscs from Utah. *Nautilus Philad.* **50** 1 1936 pp. 13-14 text-fig.
- 149.—Brooks, S. T. West Virginian Carychiidae in the Carnegie Museum collection—1936. *Nautilus Philad.* **49** 4 1936 p. 115.
- 150.—Bruce, J. R. Report on Oyster Investigations 1934 and 1935. *Rep. Mar. biol. Sta. Port Erin* **48** 1935 pp. 13-15.
- 151.—Bruce, J. R. Faunistic notes and records. *Rep. Mar. biol. Sta. Port Erin* **48** 1935 pp. 26-28. [Moll. p. 28 *otina*].
- 152.—Brumpt, E. *Schistosoma bovis* et *Schistosoma mansoni* ne sont pas transmis par *Planorbis* (*Indoplanorbis*) *exustus*. Observations biologiques concernant ce *Planorbe* (Autofécondation, Erosion de la coquille, élevage, etc. *Ann. Parasit. Parks* **14** 5 1936 pp. 464-471 pl. xxii.
- 153.—Brunet, R. & Jullien, A. De l'Architecture du coeur chez l'Huitre portugaise (*Gryphaea angulata* Lamk.) et le *Murex* (*Murex trunculus* L.). *Bull. Soc. zool. Fr.* **61** 1936 pp. 302-307 pl. iv.
- 154.—Brunet, R. & Jullien, A. De l'Architecture du coeur chez *Murex trunculus*. Préliminaire à l'étude de la genèse et de la propagation de la contraction cardiaque chez cette espèce. *C.R. Soc. Biol. Paris* **121** 10 1936 pp. 996-997.
- 155.—Brunet, R. & Jullien, A. De l'Architecture du coeur chez le Peigne. *C.R. Soc. Biol. Paris* **122** 24 1936 pp. 1104-1106 text-fig.
- 156.—Brunet, R. & Jullien, A. Des caractéristiques architecturales du coeur chez deux Lamellibranches marins. *C.R. Acad. Sci. Paris* **202** 23 1936 pp. 1945-1947 text-fig.
- 157.—Brunet, R. & Jullien, A. De l'architecture comparée du coeur chez quelques Mollusques gastéropodes. *C.R. Acad. Sci. Paris* **203** 20 1936 pp. 1016-1018.
- 158.—Buley, H. M. Consumption of diatoms and dinoflagellates by the mussel. *Bull. Scripps Instn. Oceanogr. Tech.* Ser. **4** 1 1936 pp. 19-27.
- 159.—Bunting, L. E., Eslick, A., Jones, J. W. & Orton, J. H. Rate of growth of *Cardium edule*. *Nature London* **137** 3470 1936 pp. 705-706 graph.
- 160.—Büren, G. v. Der Gerzensee, Eine limnologische Studie. [Moll. p. 87.] *Mitt. naturf. Ges. Bern.* **1935** 1936 pp. 29-93 pls. i, ii text-figs. 1-3 3 graphs.
- 161.—Büttner, K. Biologische Beobachtungen an Wasserschnecken. *Archiv Molluskenk.* **68** 3 1936 pp. 131-134.
- 162.—Büttner, K. Liste der Mollusken. *Mitt. Höhlen- u. Karstf. Berlin* 1936 Sonderheft pp. 53-54.
- 163.—Büttner, K. Die Molluskenfauna der Mergel von Dresden-Cotta und Dresden-Nickern. *SitzBer. Isis Dresden* **1935** 1936 pp. 93-96.
- 164.—Cadenat, J. Note sur un Céphalopode géant (*Architeuthis harveyi* Verrill) capturé dans le Golfe de Gascogne. *Bull. Mus. Hist. nat. Paris* (2) **8** 3 1936 pp. 277-285 text-figs. 1-4 [map].
- 165.—Calman, W. T. & Crawford, G. I. Marine boring animals. *Marine Boring Animals Brit. Mus. (N.H.) Econ. Ser.* **10** London 1936 pp. 1-38 text-figs. 1-21.
- Calvin, D. B. *vide* Ellis, M. M.
- 166.—Cantuniari, S. Studiul unui fragment de lemn silicificat dela Lipcani (Basarabia). *Bul. Soc. Nat. România București* **4** 1933 pp. 28-30.
- 167.—Casey, R. Recent additions to the Albian Ammonoid fauna of Folkestone. *Geol. Mag. London* **73** 868 Oct. 1936 pp. 444-448.
- Caster, K. E. *vide* Flower, R. H.
- 168.—Cawston, F. G. Bilharzia infection in blind lagoons. *S.A. Medical Jour.* Oct. 1936 pp. 698, 699.
- 169.—Cazalet, M. Recherches biologiques sur l'estuaire du Frémur (Limite des Côtes-du-Nord et de l'Île-et-Vilaine). *Bull. Soc. sci. Bretagne* **12** 3-4 1936 pp. 205-237 map.
- Chace, E. M. *vide* Strong, A. M.
- Chadwick, C. R. *vide* Mills and others.
- 170.—Chaloux, J. Sporocystes d'un *Brachylaemus* Dujardin chez *Helix aspersa* Müller. *Bull. Soc. sci. Bretagne* **12** 1 & 2 1935 pp. 53-57 text-figs. 1-4.

170. — Checchia-Rispoli, G. Su alcune *Eriptycha* del Cretaceo superiore della Tripolitania. Bol. Soc. geol. ital. 54 2 1936 pp. 241-248 pl. xii.

171. — Chalaux, J. Anomalie physiologique dans l'appareil génital de *Helix aspersa* Müller. Bull. Soc. sci. Bretagne 12 1 & 2 1935 pp. 58-61 text-figs. 1, 2.

172. — Chalmers, R. W. The genus *Gastrioceras* occurring in the Lower Coal Measure of the Lancashire Coalfield. J. Manchester Geol. Assoc. 1 3 1936 pp. 147-166 pls. i-iv.

173. — Chapman, F. & Crespín, I. The palaeontology of the Plantagenet beds of Western Australia. J. Roy. Soc. W. Aust. 20 1934 pp. 103-136 pls. vi-xi. [Moll. pp. 120-126, pl. xi.]

Chappell, D. W. *vide* Newcombe C. L. and others.

174. — Chatzillo, B. Contribution à l'étude de la régulation humorale de l'organisme. I. Influence hormonale des optones de la thyroïde, des surrénales et du Thymus sur la croissance du mollusque *Limnaea stagnalis*. Arch. int. Physiol. 43 1936 pp. 510-522 graphs.

175. — Chaux-Thevenin, H. Les Claires expérimentales de l'Office scientifique et technique des Pêches maritimes, à la Tremolade. Rev. Trav. Pêches marit. Paris 9 1936 pp. 83-95 text-figs. 1-7 pl. i.

176. — Chavan, A. Sur les variations de *Venericardia planicosta*. C.R. Séances Soc. géol. Fr. 7 1936 pp. 116-118.

177. — Chavan, A. Les Venericardes du groupe *Planicosta* dans l'Eocene de l'Alabama. C.R. Séances Soc. géol. Fr. 10 1936 pp. 166-168.

Chavanne, J. D. *vide* Marzloff, D. & others.

178. — Cheatum, E. P. Shell repair in *Polygyra texasiana*. Field & Lab. Dallas 5 1 1936 pp. 20-22 text-figs.

179. — Cheatum, E. P. A gastropod new to the United States. Field & Lab. Dallas 5 1 1936 p. 22.

180. — Checchia-Rispoli, G. Su alcune Bullidae del Cretaceo superiore della Tripolitania. Bol. Soc. geol. ital. 55 1 1926 pp. 39-43 pl. i.

181. — Chen, C. S. & Kao, T. P. Investigation into the cause of the premature death of the Razor Clam

Sinovacula constricta Lamark [Chinese English abstract p. 1, 2 at end]. Bull. Chekiang Prov. Fish. Exp. Sta. 2 No. 1 1936 pp. 1-12 and pp. 1, 2 English abstract.

182. — Chappars, M. S. Catalogue of the type specimens of fossils in the University of Cincinnati Museum. Ohio J. Sci. 36 1936 pp. 1-45.

183. — Clark, B. L. & Vokes, H. E. Summary of marine Eocene sequence of Western North America. Bull. Geol. Soc. Amer. Washington, D.C. 47 6 1936 pp. 851-876 pls. i, ii.

184. — Clarke, W. J. Yorkshire Cephalopoda. J. Conch. London 20 9 1936 p. 257.

185. — Cleave, H. J. van. Reversal of symmetry in *Campeloma rufum*, a fresh-water snail. Amer. Nat. 70 731 1936 pp. 567-573.

186. — Cleave, H. J. van & Richey, E. McD. Studies on the radula in snails of the genus *Viviparus*. Trans. Amer. micr. Soc. Menasha 55 2 1936 pp. 223-229 pl. xxix.

187. — Clench, W. J. The Physidae of the West Indies. Mem. Soc. cubana Hist. nat. 10 5 1936 pp. 335-342 pl. xxv.

188. — Clench, W. J. A new *Cerion* from the Bahamas. Nautilus Philad. 49 4 1936 pp. 112-113 pl. viii f. 6.

189. — Clench, W. J. Leopoldo A. Faustino. Nautilus Philad. 49 4 1936 p. 139.

190. — Clench, W. J. *Helicostyla subcarinata archeri*. Nautilus Philad. 49 4 1936 p. 140 pl. viii f. 5.

191. — Clench, W. S. A new subspecies of *Papuina* with records of land mollusks from Eastern Papua and associated islands. Nautilus Philad. 50 2 1936 pp. 53-54.

192. — Clench, W. S. & Aguayo, C. G. A new Pleistocene *Mecoliotia* from Cuba. Nautilus Philad. 49 3 1936 pp. 91-93 pl. v f. 3.

193. — Clench, W. J. & Archer, A. F. A new species of *Papuina* with notes on *P. tayloriana*. Nautilus Philad. 49 3 1936 pp. 88-91 pl. v f. 4.

Clench, W. J. *vide* Bequaert, J.

194. — Clench, W. J. & McLean, R. A. Description of a new species of *Macrocallista*. J. Conch. London 20 7 1936 pp. 201-204 text-fig.

- 195.—Clench, W. J. & McLean, R. Marine bivalves collected by the Harvard-Bahama Expedition of 1935. *Mem. Soc. cubana Hist. nat.* 10 3 1936 pp. 157-168 text-maps.
- 196.—Coates, C. W. A sea pigeon at the Aquarium. *Bull. New York zool. Soc.* 39 1936 pp. 159-160 fig.
- 197.—Coats, R. E. *Corbicula cowlitzensis* Weaver. *Nautilus Philad.* 50 1 1936 pp. 23-24.
- 198.—Coe, W. R. Protandry in the Virginian oyster. *Anat. Rec. Philadelphia* 67 Suppl. 1 1936 (Abstract 142) p. 89.
- 199.—Coe, W. R. Sequence of functional sexual phases in *Teredo*. *Biol. Bull. Woods Hole* 71 1936 pp. 122-132 tables.
- 200.—Coe, W. R. Environment and sex in the oviparous oyster *Ostrea virginica*. *Biol. Bull. Woods Hole* 71 1936 pp. 353-359.
- 201.—Coe, W. R. Sexual phases in *Crepidula*. *J. exp. Zool. Philadelphia* 72 1936 pp. 455-477 text-figs. and graphs.
- 202.—Coe, W. R. Sex ratios and sex changes in Mollusks. *Mém. Mus. Hist. nat. Belg.* (2) 3 1936 pp. 69-76 text-figs. 1-3.
- 203.—Coen, G. Di un Sepion anomalo di *Sepia filliouxii* Lafont. *Boll. Soc. venez. Stor. nat.* 1 7-8 1935 p. 156 pl. vii f. 5-7.
- 204.—Comte, P. La série devonienne de Léon (Espagne). *C.R. Acad. Sci. Paris* 202 4 1936 pp. 337-339.
- 205.—Comte, P. Le Devonien inférieur du Léon (Espagne). *C.R. Acad. Sci. Paris* 202 9 1936 pp. 771-773.
- 206.—Comte, P. Le Dévonien moyen et supérieur du Léon (Espagne). *C.R. Acad. Sci. Paris* 202 13 1936 pp. 1198-1200.
- 207.—Condit, D. D., Raggatt, H. G. & Rudd, E. A. Geology of Northwest basin, Western Australia. *Bull. Amer. Assoc. Petrol. Geol. Oklahoma* 20 8 1936 pp. 1028-1070.
- Contaut, H. *vide* Gérard, C.
- 208.—Cori, M. L'ossidazione dei protidi nello sviluppo embrionale di *Sepia officinalis*. *Pubb. Staz. zool. Napoli* 15 1936 pp. 368-376 tables and graphs.
- 209.—Corroy, G. & Denizot, G. Guide géologique de la Provence occidentale. *Ann. Fac. Sci. Marseille* (2) 8 1 1935 pp. 5-172 text-figs. pls.-iiv.
- Corteggiani, E. *vide* Mentzer & others.
- 210.—Cotton, B. C. The genus *Cheilea* in Australian waters. *J. Roy. Soc. W. Aust.* 21 1935 pp. 153-154 text-figs.
- 211.—Cotton, B. C. Recent Australian Viviparidae and a fossil species. *Rec. S. Aust. Mus. Adelaide* 5 3 1935 pp. 339-344 20 text-figs.
- Cotton, B. C. *vide* Ashby, E.
- 212.—Cotton, B. C. & Woods, N. H. The correlation of recent and fossil Turritellidae of Southern Australia. *Rec. S. Aust. Mus. Adelaide* 5 3 1935 pp. 369-387 text-figs. 1-9.
- Cox, J. H. *vide* Foerste, A. F.
- 213.—Cox, L. R. Fossil mollusca from Southern Persia (Iran) and Bahrein Island. *Palaeont. Ind. Calcutta* 22 2 1936 pp. 1-69 pls. i-viii.
- 214.—Cox, L. R. Pliocene Mollusca from Portugal, Apendice com a descrição de fauna fossil encontrada no jazigo da Mina da Ponte Nova. *Pub. Mus. Min. e geol. Univ. Coimbra, Mem. e Notic.* 1936 9 pp. 47-75 pls. i, ii.
- 215.—Cox, L. R. Karroo lamellibranchia from Tanganyika Territory and Madagascar. *Quart. J. Geol. Soc. London* 92 1 1936 pp. 32-57 pls. iv, v.
- 216.—Cox, L. R. The Gastropoda and Lamellibranchia of the Green Ammonite beds of Dorset. *Quart. J. Geol. Soc. London* 92 4 1936 pp. 456-471 pl. xxxiv.
- 217.—Cox, L. R. & Arkell, W. J. New names in d'Orbigny's 1850 "Prodrome." *Smithson. misc. Coll.* 73 8 1936 p. 5.
- Crawford, G. I. *vide* Calman, W. T.
- Crespin, I. *vide* Chapman, F.
- 218.—Crickmay, C. H. Study in the Jurassic of Wyoming. *Bull. Geol. Soc. Amer. Washington D.C.* 47 4 1936 pp. 541-564 pls. i-iii.
- Crockford, M. B. *vide* Miller, A. K.

219.—Cuénot, L. Commensalisme des pontes de Céphalopodes avec des éponges et des cnidaires. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 37-40.

Cunningham, R. B. *vide* Eddy M. W.

220.—Czogler, K. & Rotarides, M. Riesenexemplare von *Unio tumidus* Retz. aus Ungarn, zugleich einige Vergleichsdaten über ungarische Unionen. Arch. Hydrobiol. Stuttgart 30 1 1936 pp. 142-159 text-figs. 1-12 tables.

221.—Dacqué, E. Über homöogene-tische Gastropodenformen. Cbl. Min. Geol. Paläont. Stuttgart V 12 1936 pp. 533-546.

222.—Dahmer, G. Die Fauna der Obersten Siegener Schichten von der Unkelmühle bei Eitorf a.d. Sieg. Abh. preuss. geol. LdAnst. 168 1936 pp. 1-36 text-figs. pl. i-vi.

223.—Darteville, E. Les mollusques de l'Estuaire du Congo. Ann. Soc. Roy. Zool. Belg. 1934 65 pp. 63-65.

224.—Darteville, E. Notes Conchyliologiques Africaines (I). Rev. Zool. Bot. Afr. 1935 26 4 pp. 430-435 text-fig.

225.—Darteville, E. Note préliminaire sur la présence du Crétacé supérieur dans la zone littorale du Congo. Bull. Soc. belg. Géol. Paléont. Hydrol. 1934 44 pp. 22-25.

226.—Darteville, E. Note préliminaire sur l'Éocène de la zone littorale du Congo. Bull. Soc. belge Géol. Paléont. Hydrol. 1934 44 pp. 25-27.

227.—Darteville-Puissant, E. Notes conchyliologiques africaines—III. Quelques mollusques de diverses provenances. Basteria: Tijds. ned. malac. Ver. Lisse 1 4 pp. 55-63 figs.

228.—Darteville-Puissant, E. Mollusques récoltés dans le Bas-Congo et l'Enclave de Cabinda au cours de la Mission Cassel 1933. Rev. Zool. Bot. afr. Tervueren 29 1936 pp. 7-12.

229.—Darteville-Puissant, E. Notes conchyliologiques africaines (II). Mollusques récoltés dans le Bas-Congo et l'Enclave de Cabinda au cours de la Mission Cassel 1933. Rev. Zool. Bot. Afr. 1936 29 1 pp. 7-12.

230.—Das-Gupta, H. On the occurrence of Upper Palaeozoic fossils in the

vicinity of Solon (near Simla). J. Dpt. Sci. Univ. Calcutta 10 5 1933 pp. 1-4 pl. i.

231.—Davies, A. M. The composition of Tertiary Faunas. Tertiary Faunas I 1935 Mollusca pp. 116-356 pp. i-xi 1-406 text-figs.

232.—Davis, A. G. The London Clay of Sheppey and the location of its fossils. Proc. Geol. Ass. London 47 4 1936 pp. 335-345.

233.—Dean, J. D. Conchological cabinets of the last century. (Presidential address Conchological Society.) J. Conch. London 20 8 1936 pp. 225-252.

234.—Dechaseaux, C. Pectinides jurassiques de l'est du bassin de Paris révision et biogéographie. Ann. Paléont. Paris 25 1-3 1936 pp. 1-148 pls. i-x.

235.—Dechaseaux, C. Sur une nouvelle espèce d'*Arcomyltilus* de l'Oxfordien supérieur. Bull. Soc. géol. Fr. 5 IV 6-7 1935 pp. 595-597 text-fig. pl. xxxi.

236.—Dechaseaux, C. Les Lamelli-branches dysodontes du Jurassique de Belgique. Bull. Soc. géol. Fr. 5 IV 8-9 1935 pp. 759-765 map text-fig.

237.—Dechaseaux, C. Au sujet d'*Alectryonia gregarea* Sow. C.R. Séances Soc. géol. Fr. 11-12 1935 pp. 184-186.

238.—Dechsbach, N. K. *Dreissena polymorpha*—Verbreitung im europäischen Teil der Ud.S.S.R. und die sie bedingenden Faktoren. Verh. int. Vereinig. Limnol. Beograd 7 2 1935 pp. 432-438 map.

239.—Degner, E. Zur näheren Kenntnis von *Ambigua fuscolabiata* Rssm. (Gastr. pulm.) im nordwestlichen Unteritalien. Mitt. zool. Staatsins Hamburg 46 1936 pp. 19-114 text-figs. 1-28 tables.

240.—Delépine, G. Contribution à l'étude de la Faune du Dinantien des Pyrénées Première partie—Goniatites et Crustacés. Bull. Soc. géol. Fr. 5 V 1-3 1935 pp. 65-75 pl. i.

241.—Delépine, G. Contribution à l'étude de la Faune du Dinantien des Pyrénées. Deuxième Partie—La Faune de Mondette. Bull. Soc. géol. Fr. 5 V 1-3 1935 pp. 171-191 text-figs. pls. vii, viii.

242.—Demanet, F. Les Pectinidés du terrain Houiller de la Belgique. Mém. Inst. géol. Louvain 10 1936 pp. 113-149 text-figs. pls. xii, xiii.

243.—Demel, K. Études sur la Faune benthique et sa répartition dans les eaux polonaises de la Baltique. Arch. Hydrobiol. Ichthyol. Suwalki 9 3-4 1935 pp. 239-309 tables and text-figs. (Fr. rés. pp. 310-311.)

Denizot, G. *vide* Corroy, G.

244.—Desio, A. Prime notizie sulla presenza del Silurico fossilifero nel Fezzan. Bol. Soc. geol. ital. 55 1 1936 pp. 116-120.

245.—Desio, A. Nouve basi geologiche per la ricerca dei fosfati in Libia. Rend. Acc. Lincei (6) 23 3 1936 pp. 205-208.

246.—Dienst, P. *Klinoptera rhenana* eine neue Aviculide aus dem rheinischen Unterdevon. Jahrb. preuss. geol. LdAnst. 55 1 1935 pp. 388-391 text-fig.

247.—Dietrich, W. O. Über den stratigraphischen wertmesozoischer Mollusken (*Trajanella*, Gastrop.). Z. deuts. geol. Ges. Berlin 88 6 1936 pp. 399-402 text-figs.

248.—Dimitrow, Z. Die Westliche-Verbindung zwischen Balken und Sredna-Gora. [In Bulgarian, German summary pp. 204-206.] Annu. Univ. Sofia 32 3 1936 pp. 175-208 pls. and map.

249.—Dodgson, R. W. Shellfish and the public health. Brit. Med. J. London 1936 3942 pp. 169-173.

250.—Douvillé, H. Les Rudistes et leur évolution. Bull. Soc. géol. Fr. 5 V 4-5 1935 pp. 319-358 text-figs. pl. xv.

251.—Douvillé, H. Le test des Lamellibranches: sa formation dans l'*Ostrea edulis*. C.R. Acad. Sci. Paris 203 20 1936 pp. 965-968.

252.—Douvillé, H. Le test des Ostroïdes, du groupe de l'*Ostrea cochlear* (genre *Pycnodonta*, F. de W.) et le test des Rudistes. C.R. Acad. Sci. Paris 203 22 1936 pp. 1113-1117.

253.—Drefuss, M. Description d'un échantillon de *Belemnosepia sagitta* Münster (Céphalopodes Dibranches) provenant de Créveney (Haute-Saône). Bull. Soc. géol. Fr. 5 V 4-5 1935 pp. 277-280 text-figs.

Dreimanis, A. *vide* Zans, V.

254.—Duarte, A. Edade dos Calcários do Morro do Chaves estado de Sergipe. Bol. Serv. geol. e min. Brasil 79 1936 pp. 1-15 2 plates. [Moll. pp. 6-15, plate.]

255.—Eames, F. E. *Ostrea* (*Crassostrea*) *gajensis* from near Baripada, Mayurbhanj State. Rec. Geol. Surv. Ind. 71 2 1936 pp. 150-151 pl. xix.

256.—Eberzin, A. G. Das Alter der Subaklschagylschichten am Flusse Sulak (Nord-Dagestan). [In Russian, German translation pp. 276-279.] Bull. Acad. Sci. U.R.S.S. Ser. Geol. 1936 2-3 pp. 273-276.

257.—Eberzin, A. G. Geological investigations in the south-western part of the Guaduty region in Abkhazia. [Western-Transcaucasus.] [In Russian, English summary p. 111.] Trav. Soc. Nat. (Sect. Géol.) Leningrad 64 1935 pp. 94-111.

258.—Eddy, M. W. & Cunningham, R. B. The oxygen consumption of the fresh-water mussel, *Anodonta imbecilis*. Proc. Penn. Acad. Sci. 8 1934 pp. 140-143 tables and graphs.

259.—Ellis, M. M. & Calvin, D. B. Glycogen content of freshwater mussels during prolonged starvation. Proc. Soc. exp. Biol. 34 2 1936 pp. 222-225 table.

260.—Engel, H. Ueber westindische Aplysiidae und verwandten anderer Gebiete. Capita zool. 's-Gravenhage 8 Pt. 1 1936 pp. 1-76 43 text-figs. tables.

261.—Engel, H. Le genre *Phyllaplysia* P. Fischer 1872. J. de Conchyliol. Paris 80 2 1936 pp. 199-212 text-figs.

262.—Engel, H. Some additions to our knowledge of the genus *Notarchus*. Proc. Malac. Soc. London 22 3 1936 pp. 113-119 text-figs.

263.—Engel, H. On the names of the genera *Tethys* and *Aplysia*. Temminckia Leiden 1 1936 pp. 221-266.

264.—Engel, H. Die Gattung *Paraplysia* Pilsbry 1895. Zool. Anz. Leipzig 116 1936 pp. 35-40 text-fig.

265.—Engel, H. The Netherlands nudibranchiate Mollusca. Zool. Meded. Leiden 19 1936 pp. 103-116 text-fig.

Engel, H. *vide* Jutting, T. van B.

266.—Entz, G. Über das Auftreten und die Verbreitung der Wandermuschel (*Dreissensia polymorpha* Pall.) im Balaton. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 283-293 text-figs. 1-6.

267.—Erlanson, E. W. A preliminary survey of marine boring organisms in Cochin harbour. Curr. Sci. Bangalore 4 10 1936 pp. 726-732.

268.—Esaki, T. Ryûzô Isshiki a collector in Ryûkyû [in Japanese]. Venus Kyoto Japan 6 1 1936 pp. 56-59 portraits and text-figs.

Eslick, A. vide Bunting, L. E. & others.

269.—Eyerdam, W. J. The Distribution of *Melania* and *Neritina* in the British Solomon Islands. Nautilus Philad. 50 2 1936 pp. 44-46.

270.—Faessler, C. & Laverdiere, J. W. Quelques observations sur la géologie de la Côte de Beaupré. Nat. canad. Québec 63 2 1936 pp. 33-44 map.

271.—Feliksiak, S. *Alderia modesta* (Lóvén) in Wiek von Puck. Fragmenta faun. Mus. zool. Polon. 2 1936 pp. 299-303 text-figs. 1-3.

272.—Fenaux, A. Extension de la mer tertiaire dans les régions provençales et languedociennes. C.R. Acad. Sci. Paris 203 23 1936 pp. 1270-1272.

273.—Fentzer, K. Zur Kenntnis der Ammonitengattung *Onychoceras* Wunstorf. Z. deuts. geol. Ges. Berlin 88 4 1936 pp. 293-303 text-figs. pls. xxxviii.

Ferguson, H. C. vide Muller, S. W.

274.—Feruglio, E. Nota preliminar sobre algunas nuevas especies de moluscos del Supracretáceo y Terciario de la Patagonia. Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 pp. 277-300 pl. i, ii.

Fessard, A. vide Arvanitaki, A. & others.

275.—Fischer-Piette, E. Sur la Distribution de *Patella intermedia* et sur les répartitions dites Capriciennes. Bouvier Livre Jubilaire Paris 1936 pp. 27-32 maps.

276.—Fisher, N. "Nests" of two mollusks, *Lima hians* (Gm.) and *L. loscombi* Sow. Irish Nat. Journ. Belfast 6 5 1936 p. 117.

277.—Fisher, N. *Monodonta lineata* (da Costa) in North Wales. J. Conch. London 20 7 1936 p. 224.

278.—Fisher, N. *Archidoris britannica* Johnston. J. Conch. London 20 8 1936 p. 255.

279.—Fisher, N. Notes on a rare British nudibranch. Proc. malac. Soc. London 22 2 1936 pp. 73-74.

280.—Fisher, N. & Jackson, J. W. Early records of Lances. and Cheshire non-marine Mollusca by J. W. Whitehead. J. Conch. London 20 9 pp. 275-281.

281.—Flower, R. H. Cherry Valley Cephalopods. Bull. Amer. Paleont. Ithaca 22 76 1936 pp. 1-96 pls. i-ix.

282.—Flower, R. H. & Caster, K. E. The stratigraphy and paleontology of Northwestern Pennsylvania. Part II. Paleontology. Bull. Amer. Paleont. Ithaca 22 75 1935 pp. 1-74 pls. i-viii.

283.—Foerste, A. F. Cephalopods from the Upper Ordovician of Percé, Quebec. J. Paleont. Menasha Wis. 10 5 1936 pp. 373-384 pls. liv-lviii.

284.—Foerste, A. F. The Cephalopods of the Maquoketa shale of Iowa. J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 231-257 pls. xxvii-xxxvii.

285.—Foerste, A. F. Silurian Cephalopods of the Port Daniel area on Gaspé Peninsula, in Eastern Canada. J. sci. Labs. Denison Univ. 31 1-2 1936 pp. 21-92 pls. iv-xxvi.

286.—Foerste, A. F. Several new Silurian Cephalopods and Crinoids, chiefly from Ohio and Hudson Bay Ohio J. Sci. 36 5 1936 pp. 261-272 pls. i, ii.

287.—Foerste, A. F. Primitive Cephalopods (Abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 370.

Foerste, A. F. vide Ulrich, E. O.

288.—Foerste, A. F. & Cox, I. H. Cephalopods and a *Beatricea* from Akpatok Island. Geol. Mag. London 73 865 July, 1936 pp. 289-307 pl. iv text-figs.

289.—Fölovári, A. Das Vorkommen des Badener Legels in Budapest. Mag. K. Földt. Int. Evk. Pest. 66 7-9 1936 pp. 228-233.

290.—Fontaine, M. and Raffy, A. Sur la nature chimique des l'Apysio-purpurine. Bull. Soc. zool. Fr. 61 1936 pp. 49-57.

291.—Forcart, L. Revision der Vaginuliden aus Celebes in der Sammlung des Basler Naturhistorischen Museums (Vaginulidae Mollusca, Pulmonata). Verh. naturf. Ges. Basel **46** 1935 pp. 50–55.

292.—Forrest, J. E. The Natural History of Barra, Outer Hebrides. The result of a scientific expedition organised by the Biological Society of the University of Edinburgh, 1st to 14th July, 1935.—Marine Mollusca. Proc. phys. Edinb. **22** 5 1936 pp. 289–290.

Fortin, R. vide Bigot, F.

293.—Fossa-Mancini, E. La posición sistemática del orden "Ammonoidea." [Résumé in French, p. 66.] Rev. Mus. La Plata N.S. 1 Secc. Paleont. 1936 pp. 35–66.

294.—Foster, T. D. Size of shell in Land Snails of the genus *Polygyra* with particular reference to major and minor varieties. Amer. Midl. Nat. Notre Dame **17** 6 1936 pp. 978–982 graphs.

295.—Fox, D. L. The habitat and food of the California sea mussel. Bull. Scripps Instn. Oceanogr. Tech. Ser. **4** 1 1936 pp. 1–4.

296.—Fox, D. L. Certain physical and chemical properties of the fecal pellets and some experimental feeding studies [*Mytilus californianus*]. Bull. Scripps Instr. Oceanogr. Tech. Ser. **4** 1 1936 pp. 49–60 plate.

Fox, D. L. vide Austin, F. O.

297.—Fox, D. L. & Marks, G. W. The digestive enzymes. [Food of *Mytilus californianus*.] Bull. Scripps Instn. Oceanogr. Tech. Ser. **4** 1 1936 pp. 29–47 graphs.

298.—Fox, D. L., Marks, G. W. & Austin, F. O. The survival period of adult mussels in sea water of various concentrations. Bull. Scripps Instn. Oceanogr. Tech. Ser. **4** 1 1936 pp. 5–11 tables and graph.

299.—Frank, M. Der Faziescharakter der Schichtgrenzen der süddeutschen und kalkalpinen Trias. Cbl. Min. Geol. Paläont. Stuttgart pp. 375–502. [Moll. **11** 1936 p. 496.]

300.—Franz, V. *Viviparus menzelii* Franz, die diluviale Paludine von Phöben bei Potsdam. Archiv Molluskenk. **6** 4/5 1936 pp. 142–167 pls. vii, viii.

301.—Frentzen, K. Ein fossiler Mageninhalt aus dem Lias Delta (Umaltheen-Schichten) von Keichenbach, D. U. Ualen. Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe . B. **1** 1 1936 pp. 153–156.

302.—Frentzen, K. Der Lias Delta (Amaltheen-Schichten) im Gebiete zwischen Aselfingen und Aalen. Sitzber. heidelberg. Akad. Wiss. **1934** 2 pp. 1–73.

303.—Frey, E. Erfahrungen mit der Schmarotzerrose *Adamsia*. Nachr. Aquar. Terrar.-ver. Berlin **1936** pp. 124, 140.

304.—Friedberg, W. *Turritella scalaria* de Bach und einige Bemerkungen über evolute Gastropodenschalen. Bull. int. Acad. Cracovie B II **1935** 3–5 pp. 137–144 pl. iv.

305.—Friedberg, W. La *Terebralia bidentata* Deffr. (Grat.) = *Cerithium lignitarum* Eichw. dans le miocène de la Pologne. C.R. Acad. Cracovie **1936** 8 p. 5.

306.—Friedberg, W. Mieczaki miocénskie ziem Polskich (Mollusca miocaenica Poloniae). Part II.—Lamelli-branchiata. Kraków 1936 pp. 157–283 text-figs. pls. xxv–lvi.

307.—Frizzell, D. L. Genera of the Veneracea (Abstract). Proc. Geol. Soc. Amer. (1935) **1936** p. 365.

308.—Frizzell, D. L. Phylogeny of Venerid pelecypods (Abstract). Proc. Geol. Soc. Amer. (1935) **1936** p. 365.

309.—Frizzell, D. L. Classification of Veneracean pelecypods (Abstract). Proc. Geol. Soc. Amer. (1935) **1936** 415.

310.—Fröbel, E. Zur Kenntnis der Anatomie und Histologie von *Cryptozona bistrialis* (Pulmonata) (besonders des Genitalapparates). Jena Z. Naturw. **70** 3 1936 pp. 359–398 text-figs. 1–25 pl. xvi.

311.—Frömming, E. Ueber die Lebensweise der *Stagnicola palustris* Müll. und ihre Beziehungen zur Umwelt. Int. Rev. Hydrobiol. Leipzig **32** 1935 pp. 344–350 tables.

312.—Frömming, E. Über den Einfluss der Wasserstoffionenkonzentration auf unsere Süßwasserschnecken. Int. Rev. Hydrobiol. Leipzig **33** 1–2 1936 pp. 25 37.

313.—Frömming, E. Über das Gehäuse von *Theodoxus fluviatilis* L. Int. Rev. Hydrobiol. Leipzig **33** 5-6 1936 pp. 305-312 text-figs. 1-7 tables.

314.—Frömming, E. Ein weiterer Beitrag zur Verbreitung der Weinberg-schnecke in der Mark. Märk. Tierw. Berlin **1** 1936 p. 221.

Frömming, E. *vide* Volz, E.

315.—Froutin, G.-H. Contribution à l'étude des rundzellen de *Mytilus edulis* L. Bull. Soc. zool. Fr. **61** 1936 pp. 240-243.

316.—Fuchs, V. E. Extinct Pleistocene mollusca from Lake Edward, Uganda, and their bearing on the Tanganyika problem. J. Linn. Soc. London **40** 1936 pp. 93-106 4 text-figs. pls. i-iii.

317.—Fucini, A. Fossili Domeriani dei dintorni di Taormina parte quinta. Palaeontogr. ital. Siena **35** 1935 pp. 85-100 pls. viii-xi (xxxviii-xli).

318.—Fułiński, B. Przegląd do znajomości statocysty małżów. Arch. Tow. nauk. Lwow (3) **3** 20 1936 pp. 1-13 plate.

319.—Fulton, H. C. Molluscan Notes VI. Proc. Malac. Soc. London **22** 1 1936 pp. 7-9.

320.—Fulton, H. C. Descriptions of five new species and varieties. Proc. Malac. Soc. London **22** 1 1936 pp. 9-10 pl. ii.

Fujita, T. *vide* Kuroda, T.

321.—Furrow, C. L. Sex conditions in a Japanese *Valvata*. Trans. Illinois Acad. Sci. **28** 2 1936 pp. 253-254 text-fig.

322.—Gábor, R. Ujabb egri felső oligocén Gasztropodák Ann. hist.-nat. Mus. Hung. **30** 1936 pp. 1-9 (3rd pagination) pl. i.

323.—Gallien, L. & Larambergue, M. de. Cycle et dimorphisme sexuel de *Lacuna pallidula* Da Costa (Littorinidae). C.R. Acad. Sci. Paris **203** 6 1936 pp. 409-412 text-fig.

324.—Gardiner, A. P. Engel's paper on "The English species of the family Pleurobranchidae." J. Conch. London **20** 7 1936 pp. 195-198.

Gatenby, J. B. *vide* Beams, H. W. & others.

325.—Gautier, M. Sur la paléogéographie de la région de Nemours (Algérie). C.R. Acad. Sci. Paris **202** 22 1936 pp. 1870-1872.

Gautrelet, J. *vide* Mentzer and others.

326.—Geitler, L. Trypanochloris eine neue grüne Alge in den Schalen von Landschnecken und ihre Begleitflora. Biol. Generalis Wien **11** 2 1935 pp. 135-148 text-figs. 1-5 pls. ii, iii.

327.—Genson, E. La Pagetine. Bull. Soc. Étud. sci. nat. Béziers **39** 1936 pp. 59-64 plate.

328.—Gérard, C. & Contaut, H. Les Ammonites de la zone à *Peltocheras athleta* du centre-ouest de la France. Mém. Soc. géol. Fr. Paléont. Mém. **29** 13 2-3 1936 pp. 1-79 pls. i-xix text-map.

329.—Gerhardt, U. Zur Frage des Operculums bei *Parmacella* (Gastropoda, Pulmonata). Zool. Anz. Leipzig **113** 1936 pp. 41-44 text-figs.

330.—Gerhardt, U. Westere Untersuchung zur Kopulation der Stylomatophoren. Z. Morph. Ökol. Tiere Berlin **31** 1936 pp. 433-442 text-figs. 1-3.

331.—Germain, L. Contributions à la Faune malacologique de l'Afrique équatoriale. LXX. Mollusques terrestres de la Province du Kivu (Afrique orientale). Bull. Mus. Hist. nat. Paris (2) **8** 2 1936 pp. 146-157 text-figs. 41-47.

332.—Germain, L. Contributions à la Faune malacologique de l'Afrique équatoriale. LXXI. Une Achatine nouvelle de l'Afrique orientale. Bull. Mus. Hist. nat. Paris (2) **8** 3 1936 pp. 260-262 text-fig.

333.—Germain, L. La Biologie de quelques Hélicidés méridionaux des environs d'Angers et celle des mollusques dits xérophiles de la Faune française. Bull. Soc. Sci. nat. Ouest Nantes (5) **4** 1935 pp. 151-177.

334.—Germain, L. Mollusques fluviatiles du Tibesti. Mém. Acad. Sci. Paris **62** 1936 pp. 53-63 text-figs. 1-8.

335.—Germain, L. Contributions à l'étude de la faune du Mozambique. Voyage de M. P. Lesne (1928-1929). Mem. Mus. zool. Univ. Coimbra (1) **80** 1935 pp. 1-72 text-figs.

336. — Gersch, M. Der Genital apparat und die Sexualbiologie der Nordseetrochiden. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 106–150 text-figs.

Gersch, M. *vide* Reis, E.

337. — Gillet, S. & Schnéegans, D. Étude de la Région Fracturée située entre Lauw et Senthem (Haut Rhin). Bull. Serv. Carte géol. Alsace-Lorraine 2 3 1935 pp. 163–193 pl. xvi text-figs.

338. — Gillet, S. & Théobald, N. Les sables marins de l'oligocène du Haut Rhin. Bull. Serv. Carte géol. Alsace-Lorraine 3 1936 pp. 37–76 pl. iii.

339. — Glangeaud, L. Extension et caractères pétrographiques du Flandrien marin dans l'estuaire de la Gironde. C.R. Séances Soc. géol. Fr. 4 1936 pp. 54–56.

340. — Glibert, M. Faune malacologique des Sables de Wemmel. I. Pélécy-podes. Mém. Mus. Hist. nat. Belg. 78 1936 pp. 1–241 75 text-figs. pls. i–vii.

341. — Goodrich, C. *Goniobasis* of the Coosa River, Alabama. Misc. Pub. Mus. Zool. Univ. Mich 31 1936 pp. 1–60, pl. i.

342. — Goodrich, C. Notes on Philippine freshwater Mollusks. Nautilus Philad. 49 3 1936 pp. 73–79.

343. — Goodrich, C. Bryant Walker 1865–1936. Nautilus Philad. 50 2 1936 pp. 59–64 portrait.

344. — Goodrich, C. Studies of the Gastropod family Pleuroceridae—V. Occ. Pap. Mus. Zool. Univ. Mich. 318 1935 pp. 1–12.

346. — Goldring, W. Geology of the Berne quadrangle. [Lists of Ordovician, Silurian and Devonian fossils, figs.] Bull. New York St. Mus. Albany 303 1395 pp. 1–238 72 text-figs. and maps. [Moll. pp. 64, 81, 91, 111, 118, 171.]

347. — Grabar, P. Ultrafiltration fractionnée de l'Hémocyanine de l'Escargot. C.R. Soc. Biol. Paris 121 14 1936 pp. 1472–1476.

348. — Grähle, H.-O. Die Ablagerungen der Holstein-See (Mar. Interglaz. I.), ihre Verbreitung, Fossilführung

und Schichtenfolge in Schleswig-Holstein. Abh. preuss. geol. LdAnst. 172 1936 [Moll. p. 83] pp. 1–110 pl. i.

349. — Gran, H. H., Hentschel, E. & Russell, F. S. Handliste zur Sicherung der Bestimmungen nordischen Planktons. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 3 1936 pp. 15–20. [Moll. p. 20.]

350. — Grant, U. S. Summary of the marine pleistocene of California (abstract). Proc. Geol. Soc. Amer. (1935) 1936 pp. 349–350.

351. — Grave, B. H. & Smith, J. Sex inversion in *Teredo navalis* and its relation to sex ratios. Biol. Bull. Woods Hole 70 1936 pp. 332–343.

352. — Greco, B. A proposito di una critica al' opera scientifica di Gaetano Georgio Gemmellaro. Bol. Soc. geol. ital. 54 2 1936 pp. 301–312.

353. — Greco, B. La Fauna Permiana del Sosio conservata nei Musei di Pisa, di Firenze e di Padova. Palaeontogr. ital. Siena 35 1935 pp. 101–190 pls. xii–xv [i–iv].

354. — Gregg, W. O. Some erroneous and misleading records on occurrence of shells of the *Helminthoglypta cuyamacensis* group. Nautilus Philad. 50 2 1936 pp. 67–69.

355. — Gregorio, A. de. Sul Permiano di Sicilia (Fossili del calcare con Fusulina di Palazzo Adriano non descritti dal Prof. G. Gemmellaro conservati nel mio privato gabinetto). Ann. Géol. Paléont. Palermo 52 1930 pp. 1–70 pls. i–xxi.

356. — Gregorio, A. de. Monografia dei fossili Liassici di Monte San Giuliano conservati nel mio privato gabinetto geologico. Ann. Géol. Paléont. Palermo 53 1930 p. 1–57 pls. i–xiv.

357. — Gregorio, A. de. Fossili triassici delle Cave di Billiemi presso Palermo conservati nel mio privato gabinetto geologico. Ann. Géol. Paléont. Palermo 54 1930 pp. 1–40 [Moll. pp. 11–23] pls. i–vii.

358. — Gregorio, A. de. Fossili triassici della zona a *Rhynchonellina bilobata* Gemm. dei dintorni di Palermo conservati nel mio privato gabinetto geologico. Ann. Géol. Paléont. Palermo 55 1930 pp. 1–18 pls. i–iv.

359.—Gregorio, A. de. Descrizione di Taluni Fossili del giura inferiore dell' orizzonte Alpiniano zona ad *Harpoceras murchisonae* Sow. di Monte S. Giuliano conservati nel mio privato gabinetto geologico. Ann. Géol. Paléont. Palermo 56 1930 pp. 1-16 pls. i-iv.

360.—Grieg, J. A. The Cephalopod fauna of Svalbard. Tromsø Mus. Aarsheft 53 I 1933 pp. 1-19.

361.—Gripenburg-Schee, W. Klutertöhle, Bismarck und Rentropshöhle bei Milope und ihre Tierwelt. Abh. Westfäl. Provinzial-Mus. Munster i. W. 6 5 1935 pp. 1-46 (Moll. p. 20).

Grimshawe, C. N. vide Pilsbry, H. A.

362.—Grivanov, K. The geographical distribution and zones of economic importance of the slugs (*Agriolimax*) in the European part of the U.S.S.R. Summary Sci. Res. Work Inst. Plant Protect. Leningrad 1935 [1936] pp. 34-37.

363.—Grossu, A. V. *Helix pomatia elsaë* Kobelt in Rumänien. Archiv Molluskenk 68 3 1936 p. 136.

364.—Grossu, A. V. O specie de gasteropod nouă pentru România *Theodoxus prevostianus* (C. Pfeiffer) 1828. Bul. Soc. Nat. România Bucuresti 9 1936 p. 10.

365.—Gravel, A. Contribution à l'étude de la Bionomie générale et de l'exploitation de la faune du canal de Suez. Mém. Inst. Égypte 29 1936 pp. 1-255 text-figs. maps pls. i-xxv. [Mollusca pp. 183-187.]

366.—Gugenberger, O. Zur Kenntnis der Cardita-Schichten Mittelkärntens I. Die Fauna von Launsdorf. Carinthia II 123-124 1934 pp. 19-22.

367.—Gugenberger, O. Die Cardita-Schichten von Launsdorf in Mittelkärnten und ihre Fauna. V. Lamelli-branchiaten. I. Teil. SitzBer. Akad. Wiss. Wien (I) 144 5-6 1935 pp. 231-252 pl. i.

368.—Guillaume, L. Observations sur les dépôts quaternaires de Saint-Côme-de-Fresné et Asnelles-Belle-Plage (Calvados). Bull. Soc. linn. Normandie Caen (8) 8 1936 pp. 63-64.

369.—Guitart, R. P. Un nuevo *Megalomastoma* de la Provincia de

Santa Clara, Cuba. Mem. Soc. cubana Hist. nat. 10 2 1936 pp. 105-106 text-figs.

370.—Gunter, G. Radular movement in gastropods. J. Wash. Acad. Sci. 26 9 1936 pp. 361-365 text-fig.

371.—Haas, F. Binnen-Mollusken aus Inner-Afrika, hauptsächlich gesammelt von Dr. F. Haas während der Schomburg-Expedition in den Jahren 1931-32. Abh. senckenb. naturf. Ges. 431 1936 pp. 1-156 [170] text-figs. 1-17, pls. i-viii.

372.—Haas, F. Kurze Bemerkungen VII. Archiv Molluskenk. 68 3 1936 pp. 127-131.

373.—Haas, F. Kurze Bemerkungen VIII. Archiv Molluskenk. 68 4/5 1936 pp. 214-216.

374.—Haas, F. Zur Geschichte der Malakozoologie und zur Entwicklung der malakozoologischen Sammlungs-technik. Archiv Molluskenk. 68 6 1936 pp. 252-256.

375.—Haas, F. Zur Mollusken-Fauna der Picos de Europa (Asturien, Spanien). Senckenbergiana, Frankfurt, 17 5-6 1935 pp. 241-243 text-figs. 1-3.

376.—Haas, F. Malakologische Bemerkungen und Neubeschreibungen. Senckenbergiana Frankfurt 18 3-4 1936 pp. 143-154.

377.—Haas, F. Malakologische Bemerkungen und Neubeschreibungen. (A) Zur Molluskenfauna des Altai-Gebirges. (B) Über einige neue oder wenig bekannte Bulimuliden des Natur-Museums Senckenberg. Senckenbergiana 18 3-4 1936 143-154 29 text-figs.

378.—Haas, F. Neue und kritische Arten der Heliciden-Unterfamilie Helicellinae (Moll. Gastr. Pulm.). Zool. Anz. Leipzig 114 1936 pp. 297-305 text-figs. and plate (p. 303).

379.—Halfeen, L. L. Materials on stratigraphy of Devonian deposits of Altai. [In Russian, English summary pp. 34-36.] Rec. Geol. West. Siberian Region 20 1935 pp. 1-41 maps. pls. i-viii.

380.—Halton, H. Observations sur l'habitat et sur la croissance de *Patella vulgata* L. Bull. Lab. Maritime Dinard 15 1936 pp. 17-20.

- 381.—Hamai, I. Relative growth in some bivalves. Sci. Rep. Tôhoku Univ. (4) 10 4 1936 pp. 753-765 text-figs. and graphs.
- 382.—Haranghy, L. Unsere Susswassermuscheln und der *Lithoglyphus naticoides* Fér. als Faktoren der Selbstreinigungsfähigkeit der freien Gewässer. Math. term. Ért. Budapest 54 3 1936 pp. 952-978. (Germ. summ. pp. 975-978.)
- 383.—Hanna, G. D. A new land shell from the Eocene of California. J. Paleont. Menasha Wis. 10 5 1936 pp. 416-417 text-figs.
- 384.—Harper, F. The Distribution of the Limpkin and its staple food, Pomacea. Nautilus Philad. 50 2 1936 pp. 37-40 text-figs.
- 385.—Hatai, K. A note on the distribution of certain species of marine invertebrates. Bull. biogeogr. Soc. Japan 6 12 May 1936 pp. 123-141.
- Hatai, K. *vide* Nomura, S.
- 386.—Hatakeda, W. Vernacular names of shells in Shôdoshima. Venus Kyoto Japan 6 2 1936 pp. 114-118.
- 387.—Haughton, S. H. An account of the geology of the Cretaceous beds and a preliminary analysis of the associated Ammonite fauna. Ann. S. Afr. Mus. 31 1936 pp. 283-295 text-fig. (maps).
- 388.—Hausman, S. A. Food and feeding activities of the salt marsh snail (*Melampus bidentatus*). Anat. Rec. Philadelphia 67 Suppl. 1 1936 (Abstract 223) p. 127.
- 389.—Heine, F. E. Infusoria snails. Aquar. Philadelphia 4 1935 pp. 175-177 text-figs.
- 390.—Heinz, R. Inocerámidos de Alicante, Valencia y Baleares-Contribuciones al conocimiento de los Inocerámidos. XV. Bol. Soc. esp. Hist. nat. 36 2 1936 pp. 91-98 pl. xiii.
- 391.—Heinz, R. Einige Fragen aus der vergleichenden Stratigraphie der Ruhr-Oberkreide. Beiträge zur Kenntnis der Inoceramen, XVI. SitzBer. naturh. Ver. preuss. Rheine Westf. 1932-33 1934 pp. 26-35 text-figs. 1, 2.
- 392.—Henderson, J. *Physa ampullacea* Gould, *Physa nuttallii* Lea and *Physa columbiana* Hemphill. Nautilus Philad. 49 3 1936 pp. 85-87.
- 393.—Henderson, J. *Bulimulus* in Texas. Nautilus Philad. 49 3 1936 p. 105.
- 394.—Henderson, J. *Helisoma amon* (Gould). Nautilus Philad. 50 2 1936 pp. 41-42.
- 395.—Henderson, J. How some snails survive grass fires. Nautilus Philad. 50 2 1936 pp. 71, 72.
- 396.—Henderson, J. *Helix axia* Bgt. and *Helix lactea* Müller in Florida. Nautilus Philad. 50 2 1936 p. 72.
- 397.—Henderson, J. Mollusca of Colorado, Utah, Montana, Idaho and Wyoming—Supplement. Univ. Colo. Stud. 23 2 1936 pp. 81-145 text-figs. 1-9 pls. i, ii [from the Nautilus].
- 398.—Henderson, J. The non-marine mollusca of Oregon and Washington—Supplement. Univ. Colo. Stud. 23 4 1936 pp. 251-280 text-figs. 1-3 pls. i, ii.
- Henderson, J. *vide* Pilsbry, H. A.
- 399.—Henrard, J. Th. Over Albinisme bij Gastropoden, I. Basteria: Tyds. ned. malac. Ver. Kisse 1 1 1936 pp. 20-22 text-fig.
- 400.—Henrard, J. Th. Over Albinisme bij Gastropoden, II. [English summary p. 38.] Basteria: Tijds. ned. malac. Ver. Lisse 1 2 pp. 31-38.
- 401.—Henrard, J. B. Vondsten aan onze kust van schelpen uit het geslacht *Dosinia*. Basteria: Tijds. ned. malac. Ver. Lisse 1 3 pp. 45-51 figs.
- 402.—Henrard, J. T. & Koumans, F. P. Korte levensbeschrijving van Dr. J. Baster, naar wien dit tijdschrift is genoemd. Basteria 1 1 1936 pp. 6-12.
- 403.—Henrard, J. Th. & Koumans, F. P. Korte levensbechrijving van Dr. J. Baster naar wien dit tijdschrift is genoemd. Basteria: Tijds. ned. malac. Ver. Lisse 1 1 1936 p. 13.
- 404.—Henrard, J. Th. & Koumans, F. P. *Turbo stagnalis* Baster, ein nomenclatuurschets. Basteria: Tyds. ned. malac. Ver. Lisse 1 1 1936 pp. 13-16.
- 405.—Henrard, J. Th. & Koumans, F. P. On the occurrence of the *Helicigona lapicida* (L.) in the Netherlands [English]. Basteria: Tijds. ned. malac. Ver. Lisse 1 3 1936 pp. 52-54.
- Hentschel, E. *vide* Gran, H. H. & others.

406.—Herfurth, A. H. Beiträge zur Kenntnis der Bakteriensymbiose der Cephalopoden. Z. Morph. Ökol. Tiere Berlin **31** 1936 pp. 561–607 text-figs. 1–31.

407.—Heritsch, F. Oberstes Unterdevon und unteres Mitteldevon bei Graz. SitzBer. Akad. Wiss. Wien (1) **144** 5–6 1935 pp. 187–197.

408.—Herman, A. Rapport sur la reproduction des Huitres indigènes dans le Morbihan et le Finistère en 1935. Rev. Trav. Pêches marit. Paris **9** 1936 pp. 77–82.

409.—Hernandez-Pacheco, E. & F. Datos acerca de la exploración geológica a Hui. Bol. Soc. esp. Hist. nat. **36** 3 1936 pp. 155–176 text-figs. 1–4 pls. xv–xxiii.

410.—Hernández-Pacheco, F. Los materiales bituminosos de la Serranía de Ronda (Málaga). — Bol. Soc. esp. Hist. nat. **36** 5 1936 pp. 245– pls. xxx–xxvi.

411.—Hertlein, L. G. Three new sections and rectifications of some specific names in the Pectinidae. Nautilus Philad. **50** 1 1936 pp. 24–27.

412.—Hertlein, L. G. Three new sections and rectifications of some specific names in the Pectinidae. Nautilus Philad. **50** 2 1936 pp. 54–58.,

Hertlein, L. G. *vide* Palmer, R. H.

413.—Hertling, H. Mitteilungen über *Todaropsis eblanae* (Ball) *Octopus vulgaris* L. und *Eledone cirrosa* (Lam.) aus der Nordsee. Zool. Anz. Leipzig **114** 1936 pp. 289–296 text-fig.

414.—Hesse, P. W. A. Lindholm. Archiv Molluskenk. **68** 3 1936 pp. 116–117 pl. iv. [Portrait.]

Hicks, F. J. *vide* Starkey, W. F.

415.—Hildebrandt, H. Beitrag zur Molluskenfauna des Osterlandes. Mitt. Osterlande N.F. **22** 1934 pp. 45–60.

416.—Hirase, S. A new *Aglaja* from Japan. J. Conch. London **20** 9 1936 pp. 258–261 pls. x, xi.

417.—Hiarse, S. On two new Opisthobranchiata from Japan. [In Japanese résumé in English, p. 731.] Zool. Mag. Tokyo **48** 1936 pp. 731–736 pls. xxix, xxx.

418.—Hiro, F. Notes on the molluscan fauna of Palao. I. Common shells

and their habitats [in Japanese]. Venus Kyoto Japan **6** 1 1936 pp. 31–43.

419.—Hobson, A. D., Storrow, B., Leach, T. S. and Wright, F. S. A survey of the mussel beds at Blyth, Budle Bay and Holy Island. Rep. Dove mar. Lab. Cullercoats (3) **3** 1935 pp. 27–36 maps. i–iii.

420.—Hoffmann, H. Nachruf für Professor Dr. Georg Grimpe. Archiv Molluskenk. **68** 4/5 1936 pp. 137–142 pl. vi. [Portrait.]

421.—Hoffman, K. Die Ammoniten des Lias Beta der Langenbructener. Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i B. **1** 2 1936 pp. 287–303.

422.—Hoffmann, W. H. Ratten und Schnecken. Arch. Schiffs. Tropenhyg. **40** 1936 p. 397.

423.—Hogg, A. R. R. J. Welch—Photographer. Irish Nat. Journ. Belfast **6** 6 1936 pp. 136–138 pls. ix–x.

424.—Hopkins, A. E. Pulsation of blood vessels in Oysters, *Ostrea lurida* and *O. gigas*. Biol. Bull. Woods Hole **70** 1936 pp. 413–425 text-figs. 1–4.

425.—Hopkins, A. E. Pulsating blood vessels in the oyster. Science N.Y. N.S. **83** 2163 1937 p. 581.

Hornberger, J. *vide* Plummer, F. B.

426.—Houdard, M. Rapport sur la collection de Paléontologie de M. Regnault. Bull. Soc. Sci. hist. nat. Yonne **88** 1936 pp. 141–143.

427.—Howchin, W. Notes on the geological sections obtained by several borings situated on the plain between Adelaide and Gulf St. Vincent. I. Trans. roy. Soc. S. Aust. **59** 1935 pp. 68–102 (Moll. pp. 82–86) 89–91.

428.—Howell, B. F. & Knight, J. B. *Harttites*, new name for *Harttia* Walcott, preoccupied. Bull. Wagner Free Inst. Philad. **11** 2 1936 pp. 5–8 plate.

429.—Howells, H. H. The anatomy and histology of the gut of *Cymbulia peronii* (Blainville). Proc. Malac. Soc. London **22** 2 1936 pp. 62–72 pls. vii–x.

430.—Hucke, K. Über eine neue Transportart durch Eis. Z. Geschiebeforsch. Berlin **12** 1 1936 pp. 45–51 text-figs.

- 431.—Humphries, C. F. An investigation of the profundal and sublittoral fauna of Windermere. *J. Animal. Ecol.* 5 1936 pp. 29–52 text-figs. 1–5.
- 432.—Hundt, R. Die Schwaaraer Zechsteinklippe und benachbarte Klippen, ein Beitrag zur transgression des unteren Zechsteins in Ostthüringen. *Z. naturw. Halle* 89 4–6 1931 pp. 73–84 text-figs. 1–8.
- 433.—Hurst, C. T. Body weight of snails with reference to health and parasitism. *Amer. Nat.* 70 729 1936 pp. 400–403.
- 434.—Iida, T. T. Effects of flow of solutions on potential differences across the rectal wall of freshwater mussel. *Zool. Mag. Tokyo* 48 1936 pp. 1012–1013.
- 435.—Ijiri, M. On the fossils of "Paper Nautilus." [In Japanese.] *Nat. Sci. & Mus. Tokyo* 7-9 1936 pp. 8–11 text-figs.
- 436.—Ilyina, A. Stratigraphy and fauna of the Tertiary sediments of the Western coast of Kamchatka. *C.R. Acad. Sci. Moscou N.S.* 1936 2, 8 pp. 325–328.
- 437.—Ingram, W. M. A reduction of *Cyprea annae* Roberts and *Cyprea polita* Roberts to synonymy with *Cyprea semiplota* Mighels. *Nautilus Philad.* 50 2 1936 pp. 51–52.
- 438.—Innes, W. T. Giant scavenger snail (*Ampullaria cuprina* Reeve). *Aquar. Philadelphia* 4 1936 pp. 221–223 figs.
- 439.—Ionescu, M. A. Animale rare din fauna Românici; noui contributiani (notă preliminară). *Bul. Soc. Nat. Romania Bucuresti* 4 1933 pp. 2–3.
- 440.—Ionescu, M. A. Specule de Daubardiinae (Gast. ter.) din România. *Bul. Soc. Nat. România Bucuresti* 5 1934 pp. 7–11.
- 441.—Ionescu, M. A. Câteva animale rare din fauna României. *Bul. Soc. Nat. România Bucuresti* 3 1933 pp. 3–7 text-figs.
- 442.—Iredale, T. List of papers by Charles Hedley. *Proc. Linn. Soc. N.S.W.* 61 3–4 1936 pp. 214–220.
- 443.—Iredale, T. Australian molluscan notes, No. 2. *Rec. Austr. Mus. Sydney* 19 5 1936 pp. 267–340 pls. xx–xxiv.
- 444.—Iredale, T. Queensland Cobra or Shipworms. A systematic account of the Terebratulid molluscs of South Queensland. Destruction of timber by Marine Organisms. Sydney 1936 chapter II pp. 31–44 pls. i–ii.
- 445.—Ishika, H. Sex changes in Japanese Slipper Limpets *Crepidula aculeata* and *Crepidula walshi*. *J. Sci. Hiroshima Univ. Zool.* 4 1936 pp. 91–99 graphs.
- 446.—Ishiki, J. Sex changes in two Japanese species of *Crepidula* [in Japanese—vide English abstract]. *Zool. Mag. Tokyo* 48 1936 pp. 6–12 tables and graph.
- 447.—Jackson, J. W. R. J. Welch—Reminiscences. *Irish. Nat. Journ. Belfast* 6 6 1936 pp. 138–140 pls. xi, xii.
- 448.—Jacquet, F. Sur l'âge éocène inférieur des conches phosphatées du Sénégal. *C.R. Acad. Sci. Paris* 202 4 1936 pp. 335–337.
- 449.—Jacquet, F. L'Eocene et les phosphats dans la vallée du fleuve Sénégal. *C.R. Acad. Sci. Paris* 203 23 1936 pp. 1272–1274.
- 450.—Jaeckel, II, S. Zur Oekologie der Schnecken des Daroses. *Archiv Molluskenk.* 68 4/5 1936 pp. 167–193.
- 451.—Jaskó, S. Geologische Beschreibung des Pápaer Bakonygebirges, Beilage Földtani Szemle Budapest, 1935 [non vidi]. *Geol. Zbl. Leipzig* 8, 1 1936 pp. 15, 16 no. 71.
- 452.—Jaume, M. L. Estudio anatomico del molusco *Zachrysia range-lina*. *Mem. Soc. cubana Hist. nat.* 10 1 1936 pp. 29–31 text-figs.
- Jaume, M. L. vide Aguayo, C. G.
- 453.—Jaworski, E. Gastropoden aus der unteren Kreide von Kolumbien. *N. Jahrb. Min. Geol. Paläont. Stuttgart* 76 3 1936 pp. 512–538 pl. xxx text-fig.
- 454.—Jayet, A. Un abri sous-roche à micro-faune paléolithique, pres de Sergy (Département de l'Ain). *C.R. Soc. Phys. Hist. nat. Genève* 52 3 1935 pp. 265–267.
- 455.—Jenkin, P. M. Reports on the Percy Sladen Expedition to some rift valley Lakes in Kenya in 1929. VII. Summary of the ecological results, with special reference to the alkaline lakes. *Ann. Mag. Nat. Hist. (10)* 18 July 1936 pp. 133–160.

456.—Jenkin, P. M. Title as last [conclusion]. *Ann. Mag. Nat. Hist.* (10) 18 August 1936 pp. 161–181 pl. iv.

457.—Jodet, P. Une espèce ancestrale des *Clavator* de Madagascar, pulmonés terrestres, rencontrée dans les pondingues aquitaniens du Sud-Constantinois (Algérie). *Bull. Soc. géol. Fr.* 5 VI 1–3 1936 pp. 69–78 pl. viii.

458.—Johnston, R. A. & Watson, C. J. J. Protection of timber against marine borer attack in the Port of Brisbane. Destruction of Timber by Marine Organisms Suppl. Rept. 1 Sydney 1936 Chapter IV pp. 79–107 tables.

Jones, J. W. *vide* Bunting, L. E. & others.

459.—Jordan, H. J. Zoologie als leer van de organisatie en de organisatie. *Mem. Mus. Hist. nat. Belg.* (2) 3 1936 pp. 149–159.

460.—Jovanović, N. R. Prilog fauni Bihačkog tereijarnog bazena (Beitrag zur Fauna des Tertiär-beckens von Bihać) *Vesnik geol. Inst.* 4 pp. 157–176, Beograd 1934. German résumé [Abstract]. *Geol. Zentralb. Leipzig* 8 6 1936 p. 313 no. 1117.

461.—Jullien, A. Effets Chronotropes Inotropes et Tonotropes de la cicutine, du Curare, de la Véatrine et de la Digitaline sur le cœur de l'Huitre. *C.R. Soc. Biol. Paris* 121 10 1936 pp. 1002–1004.

462.—Jullien, A. Automatisme des Lambeaux cardiaques chez *Aplysia fasciata*. *C.R. Soc. Biol. Paris* 123 33 1936 pp. 905–906.

Jullien, A. *vide* Brunet, R.

463.—Jullien, A. & Richard, J. G. Influence de la réaction du milieu extérieur sur la survie de l'Huitre et le pH de l'Hémolymphe. *C.R. Soc. Biol. Paris* 122 24 1936 pp. 1106–1108 text-figs.

464.—Jullien, A. & Richard, J. E. Sur les modifications apportées par l'Huitre à la réaction du milieu extérieur. *C.R. Soc. Biol. Paris* 122 24 1936 pp. 1108–1110 text-figs. 1–2.

465.—Jullien, A. & Vairel-Blanc, H. Des rapports entre l'activité automatique des diverses régions du cœur et la structure de l'organe chez l'Escar-

got. *C.R. Acad. Sci. Paris* 202 14 1936 pp. 1307–1309.

466.—Jutting, T. v. B. Over de Anomias of Paardenzadels van het Nederlandsche strand. *Basteria: Tyds. ned. malac. Ver. Lisse* 1 1 1936 pp. 17–19 text-figs.

467.—Jutting, T. v. B. & Engel, H. Fauna van Nederland, Mollusca (1). B. Gastropoda Opisthobranchia; Amphineura et Scaphopoda. *Boschma Fauna van Nederland* 8 Leiden 1936 pp. 1–106 figs. 1–38 pls. i–ii.

468.—Kaltenbach, H. Die Conchylienfauna des Heiligenstädter Mergellagers. *Arch. Naturgesch. Leipzig (N.F.)* 5 1936 pp. 256–286.

469.—Kanehara, K. Neogene shells from South Chôsen (Korea). *Jap. J. Geol. Geogr.* 13 1–2 1936 pp. 31–37 pl. x.

470.—Kanamaru, T. A history of Japanese Conchology (18). *Venus Kyoto Japan* 6 3 1936 pp. 162–168.

Kao, T. P. *vide* Chen, C. S.

471.—Karaman, S. Die Fauna der unterirdischen Gewässer Jugoslaviens. *Verh. int. Vereinig. Limnol. Beograd* 7 1 1935 pp. 46–73.

Kaswin, A. *vide* Mentzer & others.

472.—Keen, A. M. Edgar Allan Poe's Conchological Text. *Nautilus Philad.* 50 2 1936 pp. 42–44.

473.—Keen, A. M. A new Pelecypod genus of the family Cardiidae. *Trans. San Diego Soc. nat. Hist.* 8 17 1936 pp. 119–129.

474–5.—Keen, A. M. Revision of Cardiid pelecypods (Abstract). *Proc. Geol. Soc. Amer.* (1935) 1936 p. 367.

Keen, A. M. *vide* Schenck, H. G.

476.—Kehrer, W. Versuch einer Gliederung der Kolumbianischen Kreide im Südosten von Bogotá. *Cbl. Min. Geol. Paläont. Stuttgart B* 8 1936 pp. 309–327 text-map.

477.—Kellum, L. B. Evolution of the Coahuila Peninsula, Mexico. Part III. Geology of the mountains west of the Laguna district. [Jurassic and Cretaceous formations—list of Mollusca.] *Bull. Geol. Soc. Amer. Washington D.C.* 47 7 1936 pp. 1039–1089 text-figs and plates.

478.—Kessel, E. Über den Bau der *Halotis*-Schale. (Beitrage zum Strukturproblem der Gastropodenschale III.) Zool. Anz. Leipzig **113** 1936 pp. 290-299 text-figs.

479.—Kessel, E. Über Verfärbung mariner Molluskenschalen durch Einlagerung von Eisen. Zool. Anz. Leipzig **115** 1936 pp. 129-139.

480.—Kessell, E. Über Abwandlungen der typischen Gastropodenschalenstruktur. (Beitrage zum Strukturproblem der Gastropodenschaler.) Z. Morph. Ökol. Tiere Berlin **30** 1936 pp. 774-785 text-figs.

481.—Khomerko, I. P. New data on the stratigraphy of the tertiary beds of eastern Sakhalin. Stratigraphy of the Tertiary beds of the south-western coast of the Schmidt Peninsula (northern Sakhalin). Geol. Zentralb. Leipzig **9** 1 1936 p. 28 no. 127.

482.—King, S. G. & Ping, C. Notes on a new *Dentalium* from Peitaiho. Chinese J. Zool. **1** 1936 pp. 103-105 text-figs.

483.—King, S. G. & Ping, C. The molluscan shells of Hong Kong. Part IV. Gastropods (contd.). Hong Kong Nat. **7** 2 1936 pp. 123-137 text-figs.

484.—Kiparisova, L. Upper Triassic Pelecypods from the Kolyma-Indigirka Land. Trans. arctic Inst. Leningrad **30** 1936 (English summary pp. 115-116) pp. 71-136 pls. i-v map.

Kleinpell, R. M. *vide* Woodring, W. P. & others.

485.—Klett, B. Die Conchylien diluvialer und alluvialer Schichten in Westthüringen. [Lists and tables.] Z. naturw. Halle **88** 3-5 1927 pp. 57-148.

486.—Knight, J. B. Notes on Paleozoic Gastropoda. J. Paleont. Menasha Wis. **10** 6 1936 pp. 520-534.

Knight, J. B. *vide* Howell, B. F.

487.—Kobayashi, T. *Coreanoceras*, one of the most specialized Piloceroids and its benthonic adaptation. Jap. J. Geol. Geogr. **13** 1-2 1936 pp. 185-195 text-figs. pls. xxii, xxiii.

488.—Kobayashi, T. On the Stereoplasmoceratidae. Japan. J. Geol. Geogr. **13** 3-4 1936 pp. 229-242 pl. xxvi.

489.—Kobayashi, T. & Suzuki, K. Non-marine shells of the Haktong.

Wakino Series. Japan. J. Geol. Geogr. **13** 3-4 1936 pp. 243-257 pls. xxvii-xxix.

490.—Kobayashi, T. Suggestions for the natural Classification and benthonic adaptation of early uncoiled Nautiloids. Proc. Imp. Acad. Tokyo **11** 10 1935 pp. 435-437.

491.—Kobayashi, H. Noborn Ōmori (olim Shiba) [in Japanese]. Venus Kyoto Japan **6** 1 1936 pp. 79-80 portrait.

492.—Kohler, D. Variations de l'imbition dues au déplacement réciproque des cathions fixés sur les tissus morts de *Laminaria flexicaulis*. C.R. Soc. Biol. Paris **123** 28 1936 pp. 394-396.

493.—Kokas, F. Der C-Vitamingehalt einiger Süßwassermuscheln. Arb. Ung. Biol. Forsch. Inst. **8** 1936 pp. 353-354. (Germ. summ. p. 355.)

494.—Kongiel, R. Contribution à l'étude du Siwak dans les environs de Pulawy (plateau de Lublin). Trav. Soc. Sci. Wilno **9** 1935 pp. 171-227 (French résumé p. 217) (Moll. p. 213) pls. i-viii.

495.—Korschelt, E. [Mollusca.] Vergleichende Entwicklungsgeschichte der Tiere 2 vols. Jena 1936. Vol. I, General Ch. 1-3; vol. II, pp. 840-1009 text-figs.

Koumans, F. P. *vide* Henrard, J. Th.

496.—Közminski, Z. Über die Eigentümlichkeiten des Zooplanktons des Ohridsees. Verh. int. Vereinig. Limnol. Beograd **7** 1 1935 pp. 245-254.

497.—Kožov, M. M. Mollusques du Lac Baikal Systématique Distribution, Écologie, quelques données sur la Génèse et Histoire. Trav. Sta. limnol. Lac Baikal, Leningrad **8** 1936 pp. 1-302 (German summ. pp. 303-320) pls. i-xiii.

498.—Krach, W. Materialien zur Kenntnis des Mioäns von Wolkynien. Roczn. Pol. Tow. Geol. Kraków **11** 1935 pp. 1-17 pl. i.

499.—Krausp, C. Beitrag zur estländischen Molluskenfauna. Archiv Molluskenk. Frankfurt **68** 1 1935 pp. 16-40 pls. i, ii.

500.—Krausp, C. Beitrag zur estländischen Molluskenfauna. Archiv f. Molluskenk. **68** 2 1936 pp. 16-40 pls. i, ii.

501.—Krausp, P. Beitrag zur estländischen Molluskenfauna [continued]. Archiv f. Molluskenk. **68** 2 1936 pp. 41–61 pls. i, ii.

502.—Kruglov, M. V. Nautiloidea aus dem Ober-Paläozoicum vom Ussuri-Gebiet. [In Russian, German summary p. 117.] Mém. Soc. russe Mineral **59** 1 1930 pp. 113–117 text-figs.

503.—Kruizinga, C. Schelpen van Zoelwatermossels aan het Zuidhollandsche Strand. Levende Nat. Amsterdam **40** 9 1936 pp. 199–205.

504.—Krull, W. H. *Musculium partumeium* Say under laboratory conditions. Pap. Mich. Acad. Sci. **21** 1936 pp. 635–637.

505.—Krumbeck, L. Stratigraphie und Faunenkunde des Lias y in Nordbayern. Z. deuts. geol. Ges. Berlin **88** 3 1936 pp. 129–222 pls. [tables] 27–30 map. 31.

506.—Kruta, V. Effets de l'Excitation des nerfs viscéraux sur l'activité cardiaque chez les Céphalopodes. C.R. Soc. Biol. Paris **122** 20 1936 pp. 582–585 graph.

507.—Kruta, V. Action de quelques alcaloïdes sur les nerfs cardiaques chez les Céphalopodes. C.R. Soc. Biol. Paris **122** 20 1936 pp. 585–586.

Kurta, V. *vide* Arvanitaki, A. & others.

508.—Ktémár, C. A. La géologie du calcaire de Marmarotrapeza. Prak. Akad. Athens **3** 1938 pp. 400–404 text-figs.

509.—Kténas, C. A. & Renz, C. Découverte du Werfénien supérieur ammonitifère dans l'île de Chio. Prak. Akad. Athens **3** 1938 p. 400.

510.—Kühn, A. Über Farbensinn und Anpassung der Körperfarbe an die Umgebung bei Tintenfischen. Nachr. Ges. Wiss. Göttingen (6) **1** Biol. 1903 pp. 1–9 text-figs. 1–7.

511.—Kuhn, O. Weitere Beiträge zur Fauna des untersten Lias in Schwaben und Franken. Jh. Ver. vaterl. Naturk. Württemb. **91** 1935 pp. 2–18 pls. i–iii text-fig.

512.—Kuhn, O. Die Fauna des Amaltheontons (Lias 8) in Franken. N. Jahrb. Min. Geol. Paläont Stuttgart **75** 2 1936 pp. 231–311 pls. viii–xiii.

513.—Kühn, O. Revision der Opalinuston- (Dogger a-) Fauna in Franken, mit Ausschluss der Cephalopoden. Paläont. Z. Berlin **17** 3–4 1935 pp. 109–158 pls. ix, x.

514.—Kühne, F. Die Gliederung des Flözberens. SitzBer. naturh. Ver. preuss. Rheinl. Westf. **1932–33** 1934 pp. 42–50.

515.—Kulling, O. Scientific results of the Swedish-Norwegian Arctic Expedition in the summer of 1931. Part XII. Observations on raised beaches and their faunas. Geogr. Ann. Stockholm **18** 1 1936 pp. 1–7.

Kupfer, C. *vide* Bialaszewicz, K.

516.—Kuroda, T. A narrative of the collecting trips in southern Kyûshû [in Japanese]. Venus Kyoto Japan **6** 1 1936 pp. 63–72 text-figs.

517.—Kuroda, T. Two new subspecies of *Euhadra herklotsi* from Kyûshû. [in Japanese with English summary]. Venus Kyoto Japan **6** 2 1936 pp. 81–84 pl. iv f. 1–4.

518.—Kuroda, T. Descriptions of two new forms of *Karafutohelix*. Venus Kyoto Japan **6** 2 1936 pp. 93–95 pl. iv text-figs.

519.—Kuroda, T. Reinhart's nomenclatorial view on the genus *Arca* Linné. Venus Kyoto Japan **6** 2 1936 pp. 119–121.

520.—Kuroda, T. Conchological news, with preliminary reports on new species. Venus Kyoto Japan **6** 3 1936 pp. 168–174.

521.—Kuroda, T. A list of Buccinidae of northern Japan. Venus Kyoto Japan **6** 3 1936 pp. 174–186.

Kuroda, T. *vide* Toba, G.

522.—Kuroda, T. & Fujita, T. *Corbicula sandai* reared in Lake Suwa [in Japanese]. Venus Kyoto Japan **6** 1 1936 pp. 60–63 text-figs.

523.—Kuroda, T. & Nobuzane, T. Notes on the land shell fauna of Hegurajima, Noto, with description of a new subspecies of *Euhadra*. Venus Kyoto Japan **6** 2 1936 pp. 85–88 pl. iv f. 5, 6.

524.—Kutassy, A. Faunen aus dem Hauptdolomit und Dachsteinkalk des Budaer Gebirges. Math. term. Ért. Budapest **54** 3 1936 pp. 1006–1050 (Germ. summ. pp. 1045–1050) pls. xi–xiii.

- 525.—Labbé, A. Les Silicodermés du Museum National d'Histoire naturelle—Deuxième Partie: Organisation. Ann. Inst. océanogr. Paris N.S. 16 2 1936 pp. 101-221 figs. i-civ.
- 526.—Labbé, A. La Phylogénie possible des Silicodermes. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 15-21.
- 527.—Ladeiro, J. M. Catálogo das Conchas exóticas da Coleção António Augusto de Carvalho Monteiro. II. Familias Argonautidae, Nautilidae, e Muricidae. Mem. Mus. zool. Univ. Coimbra Ser. 1 84 1935 pp. 1-12.
- 528.—Ladeiro, J. M. Catálogo das Conchas exóticas da Coleção António Augusto de Carvalho Monteiro. III. Familias Tritonidae, Fusidae, Buccinidae, Nassidae, Turbinellidae, Volutidae, e Mitridae. Mem. Mus. zool. Univ. Coimbra (1) 88 1936 pp. 1-23.
- 529.—Lafitte, R. La Jurassique et la Berriasien dans l'Aurès (Algérie). C.R. Acad. Sci. Paris 202 9 1936 pp. 773-776.
- 530.—Lafitte, R. Le Néocomien dans l'Aurès (Algérie). C.R. Acad. Sci. Paris 203 7 1937 pp. 433-435.
- 531.—Lais, R. Kaiserstuhl. III. Die Mollusken. Der Kaiserstuhl Freiburg im Breisgau 1933 pp. 367-383 fig.
- 532.—Lais, R. Die Entdeckungsgeschichte einer neuen Schnecke: *Lartetia rhenana* im Grandwasser der Rhein-Ebene. Natur. u. Volk, 66 6 1936 pp. 255-264 text-figs. 1-3.
- 533.—Lambert, L. Mytiliculture. La culture de la Moule en Hollande. Rev. Trav. Pêches marit. Paris 8 1935 pp. 431-480 text-figs. tables and maps.
- 534.—Lameere, A. Histoire de la classification des Mollusques. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 1-12.
- 535.—Lams, H. Les modifications nucleaires au debut de l'Ontogenèse d'*Arion empiricorum* et leur influence sur le rapport nucleo-plasmique. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 785-799 pls. i, ii.
- 536.—Lamy, E. Quelques mots sur le rôle joué par les Arthropodes dans la Dissémination des Mollusques. Bouvier Livre Jubilaire Paris 1936 pp. 33-36.
- 537.—Lamy, E. Sur le *Venus corrugata* Lamarck (Moll. Lamellibr.). Bull. Mus. Hist. nat. Paris (2) 7 6 1935 pp. 357-358.
- 538.—Lamy, E. Note sur le *Cytherea callosa* Conrad (Moll. Lamellibr.). [Correction of names and synonymy.] Bull. Mus. Hist. nat. Paris (2) 8 2 1936 pp. 158-159.
- 539.—Lamy, E. Le *Cypraea moneta* L. existe-t-il sur la cote occidentale d'Afrique? Bull. Mus. Hist. nat. Paris (2) 8 1936 pp. 263-266.
- 540.—Lamy, E. Liste des Mollusques recueillis par la Mission Franco-Belge à l'Ile de Paques (1934). Bull. Mus. Hist. nat. Paris (2) 8 3 1936 pp. 267-268.
- 541.—Lamy, E. Révision des Mytilidae vivants du Muséum national d'histoire naturelle de Paris. J. de Conchyliol. Paris 80 1 1936 pp. 66-102 text-figs.
- 542.—Lamy, E. Title as last. J. de Conchyliol. Paris 80 2 1936 pp. 107-198.
- 543.—Lamy, E. Title as last. J. Conchyliol. Paris 80 3 1936 pp. 229-295.
- 544.—Lamy, E. Émissions sonores produites par des Mollusques. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 31-35.
- 546.—Lane, C. The carriage of Schistosomes from man to man, with special attention to the Molluscs which are their larval hosts in different parts of the Earth. Trop. Dis. Bull. London 33 1936 pp. 1-15.
- 547.—Lang, W. D. The green Ammonite beds of the Dorset Lias. Quart. J. Geol. Soc. London 92 4 1936 pp. 423-437 pl. xxxii.
- 548.—Lanquine, A. Sur quelques gisements d'Ammonites du Callien dans la Région varoise septentrionale. C.R. Séances Soc. géol. Fr. 11-12 1935 pp. 168-170.
- Larambergue, M. de vide Gallien, L.
- 549.—La Rocque, A. *Lasmigona compressa* (Lea) in the Hudson Bay drainage Canad. Field Nat. 50 3 1936 pp. 51-52.
- 550.—La Rocque, A. Land shells of Big Island, Blue Sea Lake, Quebec. Canad. Field Nat. 50 3 1936 p. 51.
- 551.—La Rocque, A. A slug new to the Quebec and Ottawa lists. Canad. Field Nat. 50 9 1936 p. 148.
- Laverdiere, J. W. vide Faessler, C.

552.—Laws, C. R. The Waitotaran Faunule at Kaawa Creek—Part I. [Pelecypoda.] Trans. Proc. Roy. Soc. N.Z. 66 1 1936 pp. 38–59 pls. ix–xi.

553.—Laws, C. R. The Waitotaran faunule at Kaawa Creek, Part 2. [Pelecypoda.] Trans. Proc. Roy. Soc. N.Z. 66 2 1936 pp. 99–124 pls. xv, xvi, xvii.

Leach, T. S. *vide* Hobson, A. D. & others.

554.—Lebour, M. V. Notes on the eggs and larvae of some Plymouth Prosobranchs. J. Mar. biol. Ass. Plymouth N.S. 20 3 1936 pp. 547–565 pls. i–iii.

Leckwijck, W. v. *vide* Marcais, J.

Legendre, P. *vide* Bouxin, J.

Leitch, D. *vide* Weir, J.

555.—Leloup, E. Chitons recoltés au cours de la Croisière (1934–1935) du Navire-École Belge "Mercator." Bull. Mus. Hist. nat. Belg. 12 No. 6 1936 pp. 1–10.

556.—Leloup, E. Description de deux espèces d'Amphineures provenant de Trincomali. Proc. Malac. Soc. London 22 2 1936 pp. 51–61 pl. vi text-figs.

Leloup, E. *vide* Adam, W.

557.—Léonov, G. Les dépôts paléogènes du pays de Stalingrad et leurs relations avec les formations identiques des bassins du Don et du Dnepr. Bull. Soc. Nat. Moscou Sect. Géol. 44 4 1936 pp. 287–321. (French résumé pp. 320, 321.)

558.—Lewis, E. A. An investigation of the seaweeds within a marked zone of the shore at Aberystwyth during the year 1933–34 (with special reference to the use of the spores as food for Oyster larvae). J. Mar. biol. Ass. Plymouth N.S. 20 3 1936 pp. 615–620.

559.—Li, F.-C. Anatomy of *Paludina*. [German, Chinese summary p. 18.] Chinese J. Zool. 1 1935 pp. 1–18 text-figs. 1–16.

560.—Li, F.-C. Beobachtung über die embryonale Entwicklung von einigen Süßwasserschnecken. Chinese J. Zool. 1 1935 pp. 117–123 text-figs. 1–9.

561.—Licharew, B. Materials to the study of the Upper Carboniferous of

Ferghana. [English summary.] Trans. Central. geol. prospect. Ser. U.S.S.R. 31 1935 pp. 1–34. Summary 35–47.

Lillie, A. *vide* Schroeder, W.

562.—Lin, S. Y. The development of the cuttlefish, *Sepiella japonica* Sasaki. Bull. Chekiang Prov. Fish Exp. Sta. 1 No. 5 1935 pp. 1–17 text-fig. tables.

563.—Lindholm, W. Eine neue *Helicella* (Helicidae, Gastropoda) aus der Krim, nebst Notizen zur Oekologie einiger Landschnecken. Trav. Inst. zool. Acad. Sci. U.S.S.R. 3 1936 pp. 439–442 text-fig.

564.—Ling, F. C. Beobachtung über die embryonale entwicklung von einigen Süßwasserschnecken. Abstr. Pap. Sci. Conf. Nanning 1935 p. 91.

565.—Linke, O. Nachträglich veränderte Lebens-Spuren im Schlickwatt. Natur. u. Volk 66 5 1936 pp. 250–253 text-figs. 1–4.

566.—Lipparini, T. I fossili dei sedimenti marini della bassa pianura friniana. Bol. Soc. geol. ital. 55 1 1936 pp. 139–151.

567.—Little, O. H. Recent geological work in the Faiyûm and in the adjoining portion of the Nile Valley. Bull. Inst. égypt. 18 2 1936 pp. 201–240 pls. i–ix.

568.—Llabador, F. Notice sur la Faunule malacologique du Massif des M'Sirdas au Sud-Ouest de Nemours. Bull. Soc. Hist. nat. Alger. 27 6 1936 pp. 200–203.

569.—Lloyd, James W. F. Early occurrence of *C. nemoralis*. J. Conch. London 20 8 1936 p. 255.

570.—Löfgren, A. Reconhecimento geologico nos rios Tocantins e Araguaya. Bol. Serv. geol. min. Brasil 80 1936 pp. 1–61 3 plates. [Moll. pp. 29–30.]

571.—Lönnerberg, E. Note on the presence of Carotenoids in the "Liver" organs of Invertebrates. Ark. Zool. Stockholm 28A no. 6 1935 pp. 1–4.

572.—Lönnerberg, E. On the occurrence of Carotenoid substances in Cephalopods. Ark. Zool. Stockholm 28 B 8 1936 pp. 1–4 text-figs.

573.—Loosanoff, V. Sexual phases in the Quahog [*Venus mercenaria*]. Science N.Y. N.S. 83 2151 1936 pp. 287–288.

574.—Löschner, W. Zur Morphologie der Borkenberge und der Westreeper Dünen bei Haltern i. W. Sitzber. naturh. Ver. preuss. Rheinl. Westf. 1932-33 1934 pp. 69-74 text-figs. 1-4.

Lowe, H. N. *vide* Strong, A. M.

575.—Luppov, N. P. On the Polyptychites horizon of the Neocomian of the Mangyshlak. [In Russian, English summary pp. 392, 393.] Bull. Soc. Nat. Moscou Sect. Géol. N.S. 43 1935 pp. 384-391.

576.—Lvejška, F. Die Kreideinsel zwischen Letovice und Pamětica. Acta Soc. Sci. nat. Moraviae 9 2 1934 pp. 1-21. (German summ. p. 22.)

577.—Lyman, F. B. My discovery and observation of the living *Xenophora* in Florida waters. Nautilus Philad. 49 4 1936 pp. 141-142.

578.—Lyman, F. B. It was a great day [collecting at Palm Beach, Florida]. Nautilus Philad. 50 1 1936 pp. 29, 30.

579.—McConnell, D. Notes on *Helix nemoralis* at Lexington, Virginia. Nautilus Philad. 50 1 1936 pp. 15, 16.

580.—MacDonald, R. Distribution of *Planorbis corneus* (Linné) in Ulster. J. Conch. London 20 7 1936 p. 194.

581.—McGinty, P. L. A canoe trip in the Ten Thousand Islands to collect *Liguus*. Nautilus Philad. 50 1 1936 pp. 1-8.

582.—McGinty, T. L. *Liguus* at Northwest Cape Sable, Monroe County, Florida. Nautilus Philad. 50 2 1936 p. 71.

583.—Machado, A. Sobre os caperatofores de Lula pota "*Ommastrephes coindetii*" (Verany). An. Fac. Sciênc. Porto. 16 2 1930 pp. 78-79.

Machattie, C. *vide* Mills, E. A. & others.

584.—McLean, R. A. A list of bivalves from Northern Cuba. Mem. Soc. cubana Hist. nat. 10 1 1936 pp. 39-42.

585.—McLean, R. A. A new deep-water *Lucina* from off Maryland. Nautilus Philad. 49 3 1936 p. 87 pl. v f. 1, 2.

586.—McLean, R. A. *Panope bitrun-cata* Conrad at Sarubel Florida. Nautilus Philad. 49 3 1936 p. 104.

McLean, R. A. *vide* Zetek, J.

587.—McLean, R. A. Some marine bivalves from the Bahama Islands. Nautilus Philad. 49 4 pp. 116-119.

McLean, R. *vide* Clench, W. J.

588.—MacNeil, F. S. A new crassatellid from the Waccamaw formation of North and South Carolina and the Caloosahatchee marl of Florida. J. Wash. Acad. Sci. 26 12 1936 pp. 528-530 text-figs.

589.—Magne, A. Recherches sur la variabilité des Crêtes de la Mandibule d'*Euparypha pisana* (Müller). Bull. Sta. biol. Arcachon 32 2 1935 pp. 155-172 figs. p. 171.

590.—Maillieux, E. La faune et l'âge des Quartzophyllades siegeniens de Longlier. Mém. Mus. Hist. nat. Belg. 73 1936 pp. 1-140 pls. i-iii.

591.—Maillieux, E. La Faune des Schistes de Matagne (Frasnien supérieur). Mém. Mus. Hist. nat. Belg. 77 1936 pp. 1-74 pl. i. [Moll. pp. 30-63.]

592.—Makiyama, J. The Meisen Miocene of North Korea. Mem. Coll. Sci. Kyoto (B) 11 4 1936 pp. 193-228 2 text-figs and pls. iv, v.

593.—Mansfield, W. C. Stratigraphic significance of Miocene, Pliocene, and Pleistocene Pectinidae in the South-Eastern United States. J. Paleont. Menasha Wis. 10 3 1936 pp. 168-192 pls. xxii, xxiii.

594.—Mansfield, W. C. Additional notes on the molluscan fauna of the pliocene Croatan sand of North Carolina. J. Paleont. Menasha Wis. 10 7 1936 pp. 665-668.

595.—Mansfield, W. C. A new species of "*Crassatellites*" from the upper Miocene of Florida. J. Wash. Acad. Sci. 26 10 1936 p. 395.

596.—Marcais, J. & Lekwijck, W. van. Sur des affleurements du Jurassique supérieur dans le Rif oriental (Maroc). C.R. Séances Soc. géol. Fr. 4 1936 pp. 60-62.

597.—Marceau, F. Sur quelques propriétés spéciales des muscles adducteurs des mollusques acephales en rapport avec leur disposition et leur structure. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 941-975 text-figs. 1-19.

Marks, G. W. *vide* Fox, D. L.

598.—Marmet, M. Un cas de coaptation. Le Boutonpression des Céphalopodes. Ann. Fac. Sci. Marseille (2) 9 1 1935 pp. 21–61 text-figs.

599.—Martin, K. Bericht over fossielen van Kedoeng waroe in Soerabaja. Jaarb. Mijnw. Ned.-Oost.-Ind. 59 3 1932 pp. 113–121.

600.—Martin, K. Oligocaene Gastropoden von Buton [S.E. of Celebes]. Leidsche Geol. Mededeel. Leiden 7 1 1935 pp. 111–118 text-figs. pls.

601.—Marwick, J. Some new genera of the Myalinidae and Pteriidae of New Zealand. Trans. Proc. Roy. Soc. N.Z. 65 3 1935 pp. 295–303 pls. xxxiv–xxxvi.

602.—Marzloff, D., Chavanne, J. D. de la & Moret, L. Étude sur la Faune du Bajocien Supérieur du Mont d'Or Lyonnais (Ciret). Gastéropodes, Lamellibranches, Brachiopodes, Echinodermes, Anthozoaires, Spongiaires. Suite et fin. Trav. Lab. Géol. Lyon 28 9 1936 pp. 59–147 pls. viii–xiii.

603.—Matheson, C. The Oyster fishery at Mumbles, Glamorgan. Trans. Cardiff Nat. Soc. 66 1935 pp. 81–86 pls. iv–vii.

604.—Mattox, N. T. Sex organs and reproduction in *Campeloma rufum*, a freshwater snail. Anat. Rec. Philadelphia 67 Suppl. 1 1936 (Abstract 108) p. 77.

605.—Matumoto, T. Contributions to the Cretaceous Palaeontology of Japan. I. Preliminary notes on the so-called *Parapachydiscus egeroni* (Forbes) from Japan. Japan. J. Geol. Geogr. 13 3–4 1936 pp. 259–267 text-figs. pls. xxx, xxxi.

606.—Matwiejewówna, L. Strati-graphische Betrachtung der Pelecypoden- und Gastropodenfauna des "Siwak" in der Umgegend von Palawy bei Lublin. Trav. Soc. Sci. Wilno 9 1935 pp. 91–119. (German summ. pp. 111–113.)

607.—Maury, A. Deux Gastéropodes Nudibranches et un Gastéropode Tectibranche observés dans la région marine de Granville (Manche). Bull. Soc. linn. Normandie Caen (8) 8 1936 pp. 14–15.

608.—Maximowa, S. On some new species of Artinsk Ammonoids [in Russian, English summary p. 288]. Bull. Soc. Nat. Moscou Sect. Géol. 43 2 1935 pp. 273–287 pl.

609.—Maximovich, G. A. Coal in the Chechyna Autonomous Province. [In Russian, English summary pp. 90–92.] Sci. Mem. M. Gorky St. Univ. Perm. 2 2 1936 pp. 69–92 pls. i, ii. (Engl. summ. p. 90.)

610.—Mazenot, G. Sur les faunes d'Ammonites de la limite Jurassico-crétacée de l'Europe centrale et de l'Argentine. C.R. Séances Soc. géol. Fr. 16 1935 pp. 253–255.

611.—Melnik, M. O. Die Molluskenfauna der Lösses der Ukr.S.S.R. Ukrainische Akad. Wiss. "Die Quartärperiode" 4 1932 pp. 61–67.

612.—Menchikoff, N. & Monod, T. Coupe géologique du Hank à Taoudeni (Sahara occidental). C.R. Acad. Sci. Paris 202 3 1936 pp. 230–232.

613.—Mentzer, C., Kaswin, A., Correggiani, E. & Gautrelet, J. Contribution à l'étude de la Choline et de l'Acétylcholine chez les invertébrés. Recherches dans les organes d'*Helix pomatia*. C.R. Soc. Biol. Paris 123 31 1936 pp. 668–670.

614.—Mercier, L. Acclimatation d'*Helix elegans* Drap. en Normandie et étude sur la variation de la coquille. Bull. Soc. zool. Fr. 61 1936 pp. 145–150.

615.—Meschkat, A. Untersuchungen über den Aufbau der Kabeljaunahrung im Bereich der Vestmannainseln. Rapp. Cons. Explor. Mer. Copenh. 99 1936 No. 3 pp. 1–19 tables.

616.—Meznerics, I. Stieermarkische Schlierfauna und ihre neuen Formen. Mag. K. földt. Int. Évk. Pest. 65 10–12 1935 pp. 332–340 pl. xii.

Mihailovic, D. vide Petković, K. V.

617.—Miller, A. K. A Mississippian Goniatite from Virginia. J. Paleont. Menasha Wis. 10 1 1936 pp. 69–72 text-fig.

618.—Miller, A. K. A species of the ammonoid genus *Artinskia* from the Lower Permian of Kansas. J. Paleont. Menasha Wis. 10 6 1936 pp. 490–496 pl. lxxiii text-figs.

619.—Miller, A. K. A new Permian Ammonoid fauna from Western Australia. J. Paleont. Menasha Wis. 10 8 1936 pp. 684–688 pl. xcii.

620.—Miller, A. K. Devonian Ammonoids of Iowa. Pan-Amer. Geol. 65 5 1936 pp. 336–338.

621.—Miller, A. K. Permian Cephalopods from British Columbia (Abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 370.

622.—Miller, A. K. & Crockford, M. B. Permian Cephalopods from British Columbia. Trans. Roy. Soc. Can. IV (3) 30 1936 pp. 23–28 pl. i.

623.—Miller, A. K. & Owen, J. B. New Pennsylvanian Cephalopod fauna from the Nowata Shale of Oklahoma (abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 369.

624.—Miller, A. K. & Thomas, H. D. The Casper formation (Pennsylvanian) of Wyoming and its Cephalopod fauna. J. Paleont. Menasha Wis. 10 8 1936 pp. 715–738 pls. xvi–xcix text-figs.

625.—Miller, A. K. & Warren, P. S. A *Timanites* from upper Devonian beds of America. J. Paleont. Menasha, Wis. 10 7 1936 pp. 632–636 text-figs.

Miller, C. E. *vide* Newcombe, C. L. & others.

Miller, K. *vide* Teichert, C.

626.—Mills, E. A., Machattie, C. & Chadwick, C. R. *Schistosoma haematobium* and its life cycle in Iraq. [References to molluscan hosts.] Trans. Soc. trop. Med. Hyg. Lond. 30 3 1936 pp. 317–334 tables pls. i, ii.

627.—Miloradovich, B. V. Lower Permian fauna from the Island Mejdusharsky (Southern Island of Novaya Zemlya). (Eng. summ. p. 69.) Trans. arctic Inst. Leningrad 37 1936 pp. 37–82 pls. i–iv.

628.—Milovanović, B. Les Rudistes de la Yougoslavie. [In Serbian, French resumé pp. 248–254.] Ann. géol. Pén. balkan Belgrade 12 1 1934 pp. 178–254.

629.—Milovanović, B. Les Rudistes de la Yougoslavie. [In Serbian, French translation pp. 302–308.] Ann. géol. Pén. balkan Belgrade 12 2 1935 pp. 275–308 pls. i, v.

630.—Mirčink, G. La corrélation entre les dépôts quaternaires continentaux de la plaine russe et les dépôts correspondants du Caucase et de la dépression Ponto-caspienne. Beitr. z. Kenntniss der Quartärs der U.S.S.R. Moscow 1936 pp. 15–36.

631.—Miyasaki, I. On the incubatory habits and larval forms of Bivalves.

[In Japanese.] Botany & Zool. Tokyo 4 11 1936 pp. 1879–1886 text-figs.

632.—Miyasaki, I. On the development of some marine bivalves, with special reference to the shelled larvae. II. J. Imp. Fish. Inst. Tokyo 31 1936 pp. 35–41 pls. viii–xii.

633.—Miyasaki, I. On the development of *Paphia philippinarum* (Adams & Reeve) [English Abstract]. Suisan Gakkwai Hô 6 No. 2 1934 pp. 71–75. [Abstract in Japan. J. Zool. 6 1936 p. (79).]

634.—Modén, O. Flodpärlmusslan i Värmland. Medd. Värml. Naturh. For. Karlstad 9 1936 p. 14.

635.—Moll, F. Les animaux rongeurs de bois sur les côtes de l'Indochine. J. Conchyliol. Paris 80 1936 3 pp. 296–301.

636.—Moll, F. Ueber Wanderungen von Terebrinen. Mitt. Ges. Vörratssch. Berlin 12 1 1936 pp. 3–4.

637.—Moment, G. B. Experimental modification of chromosome behaviour during reduction divisions in the egg of *Nassa* (*Ilyanassa*). Anat. Rec. Philadelphia 67 suppl. 1 1936 (abstract 77) p. 63.

Monod, T. *vide* Menchikoff, N.

638.—Montanaro, E. Sudi monografici sulla malacologia miocenica modenese Parte I. I molluschi tortoriani di Montegibbio. Palaeontogr. ital. Siena 35 1935 pp. 1–84 pls. i–vii.

639.—Morehouse, C. M. Conchology Naturalist London 1936 949 pp. 38–40

640.—Morgan, T. H. Further experiments on the formation of the antipolar lobe of *Ilyanassa*. J. exp. Zool. Philadelphia 74 1936 pp. 381–425 text-figs.

641.—Moore, E. W. J. The Bowland Shales from Pendle to Dinckley. J. Manchester Geol. Assoc. 1 3 1936 pp. 167–192 pls. i–iii text-figs.

642.—Morellet, L. & J. Sur l'existence des Sables de Cresnes à Cléry-en-Vexin (Seine-et-Oise). Bull. Mus. Hist. nat. Paris (2) 7 6 1935 pp. 375–376.

643.—Morellet, L. & J. Faune des sables à *Nummulites variolarius* de Lévis (Oise). [Lists Moll. 294–310.] Bull. Mus. Hist. nat. Paris (2) 8 3 1936 pp. 292–310.

644.—Moret, L. *Durania lephiniensis* nouvelle espèce de rudiste du Vraconien de la Fauge, près Grenoble et Révision du genre *Durania* Douvillé. Bull. Soc. sci. Dauphiné 55 1935 pp. 507-530 text-figs. pl. i.

645.—Moret, L. *Durania delphinensis* nouvelle espèce de Rudiste du Vraconien de la Fauge, près Grenoble et Révision du Genre *Durania* Douvillé. Trav. Lab. Géol. Univ. Grenoble 18 1936 pp. 157-180 pl. i. [Vide etiam title supra.]

Moret, L. vide Marzloff, D. & others.

646.—Mori, S. Some ecological observations on the freshwater snails *Melanoides* (Semisulcospira) libertinus (Gould) [in Japanese]. Venus Kyoto Japan 6 1 1936 pp. 14-21 text-figs. and tables.

647.—Mori, S. On the classification of Japanese *Sphaerium* III. [In Japanese, English summary.] Venus Kyoto Japan 6 2 1936 pp. 108-110 text-figs.

648.—Moros, F. A. Datos para el Estudio paleontológico del Flysch de la Costa Cantábrica y de algunos otros puntos de España. Bol. Inst. Geol. Esp. 53 1933 pp. 1-65 pls. i-xix.

649.—Morris, F. K. Central Asia in Cretaceous time. Bull. Geol. Soc. Amer. Washington D.C. 47 9 1936 pp. 1477-1533 pls. i, ii.

650.—Mort, H. S. Abnormalities among shells. Aust. Mus. Mag. Sydney 6 3 1936 pp. 105-108 text-figs.

651.—Mötteli, O. Aus dem thurgauischen Museum Schnecken und Muscheln des Kantons Thurgau. Mitt. thurg. naturf. Ges. Frauenfeld 30 1936 pp. 3-38.

652.—Mozley, A. The statistical analysis of the distribution of pond molluscs in Western Canada. Amer. Nat. 70 728 1936 pp. 237-244.

653.—Mozley, A. The Freshwater and terrestrial mollusca of Northern Asia. Trans. roy. Soc. Edinb. 58 3 1936 pp. 605-696 pls. i-v.

Muliyil, J. A. vide Beams, H. W. & others.

654.—Muller, S. W. & Ferguson, H. G. Triassic and Lower Jurassic formations of West Central Nevada.

Bull. Geol. Soc. Amer. Washington D.C. 47 2 1936 pp. 241-251.

655.—Müller-Stoll, H. Beiträge zur Anatomie der Belemnioidea. Nova Acta Leop. Carol. Halle N.F. 4 20 1936 pp. 157-226 text-figs. 1-5 pls. lvi, i-lxix, xiv.

656.—Murgeanu, G. Sur une Ammonite de Vulpea (Prahova). Bul. Soc. Romane Geol. 1 1932 pp. 199-201 text-fig.

657.—Musham, J. F. Conchology. [Records.] Trans. Lincoln Nat. Union Louth 1935 1936 pp. 50-51.

658.—Nalivkina, A. K. On the Upper Devonian Goniatites of Novaya Zemlya. Trans. arctic Inst. Leningrad 58 1936 pp. 91-108 pls. i-ii. (Eng. summ. p. 104.)

659.—Nalivkin, D. V. Silurian and Devonian fauna of the Northern Island of Novaya Zemlya. (Eng. summ. p. 24.) Trans. arctic Inst. Leningrad 58 1936 pp. 7-32 pl. i, ii.

660.—Nalivkina, A. Upper Devonian Goniatites beds of the Ay River, South Ural. [In Russian, English summary pp. 20, 21.] Trans. Centr. Geol. Prosp. Inst. U.S.S.R. 79 1936 pp. 1-24 pls. i, ii text-figs.

661.—Navas, R. P. L. Excursión científica a Casa de la Vega Embid de Ariza (Zaragoza). Rev. Acad. cienc. Zaragoza 19 1936 pp. 30-40.

662.—Navez, A. E. Observations sur le Rythme cardiaque d'*Anomia simplex* (D'Orbigny) (Lamellibranchia). Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 701-737 text-figs. 1-7 tables.

663.—Nelson, T. C. Water filtration by the Oyster and a new Hormone effect upon the rate of flow. Proc. Soc. exp. Biol. 34 2 1936 pp. 189-190.

664.—Netting, M. G. The viability of a snail in a killing solution. Nautilus Philad. 49 3 1936 pp. 104, 105.

665.—Neveu-Lemaire, M. Mollusca. Traité d'Helminthologie médicale et vétérinaire. Paris 1936 pp. 1433-1447 text-figs.

666.—Newcombe, C. L. A comparative study of the abundance and the rate of growth of *Mya arenaria* L. in the Gulf of St. Lawrence and Bay of Fundy regions. Ecology Brooklyn 17 3 1936 pp. 418-428 tables.

- 667.—Newcombe, C. L. Variations in growth indices of *Mya arenaria* L. on the Atlantic coast of North America. Ecology Brooklyn **17** 3 1936 pp. 429–443 tables and graphs.
- 668.—Newcombe, C. L. Validity of concentric rings of *Mya arenaria* L. for determining age. Nature London **137** 3457 1936 pp. 191–192.
- 669.—Newcombe, C. L., Miller, C. L. & Chappell, D. W. Preliminary report on Respiratory studies of *Littorina irrorata*. Nature London **137** 3453 1936 p. 33.
- 670.—Newell, N. D. Some mid-Pennsylvanian invertebrates from Kansas and Oklahoma: III. Cephalopoda. J. Paléont. Menasha Wis. **10** 6 1936 pp. 481–489 pls. lxxviii–lxxii.
- 671.—Nichols, D. A. Post-Pleistocene fossils of the uplifted beaches of the Eastern Arctic regions of Canada. Canad. Field Nat. **50** 8 1936 pp. 127–129.
- 672.—Nicolesco, C.-P. & Stiegelmann, J. J. Sur la présence d'*Exogyra latissima* Lamk. (*Gryphaea aquila* Brong.) dans l'Albien des environs du Havre (Seine-Inférieure) et de sa valeur stratigraphique. Bull. Soc. géol. Normandie **38** (1935) 1936 pp. 21–27.
- Nobuzane, T. vide Kuroda, T.
- 673.—Nomura, S. Der Kohlenhydratsstoffwechsel der Weinberg-Schnecke (*Helix pomatia* L.) unter der Einwirkung von Insulin und Adrenalin. Botany & Zool. Tokyo **4** 5 1936 pp. 918–921.
- 674.—Nomura, S. & Hatai, K. On some species of the genus *Arca* from the Neogene of North-East Honsyû, Japan. Jap. J. Geol. Geogr. **13** 1–2 1936 pp. 63–70 pls. xii, xiii.
- 675.—Nomura, S. & Hatai, K. A note on some fossil mollusca from Tugaru peninsula, North-East Japan. Japan. J. Geol. Geogr. **13** 3–4 1936 pp. 277–281 pl. xxxiii.
- 676.—Nomura, S. & Zinbô, N. Molluscan fossils from the Simaziri beds of Okinawa-Zima, Ryûkyû Islands. Sci. Rep. Tôhoku Univ. **18** 3 1936 pp. 229 (1)–266 (38) pl. xi (i).
- 677.—Nomura, S. & Zinbo, N. Two new species of *Acila* from the Neogene of northeast Honsyû, Japan. Venus Kyoto Japan **6** 2 1936 pp. 104–107 text-figs.
- 678.—Norton, A. H. The status of *Pomatia aspersa* (Müller) in Maine. Nautilus Philad. **49** 4 1936 pp. 113–114.
- 679.—Noszky, J. Die Molluskenfauna des Oberen Cattiens von Eger im Ungarn. [German summary pp. 100–115.] Ann. hist.-nat. Mus. Hung. **30** 1936 pp. 53–100 (3rd pagination) pls. v, vi.
- 680.—Nuccorini, R. Cenzo sullavoro compiuto dal Laboratorio chimico del R. Uft. Geologico nell' anno 1935. Boll. R. Uff. Geol. ital. **61** 1936 pp. 1–8 pls. i, ii.
- Obata, T. vide Shimiza, S.
- 681.—Odhner, N. H. Nudibranchia dendronotacea. A revision of the System. Mém. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 1057–1128 text-figs. 1–47 pl. i.
- 682.—Ødum, H. En Forekomst af marint Pliocæn ved Tønder. Medd. dansk. geol. Foren. **8** 4 1934 pp. 359–370 text-figs.
- 683.—Ôinomikado, T. Conchometric research on the fossil *Anadara granosa* (Linné). [In English, Japanese summary.] Venus Kyoto Japan **6** 3 1936 pp. 135–146 text-figs. and tables.
- 684.—Okada, K. Some notes on *Sphaerium japonicum biwaense* Mori. A freshwater bivalve. IV. Gastrula and fetal larva. Sci. Rep. Tôhoku Univ. (4) **11** 1 1936 pp. 49–68 pls. i, ii.
- 685.—Olagüe, L. Notas para el estudio del Jurásico en la Rioja. Bol. Soc. esp. Hist. nat. **36** 2 1936 pp. 101–123 text-figs. 1–6.
- Oldham, C. vide Boycott, A. E.
- 686.—Olujic, J. P. Ueber die geschlossenen, progressiven Entwicklungsreihen der Schalen der pontischen Prososthenien (Vorläufige Mitteilung). Archiv Molluskenk. **68** 3 1936 pp. 118–120 text-figs. pl. iv.
- 687.—Oostingh, C. H. Eenige opmerkingen over A. von Kutassy's beschrijving van jongtertiaire mollusken uit Oost-Celebes "De Ingenieur in Nederl. Indie." No. 4. Pp. 33–35 Batavia 1935. [Abstract.] Geol. Zbl. Leipzig **8** 2 1936 p. 97 no. 364.

688.—Oostingh, C. H. Aanteekeningen over eenige bivalven uit het Neogeen van Java (mit "Beschreibung einiger neuer Bivalven aus dem Neogen von Krawang, Java"). De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijningenieur" 1 1 1934 (IV) pp. 19-22 text-figs.

689.—Oostingh, C. H. Die Purpurinen aus dem Pliocän des Tijdjoereij in Cheribon, Java. De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijningenieur" 1 2 1934 (IV) pp. 28-30 text-figs.

690.—Oostingh, C. H. Eenige opmerkingen over A. von Kutassy's beschrijving van jongtertiaire mollusken uit Oost-Celebes. De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijningenieur" 2 4 1935 (IV) pp. 33-35.

691.—Oostingh, C. H. Einige neue Gastropoden aus dem Miocän von Mittel Bantam (Java). De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijningenieur" 2 9 1935 (IV) pp. 79-83 text-figs.

692.—Orton, J. H. Observations and experiments on sex-change in the european oyster, *Ostrea edulis* L. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 997-1056 text-figs. 1-4 maps tables.

693.—Orton, J. H. Habit and shell-shape of Portuguese Oyster, *Ostrea angulata*. Nature London 138 3489 1936 pp. 466-467.

Orton, J. H. vide Bunting, L. E. & others.

694.—Osaulenko, P. On the discovery of a firth (liman) fauna on bottom of the contemporary river bed of Inguletz. [In Russian, English summary pp. 88-89.] Ukrainische Akad. Wiss. "Die Quartärperiode" 10 1935 pp. 79-89.

695.—Otuka, Y. The Oli Graben in Southern Noto Peninsula, Japan. Part 3. Bull. Earthquake Res. Inst. 13 Pt. 4 pp. 846-909 7 text-figs. 5 pls. Tokyo imp. Univ. 1935. [Abstract.] Geol. Zentralb. Leipzig 9 1 1936 pp. 32, 33 no. 133.

696.—Otuka, Y. The Oti Graben in Southern Noto Peninsula, Japan. (Part 3.) Bull. Earthqu. Res. Inst. 13 (4)

pp. 846-909 5 pls. Tokyo 1935 [non vidi]. Geol. Zbl. Leipzig 8 4 1936 p. 221 no. 820.

697.—Ôtuka, Y. Notes on some shells from Southern Taiwan. Venus Kyoto Japan 6 3 1936 pp. 155-162 text-figs.

698.—Ovtschinkow, J. F. La signification des Mollusques d'eaux douces en méthodes de typologie de lacs. [In Russian, French résumé p. 393.] Zool. J. Moscow 15 1936 pp. 382-393.

Owen, J. B. vide Miller, A. K.

699.—Pallary, P. Deuxième complément à la faune malacologique de la Berbérie. J. de Conchyliol. Paris 80 1 1936 pp. 5-65 text-figs. pls. i-iii.

700.—Palmer, R. H. & Hertlein, L. G. Marine Pleistocene mollusks from Oaxaco, Mexico. Bull. S. Calif. Acad. Sci. 35 2 1936 pp. 65-81 pl. xviii (p. 72) pl. xix (p. 81).

701.—Palombi, A. *Eugymnanthea inquilina* nuova leptomedusa derivente de un atecota idroide ospite interno di *Tapes decussata* L. Pubbl. Staz. zool. Napoli 15 1936 pp. 159-168 text-figs. 1-8 pl. ii.

702.—Pannekoek, A. Ein fossil-reiches Geschiebe von Holsteiner Gestein aus Maarn (Holland). Z. Geschiebeforsch. Berlin 12 2 1936 pp. 57-62 text-figs.

703.—Parodi, A. Notizie geologiche della Regione compresa fra la Val Canale e la Valle del Riso Valle Seriana (Bergamo). Bol. Soc. geol. ital. 55 1 1936 p. 208 pp. 191-220 pls. viii-x.

704.—Parona, C. F. Qualche appunto per lo studio della fauna miocenica di Montemurro e Armento (Potenza). Bol. Soc. geol. ital. 55 1 1936 pp. 35-38.

705.—Parona, C. F. La formazione miocenica e la Tettonica della Valle Roveto (alta Valle del Liri). Appendice paleontologica. Boll. R. uff. geol. ital. 61 vii 1936 pp. 12-15 pl. ii.

706.—Passendorfer, E. Studien über die Stratigraphie und die Paläontologie des hochtatrischen Jura in Tatry. Roczn. Pol. Tow. Geol. Krakow 11 1935 pp. 83-103 pls. ii-iv text-figs.

- 707.—Patteisky, K. Die obercarbonischen Goniatiten der Hultschiner und Ostrauer Schichten. N. Jahrb. Min. Geol. Paläont. Stuttgart **76** 1 1936 pp. 1-30 pl. i.
- 708.—P[earsall], W. H. The habitats of Freshwater mollusca [review of paper by A. E. Boycott]. Naturalist London 1936 956 p. 208.
- 709.—[Pearsall, W. H. & Grist, W. R.] Correction Mollusca at Hawes. Naturalist London 1936 p. 207.
- 710.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill **52** 2 1936 pp. 174-222 pls. xv, xvi.
- 711.—Peile, A. J. Some Tristram types. J. Conch. London **20** 8 1936 p. 254.
- 712.—Peile, A. J. *Helix minuscula* Binney. J. Conch. London **20** 9 1936 pp. 281-282.
- 713.—Peile, A. J. The radula of *Macrochlamys glauca*. Proc. Malac. Soc. London **22** 1 1936 pp. 11-12 fig.
- 714.—Peile, A. J. Three new species of land shells from Mauritius. Proc. Malac. Soc. London **22** 3 1936 pp. 121-123 text-figs.
- 715.—Peile, A. J. Radula Notes. Proc. Malac. Soc. London **22** 3 1936 pp. 139-144 text-figs.
- 716.—Pelseneer, P. A propos de l'Éthologie des Mollusques. C.R. Congr. Sci. Bruxelles 1930 pp. 814-818 tables.
- 717.—Pelseneer, P. Evolution phylogénétique de la ponte chez les Mollusques. C.R. 2^{me} Congr. Sci. Bruxelles 2 1935 pp. 1077-1078.
- 718.—Péneau, J. Contribution à la Faune du Dévonien inférieur du Massif Armoricaïn. Bull. Soc. géol. Fr. **5** IV 6-7 1935 pp. 548-561 pl. xxx.
- 719.—Pérez, C. Atrophie des glandes genitales de la Turtelle sous l'influence du Parasitisme par les sporocystes d'un Trematode. Mém. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 539-547 text-figs. 1-9.
- 720.—Perry, L. M. A marine tenebrionid [spp. living on shell of *Atrina*]. Science N.Y. N.S. **84** 2172 1936 pp. 156-157.
- 721.—Pesson, P. Notes de Faunistique Armoricaïne. Bull. Soc. sci. Bretagne **13** 1-2 1936 pp. 83-88.
- 722.—Petković, K. V. & Mihailović, D. La faune de Céphalopodes trouvée dans le Trias inférieur en Monténégro (Yougoslavie) ses caractéristiques et son importance. [In Serbian, French résumé pp. 267-269.] Ann. géol. Pén. balkan Belgrade **12** 2 1935 pp. 253-269 pls. i-iii.
- 723.—Petrbok, J. Les Mollusques Holocènes dans les dunes de Carevo sur la Mer Noire, en Bulgarie. J. de Conchyliol. Paris **80** 2 1936 pp. 215-217.
- 724.—Petrbok, J. L'extinction des Mollusques sur le haut plateau à Beleva, en Bulgarie. J. de Conchyliol. Paris **80** 2 1936 pp. 213-214.
- 725.—Petrbok, J. Zur Kenntnis der quartären Mollusken von Beograd. Archiv. Molluskenk. **68** 3 1936 pp. 134-136.
- 726.—Petrbok, J. Měkkýši slovenského kvartern. [Translation in English in Bull. int. Acad. Prague **35** 1934 pp. 100-114 plate.] Rozpr. české Akad. Praha **44** 15 1935 pp. 1-15 plate.
- 727.—Petrbok, J. Molluscs of the Slovak Quaternary deposits. Bull. int. Acad. Prague **35** 1934 pp. 100-114 plate.
- 728.—Petrbok, J. *Corbicula fluminalis* Müller a fauna třebestovecké plistocaenné terasy v Čilci u Nymburka. [Translation in English in Bull. int. Acad. Prague **35** 1934 pp. 27-40 q.v.] Rozpr. české Akad. Praha **44** 3 1935 pp. 1-13 plate.
- 729.—Petrbok, J. *Corbicula fluminalis* Müller in the Bohemian Pleistocene. Bull. int. Acad. Prague **35** 1934 pp. 27-40 plate.
- 730.—Peyrot, A. Le Falun de Baudignan (Landes). Proc.-verb. Soc. linn. Bordeaux **86** 2 1935 pp. 158-166 lists.
- 731.—Philipp, H. & Wehrli, H. Bohrlöcher von Pholadiden in Ligniten aus dem Dach und dem Hangenden der Grube Fischbach (Ville). Cbl. Min. Geol. Paläont. Stuttgart **1** 1936 pp. 15-20 text-figs.

- 732.—Picard, L. & Solomonica, P. On the Geology of the Gaza-Beersheba District. Bull. Geol. Dept. Hebrew Univ. Jerusalem 1 2 1936 pp. 180 (1)-223 (44) text-figs. pls. i, ii map.
- 733.—Pieh, S. Über die Beziehungen zwischen Atmung, Osmoregulation und Hydratation der Gewebe bei euryhalinen Meeresevertebraten. Zool. Jahrb. Jena Allg. Zool. 56 1936 pp. 129-160 text-figs. tables.
- 734.—Pickford, G. E. A new order of Dibranchiate Cephalopods. Anat. Rec. Philadelphia 67 Suppl. 1 1936 (Abstract 109) pp. 77, 78.
- 735.—Pieragnoli, L. Fossili eocenici d'Egitto raccolti da Figari Bey con alcuni altri dell' Arabia Petrea. Bol. Soc. geol. ital. 54 2 1936 pp. 161-190 pls. vii, viii.
- 736.—Piersanti, C. La Fauna malacologica dei laghi de Cei, Loppio e Tenno. Studi trentini Trento 16 2-3 1935 pp. 150-157.
- 737.—Piersanti, C. Le forme più frequenti di restauro e di ricostruzione conchigliare della *Clausilia* (*Delima*) *itala* Mart. Studi trentini Trento 16 2-3 1935 pp. 206-212 pls. i, ii.
- 738.—Pilsbry, H. A. Land shells from Texas and New Mexico. Nautilus Philad. 49 3 1936 pp. 100-102.
- 739.—Pilsbry, H. A. *Ostrea kamehameha* new name for *Ostrea bryani* Pils. Nautilus Philad. 49 3 1936 pp. 103, 104.
- 740.—Pilsbry, H. A. *Cepolis* (*Plagioptycha*) *imperfata* new species. Nautilus Philad. 49 3 1936 pp. 105, 106.
- 741.—Pilsbry, H. A. A new *Polygyra* from Florida. Nautilus Philad. 49 4 1936 p. 109.
- 742.—Pilsbry, H. A. The Eastern limit of *Sonorella*. Nautilus Philad. 49 4 1936 pp. 109, 110.
- 743.—P[ilsbry], H. A. *Sanguinolaria bertini* Pilsbry & Lowe. Nautilus Philad. 49 4 1936 p. 140.
- 744.—Pilsbry [H. A.]. *Praticolella martensiana*. Nautilus Philad. 49 4 1936 p. 140.
- 745.—P[ilsbry], H. A. John Henry Gatliff. Nautilus Philad. 50 1 1936 p. 28.
- 746.—P[ilsbry], H. A. Herbert N. Lowe. [Preliminary notice of obit. only.] Nautilus Philad. 50 1 1936 p. 28.
- 747.—Pilsbry, H. A. *Drymaeus multilineatus latizonatus* subsp. n. Nautilus Philad. 50 2 1936 pp. 69-70.
- 748.—P[ilsbry], H. A. *Melongenella corona*. Nautilus Philad. 50 1 1936 p. 29.
- 749.—Pilsbry, H. A. *Borus* Herbst 1797 and *Borus* Agassiz 1846, vs. *Borus* Albers 1850. Smithson. misc. Coll. 73 8 1936 p. 3.
- 750.—P[ilsbry], H. A. & B[aker], H. B. Bryant Walker 1856-1936. [Preliminary notice of obit. only.] Nautilus Philad. 50 1 1936 p. 28.
- 751.—Pilsbry, H. A. & Grimshawe, C. N. *Oxystyla undata undata* in Florida. Nautilus Philad. 50 1 1936 pp. 19-20.
- 752.—Pilsbry, H. A. & Henderson, J. *Polygyra columbiana depressa*, new subspecies from Oregon. Nautilus Philad. 49 4 1936 p. 134.
- 753.—Pilsbry, H. A. & Vanatta, E. G. Three Mexican Euglandinas. Nautilus Philad. 49 3 1936 pp. 97-98 pl. vii f. 4, 5.
- 754.—Pinard, A. Présence d'une Nérite voisine de *Velates schmideliana* dans le Montien de Vigny. C.R. Séances Soc. géol. Fr. 6 1936 pp. 100-102 text-fig.
- 755.—Ping, C. Notes on some Gastropods from Tatung. Abst. Pap. Sci. Conf. Nanning 1935 pp. 49, 50.
- Ping, C. vide King, S. G.
- 756.—Pinto, R. de S. Daniel Sharpe e a Geologia portuguesa. An. Fac. Ciênc. Porto 17 4 1932 pp. 193-203 text-figs. 1, 2 (map).
- 757.—Piton, L. Note sur une "Testacelle" nouvelle. Rev. sci. Bourbonnais 1935 3-4 pp. 43-44.
- 758.—Piton, L. Note malacologique. [List of spp. collected on excursions.] Bull. Soc. Hist. nat. Auvergne 20 1932 p. 36.
- 759.—Plummer, F. B. & Hornberger, Jr., J. Geology of Palo Pinto County, Texas. Univ. Texas Bull. 3534 1935 pp. 1-238 [Mollusca, numerous lists] text-figs. pl. i.

760.—Pohl, [G.] Remarques sur deux Mollusques d'eau douce. Bull. Nat. Mons. 15-16 1932-34 pp. 221-223.

761.—Poirion, L. Note sur la faune des Souterrains du Port de la Pallice. Ann. Soc. Sci. nat. Charente Inf. N.S. 1 8 1934 pp. 129-135 text-figs.

762.—Pora, E. A. Sur les Différences chimiques et Physicochimiques du Sang des deux sexes de quelques invertébrés marins. Bull. Inst. océanogr. Monaco 689 1936 pp. 1-4.

763.—Postma, N. Shape and slope of rest curves of the stretched foot of the snail (*Helix pomatia* L.) in relation to its water content. Proc. K. Akad. Wet. Amsterdam 39 7 1936 pp. 891-896.

764.—Powell, A. W. B. The Paryphantidae of New Zealand. Rec. Auckland Inst. & Mus. 2 1 1936 pp. 29-41 map pls. vii-ix.

765.—Powers, W. E. Geological setting of the Aurora Mastodon remains. [List of shells associated.] Trans. Illinois Acad. Sci. 28 2 1936 pp. 193-194.

766.—Praeger, R. L. Robert John Welch 1859-1936. Irish Nat. Journ. Belfast 6 6 1936 pp. 131- pls. vii, viii. (Obituary, 4.)

767.—Prashad, B. *Potomida* v. *Parreysia*. Proc. Malac. Soc. London 22 3 1936 pp. 120-121.

768.—Precht, H. Epizonen der Kieler Bucht. Nova Acta Leop. Carol. Halle N.F. 3 15 1935 pp. 405-474 table. [Moll. 409-411.]

769.—Precht, H. Zur Kopulation und Eiablage einiger Planorbiden. Zool. Anz. Leipzig 115 1936 pp. 80-89 text-figs.

770.—Precht, H. Der Beginn der Luftatmung bei Planorbiden und deren Abhängigkeit von äusseren Faktoren. Zool. Anz. Leipzig 115 1936 pp. 113-125.

771.—Prenant, M. Sur un curieux complexe d'*Asterie* et de *Donax*. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 413-414.

772.—Prendergast, K. L. Some Western Australian upper palaeozoic fossils. J. Roy. Soc. W. Aust. 21 1935 pp. 9-35 pls. ii-iv.

773.—Pruvot-Fol, A. Note préliminaire sur les Nudibranches de Risso. Rev. suisse Zool. Genève 43 1936 pp. 531-533.

774.—Pruvot-Fol, A. Essai d'identification des Nudibranches de Risso. Rev. suisse Zool. Genève 43 1936 pp. 631-639.

775.—Pruvot-Fol, A. Morphologie du Pied des Mollusques. Ses Homologies. Verh. schweiz. naturf. Ges. 117 1936 pp. 327-328.

776.—Prytherch, H. F. Auto-Narcosis in the Oyster and its industrial application. J. Elisha Mitchell sci. Soc. Chapel Hill 52 2 1936 p. 162.

777.—Quick, H. E. The anatomy of some African Succineae, and of *Succinea hungarica* Hazay and *S. australis* Férussac for comparison. Ann. Natal Mus. P'mburg 8 1 1936 pp. 19-45 pls. i-iv.

778.—Quick, H. E. Notes and Records. Mollusca. Proc. Swansea sci. Field Nat. Soc. 1 10 1936 p. 322.

779.—Rabaud, E. La fixation des Pagures dans les coquilles de Gastéropodes. C.R. Soc. Biol. Paris 122 17 1936 pp. 152-154.

Raffy, A. *vide* Fontaine, M.

Raggatt, H. G. *vide* Condit, D. D. & others.

780.—Ragozin, L. A. The geological distribution of Pelecypods in the productive series of Kuzbass. [In Russian, English summary p. 63.] Rec. Geol. West Siberian Region 13 1934 pp. 56, 63.

Raja, K. C. K. E. *vide* Rao, H. S.

781.—Rakovec, I. Zur Miocänfauna der Steirer Voralpen, Prirodoslovene Razprave. I. Izdaja in Zalaga Prirodoslovna Sekcija Muzejokega Drustoa za Slovenijo. Diss. Hist. nat. publ. par la Section Hist. nat. Assoc. Mus. Slavonie 1 232-233 2 pls. Ljubljana 1932. [Abstract.] Geol. Zbl. Leipzig 8 2 1936 p. 99 no. 371.

782.—Ramaccioni, G. Il Lias medio di Monte Cucco nell' Appennino centrale. Bol. Soc. geol. ital. 55 1 1936 pp. 169-189 pl. vii.

783.—Ranson, G. La maladie du "Pied" chez *Gryphaea angulata* Lmk. en 1935 dans la région de Marennes. C.R. Soc. Biol. Paris 121 6 1926 pp. 540-546.

784.—Ranson, G. Biologie Ostréicole. L'Absence de naissains d'Huitres portugaises en 1934 and 1935, dans la région de Marennes, causes et conséquences. Rev. Trav. Pêches marit. Paris 9 1936 pp. 67-75 text-figs. 1-6.

785.—Ranzi, S. Ricerche sull'assunzione di sostanze minerali per parte dell'embrione di *Sepia officinalis*. Rend. Acc. Lincei (6) 22 12 1935 pp. 605-608.

786.—Rao, H. S. Pearl-like concretions (calculi) found in the stomach of cartilaginous and bony fishes from the Andaman Sea. Proc. Nat. Inst. Sci. India 2 2 1936 pp. 95-100 pl. ii.

787.—Rao, K. V. The morphology of *Kalinga ornata* (Ald. & Han.). Rec. Ind. Mus. Calcutta 38 1936 pp. 41-79 text-figs. 1- pl. iii.

788.—Rao, H. S. Observations on the rate of growth and longevity of *Trochus niloticus* Linn. in the Andaman Islands. Rec. Ind. Mus. Calcutta 38 1936 pp. 473-498 pl. xiv.

789.—Rao, H. S. & Raja, K. C. K. E. A statistical study of the data of growth in shells of *Trochus niloticus* Linn. in Andaman waters. Rec. Ind. Mus. Calcutta 38 1936 pp. 499-502.

790.—Rego, L. F. de M. Contribuição ao estudo das camadas superiores da Serêe Bassa Dous. Ann. Acad. Bras. Sci. Rio 8 1 1936 pp. 41-54.

791.—Rehder, H. A. The type of *Polygyra* Say. Nautilus Philad. 49 3 1936 pp. 102, 103.

Rehder, H. A. *vide* Aguayo, C. G.

792.—Reichmuth, W. Die Leberegelschnecke *Galba truncatula* Müll. Zugleich ein Beitrag zur Systematik der Süßwasserschneckenfamilie Lymnaeidae. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 207-244 text-figs. graphs.

793.—Reinhart, P. W. Pacific slope species incorrectly assigned to the Pelecypod family Arcidae (abstract). Proc. Geol. Soc. Amer. (1935) 1936 pp. 366-367.

Reinhart, P. W. *vide* Schenck, H.

Remes, M. *vide* Augusta, J.

794.—Rendall, R. *Simnia patula* (Pennant) in Orkney. J. Conch. London 20 9 1936 p. 283.

795.—Rennie, J. V. L. Lower Cretaceous Lamellibranchia from Northern

Zululand [Descriptions p. 304.] Ann. S. Afr. Mus. 31 1936 pp. 277-283 & 304-391 pls. xxxvii-lv & table.

796.—Rennie, J. V. L. Upper Cretaceous Lamellibranchia from Incomanini, Portuguese East Africa. Ann. Transv. Mus. 18 4 1936 pp. 325-347 pls. xiii-xvii.

797.—Rensch, I. und B. Systematische und tiergeographische Studien über die Landschnecken der Salomonen. Rev. suisse Zool. Genève 43 1936 pp. 653-695 text-figs.

798.—Renz, H. H. Neue Cephalopoden aus der oberen Kreide vom Rio Grande del Norte (Mexico und Texas). Abh. schweiz. paläont. Ges. 57 1936 No. 1 pp. 1-16 pls. i-iv text-figs.

799.—Renz, C. Les Céphalopodes du calcaire de Marmarotrapeza. Prak. Akad. Athens 3 1928 pp. 404-406.

Renz, C. *vide* Kténas.

800.—Rey, L. L. El *Loligo forbesi* St. en el mercado de Madrid. Bol. Soc. esp. Hist. nat. 36 1 1936 pp. 47-48 pl. x.

801.—Richards, H. G. Mollusks associated with early man in the southwest. Amer. Nat. 70 729 1936 pp. 369-371.

802.—Richards, H. G. Marine shells of James Bay. Amer. Midl. Nat. Notre Dame 17 2 1936 pp. 528-545 text-figs. 1-4.

803.—Richards, H. G. Fauna of the Pleistocene Pamlico formation of the Southern Atlantic coastal plain. Bull. Geol. Soc. Amer. Washington D.C. 47 10 1936 pp. 1611-1656 pls. i-iv.

804.—Richards, H. G. Land and freshwater mollusks collected on a trip to James Bay. Canad. Field Nat. 50 4 1936 pp. 58-60.

805.—Richards, H. G. Some shells from the North Carolina "Banks." Nautilus Philad. 49 4 1936 pp. 130-134.

806.—Richards, H. G. A conchological expedition to Cuba. Proc. Penn. Acad. Sci. 7 1933 pp. 167-172 text-fig.

Richard, J. G. *vide* Jullien, A.

807.—Richardson, G. H. Fossil hunters' holiday. [Yorkshire coast, England.] Nat. Hist. N.Y. 37 4 1936 pp. 346-352 plate text-figs. map.

Richey, E. McD. *vide* Cleave H. J. van.

808.—Ries, E. & Gersch, M. Die Zelldifferenzierung und Zellspezialisierung während der Embryonalentwicklung von *Aplysia limacina* L. Zugleich ein Beitrag zu Problemen der vitalen Färbung. *Pubb. Staz. zool. Napoli* 15 1936 pp. 223–273 text-figs. 1–18 table.

809.—Risbec, J. Biologie et ponte de mollusques gastéropodes Néo-Calédoniens. *Bull. Soc. zool. Fr.* 60 1936 pp. 387–417 text-figs.

810.—Ritchie, I. H. Coates 1859–1935. *J. Conch. London* 20 9 1936 p. 262.

811.—Robson, G. C. Phylum Mollusca. *Regan. Natural History London* 1936 pp. 48–64 text-figs.

812.—Rocha e Silva, M. Ação fotodinâmica sobre os cílios das brânquias do molusco: "*Mytilus perna*" L. [Résumé in Franch p. 93.] *Rev. Biol. Hyg. S. Paulo* 6 2 1935 pp. 91–93 text-figs.

813.—Roger, E. J. La radula des Nérítidées du genre *Theodoxia* D. de Montf. (Gastropode Prosobranchie) et les variations de sa dent latérale. *Bull. Soc. sci. Bretagne* 9 3 and 4 1932 pp. 79–87 text-figs. i, ii.

814.—Roger, E. J. Sur la poche à cristaux de l'appareil génital femelle de *Theodoxia bourguignati* Récl. (Gastropode Prosobranchie). *Bull. Soc. sci. Bretagne* 10 3 & 4 1934 pp. 166–170 text-figs. i–iv.

815.—Rohrbach, F. Eine interessante Molluskenfauna aus der Umgebung von Frankfurt am Main. *Archiv. Molluskenk.* 68 4/5 1936 pp. 205–211 text-fig. (map).

816.—Rohrbach, F. Neue Beobachtungen über die Fluss-Deckelschnecke (*Viviparus fasciatus* Müll.) im Main bei Frankfurt. *Natur. u. Volk.* 66 1 1936 pp. 82–85 text-figs. 1–3.

817.—Roman, F. Le Tithonique dans le massif du Djurjura. *C.R. Séances Soc. géol. Fr.* 4 1936 pp. 51–53.

818.—Roquefort, C. Monographie du Lias et du Jurassique de la région de Fouzilhon (Hérault). *Bull. Soc. Étud. sci. nat. Beziers* 39 1936 pp. 68–84 pls. i, ii.

819.—Rosén, B. Mikroskopische Beobachtungen bezüglich der Eiweiss-

verdauung bei *Helix pomatia* L. *Zool. Jahrb. Jena (Allg. Zool.)* 57 1936 pp. 229–234 pp. 3–5.

820.—Rosenberg, G. Eine *Trigonia* aus dem Rhät des Kitzberges bei Pernitz in Niederösterreich. *Verh. geol. BundeAnst. Wien* 4 1936 pp. 107–112 text-figs.

821.—Rotarides, M. Examen anatomique des mollusques gastéropodes par le procédé des préparations transparentes. *Allat. Közlen Budapest* 33 1–2 1936 pp. 44–53. (French rés. pp. 52–53.)

822.—Rotarides, M. Züchtungsversuche mit Schnecken im Gewächshaus. *Arb. Ung. Biol. Forsch. Inst.* 8 1936 pp. 150–152.

823.—Rotarides, M. Die Reaktionsformen der Wasserschnecke *Limnaea stagnalis* L. im Belső-tó auf der Halbinsel Tihany. *Arb. Ung. Biol. Forsch. Inst.* 8 1936 pp. 142–147–149 text-figs. 1–6.

824.—Rotarides, M. Untersuchungen über die Molluskenfauna der Ungarischen Lössablagerungen. *Festschrift f. Embrik Strand* 2 Rigo 1936 pp. 1–51 pls. i–iii.

Rotarides, M. *vide* Czogler, K.

825.—Rothschild, M. Gigantism and variation in *Peringia ulvae* Pennant caused by infection with larval Trematodes. *J. Mar. biol. Ass. Plymouth N.S.* 20 3 1936 pp. 537–546 text-figs.

826.—Rothschild, M. The process of encystment of a *Cercaria* parasitic in *Limnaea tenera euphratica*. *Parasitology* 28 1 1936 pp. 56–62 text-figs. pls. i, ii.

827.—Rousseau, C. Histophysiologie du foie des Eolidiens étude de leurs Xantheselles cytologie des cellules nématophages. *Arch. Anat. micr. Paris* 31 3 1935 pp. 305–395 text-figs. 1–21.

828.—Roux, P. Ingestion et assimilation directes de carbonate de chaux par certains Mollusques Gastropodes. *Bull. Soc. sci. Bretagne* 11 3 & 4 1935 pp. 101–107 text-figs. 1–3.

829.—Rowland, H. I. *vide etiam* H. I. Tucker. The Atlantic and Gulf Coast Tertiary Pectinidae of the

United States, II. Amer. Midl. Nat. Notre Dame **17** 6 1936 pp. 985-1017 pls. i-x.

Rudd, E. A. *vide* Condit, D. D. & others.

Russell, F. S. *vide* Gran, H. H. & others.

830.—Russo, P. Sur le Lias de l'extrémité septentrionale du Moyen Atlas. C.R. Acad. Sci. Paris **202** 22 1936 pp. 1866-1867.

831.—Rutsch, R. Beiträge zur Kenntnis tropischamerikanischer Tertiärmollusken. IV. Die stratigraphische Bedeutung der *Venericardia planicosta* und ihrer Verwandten. Ecl. geol. Helv. **29** 1 1936 pp. 151-186 p. 1, xvi text-figs.

832.—Rutsch, R. Beiträge zur Kenntnis tropischamerikanischer Tertiärmollusken. V. Ist *Venericardia beaumonti* auf die Oberkreide beschränkt? Ecl. Geol. Helv. **29** 1 1936 pp. 187-207 pl. xvii.

833.—Rutten, M. G. Rudistids from the Cretaceous of Northern Santa Clara Province, Cuba. J. Paleont. Menasha Wis. **10** 2 1936 pp. 134-142 text-figs.

834.—Sahni, M. R. On the supposed Cretaceous Cephalopods from the Red beds of Kalaw and the age of the Red beds. Rec. Geol. Surv. Ind. **71** 2 1936 pp. 166-169 pl. xxv.

835.—Saito, K. Older Cambrian Brachiopoda, Gastropoda, etc., from North-western Korea. J. Fac. Sci. Univ. Tokyo Geol. **4** 3 1936 pp. 345-367 pls. i-iii.

836.—Salin, E. Monographie des calcaires du Barrois. Bull. Soc. géol. Fr. **5** V 1-3 1935 pp. 117-166 pls. iv-vi.

837.—Salisbury, A. E. Two new species of marine Gastropods. Proc. Malac. Soc. London **22** 3 1936 pp. 124-125 pl. 13A.

838.—Salopek, M. Über die Zephelopodenkalke des Greguriébrijeg in der Samoborska gora. [Abstract ex Prirod. Istrav. **20** 1936 pp. 201-228.] Bull. Int. Acad. yougoslav **29**-30 1936 pp. 173-182.

839.—Salopek, M. O cetalopodnim vapnencima Greguriébrigega u Samoborskoj gori. [This paper has a résumé in: Bull. Int. Acad. yougoslav. **29**, **30** 1936 p. 173.] Prirod. Istraž. Kral. jugoslav. **20** 1936 pp. 201-228 text-figs. 1-11 pls. i-iv.

840.—Sanderson, A. R. Note on a Pteropod *Trochophora* found in the Tay Estuary. Trans. Perthsh. Soc. nat. Sci. **9** 5 1936 p. 147.

841.—Sandford, K. S. Observations on the distribution of land and freshwater mollusca in the Southern Libyan Desert. Quart. J. Geol. Soc. London **92** 2 1936 pp. 210-220 text maps 1 pls. xii, xiii.

842.—Šauer, V. La développement de la dépression de Vyškov. [In Czech. French résumé pp. 14-15.] Acta Soc. Sci. nat. Moraviae **9** 7 1934 pp. 1-13.

843.—Sauermilch-Holzminden, C. Beitrag zur Molluskenfauna des Oberwesergebiets. Abh. Westfäl. Provinzial-Mus. Munster i. W. **6** 3 1935 pp. 1-18.

844.—Saurin, E. Études géologiques sur l'Indochine du Sud-est (Sud-Annam-Cochinchine-Cambodge oriental). Bull. Serv. géol. Indo-Chine **22** 1 1935 pp. 1-419 pls. i-xv maps.

845.—Sawano, E. Contributions to the knowledge on the digestive enzymes in marine Invertebrates. I. Proleolytic enzymes in *Polypus vulgaris* (Lamarck) Preliminary Reports. Sci. Rep. Tokyo Bun. Daig. (B) **34** 1935 pp. 101-126 12 text-figs. (graphs).

846.—Scatizzi, I. L'apparato renale nei Molluschi Prosobranchi. Arch. zool. Torino **22** 1936 pp. 181-184 pl. iv.

847.—Schalie, H. van der. The Naiad fauna of the St. Joseph River drainage in Southwestern Michigan. Amer. Midl. Nat. Notre Dame **17** 2 1936 pp. 523-527.

848.—Schalie, H. van der. An unusual Naiad fauna of a Southern Michigan Lake. Amer. Midl. Nat. Notre Dame **17** 3 1936 pp. 626-628.

849.—Schalie, H. van der. Transposed hinge teeth of North American Naiades. Nautilus Philad. **49** 3 1936 pp. 79-84.

850.—Schalie, H. van der. Ovoviviparity among mollusks. Nautilus Philad. **50** 1 1936 pp. 16-19.

851.—Schenck, H. G. & Keen, A. M. Bathymetric distribution of marine pelecypoda. (Abstract.) Proc. Geol. Soc. Amer. (1935) **1936** pp. 367-368.

852.—Schenck, H. G. Revision of Nuculid pelecypods. (Abstract.) Proc. Geol. Soc. Amer. (1935) **1936** p. 368.

- 853.—Schenck, H. G. Evolution of the Pelecypoda. (Abstract.) Proc. Geol. Soc. Amer. (1935) 1936 p. 368.
- 854.—Schenck, H. G. New Ammonite genus from the upper Triassic of Central Oregon. (Abstract.) Proc. Geol. Soc. Amer. (1935) 1936 p. 410.
- 855.—Schenck, H. & Reinhart, P. W. Oligocene Arcid pelecypods of the genus *Anadara*. (Abstract.) Proc. Geol. Soc. Amer. (1935) 1936 p. 412.
- 856.—Schenck, H. G. & Keen, A. M. West American marine Molluscan provinces. Proc. Geol. Soc. Amer. (1935) 1936 pp. 413-414.
- 857.—Schenck, H. G. Classification of Glycymerid pelecypods. (Abstract.) Proc. Geol. Soc. Amer. (1935) 1936 p. 414.
- 858.—Schenck, H. G. Nuculid bivalves of the genus *Acila*. Spec. Pap. Geol. Soc. America 4 1936 pp. 1-149 pls. i-xviii.
- 859.—Schilder, F. A. Zwei interessante fossile Cypraea aus Indien (Mollusca Gastropoda). De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijningenieur" 3 12 1936 (IV) pp. 207-209 text-figs.
- 860.—Schilder, F. A. Some interesting monstrosities in Cypraeidae. J. Conch. London 20 7 1936 pp. 222-223 pl. ix.
- 861.—Schilder, F. A. Anatomical characters of the Cypraea. Proc. Malac. Soc. London 22 2 1936 pp. 75-112 pls. xi, xii tables.
- 862.—Schmidt, H. Die Abhängigkeit der Darmgestaltung der Landpulmonaten von phylogenetischen und ökologischen Faktoren sowie von der Gehäuseform. Arch. Naturgesch. Leipzig (N.F.) 5 1936 pp. 23-92.
- 863.—Schmidt, M. Fossilien der spanischen Trias weitere Pseudofossilien und Problematica. Abh. heidelberg Akad. Wiss. 22 1936 pp. 18-140 text-figs. 1-66 pls. i-vi.
- 864.—Schindewolf, O. H. Zu Stammesgeschichte der Cephalopoden. Jahrb. preuss. geol. LdAnst. 55 1 1935 pp. 258-283 text-figs.
- 865.—Schmidt, M. Über *Ceratites antecedens* Beyrich und verwandte Formen. Jahrb. preuss. geol. LdAnst. 55 1 1935 pp. 198-212.
- 866.—Schindewolf, O. H. Status of the "Gattungsbezeichnungen" of Sobolew 1914. Smithsonian. misc. Coll. 73 8 1936 p. 39.
- 867.—Schindewolf, O. H. Neue Gattungen tieferdevonischer Goniatiten. Z. deuts. Geol. Ges. Berlin 88 10 1936 pp. 689-691 text-figs.
- 868.—Schlesch, H. Nachtrag zu "Revidiertes Verzeichnis der dänischen Land- und Susswassermollusken und ihre Verbreitung." Archiv f. Molluskenk. Frankfurt 68 1 pp. 1-12.
- 869.—Schlesch, H. Title as last. Archiv f. Molluskenk. 68 2 1936 pp. 61-62.
- 870.—Schmierer, Th. Über *Vertigo moulinsiana* Dupuy und ihre Bedeutung für die Quartärgeologie (Gastrop. Pulmon.). Märk. Tierw. Berlin 2 1936 pp. 1-19.
- 871.—Schnéegans, D. La stratigraphie du Lias de la nappe de l'Ubaye dans le massif du Morgou (Basses-Alpes) C.R. Acad. Sci. Paris 202 16 1936 pp. 1378-1380.
- Schnéegans, D. *vide* Gillet, S.
- 872.—Schneider, C. O. Datos preliminares sobre el Hallazgo de restos de Sauroterigios en ler Aldrededores de Concepcion. Comun. Mus. Concepcion 1 1 1936 pp. 6-10.
- 873.—Schneider, C. O. El afloramiento fosilifero del Cerro Amarillo, en Concepcion. Comun. Mus. Concepcion 1 4 1936 pp. 60-68.
- 874.—Schneider, C. O. Un estilomatóforo nuevo para la Fauna de Chile. Riv. Univ. Santiago 21 1 1936 pp. 91-92.
- 875.—Schouteden, H. Types et Paratypes de Preston dans les collections malacologiques du Musée du Congo Belge. Rev. Zool. Bot. afr. Tervueren 28 1936 pp. 497-503.
- 876.—Schouteden, H. *Edentulina* du Musée du Congo (Moll.). Rev. Zool. Bot. afr. Tervueren 29 1936 pp. 138-140 pl. iv.
- 877.—Schrott, F. *Chondrina circumplicata* West. nelle due Provincie di Trento e Bolzano. Studi trentini Trento 16 2-3 1935 pp. 183-193.

878.—Schulz, E. Beitrag zur Biologie des amphibischen Opisthobranchiers *Alderia modesta* Lov. Zool. Anz. Leipzig **116** 1936 pp. 41–46 text-figs.

879.—Schwarzbach, M. Zur Lebensweise der Ammoniten. Natur. u. Volk **66** 1 1936 pp. 8–11 text-figs. 1–3.

880.—Schwind, J. Molluskenfunde im österreichischen Gebiet des Kleinen Walsertales südlich Oberstdorf und in Bayern. Archiv Molluskenk. **68** 6 1936 pp. 217–228 pl. ix.

881.—Seidler, A. Ein neuer Standort von *Vertigo moulinsiana* Dupuy im Untermaingebiet. Archiv f. Molluskenk. Frankfurt **68** 1 1936 pp. 13–15.

883.—Switz, O. Die Variabilität des *Inoceramus labiatus* v. Schloth. Jahrb. preuss. geol. LdAnst. **55** 1 1935 pp. 429–474 text-figs. pls. xxxvi–xl.

884.—Semenkowsitch, I. S. Les Alektrionidae de couches mosenoniennes des environs de Baktschisarai [in Russian]. Trav. Sta. sci. nat. Karadagh. **2** 1 1918 pp. 1–26 pls. iii, iv.

885.—Senô, H. The Oyster culture in the World. Botany & Zool. Tokyo **4** 1 1936 pp. 89–94.

886.—Senô, H. Title as last. Botany & Zool. Tokyo **4** 2 1936 pp. 427–431.

887.—Senô, H. Title as last. Botany & Zool. Tokyo **4** 3 1936 pp. 577–586.

888.—Senô, H. Title as last. Botany & Zool. Tokyo **4** 5 1936 pp. 890–894 text-figs.

889.—Senô, H. Title as last. Botany & Zool. Tokyo **4** 7 1936 pp. 1255–1260 text-figs.

890.—Senô, H. Title as last. [In Japanese.] Botany & Zool. Tokyo **4** 9 1936 pp. 1589–1594.

891.—Serra, G. Di un nuovo pettine del Pliocene di Anzio. Bol. Soc. geol. ital. **54** 2 1936 pp. 249–252 pl. xiii.

892.—Serra, G. Nuovi lamellibranchi maestrichtiani della Tripolitania. Bol. Soc. geol. ital. **55** 1 1936 pp. 121–127 pl. iii.

893.—Seshaiya, R. V. Anatomy of *Melania* (*Radina*) *crenulata* (Desh.) var. *tirouri*. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 314 (abstr.).

894.—Shadin, W. I. Materialien zur Süßwassermollusken Fauna des Nord-Donetz-Bassins. [In Russian, German summary pp. 97–100 map.] Trav. Soc. Nat. Kharkov. **52** 1929 pp. 77–96.

895.—Shimek, B. Comparative studies of Loess and Recent Mollusks. Nautilus Philad. **49** 3 1936 pp. 71–73.

896.—Shimek, B. Comparative studies of Loess and Recent Mollusks. II. Nautilus Philad. **49** 4 1936 pp. 119–127.

897.—Shimizu, S. & Obata, T. Remarks on Hayasaka's *Protocycloceras* cfr. *cyclophorum* and the Permian and Carboniferous Orthoconic Nautiloids of Asia. [In Japanese, English résumé pp. 28–29.] J. Geol. Soc. Japan **43** 508 1936 pp. 11–29.

898.—Shimizu, S. & Obata, T. New genera of Gotlandian and Ordovician Nautiloids. J. Shanghai Sci. Inst. (2) **2** 1 1935 pp. 1–10.

899.—Shimizu, S. & Obata, T. On some new genera of Ordovician Nautiloids from East Asia. J. Shanghai Sci. Inst. (2) **2** 2 1936 pp. 11–25.

900.—Shimizu, S. & Obata, T. Three new genera of Ordovician Nautiloids belonging to Wutinoceratidae nov. from East Asia. J. Shanghai Sci. Inst. (2) **2** 3 1936 pp. 27–35 text-figs.

901.—Shrubsole, G. Apparent disappearance of *Limnaea peregra* from Friston Pond, Eastbourne Downs. J. Conch. London **20** 7 1936 pp. 217–218.

902.—Shrubsole, G. Mollusca of the ponds on the Eastbourne Downs. Trans. Eastbourne nat. Hist. Soc. **11** 3 1936 pp. 29–35 map.

903.—Shrubsole, G. The occurrence of *Hydrobia jenkinsi* (E. A. Smith) on Beachy Head. Trans. Eastbourne nat. Hist. Soc. **11** 3 1936 pp. 36.

904.—Sieber, P. Die Cancellariidae des niederösterreichischen Miozäns. Archiv Molluskenk. **68** 2 1936 pp. 65–88 pl. iii.

905.—Sieber, R. Die Cancellariidae des niederösterreichischen Miozäns. Archiv Molluskenk. **68** 3 1936 pp. 89–115 [vide pl. iii *op. cit.* **68** 2 1936].

906.—Siemiradzki, J. Fauna utwarów liasowyc i jurajskich Tatr i Podhala. [In Polish.] Arch. Tow. nauk. Lwow (3) **3** 3 1933 pp. 1–52 pls. i–viii.

907.—Simpson, H. H. Note on the zone of *Anthraconauta phillipsi* in the Denbighshire Coalfield. Geol. Mag. London 73 864 1936 pp. 278–280.

908.—Sindowski, H. Sediment and Fauna im Septarienton und Stettiner Sand bei Stettin. Cbl. Min. Geol. Paläont. Stuttgart 5 1936 pp. 192–206.

909.—Sindowski, K.-H. Sediment und Fauna im Dogger des Breisgaues. Z. deuts. geol. Ges. Berlin 88 6 1936 pp. 380–398 text-figs.

910.—Slodkewitsch, W. S. The molluscan fauna of the Pleistocene deposits of the Lawrence Bay coast. [In Russian, English summary p. 122.] Trav. Soc. Nat. (Sect. Géol.) Leningrad 64 1935 pp. 112–121 pl. i.

911.—Smedley, N. *Achatina fulica* (Fér.) the Giantsnail, as a possible source of disease. Malayan Nat. Singapore 2 1 1928 p. 47.

912.—Smetana, V. *Corbicula fluminalis* Müller and the fauna of the Pleistocene Trěbestovické terrace of Čilec, near Nymbark. Geological part. Bull. int. Acad. Prague 35 1934 pp. 23–26 plate.

913.—Smetana, V. *Corbicula fluminalis* Müller a fauna trěbestovické pliocenné terasy v Čileci u Nymburka. [Abstract in English in Bull. int. Acad. Prague 35 1934 pp. 23–36 plate.] Rozpr. české Akad. Praha 44 4 1935 pp. 1–12 plan & plate.

914.—Smith, A. H. Conchological notes for 1933. J. Northants Nat. Hist. Soc. 28 214 1935 pp. 24–26.

915.—Smith, B. Geology and mineral resources of the Skaneateles Quadrangle. Bull. New York St. Mus. Albany 200 1935 pp. 1–120 text-figs. & map.

Smith, J. vide Grave, B. H.

916.—Smith, M. New Tertiary shells from Florida. Nautilus Philad. 49 4 1936 pp. 135–139, pl. ix.

917.—Smith, M. New Tertiary shells from Florida (continued). Nautilus Philad. 50 1 1936 pp. 20–22 [vide pl. ix op. cit. 49 4 1936].

918.—Smoleńska, J. Observations biologiques sur la *Bielzia coerulans*. Ann. Mus. zool. polon. 11 1936 pp. 241–261 text-figs pls. xxx, xxxi.

919.—Salignac, M. Étude géologique de la Tunisie septentrionale. Tunis 1927 pp. i–xiii 1–756 maps text-figs.

920.—Sollé, G. Revision der Fauna des Koblenzquarzits an Rhein und Mosel. Senckenbergiana Frankfurt 18 3–4 1936 pp. 154–214 text-figs. p. 202.

921.—Solminiach, L. de. La ostrica y la ostricultura chilena. Act. Soc. sci. Chili 36 1929 pp. 93–102 text-figs.

Solomonica, P. vide Picard, L.

Solun, V. I. vide Vjalov, O. S.

922.—Sonehara, S. On the respiration of a pond snail *Lymnaea (Radix) japonica* Jay. J. Sci. Hiroshima Univ. Zool. 4 1935 pp. 15–21 tables.

923.—Souché, G. Sur des altérations présentées par des os de Seiche (*Sepia officinalis*). Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 140–145 text-figs. 1–4.

Soukupk J. vide Zázvorka, V.

924.—Sowden, H. Mollusca of the Pocklington Canal near York. North Western Nat. Arbroath 10 4 1935 pp. 332–334.

925.—Špálek, V. Neue Stratigraphie des Neogens aus der Umgebung v Grussbach. Sbor. Kl. přív. Brno 18 1936 pp. 103–122.

926.—Späreck, R. On the relation between metabolism and temperature in some marine Lamellibranchs, and its zoogeographical significance. Biol. Meddel. Kjøbenhavn. 13 5 1936 pp. 1–27.

927.—Späreck, R. Review of the Danish investigations on the quantitative composition of the bottom fauna in Iceland and Greenland waters. Rapp. Cons. Explor. Mer. Copenh. 99 1936 No. 5 pp. 1–5 map.

928.—Späreck, R. On the occurrence of *Crepidula fornicata* (L.) in the Limfjord. Rep. Danish biol. Sta. 40 1935 pp. 43–44.

929.—Späreck, R. Investigations on the biology of the Oyster. On the size and age composition of the stock of native oyster in 1935. Rep. Danish Biol. Sta. 40 1935 pp. 39–41.

930.—Späreck, R. Über die zoogeographische Bedeutung der Petersenchen Tiergemeinschaften. Zoogeogr. Jena 3 1936 pp. 132–144 text-maps.

931.—Spath, L. F. Ammonite terminology. Geol. Mag. London **73** 865 July 1936 p. 334.

932.—Spath, L. F. So-called *Salterella* from the Cambrian of Australia. Geol. Mag. London **73** 868 Oct. 1936 pp. 433-440 text-figs.

933.—Spath, L. F. The upper Jurassic invertebrate faunas of Cape Leslie, Milne Land. II. Upper Kimmeridgian and Portlandian. Medd. Grønland **99** 3 1936 pp. 1-177 text-figs. 1-2 pls. i-l.

934.—Spath, L. F. On Bajacian. Ammonites and Belemnites from Eastern Persia (Iran). Palaeont. Ind. Calcutta **22** 3 1936 pp. 1-21 pl. i.

935.—Spath, L. F. The Ammonites of the Green Ammonite Beds of Dorset. Quart. J. Geol. Soc. London **92** 4 1936 pp. 438-455 pl. xxxiii text-figs.

936.—Spath, L. F. *Lytoceras* Suess 1865. Smithsonian. misc. Coll. **73** 8 1936 p. 34.

937.—Spence, G. C. Two new *Urocoptis* from Cuba. Proc. Malac. Soc. London **22** 1 1936 pp. 13-14 text-figs.

938.—Spriestersbach, J. Beitrag zur Kenntnis der Fauna des rheinischen Devon. Jahrb. preuss. geol. LdAnst. **55** 1 1935 pp. 475-535 text-figs. pls. xli-l.

939.—Starkey, W. F. & Hicks, F. J. Phosphatase in the clam (*Venus mercenaria*). Proc. Penn. Acad. Sci. **9** 1935 pp. 57-58.

940.—Steenberg, C. M. Recherches anatomiques et systematiques sur le gastéropode pulmone, *Gonidomus pagoda* (Férussac), de l'Île Maurice. Mém. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 115-148 text-figs. 1-21.

941.—Stefanoff, A. Die Fauna aus der Trias von Golo-Bărdo in S.W. Bulgarien. 2. Cephalopoda. [In Bulgarian Germany Summary pp. 161-162.] Bull. Inst. Roy. Hist. nat. Sophia **9** 1936 pp. 147-162 pls. i-iv.

942.—Stelfox, A. W. R. J. Welch—Conchologist. Irish Nat. Journ. Belfast **6** 6 1936 pp. 133-136.

943.—Stephenson, L. W. Geology and Paleontology of the Georges Bank Canyons. Part II. Upper Cretaceous fossils from Georges Bank (including

species from Banquereau Nova Scotia). Bull. Geol. Soc. Amer. Washington D.C. **47** 3 1936 pp. 367-410 pls. i-v.

944.—Stephenson, L. W. *Cardium nixicollis* and *Ostrea battensis* substituted for preoccupied names. J. Paleont. Menasha Wis. **10** 7 1936 p. 669.

945.—Stephenson, T. A. The marine ecology of the South African coasts, with special reference to the habits of limpets. Proc. Linn. Soc. London **1935-36** 2 1936 pp. 74-79.

946.—Steuer, A. The Fishery grounds near Alexandria. 1.—Preliminary report. Ministry of Finance Egypt Fisheries Research Directorate Notes & Mems. **8** Cairo 1935 pp. 1-18 4 figs. & 2 charts.

947.—Steusloff, U. Das Periglazial des Jungdiluviums im Emscher- und Lippetale. SitzBer. naturh. Ver. preuss. Rheinl. Westf. **1932-33** 1934 pp. 17-25 map.

Stiegelmann, J. J. *vide* Nicolesco, C.-P.

Storror, B. *vide* Hobson, A. D. & others.

948.—Strong, A. M. & Chace, F. M. Herbert Nelson Lowe. Nautilus Philad. **50** 2 1936 pp. 64-66.

949.—Strong, A. M. & Lowe, H. N. West American species of the genus *Phos*. Trans. San Diego Soc. Nat. Hist. **8** 22 1936 pp. 305-311 pl. xxii.

950.—Šuklje, F. Prilog stratigrafiji Samoborske gore. Glasnik hrv. prirodosl. Dr. Zagreb **41-48** 1936 pp. 283-287. (German summ. p. 28.)

951.—Šuklje, F. & Poljak, J. Pliocen Lapavine, Sokolovea i Šemovca u Hrvatskoj. (Das Pliozan von Lepavina, Sokolovac und Šemovac in Kroatien.) Vesnik geol. Inst. **4** pp. 177-196 Beograd 1934. [German résumé.] [Abstract.] Geol. Zentralb. Leipzig **8** 6 1936 p. 315 no. 1123.

952.—Šulc, J. Studie über die fossilen Chitonen. I. Die fossilen Chitonen im Neogen des Wiener Beckens und der angrenzenden Gebiete. Ann. naturk. Mus. Wien **47** 1936 pp. 1-31 text-figs. 1-4 pls. i, ii.

Susuki, K. *vide* Kobayashi, T.

953.—Swinnerton, H. H. The Cretaceous Belemnites. Pt. I. Mon. Pol. Soc. 1936 pp. i-xvi 1-16 pls. i-v.

954.—Szabo, I. & M. Ueber eine Fuhlermissbildung bei *Vivipara fasciata* Müll. Archiv f. Molluskenk. Frankfurt 68 2 1936 pp. 62–64 text-fig.

955.—Szabó, I. & M. Histologische Untersuchungen über den Zusammenhang zwischen Langlebigkeit und Fortpflanzung. Zool. Anz. Leipzig 113 1936 pp. 143–153 text-figs.

956.—Szabó, M. Die Morphologie des blasigen Bindegewebes in der Lungendecke von *Helix pomatia*. Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 156–169 text-figs. 1–4. (Germ. summ. pp. 166–169.)

957.—Szabó, M. Todesuraschen und pathologische Erscheinungen bei Pulmonaten, IV. Archiv Molluskenk. 68 4/5 1936 pp. 199–204.

Szabo, M. *vide* Szabo, I.

958.—Takatsuki, S. The excretory system and its function in the Oyster, *Ostrea edulis*. Sci. Rep. Tokyo Bun. Daig. (B) 3 45 1936 pp. 17–20 text-figs.

959.—Taketani, M. A collection of land mollusca from Taiwan (Formosa). Trans. nat. Hist. Soc. Formosa 26 154 1936 pp. 271–278.

960.—Taki, I. Observations on autophagy in *Octopus*. Annot. zool. jap. 15 1936 pp. 352–354 text-figs.

961.—Taki, I. Miscellaneous notes on shells. Venus Kyoto Japan 6 1 1936 pp. 44–55.

Tamini, E. *vide* Alberici, E.

962.—Tarao, S. Microscopical study on the hypobranchial gland of *Haliotis japonica* Reeve with a note on the restitution of the secretion. J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 pp. 103–114 text-figs. & pl. vi.

963.—Tanson, A. O. Lake Dikoye and its biology. [In Russian, English summary pp. 51–55.] Scient. Mem. M. Gorky St. Univ. Perm. 1 2–3 1935 pp. 3–55 map pls. i–iii.

964.—Tavani, G. Fauna malacologica miocenica di alcune Località della Cirenica. Bol. Soc. geol. ital. 54 2 1936 pp. 191–202.

Tavani, G. *vide* Blanc, A. C.

965.—Tchakhotine, S. Sur le mécanisme de la réaction de la couche

superficielle de l'oeuf de la Pholade à la micropuncture ultraviolette. C.R. Soc. Biol. Paris 120 35 1935 pp. 714–716.

966.—Tchang-Si, —. Contribution à l'étude des Opisthobranches de la côte de Tsingtao. [Summary in Chinese, pp. 140–148.] Contr. Inst. Zool. Peiping 2 No. 2 1934 pp. 1–148 text-figs. 1–66 pls. i–xvi.

967.—Tchang-Si, —. Sur un nouveau Nudibranche de la Côte d'Amoy. [Chinese summary, pp. 164, 165.] Contr. Inst. Zool. Peiping 2 No. 2 1934 pp. 149–165 text-figs. 1–9 pl. i f. 11–13 pl. xvii.

968.—Teichert, C. Einige actinoceroide Cephalopoden aus danischen Diluvialgeschieben und aus dem Gotlandium Skandinaviens. Medd. dansk. geol. Foren. 8 4 1934 pp. 371–401 pls. viii–x.

969.—Teichert, C. Über *Pterotheca* Salter und verwandte Bellerophonataeen. Paläont. Z. Berlin 17 3–4 1935 pp. 167–177 text-figs.

970.—Teichert, C. & Miller, K. What is *Orthoceras*? Amer. J. Sci. New Haven (5) 31 185 1936 pp. 352–362.

971.—Terroux, K. G. The buffering powers of natural and dialysed *Helix pomatia* serum. Biol. Bull. Woods Hole 70 1936 pp. 321–331.

972.—Tétty, A. Contribution à la connaissance de la faune de l'étang de Lindre. Bull. Soc. Hist. nat. Metz (3) 34 1935 pp. 249–265. (Moll. p. 254.)

973.—Thackway, A. E. J. Some natural enemies of the engineer. Aust. mus. Mag. Sydney 6 2 1936 pp. 59–63.

974.—Thamdrup, H. M. Beiträge zur Ökologie der Wattenfauna. Medd. Komm. Havendersog. Kjøb. (Fiskeri) 10 No. 2 1935 pp. 1–125 pls. (figs.) c–cxxiv graphs.

Theobald, N. *vide* Gillet, S.

975.—Thiadens, A. Rudistids from Southern Santa Clara, Cuba. Proc. K. Akad. Wet. Amsterdam 39 8 1936 pp. 1010–1019 plate & text-figs.

976.—Thirring, J. T. Paläontologische Neuigkeiten aus dem Bakonygebirge. Mag. K. földt. Int. Eök. Pest, 66 1–3 1936 pp. 51–68 pls. i, ii.

Thomas, D. H. *vide* Miller, A. K.

977.—Thorp, E. M. Calcareous shallow-water marine deposits of Florida and the Bahamas. Pap. Tortugas Lab. Carn. Instn. 29 1936 pp. 37-119 pls. i-iv [map].

978.—Thorslund, P. Siljansområdet brännkalkstenar och Kalkindustri. [Moll. pls. 1 & 2.] Sverig. geol. Undersökn. Årsb. C 30 5 1936 pp. 1-64 pls. i-iii.

979.—Thorson, G. The larval development, growth and metabolism of Arctic marine bottom invertebrates compared with those of other seas. Medd. Grønland 100 6 1936 pp. 1-155 32 text-figs. (Mollusca pp. 37-64.)

980.—Toba, G. & Kuroda, T. On *Euhadra decorata* and its varieties. Venus Kyoto Japan 6 2 1936 pp. 88-95 text-figs. pl. iv f. 7, 10.

981.—Tolmer, L. Notes d'Histoire des Sciences—Les Oolithes d'après François Ernest Brüchmann (1721). Bull. Soc. linn. Normandie Caen (8) 7 1935 pp. 24*-27*.

982.—Tolmer, L. *Doris coccinea* Ald. et Han. Nudibranche nouveau pour la région de Luc-sur-Mer. Bull. Soc. linn. Normandie Caen (8) 8 1936 p. 48.

983.—Tolmer, L. Notes de faunistique. Bull. Soc. linn. Normandie Caen (8) 8 1936 pp. 86-88.

984.—Tomlin, J. R. le B. Mollusca. [Sussex Records.] Hastings Nat. 5 3 1936 pp. 150-151.

985.—Tomlin, J. R. le B. *Conus gracilis* G. B. Sowerby, III. J. Conch. London 20 8 1936 p. 254.

986.—Tomlin, J. R. le B. Mollusca destroyed by frost. J. Conch. London 20 9 pp. 273-274.

987.—Tomlin, J. R. le B. Book Notes, I. Gredler. Proc. Malac. Soc. London 22 1 1936 pp. 15-16 pl. iii (portrait).

988.—Tomlin, J. R. le B. Book Notes, 2: Dall's Catalogue of 1889. Proc. Malac. Soc. London 22 2 1936 p. 51.

989.—Tomlin, J. R. le B. Book Notes, 3. "The Glory of the Sea." 4. "Thiele's Handbuch der Systematischen Weichtierkunde." Proc. Malac. Soc. London 22 3 1936 pp. 135-137.

990.—Tomlin, J. R. le B. Notes from The British Museum. VII. *Turbo intercostalis* Menke. Proc. Mala. Soc. London 22 3 1936 pp. 137-138.

991.—Tomlin, J. R. le B. Shells from the Loyalty Islands. Proc. Malac. Soc. London 22 3 1936 pp. 145-152.

992.—Tomlin, J. R. le B. & Winckworth, R. An index to the species of mollusca in the Beschreibung of H. F. Link. Proc. Malac. Soc. London 22 1 1936 pp. 27-48.

993.—Trauth, F. Aptychenstudien, VIII. Die Laevilamellaptychi des Oberjura und der Unterkreide. Ann. naturh. Mus. Wien 47 1936 pp. 127-145 pl. iii.

994.—Trauth, F. Die Aptychen des Paläozoikums. Jahrb. preuss. geol. LdAnst. 55 1 1935 pp. 44-83 pls. ii, iii.

995.—Trauth, F. Die zweivalvigen Aptychen des Lias. Jh. Ver. vaterl. Naturk. Württemb. 91 1935 pp. 33-58 pls. v, vi.

996.—Trauth, F. Über Aptychenfunde auf Cuba. Proc. K. Akad. Wet. Amsterdam 39 1 1936 pp. 66-76.

997.—Trauth, F. Die Aptychen der Trias. Sitzber. Akad. Wiss. Wien Abt. I 144 9 & 10 1935 pp. 455-483 text-figs. & pl. i.

998.—Tsukamoto, Y. On shell mound at Kudan, Tokyo. Venus Kyoto Japan 6 2 1936 pp. 110-114 text-figs.

999.—Tucker, H. L. *vide etiam* H. I. Rowland. The Atlantic and Gulf Coast Tertiary Pectinidae of the United States. Amer. Midl. Nat. Notre Dame 17 2 1936 pp. 471-490 pls. i-iv.

1000.—Tully, J. P. The nutritive value of marine products. XIV. Proximate analyses of fresh British Columbia oysters. J. biol. Board Canada 2 1936 pp. 477-484 graphs & tables.

1001.—Tuzet, O. Sur la spermatogénèse de *Carinaria lamarchi* Less. Arch. zool. exp. gén. Paris (Notes et Revue) 78 1936 pp. 68-78 text-figs. 1-45.

1002.—Tzankov, V. Notes on the genus *Holcodiscus*. [In Bulgarian, French résumé pp. 84-100.] Ann. Univ. Sofia 31 3 1935 pp. 57-100 pls. i-vi.

1003.—Tzankov, V. & Bončev, E. Quelques Cephalopodes fossiles du Bajocien des environs du village Stratidja, arrondissement d'Eski-Djumaia (Bulgarie de Nord). [In Bulgarian, French résumé pp. 245-248.] Ann. Univ. Sofia 30 3 1934 pp. 235-253 pls. i, ii.

1004.—Tzvetkov, B. und E. Beitrag zur Kenntnis der Malakofauna des ehemaligen Kulugaschen Gouvernements. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 367-392.

1005.—Uhl, F. Zur Molluskenfauna des zwischenzeitlichen Alms bei Tutting in Südbayern. Cbl. Min. Geol. Paläont. Stuttgart 5 1936 pp. 216-222.

1006.—Uhl, F. Fossilführende postglaziale Bildungen bei Burghausen a. d. Salzach. Verh. geol. Bundesanst. Wien 4 1936 pp. 112-116.

1007.—Ulrich, E. O. & Foerste, A. F. *Parendoceras*, new name for *Staffordoceras* Ulrich & Foerste (not Foerste & Teichert). J. Paleont. Menasha Wis. 10 5 1936 p. 417.

1008.—Ulrich, E. O. & Foerste, A. F. New genera of Ozarkian and Canadian Cephalopods. J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 259-291 pl. xxxviii.

1009.—Usenko, K. S. The distribution of lower Sarmatian deposits of the North-Western outskirts of the Donets basin. C.R. Acad. Sci. Leningrad N.S. 3 2 1936 pp. 87-88.

Vairel-Blanc, H. *vide* Jullien, A.

1010.—Valkanov, A. Notizen über die Brackwasser Bulgariens. I. [In Bulgarian, German summary pp. 286-293.] Ann. Univ. Sofia 31 3 1935 pp. 249-393. [Mollusca pp. 251, 259, 264, 269, 271.]

1011.—Valkanov, A. Title as last. 2. [German summary, pp. 327-335.] Ann. Univ. Sofia 32 3 1936 pp. 209-341 [Mollusca pp. 309, 310] text-figs. map.

1012.—Vanatta, E. G. Two new Jamaican land shells. Nautilus Philad. 49 3 1936 pp. 98-99 pl. vii f. 6.

1013.—Vanatta, E. G. A new subspecies of *Zonitoides* (*Ventridens*) *suppressa* Say. Nautilus Philad. 49 3 1936 pp. 99-100.

1014.—Venzo, S. I Fossili del neo-gene Trentino, Veronese e Bresciano.

II. Cefalopodi, Gasteropodi, Scafo-podi, Echinidi e Colenterati conclusioni. Palaeontogr. ital. Siena 35 1935 pp. 201-255 pls. xvii-xix (v-vii).

1015.—Verlaine, L. Les oiseaux briseurs de coquilles d'*Helix*. C.R. Congr. Sci. Bruxelles 1930 pp. 789-792.

1016.—Verlaine, L. L'Instinct et l'Intelligence chez les Mollusques. Les Gastéropodes perceurs de coquilles. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 387-394 text-figs. i-iv.

1017.—Verniory, R. Le Mésozoïque des collines du Faucigny (Préalpes externes). Arch. Sci. phys. nat. Genève (5) 17 Mars.Oor. 1935 pp. 49-52. (C.R. pag.)

1018.—Veronesi, B. A proposito del cosiddetto "Piano di Tabiano" Mayer Atti Soc. Nat. Mat. Modena 66 1935 pp. 91-98.

1019.—Vitalis, I. *Orygoceras*-Arten in der unterpontischen Ablagerungen der Gegend von Sopron, ihre Verbreitung in Ungarn und den benachbarten Ländern. Math. term. Ert. Budapest 54 1936 pp. 626-643 table map. (Germ. summ. p. 642-643.)

1020.—Vjalow, O. S. & Solun, V. I. Sur les Turritellides paléogènes de Ferghana. C.R. Acad. Sci. Moscou N.S. 1936 4 4 pp. 191-194.

1021.—Vjalov, O. Materials concerning the geology of the Bolshije Barssooki (Casakstan). [In Russian, English summary pp. 162-163.] Trav. Soc. Nat. (Sect. Geol.) 63 1934 pp. 139-163. (Engl. summ. p. 162.)

1022.—Vlerk, I. M. van der. Molluskenfauna uit het bovengedeelte van het Pliocene. Jaarb. Mijnw. Ned.-Oost.-Ind. 59 3 1932 pp. 110-112.

1023.—Voisey, A. H. The Upper Palaeozoic rocks in the neighbourhood of Boorook and Drake N.S.W. Proc. Linn. Soc. N.S.W. 61 3-4 1936 pp. 155-168 map.

1024.—Vokes, H. E. The Gastropod Fauna of the intertidal zone at Mass Beach, San Mateo County, California. Nautilus Philad. 50 2 1936 pp. 46-50.

1025.—Vokes, H. E. Middle Eocene molluscan faunas of the Vallecitos and Coalinga area (Abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 411.

1026.—Vokes, H. E. Notes on *Ancilla* Lamarck (Abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 441.

Vokes, H. E. *vide* Clark, B. L.

1027.—Volz, E. & Frömming, E. Parasiten in *Acroloxus lacustris*. Archiv Molluskenk. 68 4/5 1936 pp. 211–213.

1028.—Voronetz, N. S. The mesozoic fauna of the Kharaulakh Mountain Range. (Eng. summ. p. 30.) Trans. arctic Inst. Leningrad 37 1936 pp. 7–36 pls. i–iv.

1029.—Wächtler, W. Die Schneckenfauna des alluvialen Kalktufflagers in Siegelbach bei Herrnsdorf in Thüringen. Archiv Molluskenk. 68 4/5 1936 pp. 193–199.

1030.—Waele, A. de. Les accroissements périodiques de la coquille de *Anodonta cygnea*. C.R. Congr. Sci. Bruxelles 1930 pp. 819–824 text-figs. 1–4.

1031.—Wagner, J. Die Nacktschnecken Ungarns, Croatiens und Dalmatiens. [German summary pp. 85–104.] Ann. hist.-nat. Mus. Hung. 30 1936 pp. 67–84 text-figs.

1032.—Wagner, J. Die Vallonien Ungarns. Math. term. Ert. Budapest 53 1935 pp. 701–716 text-figs. 1–6.

1033.—Wagner, H. Die Wandermuschel (*Dreissensia*) erobert den Platten-See. Natur. u. Volk. 66 1 1936 pp. 37–41 text-figs. 1–3.

1034.—Wagner, H. Zur Anatomie und systematischen Stellung einer alpinen Nacktschnecke (*Agriolimax planoeroides* Simroth). Zool. Anz. Leipzig 115 1936 pp. 221–222 text-figs.

1035.—Walzl, E. M. Electrical inhibition in the heart of the oyster. Anat. Rec. Philadelphia 67 Suppl. 1 1936 (Abstract 158) p. 96, 97.

1036.—Walzl, E. M. Effect of Calcium and Potassium on the threshold of excitation of the heart of the oyster. Anat. Rec. Philadelphia 67 Suppl. 1 1936 (Abstract 159) p. 97.

1037.—Wandel, G. Beiträge zur Paläontologie des Ostindischen Archipels.—XIII. Beiträge zur Kenntnis der jurassischen Molluskenfauna von Misol, Ost-Celebes, Buton, Sezan und Jamdena. N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 pp. 447–526 text-figs. maps pls. xv–xx.

1038.—Warren, A. E. An ecological study of the sea mussel (*Mytilus edulis* Linn.). J. biol. Board Canada 2 1936 pp. 89–94 table graph.

Warren, P. S. *vide* Miller, A. K.

1039.—Waterlot, G. Paléozoologie du Bassin de la Sarre. Ann. soc. géol. Nord Lille 59 1934 pp. 201–213.

1040.—Waterston, A. R. The Natural History of Barra, Outer Hebrides. The result of a scientific expedition organised by the Biological Society of the University of Edinburgh, 1st to 14th July 1935.—Land and Freshwater Mollusca. Proc. phys. Soc. Edinb. 22 5 1936 pp. 290–294.

1041.—Watson, C. J. J. Marine borers destroying timber in the port of Brisbane. Destruction of Timbers by Marine Organisms Brisbane 1936. Chapter II pp. 10–30 tables.

1042.—Watson, C. J. J. Timbers and their resistance to marine borer attack. Destruction of Timber by Marine Organisms Suppl. Rept. I Chapter III pp. 49–62 text-figs.

Watson, C. J. J. *vide* Johnson, R. A.

Wehrli, H. *vide* Philipp, H.

1043.—Weigmann, R. Zur Kältebeständigkeit poikilothermer Tiere Untersuchung an Schnecken und Fischen. Biol. Zbl. Leipzig 56 5–6 1936 pp. 301–322 graphs & tables.

1044.—Weiler, W. Neue geologische und paläontologische Untersuchungen im südlichen Rheinhessen. Notizbl. Ver. Erdk. Darmstadt (5) 16 1935 pp. 56–81 pls. iv–viii.

1045.—Weir, J. & Leitch, D. The zonal distribution of the non-marine lamellibranchs in the coal measures of Scotland. Trans. roy. Soc. Edinb. 58 3 1936 pp. 697–751 text-figs. & tables.

1046.—Wenz, W. Die Molluskenfauna der Mergel von Paulhiac (Lot-et-Garonne). Archiv Molluskenk. 68 6 1936 pp. 228–238 text-figs.

1047.—Wenz, W. Weitere Beiträge zur Land- und Süßwasser-Molluskenfauna der subalpinen Molasse des Pfändergebietes. Senckenbergiana Frankfurt 17 5–6 1936 pp. 223–225.

1048.—Werth, E. & Baas, J. Pollenanalytische Untersuchungen zur Vegetations- und Kulturgeschichte im deutschen Küsten-Bereich der Ostsee

und Nordsee. Abh. Senck. naturf. Ges. 434 1936 pp. 1-41. [Moll. p. 6.]

1049.—Westergård, A. H. *Paradoxides oelandicus* beds of Öland with account of a diamond boring through the Cambrian at Mossberga [Mollusca p. 25]. Sverig. geol. Undersökn. Årsh. C 30 1 1936 pp. 1-66 pls. i-xii.

1050.—Wetzel, W. Faziesprobleme der mitteleuropäischen Tertiärmeere. Nr. 3. Zur Stratigraphie, Sediment-petrographie und Paläontologie des Alttertiärs von Fehmarn und der Umgegend Kiels. Cbl. Min. Geol. Paläont. Stuttgart B 12 1936 pp. 513-529 text-figs.

1051.—Wetzel, W. Über einige stammesgeschichtlich interessante Ammonitenarten der obersten Bajocien. N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 pp. 527-542 pl. xxi text-figs.

1052.—Weyl, R. Faziesprobleme der mitteleuropäischen Tertiärmeere. Nr. 2. Fazies und Fauna im Unter-miocän Schleswig-Holsteins. Cbl. Min. Geol. Paläont. Stuttgart B 9 1936 pp. 377-394.

1053.—Whedon, W. F. Spawning habits of the mussel *Mytilus californianus* Conrad with notes on the possible relation to mussel poison. Univ. Calif. Pub. Zool. 41 1936 pp. 35-43 graph pl. iii.

1054.—Wheeler, H. E. Timothy Abbott Conrad with particular reference to his work in Alabama one hundred years ago. Bull. Amer. Paleont. Ithaca 23 77 1935 pp. 1-159 pls. i-xxvii portraits map Alabama tables & graphs.

1055.—Willard, B. Chemung of Southwestern Pennsylvania [one or two spp. of Mollusca only]. Proc. Penn. Acad. Sci. 7 1933 pp. 148-159.

1056.—Willard, B. A Tully Lime-stone outcrop in Pennsylvania. Proc. Penn. Acad. Sci. 8 1934 pp. 57-62.

1057.—Williams, J. S. & Bridge, J. Large coiled Cephalopods from the Pennsylvanian of North Central Texas (abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 369.

1058.—Winckworth, R. Marine mollusca from South India and Ceylon, IV-X. Proc. Malac. Soc. London 22 1 1936 pp. 16-23 pl. iv text-figs.

1059.—Winckworth, R. Journal de Conchyliologie: Dates of publication.

Proc. Malac. Soc. London 22 3 1936 pp. 153-156.

1060.—Wirth, E. Beiträge zur Kenntnis des Paläozoicums in der Umrandung des Roten Beckens von Szechuan Südwest-China. [Lists only including mollusca.] N. Jahrb. Min. Geol. Paläont. Stuttgart 77 1 1937 pp. 77-112 text-figs. pls. iii-v.

1061.—Wirth, E. Beiträge zur Kenntnis der Trias in der Provinz Szechuan, West China. N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 pp. 412-446 pls. xiv text-figs. map.

1062.—Wolf, B. Mollusca. Animalium Cavernarum Catalogus 3 1936 pp. 664-695.

1063.—Woodring, W. P. New miocene fauna from the California coast ranges (Abstract). Proc. Geol. Soc. Amer. (1935) 1936 p. 366.

1064.—Woodring, W. P. Pliocene Viviparoid calcareous operculum from the Kettleman Hills. (Abstract.) Proc. Geol. Soc. America (1935) 1936 p. 413.

1065.—Woodring, W. P., Bramlette, M. N. & Klempell, R. M. Miocene stratigraphy and paleontology of Palos Verdes Hills, California. Bull. Amer. Ass. Petrol. Geol. Chicago Ill. 20 2 1936 pp. 125-149 text-figs.

1066.—Wright, F. S. Report on investigations into the condition of certain of the Oyster Beds in the South Wales sea Fisheries District. Fish. Invest. London (2) 14 No. 5 1935 [1936] pp. 1-29 text-figs. tables maps.

1067.—Wright, F. S. Report on the Maldon (Essex) Periwinkle Fishery together with Observations on the Natural History of the Common Periwinkle *Littorina littorea* Linnaeus and suggestions in regard to conservation. Fish. Invest. London (2) 14 No. 6 1936 pp. 1-37 text-figs. tables & maps.

Wright, F. S. *vide* Hobson, A. D. & others.

1068.—Wrigley, A. An "Aenigma" of the London Clay. Proc. Malac. Soc. London 22 1 1936 pp. 23-26 pl. v.

Woods, N. H. *vide* Cotton, B. C.

1069.—Yank, K. Un fossile dans le Marbre du Sud de Nautai. Bull. Geol. Soc. China Peiping 14 3 1935 pp. 303-307 text-figs.

1070.—Yen, Teng-Chien. Some quaternary Gastropods from Eastern Szechwan. Bull. Geol. Soc. China Peking 15 3 1936 pp. 331-342 pl. i.

1071.—Yen, T. Notes on the distribution of non-marine mollusks in the Soochow area. China J. Shanghai 24 1 1936 pp. 44-47.

1072.—Yen, T.-C. Additional Notes on Marine Gastropods of Pei-Hai and Wei-Chow Island. Notes Malac. Chinoise Shanghai 1 fasc. 3 1936 pp. 1-13.

1073.—Yermolaev, M. M. Notes on the stratigraphy of the northern Island of Nova Zemlya. Trans. Arctic Inst. Leningrad 27 1935 pp. 1-52 text-figs. (Engl. summ. pp. 53-63.)

1074.—Yin, T. H. Upper Palaeozoic Ammonoids of China. Palaeont. sinica B XI 4 1935 pp. 1-44 pls. i-v.

1075.—Yokoyama, M. Molluscan fossils from Karafto. J. Fac. Sci. Univ. Tokyo (Geol.) 2 9 1929 pp. 369 pls. lxxi-lxxv.

1076.—Yonge, C. M. The evolution of the swimming habit in the Lamelli-branchia. Mém. Mus. Hist. nat. Belg. (2) 3 1936 pp. 77-100 text-figs. 1-10.

1077.—Yonge, C. M. Mode of life, feeding, digestion and symbiosis with zooxanthellae in the Tridacnidae. Scient. Repts. Gt. Barrier Reef Exped. 1928-29 London 1 11 1936 pp. 283-321 pls. i-v.

1078.—Yoshida, H. On the pelagic larvae and young of *Mytilus crassitesta* Lischke. [In Japanese, summary in English.] Venus Kyoto Japan 6 1 1936 pp. 22-31 text-figs. pl. iii.

1079.—Young, J. Z. The structure of nerve fibres in Cephalopods and Crustacea. Proc. Roy. Soc. London (B) 121 823 1936 pp. 319-337 text-figs. pls. xiv-xv.

1080.—Young, J. Z. The giant nerve fibre and epistellar body of Cephalopods. Quart. J. micr. Sci. London N.S. 78 3 1936 pp. 367-386 text-figs. 1-20.

1081.—Zāns, V. & Dreimanis, A. Ein Fund von *Portlandia* (Yoldia) *arctica* Gray in Lettland. [In German, Latvian summary pp. 76-77.] Latv. biol. Biedr. Raksti 5 1935 pp. 67-77 text-figs.

1082.—Zázvorka, V. *Cepaea eversa larteti* (Boissy) aus dem Obermiocän von Strakonice (Südböhmen). Cbl. Min. Geol. Paläont. Stuttgart 4 1936 pp. 157-159 text-figs.

1083.—Zázvorka, V. & Soukup, J. Paleontologie křídý na Bělohorskú. [Abstract in French in Bull. int. Acad. Prague 35 1934 pp. 207-212, q.v.] Rozpr. české Akad. Praha 44 27 1935 pp. 1-22.

1084.—Zázvorka, V. & Soukup, J. Paléontologie du Crétacé des environs de Lázně Bělohrad dans la Bohême de N.E. Bull. int. Acad. Prague 35 1934 pp. 207-212.

1085.—Zetek, J. & McLean, R. A. *Hiata*, a new genus of the family Pholadidae from the Pacific at Panama, with a description of a new species. Nautilus Philad. 49 4 1936 pp. 110-111 pl. viii f. 1-4.

1086.—Zhizchenko, B. Mollusca from the Miocene of Ciscaucasia. Trans. Oil Geol. Inst. (A) 38 pp. 1-92 9 pls. Leningrad 1934. Russian, with English summary. [Abstract.] Geol. Zentralb. Leipzig 8 6 1936 p. 317 no. 1128.

1087.—Zilch, A. Nachtrag zur Typus-Bestimmung der Fauna des Mittel-Miocäns von Kostej (Banat). Senckenbergiana Frankfurt 17 5-6 1936 pp. 226-228 text-figs. 1-7.

1088.—Zilch, A. Unser Kenntnis von fossilen Perlen. Archiv Molluskenk. 68 6 1936 pp. 238-252 pl. x.

Zinbo, N. *vide* Nomura, S.

1089.—Zuffardi-Comerci, R. Due nuove forme del Sottsgenere "*Circe*" s.s. Giorn. Geol. Bologna 10 1935 pp. 29-32 text-figs.

II.—SUBJECT INDEX.

N.B.—The number in Clarendon type quoted after the author's name in both Subject and Systematic Indices, refers to "Titles," where the fuller reference will be found.

GENERAL.

Historical. — Corallian Dorset, ARKELL, 43; *Architeuthis* history of

captures map, CADENAT, 164; Japanese Conchology, KANAMARA, 470; Lake Baikal, KOZOV, 497; History of Classification, LAMEERE, 534; *Ostrea* in Britain, MATHESON, 603; Daniel Sharpe and Portuguese geology, PINTO, 756; *Kalinga*, RAO, 787; SWINNER-TON, 953; TOLMER, 981; Biography and work of T. A. Conrad, WHEELER, 1054.

Biography.—Memorial Series No. 5, "Charles Hedley," ANDERSON, 22; W. A. Lindholm 1874–1935, ANON, 33; Leopoldo A. Faustino, W. J. CLENCH, 189; Ryūzō Isshiki, ESAKI, 268; J. W. Whitehead, FISHER & JACKSON, 280; Bryant Walker, GOODRICH, 313; J. Baster, HENNRAD & KOUMANS, 402; W. A. Lindholm, P. HESSE, 414; Georg Grime [portrait], HOFFMANN, 420; R. J. Welch—Photographer, HOGG, 423; R. J. Welch—Reminiscences, JACKSON, 447; Noboru Ōmori (*olim* Shiba), KOBAYASHI, 491; J. H. Gatliff, P[ILSBRY], 745; R. J. Welch (portraits), PRAEGER, 766; Henry Coates, J. RITCHIE, 810; R. J. Welch—Conchologist, STELFOX, 942; Herbert Nelson Lowe, STRONG & CHACE, 948; Gredler (portrait), TOMLIN, 987; The work and biography of T. A. Conrad, WHEELER, 1054.

Bibliography.—Corallian Dorset, ARKELL, 43; Dates of *Nautilus*, H. B. B[AKER], 69; Relative to Pelagic Cephalopoda in the Atlantic, BOUXIN & LEGENDRE, 122; Relative to Fresh-water Mollusca, Britain, BOYCOTT, 131; Relative to the Albian of Char-treuse, BREISTROFFER, 144; Works and papers relative to marine boring animals, CALMAN & CRAWFORD, 165; Relative to the Jurassic of France, DECHASEAUX, 234; The names of the genera *Tethys* and *Alysia*, ENGEL, 263; Relative to the Nudi-branchiata of the Netherlands, ENGEL, 265; First discovery of nested *Lima*, N. FISHER, 276; FULTON, 319; Relative to the Oxford as Callovian of France, GÉBARD & COUTAUT, 328; Gemmellaro species, GRECO, 352; List of papers by Grime, HOFFMANN, 420; List of papers by Charles Hedley, IREDALE, 442; E. A. Poe's Concho-logical Text, KEEN, 472; MONTANARO, 638; Relative to L. & F. W. Moll of N. Asia, MOZLEY, 653; Identification of Nudibranchs described by Risso,

PRUVOT-FOL, 774; Relative to *Acila*, SCHENCK, 858; Relative to Arctic marine bottom invertebrates, THORSON, 979; Gredler's "Zur Conchylien-Fauna von China, I–XX," TOMLIN, 987; Dall's Catalogue Marine Mollusca, S.-E. coasts U.S.A., TOMLIN, 988; "Glory of the Sea" by "Darley Dale" (F. M. Steele) and "Handbuch der Systematischen Weichtierkunde" Thiele TOMLIN, 989; Papers of Loyalty Island Shells, TOMLIN, 991; H. F. Link's Beschreibung—Index, TOMLIN & WINCKWORTH, 992; Dates of publication of Journal de Conchylio-logie, WINCKWORTH, 1059.

General Treatises and Monographs.—Prosobranchia, ANKEL, 25; Corallian Lamellibranchia, ARKELL, 42; Paleon-tologie, AUGUSTA & REMES, 55; *Eden-tulina* Pfr., BEQUAERT & CLENCH, 84; Sex of *Anodonta anatina*, H. H. BLOOMER, 117; On *Architeuthis harveyi* Verrill, figs., CADENAT, 164; West Indies Physidae, CLENCH, 187; Sexual changes in *Crepidula*, figs., COE, 201; Sex ratios and sex changes, COE, 202; Composition of Tertiary faunas, A. M. DAVIES, 231; *Ambigua fuscolabiata*, DEGNER, 239; Shellfish and the public health, DODGSON, 249; West Indian Aplysiidae, figs., ENGEL, 260; *Phylla-physia* Fischer, ENGEL, 261; *Notarchus*, ENGEL, 262; On the names of the genera *Tethys* and *Aplysia*—and Biblio-graphy, ENGEL, 263; *Paraplysia* Pilsbry, ENGEL, 264; The Nudi-branchiata of the Netherlands, ENGEL, 265; Miocene Lamellibranchiata of Poland, FRIEDBERG, 306; Genera of Veneracea (389 names), FRIZZELL, 307; Copulation of Stylommatophora, GER-HARDT, 330; Angers Mollusca of, GERMAIN, 333; *Goniobasis* of Coosa R., Alabama, GOODRICH, 341; *Goniobasis* of Alabama, GOODRICH, 345; Growth in Bivalves, HAMAI, 381; Bacteria symbiosis, Cephalopoda, HER-FURTH, 406; Fauna of Windermere, HUMPHRIES, 431; Fossils of Paper Nautilus, IJERI, 435; Fauna Nether-lands, JUTTING & ENGEL, 467; Shells of Hong Kong figs., KING & PING, 483; (Mollusca *vide* Vol. I, Chs. 1–3; Vol. II, pp. 840–1009), KORSCHULT, 495; Mol-lusca of Lake Baikal, KOZOV, 497; Phylogénie possible des Silicodermes, LABBÉ, 526; History of Classification, LAMEERE, 534; Revision of *Mytilus*, LAMY, 541; Mytilidae in Mus. Hist.

Nat. Paris, LAMY, 542, 543; Waitotaran, Miocene, of Kaawa Creek, N. Zealand, LAWS, 553; The anatomy of *Paludina*, figs., LI, 559; Meisen Miocene, N. Korea, MAKIYAMA, 592; Vestmanna Islands and food on fishing grounds, MESCHKAT, 615; Rudists of Yugoslavia, MILOVANOVIĆ, 628; Formation of antipolar lobe of *Ilyanassa*, MORGAN, 640; *Durania*, MORET, 645; Helminthology, NEVERO, LEMAIRE, 665; *Mya arenaria* growth, C. L. NEWCOMBE, 667; Notes on *Sphaerium japonicum biwaense* figs., OKADA, 684; Morphology of *Kalinga ornata* (A. & H.), figs., RAO, 787; *Galba truncatula* Müll., REICHMUTH, 792; Embryology of *Aplysia limacina*, RIES & GERSCH, 808; Mollusca Nat. Hist. of, ROBSON, 811; *Tneodoxia* Radula variations and genital organs, figs., ROGER, 813, 814; Cretaceous Barrois, SALIN, 836; *Acila*, SCHENCK, 858; Darmgestaltung of Land pulmonates, figs., SCHMIDT, 862; Oyster culture in the world, SENÓ, 885-890; The Miocene Cancellariidae, Dutch East Indies, SIEBER, 914, 915; Tunisian geology (lists mollusca), SOLIGNAC, 919; Bottom fauna, SPÄCK, 930; W. American species of *Phos*, STRONG & LOWE, 919; SWINNERTON, 953; Opisthobranchs of the coasts of Tsingtao figs., TCHAZNG-SI, 936; Notes on the genus *Holcodiscus*, TZANKOV, 1002; Slugs of Hungary, Croatia and Dalmatia, WAGNER, 1031; Distribution of land and freshwater mollusca in the Soochow area, YEN, 1071; Fossil molluscan fauna of Karafto Island, YOKOYAMA, 1075; Swimming habit and evolution in Lamellibranchia, YONGE, 1076; Life, feeding, Tridacnidae, YONGE, 1077; Structure of nerve fibres in Cephalopoda, J. Z. YOUNG, 1079; Giant nerve fibres and epistellar body of Cephalopods, YOUNG, 1008.

Lists and Catalogues.—ABRARD, 1; AGALÉDE, 6; Some marine mollusca of Cuba, AGUAYO & JAUME, 7; Rasa, Italy, AIRAGHI, 10; Gastropoda of Naardemeer, ALTENA, 18; ARAMBOURG, 37; Mollusca of Cheboygan County, Michigan, ARCHER, 38; Corallian fossils of Dorset, ARKELL, 43; ARKELL, 44; The fossil Chitons from Europe in the Ashby collection in S. Australian museum, ASHBY & COTTON, 49; ASKLUND, 51; AZZI, 59; Fauna of Akkeshi Bay, BABA, 60; Opisthobranchia of

Ryûkû (Okinawa) Islands, BABA, 61; Pleistocene Illinois, F. C. BAKER, 65; Cretaceous of the Andean Cordilleras, BASSE, 77; *Gonaxis* species, BEQUAERT & CLENCH, 85; Mollusca of Yucatan, BEQUAERT & CLENCH, 88; Shells of Keppel Bay, BERNHARD, 93; Pearls in Fossil Mollusca, BERRY, 94; Fossils of the Oligocene (Dogger) of S.W. Germany, BESSLER, 97; Fossils of Lias N.E. of Chasville, BESTEL, 98; Cretaceous fossils, Westfalia, BEYENBURG, 99; Some Mollusca of Iranian Plateau, BIGGS, 102; Species of the Bathonian Normandy, BIGOT, 103; Molluscan fossils of the Mussolini Canal, BLANC, 107; Mollusca of the Dogger, Alps, BLANCHET, 112; Astrakhan, BODANOV, 124; BOGSCH, 125; BONDARTSCHUK, 126; Mollusca of Western parts of the Shropshire Union Canal, BOYCOTT & OLDHAM, 135; Vraconian fossils, BREISTROFFER, 139; Lower Cretaceous (Hauterivian) fossils of Neron Chartreuse, BREISTROFFER, 140; Mollusca of the Albian of Chartreuse, BREISTROFFER, 144; Cretaceous Chartreuse, BREISTROFFER, 145; Mollusca collected from Southampton Island, Hudson Bay, BROOKS, 147; Utah Mollusks, BROOKS, 148; BÜREN, 160; BÜTTNER, 162; 163; Gault fossils, Folkestone, CASEY, 167; Fossils from the Plantagenet [Miocene] beds of Western Australia, CHAPMAN & CRISPIN, 173; Type specimens of fossils in the University of Cincinnati Museum, CHEPPARS, 182; Eocene Western N. America, CLARK & VOKES, 183; Marine bivalves of Bahama, CLENCH & MCLEAN, 195; Devonian of Léon Spain, COMTE, 205; Devonian Spain, COMTE, 206; Permian, Carboniferous, CONDIT, RAGGATT & RUDD, 207; Fossils of E. Provence, CORROY & DENIZOT, 209; A. G. DAVIS, 232; Jurassic Lamellibranchs of France, DECHASEAUX, 236; DESIO, 244; DUARTE, 251; N. Daghestan fossils, EBERZIN, 253; Miocene of Trans-Caucasus, EBERZIN, 257; Nudi-branchiata of the Netherlands, ENGEL, 265; Patagonia Cretaceous and Tertiary fossils, FERUGLIO, 274; Mers-ay side, FISHER & JACKSON, 280; Upper Ordovician Cephalopods Quebec, FOERSTE, 283; FÖLDVÁRI, 289; Vaginulidae in Basl. museum, FORCART, 291; Marine mollusca, Barra Island, Outer Hebrides, FORREST, 292; Trias Europe, FRANK, 299; FRENTZEN, 301; Lias, FRENTZEN, 302; Miocene Lamelli-

branchiata of Poland, FRIEDBERG, 306; Ammonites of the Oxford of France, GÉRAUD & CONTAUT, 328; Fauna of Province of Kivu, E. Africa, GERMAIN, 331; Mollusca of Angers and Chinon, GERMAIN, 333; Shells of Tibesti, GERMAIN, 334; Mollusca of Mozambique, GERMAIN, 335; GILLET & SCHNEEGANS, 337; GLANGEAND, 339; Fossils of the Berne quadrangle, GOLDRING, 346; GRAHLE, 348; GRAN, HENTSCHEL & RUSSELL, 349; Species of Gemmellaro and their nomenclature, GRECO, 352; Triassic Palermo, GREGORIO, 357; GREGORIO, 359; GRIEPENBURG-SCHÉE, 361; Launsdorf, GUGENBERGER, 366; (Under districts) Shells of Schomburg Expedition, Central Africa, HAAS, 371; HAAS, 372; Eocene fossil California, HANNA, 383; Upper Cretaceous fossils, HEINZ, 391; Mollusca from Colorado, Utah, Montana, Idaho and Wyoming, HENDERSON, 397; Mollusca of Oregon and Washington, HENDERSON, 398; HERITSCH, 407; Lists and notes, Austrian land and freshwater mollusca, HILDEBRANDT, 415; Shells of Palao, HIRO, 418; Ammonites of Lias, HOFFMAN, 421; Cretaceous and jurassic fossils in col. M. Regnault, Yonne, HOUDARD, 426; Pliocene mollusca near Adelaide, HOWCHIN, 427; Tertiary of Kamchatka, ILYINA, 436; JACQUET, 449; JAECKEL, 450; Mollusca of Kenya lakes, JENKIN, 455, 456; JOVANOVIĆ, 460; Fauna, KALTENBACH, 468; Cretaceous S.E. of Bogota, KEHRER, 476; Jurassic and cretaceous of Mexico, KELLUM, 477; KHOMENKO, 481; Figs. of shells of Hong Kong, KING & PING, 483; Lists and tables, KLETT, 485; Cretaceous fossils from Lublin, Poland, KONGEIL, 494; Moll. of Estland, KRAUSE, 499; KRAUSE, 500; Germany, KRUMBECK, 505; KUHN, 512; Mollusca of Lias Franken, S. Germany, pp. 234-238, KUHN, 512; Fauna of the Dogger in Franken, KÜHN, 513; KÜHNE, 514; Mollusca obtained from raised beach (Hinlopenstredet) by the Swedish-Norwegian Arctic Expedition, 1931, KULLING, 515; Buccinidae of Northern Japan, KURODA, 512; Argonautidae, Nautilidae et Muricidae in Collection Antonio Augusto, LADEIRO, 527; Tritonidae, Fusidae, Buccinidae, Nassidae, Turbellinellidae, Volutidae, et Mitridae in Collection Antonio Augusto, LADEIRO, 528; Jurassic Algeria, LAFFITTE, 529; Neocomian fossils, Algeria, LAFFITTE, 530;

Mollusca of the Kaiserstuhl, LAIS, 531; Mollusca collected by Franco-Belgian Expedition to Easter Island, 1934, LAMY, 540; Fossils of the Green Ammonite Beds, Dorset, LANG, 547; Shells of Blue Sea Lake, Quebec, LA ROCQUE, 550; Pelecypoda from Kaawa Creek beds, "Recent" and fossil LAWS, 552; Gastropoda from Kaawa Creek beds, New Zealand, LAWS, 553; LÉONOV, 557; Carboniferous of Fergana, LICHAREW, 561; LIPPARINI, 566; Freshwater mollusca of the Faiyûm, LITTLE, 567; Nemours, LLABADOR, 568; LÖFGREN, 570; Bivalves from Northern Cuba, McLEAN, 584; Marine bivalves, Bahamas, McLEAN, 587; Siegenian fossils from Longlier, MAILLIEUX, 590; Meisen miocene, N. Korea, MAKIYAMA, 592; Pliocene species of Croatan sand, N. Carolina, MANSFIELD, 594; Jurassic Morocco, MARCAIS & LECKWILCK, 596; Fossils of Kedoengwaroe in Soerabaja, MARTIN, 599; MARYLOFF, CHAVANNE & MORET, 602; Fossils of Siwak Poland, MATWIEJEWÓWNA, 606; MAXIMOVICH, 609; Tertiary Chechyna, MAXIMOVICH, 609; MELNYK, 611; Mollusca in Iraq, MILLS, MACKATTIE & CHADWICK, 626; Miocene (Tortonian) Mollusca of Montegibbio, MONTANARO, 638; Lists of land and freshwater shells recorded from Yorkshire, 1935, MOREHOUSE, 639; Fossils at Cléry-en-Vexin, MORELLET, 642; Molluscan fossils of the *Nummulites variolaris* sands of Léviguen, L. & S. MORELLET, 643; Land and freshwater mollusca in Thurgau Museum, MÖTTEL, 651; Trias and Jurassic fossils West Central Nevada, MÜLLER & FERGUSON, 654; Upper Devonian fossils, Nova Zemlya, NALIVKIN, 658; Silurian and Devonian of Nova Zemlya, NALIVKIN, 659; NAVAS, 661; Post-Pleistocene fossils, E. Arctic regions of Canada, NICHOLS, 671; Oligocene fossils, Tuguru Japan, NOMURA & HATAI, 675; Tertiary fossils (Cattien) Hungary, NOSZKY, 679; ODUM, 682; Jurassic fossils of Rioja, Spain, OLAGÜE, 685; OSAULENKO, 694; OTUKA, 695; Pleistocene fossils from Oaxaco, Mexico, PALMER & HERTLEIN, 700; PANNEKOEK, 702; PARODI, 703; PARONA, 704; Estuarine animals of Beaufort, N. Carolina, PEARSE, 710; Trias Cephalopods, Montenegro, PETKOVIC & MILHALLOVIC, 722; Belgrade Quaternary, PETRBOK, 725; Species unusual in Bohemian

Pleistocene, PETRBOK, 728, 729; Fossils of Bandignan, PEYROT, 730; Cretaceous Fossils of Palestine, PICARD & SOLOMONICA, 732; Lakes of Cei, Loppio and Tenno, PIERSANTI, 736; Species collected on excursions of 1932, Auvergne, PITON, 758; Fossils of Palo Pinto Co., Texas, PLUMMER & HORNBERGER, 759; Shells of graymarl, Illinois, POWERS, 765; RAKOVEC, 781; Fossils of Passa Dous series, Brazil, REGO, 790; RENNIE, 795; Shells of the Solomon Islands, I. & B. RENSCH, 797; Cretaceous of Mexico-Texas, RENZ, 798; RENZ, 799; Pleistocene Mollusca and climatic conditions, RICHARDS, 801; Recent and fossil Mollusca from James Bay, Hudson Bay, RICHARDS, 802; Fauna of Pleistocene Pamlico formation, S. Atlantic coastal U.S.A., RICHARDS, 803; Recent and Pleistocene L. and F-W. Mollusca collected at James Bay, Canada, RICHARDS, 804; Fossil shells of Carolina, H. G. RICHARDS, 805; Cuban Mollusca, RICHARDS, 806; Tertiary Mollusca Frankfurt, ROHRBACH, 815; ROMAN, 817; SALIN, 836; Oberweser, SAUERMILCH-HOLZMINDEN, 843; Unionidae from St. Joseph R. drainage, S.W. Michigan, SCHALIE, 847; *Acila* spp., SCHENCK, 858; Superfamilies, families, subfamilies, tribes, genera and subgenera of Cypraeacea, SCHILDER, 861; Fossils Trias Spain, SCHMIDT, 863; SCHLESCH, 868, 869; SCHMIERER, 870; Lias Europe, SCHNEEGANS, 871; SCHNEIDER, 872; Concepcion fossils, SCHNEIDER, 873; SCHWIND, 880; SHADIN, 894; Mollusca of ponds on the Eastbourne Downs, SHRUBSOLE, 902; Cancellariidae Dutch East Indies Miocene, SIEBER, 925; SINDOWSKI, 908; Dogger Breisgau, SINDOWSKI, 909; Pleistocene Mollusca of Lawrence Bay, Tchukotka Peninsula, figs., SLODKEWITSCH, 910; Northamptonshire records, A. H. SMITH, 914; Fossils from the Devonian and Silurian of the Skaneateles Quadrangle, New York, B. SMITH, 915; Fossil Mollusca of Tunis, SOLIGNAC, 919; SOLLE, 920; Mollusca of the Pocklington Canal nr. York, SOYDEN, 924; Neogene Czechoslovakia, ŠPALEK, 925; Triassic Cephalopoda from Golo-Bărdo, S.-W. Bulgaria, STEFANOFF, 941; Fossils from Banquerean Nova Scotia, L. W. STEPHENSON, 943; STEUSLOFF, 947; W. American species of *Phos*, STRONG & LOWE, 949; Land shells of Taiwan,

Formosa, TAKETANI, 959; Moll., Lake Dikoye, TANSON, 963; Miocene fossils of Cirenaica, TAVANI, 964; Arctic marine bottom mollusca, THORSON, 979; Shells from Loyalty Islands, TOMLIN, 991; Species of mollusca in H. F. Link's Beschreibung (Index), TOMLIN & WINCKWORTH, 992; Shells from a mound at Kudan Tokyo, figs., TOUKAMOTO, 998; Jurassic Cephalopods from Northern Bulgaria, TZANKOV & BONČEV, 1003; B. & E. TZVETKOV, 1004; UHL, 1005; UHL, 1006; Bulgaria, VALKANOV, 1010, 1011; VENZO, 1014; Mesozoic Faucigny, VERNORY, 1017; VERONESI, 1018; VJALOV, 1021; Pliocene fauna of, VLERK, 1022; Carboniferous, Emu Creek, and Permian, Drake, N.S.W., VOISEY, 1023; Fauna of Mars Beach shore, California, VOKES, 1024; WÄCHTLER, 1029; Land and freshwater mollusca of Baira Island, Outer Hebrides, WATERSTON, 1040; Rhineland fossils, WEILER, 1044; Tertiary mollusks, France, WENZ, 1046; Land and freshwater mollusca Pfandergebietes, WENZ, 1047; WERTH & BAAS, 1048; Lower Miocene Europe, WEGEL, 1052; Devonian fossils from Pennsylvania, WILLARD, 1055; Tully Limestone (Devonian), U.S.A., WILLARD, 1056; *Pinna* species—emendations, WINCKWORTH, 1058; Mollusca listed in Animalium Cavernarum Catal., WOLF, 1062; Miocene fossils, Palos Verdes Hill, California, WOODRING, BRAMLETTE & KLEINFELL, 1065; Mollusca of Soochow, YEN, 1071; Silurian, Devonian and Carboniferous fossils of Nova Zemlya, YERMOLAER, 1073; Pliocene and Pleistocene fossils of Karafto, YOKOYAMA, 1075; Fossils of the Cretaceous of Bohemia, ZAZVORKA & SOUKUP, 1083, 1084.

Museums, Collections and Expeditions.—ANON, 30; S. Australian Museum, European fossil Chitons in the Ashby collection, ASHBY & COTTON, 49; Collecting in Keppel Bay, BERNHARD, 93; Lias N.-E. of Charleville, BESTEL, 98; Carnegie Museum, Carychiidae, S. T. BROOKS, 149; University of Cincinnati Museum, Catalogue of type specimens of fossils, CHEPPARS, 182; Harvard-Bahama Expedition, 1935—Marine Bivalves, CLENCH & McLEAN, 195; Collections of the 19th century, J. D. DEAN, 233; Collecting, ESAKI, 268; Basler Museum, Vaginuli-

dae, FORCART, 291; Gregorio Cabinet, GREGORIO, 358; Schomburgh Expedition 1931/32 to Central Africa, HAAS, 371; Percy Sladen Expedition, Kenya, JENKIN, 455, 453; Swedish-Norwegian Arctic Expedition, 1931, KULLING, 515; Collecting in Southern Kyûshû, KURODA, 516; Hist. nat. Paris, Silicoderins, LABBÉ, 525; Mus. Zool. University of Coimbra Catalogue of Argonautidae, Nautilidae and Muricidae, LADEIRO, 527; Franco-Belgian Exp. to Easter Island, 1934, List of Mollusca, LAMY, 540; Mus. nat. d'hist. nat. Paris, Mytilidae, recent species, LAMY, 541; 543; Collecting *Liguus*, MCGINTY, 581; Thurgau Museum, Land and Freshwater Mollusca, MÖTTEL, 651; Casa de la Vega, NAVAS, 661; Cuba lists and new subsp. of *Pomacea*, RICHARDS, 806; Tervueren Congo Museum, Preston's types and paratypes, SCHOUTEDEN, 875; Museum Congo, SCHOUTEDEN, 876; Treasars Expedition to Christian Land 1931-34, SPATH, 933; Templeton Crocker Exped. 1932, STRONG & LOWE, 949; Hadfield Collection, TOMLIN, 991.

Classification.—ABRARD, 2; *Hydrobia*, ALTENA, 17; Prosobranchia, ANKEL, 25; International Commission, ANON., 34; Ammonites of the English Corallian Beds, ARKELL, 41; Chitons of Western Australia, ASHBY & COTTON, 48; Opisthobranchia of Akkeslie Bay, BABA, 60; Opisthobranchia of the Ryûkû (Okinawa) Islands, BABA, 61; *Helisoma* in Canada, F. C. BAKER, 64; F. C. BAKER, 66; *Planorbis obstructus*, F. C. BAKER, 76; *Gonaxis*, BEQUAERT & CLENCH, 85; BEQUAERT & CLENCH, 87; African mollusca, Congo, BEQUAERT & CLENCH, 90; Cephalopoda from stomachs of fishes, BOUXIN & LEGENDRE, 122; Australian *Cheilea*, COTTON, 210; Australian Viviparidae, COTTON, 211; Pliocene Mollusca Portugal, L. R. COX, 214; Tertiary mollusca, A. M. DAVIES, 231; *Pecten* Jurassic France, generic types, figs., DECHASEAUX, 234; Aplysiidae, West Indian, figs., ENGEL, 260; *Notarchus*, ENGEL, 262; FLOWER & CASTER, 282; Ordovician Cephalopods Quebec, FOERSTE, 283; Silurian Cephalopods of Gaspe Peninsula, E. Canada, FOERSTE, 285; Silurian Cephalopods of Hudson Bay area, FOERSTE, 286; Vaginulidae in Basler Museum, FORCART, 291; Systematic Position of Ammonoidea, FOSSA-MAN-

CINI, 293; Miocene Lamellibranchiata of Poland, FRIEDBERG, 306; Veneracea, FRIZZELL, 310; *Pleurobranchus*, GARDINER, 324; Mollusca of Mozambique, GERMAIN, 335; *Goniobasis*, GOODRICH, 341; *Goniobasis* of Alabama, GOODRICH, 345; Fossil *Avicula*, GUGENBERGER, 367; Shells of Central Africa, HAAS, 371; HAAS, 377; *Helicella* spp. et subsp. n., HAAS, 378; Mollusca of Colorado, Utah, Montana, Idaho and Wyoming, HENDERSON, 397; Pectinidae, HERTLEIN, 411; Daubebardiinae in Roumania, IONESCA, 440; Nederland Opisthobranchia Amphineura and Scaphopoda, Diagnostic tables, figs., JUTTING & ENGEL, 467; KEEN, 475; Fossil Nautiloids, KOBAYASHI, 490; Moll. Lake Baikal, KOZOR, 497; Lias fossils, Franken, S. Germany, KUHN, 512; Triassic fossils, Hungary, KUTASSY, 524; History of, LAMEERE, 534; Mytilidae, LAMY, 541; Mytilidae, LAMY, 542; MAGNE, 589; New Miocene species from Korea, MAKIYAMA, 592; Myalinidae and Pteriidae, New Zealand, MARWICK, 601; *Parapachydiscus* Cretaceous Japan, MATUMOTO, 605; *Durania* Douvillé, MORET, 644; Revision of genus *Durania*, MORET, 645; *Sphaerium* of Japan, MORI, 647; L. & F. W. Mollusca of N. Asia, MOZLEY, 653; Oligocene spp. from Tuguru, Japan, NOMURA & HATAI, 675; Tertiary fossils Hungary, NOSZKY, 679; Mollusca of Barbary, Tunis, PALLARY, 699; Carboniferous Ammonites, Germany, PATTEISKY, 707; Types, Tristram, PEILE, 711; PEILE, 714; Vampyromorpha order nov., PICKFORD, 734; Paryphantidae of New Zealand, POWELL, 764; Type of *Polygyra*, REHDER, 791; REINHART, 793; Upper Cretaceous Lamellibranchs from Portuguese E. Africa, RENNIE, 796; Mollusca of the Solomon Islands, I. & B. RENSCH, 797; Cuban Mollusca, RICHARDS, 806; Mollusca, ROBSON, 811; ROSENBERG, 820; Glycymerid pectycopods, SCHENCK, 857; Fossil Cypraea, SCHILDER, 859; Cypraeacea, SCHILDER, 861; Types and Paratypes of Preston in the Belgian Congo Museum, Tervueren, SCHOUTEDEN, 875; Goltandian and Ordovician Nautiloids, SHIMIZU & OBATA, 898; Ordovician Nautiloids E. Asia, SHIMIZU & OBATA, 899; Ordovician Nautiloids, E. Asia, SHIMIZU & OBATA, 900; Kimmeridgian and Portlandian fossils of Greenland, SPATH, 933; Neogene Chitons, Hun-

gary, ŠULC, 952; Opisthobranchiata of Tsingtao, TCHANG-SI, 966; TEICHERT, 969; Orthoceras? TEICHERT & MILLER, 970; Tertiary Pectinidae, U.S.A., TUCKER, 999; *Holcodiscus*, TZANKOV, 1002; VENZO, 1014; *Turritella* and *Mesalia*, VJALOV & SOLUN, 1020; VOKES, 1026; Jurassic Mollusca from the East Indian Archipelago, WANDEL, 1037; Trias fossils, West China, WIRTH, 1061; WRIGHT, 1067; New genus of Pholadidae, ZETEK & MCLEAN, 1085; *Circe*, ZUFFARDI-COMERCI, 1089.

Nomenclature.—*Turbonilla* sp. n. Cuba, figs., AGUAYO & JAUME, 7; *Pachychilus* sp. n., AGUAYO, 8; Cuban mollusca spp. n., AGUAYO & REHDER, 9; New species of the Eocene of Alabama, ALDRICH, 12; *Goniophora* sp. n., R. S. ALLAN, 16; *Hydrobia*, ALTENA, 17; *Trigonia*, ALTHOFF, 21; Opinions rendered by the International Commission on Zoological Nomenclature, 124-133, ANON., 34; *Orbignya* sp. n. Santonian France, ANTONINE, 35; New Ammonites of the Corallian Beds, Dorset, ARKELL, 41; Loricates of Australia, ASHBY, 47; New Chitons from Western Australia, ASHBY & COTTON, 48; *Pleurotomaria* new fossil species, ASTRE, 53; New species from Akkeshi Bay, BABA, 60; Opisthobranchia of the Ryûkû (Okinawa) Islands nov. spp., BABA, 61; Palaeozoic *Planorbis* Europe, BABOR, 63; *Lymnaeidae*, U.S.A., vars. n., F. C. BAKER, 68; H. B. BAKER, 70; H. B. BAKER, 71; H. B. BAKER, 72; Subsp. *Obba* Philippines, BARTSCH, 75; *Katayama* sp. n., BARTSCH, 76; *Achatina*, BEQUAERT & CLENCH, 83; *Edentulina*, BEQUAERT & CLENCH, 84; Land and freshwater mollusca of Congo [new spp.], BEQUAERT & CLENCH, 86; *Ptychotrema*, GULETTA, spp. n., BEQUAERT & CLENCH, 87; *Archachatina*, BEQUAERT & CLENCH, 89; S. Afr. Operculates new subgenera, BEQUAERT & CLENCH, 90; *Dimya* sp. n., S. S. BERRY, 95; *Inoceramus*, *Endocostea*, BEYENBURG, 99; *Clausilia*, BIGGS, 101; Species of the Bathonian Normandy, BIGOT, 103; BOGHACHEV, 124; *Eriptycha* new species, CHECCHIA-RISPOLI, 170; Cephalopods Carboniferous, Lancashire, CHALMERS, 172; Miocene species from Western Australia, CHAPMAN & CRESPIN, 173; Cretaceous Bullidae, Tripolitania, CHECCHIA-RISPOLI, 180; *Cerion* sp. n., CLENCH, 188; *Papuina*,

CLENCH, 191; *Mecoliotia* sp. n., CLENCH & AGUAYO, 192; *Papuina* sp. n., CLENCH & ARCHER, 193; *Macrocallista*, CLENCH & MCLEAN, 194; Australian *Cheilea*, COTTON, 210; New species of Australian Viviparidae, COTTON, 211; Pliocene mollusca, Portugal, L. R. COX, 314; Mollusca of the Green Ammonite beds, Dorsetshire, L. R. COX, 216; Status of new names in d'Orbigny's 1850 "Prodrome," COX & ARKELL, 217; New species, Devonian, DAHMER, 222; Central African *Eneidae* n. spp., DARTEVELLE-PAISSANT, 227; Pectinidae new species Jurassic, France, DECHASEAUX, 234; *Arcomytilus* sp. n., DECHASEAUX, 235; *Goniatite* sp. n., DELÉPINE, 240; New species of the Carboniferous Belgium, DEMANET, 242; gen. n., *Aviculidae*, DIENST, 246; *Aplysiidae* and synonymy, ENGEL, 260; *Tethys* and *Aplysia*, ENGEL, 263; The Netherlands Nudibranchiata, ENGEL, 265; *Onychoceras* spp. n., FENTZER, 273; Cretaceous and Tertiary fossils of Patagonia, FERUGLIO, 274; FLOWER & CASTER, 282; Ordovician Cephalopods Quebec, FOERSTE, 283; Silurian, Cephalopods of Gaspé Peninsula, E. Canada, FOERSTE, 285; Silurian Cephalopods of the Hudson Bay area, FOERSTE, 286; Cephalopods, Akpatok Island, FOERSTE & COX, 288; Nomenclature and Synonymy, FULTON, 319; *Conus*, *Murex*, *Ocenebra*, *Gyrineum*, *Strophocheilus*, FULTON, 320; Oligocene fossils, Hungary, GÁBOR, 322; *Pleurobranchus*, A. P. GARDINER, 324; *Achatina* sp. n., GERMAIN, 332; *Cleopatra* and *Thapsia*—spp. n., Mozambique, GERMAIN, 335; Eocene Belgium, GLIBERT, 340; *Goniobasis* of Coosa R., Alabama, GOODRICH, 341; *Goniobasis* of Alabama, GOODRICH, 345; Relative to species of Gemmellaro, GRECO, 352; Permian Italy, GRECO, 353; New species from the Permian Sicily, GREGORIO, 355; Fossils Jurassic S. Giuliano, GREGORIO, 359; Fossils of Suez and Red Sea, GRUVEL, 365; GUGENBERGER, 367; *Megalomastoma* sp. n., GUITART, 369; HAAS, 371; New species, HAAS, 377; *Helicella* spp. et subspp. n., HAAS, 378; Eocene, California, HANNA, 383; Vernacular names in Shôdoshima, HATAKEDA, 386; HENRARD & KOUMANS, 404; Pectinidae, HEITLEIN, 411, 412; *Aglaja*, Japan, HIRASE, 416; Opisthobranch, Japan, HIRASE, 417; *Harttites* nom. nov. for *Harttia*, HOWELL &

- KNIGHT, 428; Cypraeidae, INGRAM, 437; Australian mollusca, IREDALE, 443; Cretaceous Columbia, JUWORSKI, 453; Neogene shells from Korea, KANEHARA, 469; *Cardium nuttallii* new genus for, KEEN, 473; *Olinocardium* gen. n., KEEN, 475; *Dentalium* sp. n., KING & PING, 482; Corrections, J. B. KNIGHT, 486; Stereoplasmodermitidae spp. n., KOBAYASHI, 488; Upper Jurassic fossils, Japan, KOBAYASHI & SUSUKI, 489; Mollusca, Lake Baikal, KOZOV, 497; Molluscan fossils of the Lias, Franken, S. Germany, KUHN, 512; Species of the Dogger in Franken, KÜHN, 513; *Euhadra*, KURODA, 517; *Fruticicola* (*Karatohelix*) new forms, KURODA, 518; Reinhart's views on genus *Arca* L., KURODA, 519; *Hemiphaedusa*, *Chamalycaeus* spp. n., KURODA, 520; *Euhadra* subsp. n. Japan, KURODA & NOBUZANE, 523; Fossils of Hauptdolomit and Dachsteinkalk [Trias], Hungary, new spp., KUTASSY, 524; *Venus corrugata*, LAMY, 537; *Cytherea callosa* Conrad and shells confused with it, LAMY, 538; *Mytilus*, LAMY, 542; Chitons new species, LELOUP, 555; *Ischnochiton*, *Tonicia*, LELOUP, 556; LINDHOLM, 533; *Lucina*, sp. n., McLEAN, 585; *Eurassatella* sp. n., MacNEIL, 588; Devonian fossils, Belgium, MAILLEUX, 591; Miocene spp., Korea, MAKIYAMA, 592; K. MARTIN, 600; Myalinidae and Pteridae, New Zealand, MARWICK, 601; *Artinskia* sp. n., MILLER, 618; *Adrianites* sp. n., MILLER & CROCKFORD, 622; *Temanites* sp. n. Devonian, MILLER & WARREN, 625; N. spp. of Rudists from Servia, MILOVANOVIĆ, 628; Cretaceous Rudists of Eastern Servia, MILOVANOVIĆ, 629; *Durania* sp. n., MORET, 644; *Durania* sp. n., MORET, 645; *Pseudohyria*, F. K. MORRIS, 649; Upper Devonian mollusks of Novaya Zemlya, NALIVKINA, 658; *Praeglyphioceras* sp. n., NALIVKINA, 660; Neogene *Arca* Japan, NOMURA & HATAI, 674; New Oligocene spp. from Tuguru Japan, NOMURA & HATAI, 675; *Nucula*, NOMURA & ZINBO, 677; New Tertiary fossils, Hungary, NOSZKY, 679; *Prososthenia* new forms, OLUJIC, 686; Mactridae, Tellinidae, new species, OOSTINGH, 688; Pliocene *Thais*, Java, OOSTINGH, 689; Miocene species, Java, OOSTINGH, 691; *Nuculana* subsp. n., OTUKA, 697; New species from Barbary, Tunis, PALLARY, 699; Carboniferous Ammonites, Germany, PATTEISKY, 707; PEILE, 712; New species from Mauritius, PEILE, 714; *Ceratioceras* sp. n., PÉNEAU, 718; New Quaternary *Clausilia*, PETRBOK, 726, 727; Eocene fossils of Arabia, PIERAGNOLI, 735; Shells from Texas and New Mexico, PILSBRY, 738; *Ostrea*, PILSBRY, 739; *Cepolis* sp. n. Haiti, PILSBRY, 740; *Polygyra* Florida, PILSBRY, 741; *Sonorella*, PILSBRY, 742; *Drymaeus*, PILSBRY, 747; PILSBRY, 749; *Polygyra* var., PILSBRY & HENDERSON, 752; Mexican *Euglandina* spp. n., PILSBRY & VANATTA, 753; *Testacella* sp. n., PITON, 757; Paryphantidae of New Zealand, POWELL, 764; *Potomida* or *Parreysia*, PRASHAD, 767; Zululand Cretaceous, RENNIE, 795; New species Lamellibranch of the Upper Cretaceous of Portuguese E. Africa, RENNIE, 796; *Palaeohelicina* forma nov., I. & B. RENSCH, 797; *Pomacea* subsp. n. from Cuba, RICHARDS, 806; *Venericardia* sp. n., RUTSCH, 831; *Chiapasella* sp. n., RUTTEN, 833; Cambrian species from Korea, SAITO, 835; Cretaceous, France, SALIN, 836; *Turbonilla*, *Clanculus* spp. n., SALISBURY, 837; Terminology of Reproduction, SCHALIE, 850; SCHENCK, 858; Cypraeacea new genera, SCHILDER, 859; Status of "Gattungsbezeichnungen," Sobolev 1914, SCHINDEWOLF, 866; SCHINDEWOLF, 867; New Cretaceous species, Tripolitania, SERRA, 892; Gotlandian and Ordovician Nautiloids, SHIMIZU & OBATA, 898; Ordovician Nautiloids genn. n., SHIMIZU & OBATA, 899; Ordovician Nautiloids, E. Asia, SHIMIZU & OBATA, 900; Miocene species of Cancellariidae Dutch East Indies, SIEBER, 904; Tertiary shells of Florida, M. SMITH, 916; *Langeites* for *Kochina*, SPATH, 931; "Salterella," SPATH, 932; Kimmeridgian, Portlandian fossils, Greenland, SPATH, 933; SPATH, 935; Status of *Lytoceras* SUESS 1865, SPATH, 936; *Urocoptis* spp. n. from Cuba, SPENCE, 937; SPRIESTERSBACH, 938; *Cardium*, *Ostrea* spp. nomm. nov., STEPHENSON, 944; Neogene Chitons, Hungary, ŠULC, 952; Opisthobranchiata spp. n. from Tsingtau figs., TCHANG-SI, 966; Nudibranchiata gen. et sp. n. of Amoy, TCHANG-SI, 967; TEICHERT, 969; *Orthoceras*, *Orthoceros*, *Orthocera* not Mollusca, *Orthoceratites*, TEICHERT & MILLER, 970; Tertiary species, Hungary, THIRRING, 976; *Euhadra* sp. et subsp. n. Japan, TOBA & KURODA, 980; *Conces*, TOMLIN, 985;

Synonymy of Loyalty Island shells, TOMLIN, 991; Liassic *Aptychus*, TRAUTH, 995; Tertiary Pectinidae U.S.A., TUCKER, 999; *Holcodiscus* spp. n. Bulgaria, TZANKOV, 1002; ULRICH & FOERSTE, 1007; Jamaican shells, VANATTA, 1012; *Zonitoides*, VANATTA, 1013; *Turritella* and *Mesalia* spp. n., VJALOV & SOLUN, 1020; *Ancilla*, VOKES, 1026; Mesozoic fossils from the Kharaulakh range Siberia, VORONETZ, 1028; Jurassic Mollusca from the East Indian Archipelago, WANDEL, 1037; Carboniferous Lamelli-branths spp. n., WEIR & LEITCH, 1045; Tertiary Pauliac France, WENZ, 1046; *Orlandia* gen. et sp. n., WESTERGARD, 1049; Ammonite gen. et sp. n., WETZEL, 1051; S. India and Ceylon mollusca, WINCKWORTH, 1058; Trias fossils, West China, WIRTH, 1061; WRIGHT, 1067; *Enigmonia* sp. n., WRIGLEY, 1068; Quaternary mollusca from China, YEN, 1070; Littorina, Natica new species, YEN, 1072; Palaeozoic Ammonoids China, new species, YIN, 1074; *Hiata* gen. et sp. n., ZETEK & McLEAN, 1085; *Circe*, ZUFFARDI-COMERCI, 1089.

Conchometry. — *Helisoma*, F. C. BAKER, 64; BEQUAERT & CLENCH, 85; BONDARTSCHUK, 126; *Architeuthis*, CADENAT, 164; *Macrocallista*, CLENCH & McLEAN, 194; *Corbicula coccolit-zensis*, COATS, 197; *Unio tumidus*, CzÓLER & ROTARIDES, 220; *Ambigua fuscolabiata*, DEGNER, 239; FLOWER, 281; FUCHS, 316; Spp. from Kivu, E. Africa, GERMAIN, 331; Cephalopods of Svalbard, GRIEG, 360; Central African spp., HAAS, 371; Size-age relation, HALTON, 380; Growth in bivalves, HAMAI, 381; Sex and size in *Crepidula*, ISHIKA, 445; *Clavator*, JODOT, 547; McCONNELL, 579; MAXIMOWA, 608; *Aplexa hypnorum*, *Lymnaea stagnalis*, *auricularia*, *palustris*, in N. Asia, MOZLEY, 653; *Belemnites*, MULLER-STOLL, 655; *Mya arenaria*, C. L. NEWCOMBE, 666; NEWELL, 670; *Arca* fossils, Japan, NOMURA & HATAI, 674; NOMURA & ZINBÔ, 676; *Anadara granosa*, OINOMIKADO, 683; *Trochus niloticus*, RAO, 788; *Trochus niloticus* in Andaman Waters, RAO & RAJA, 789; *Galba truncatula*, *palustris*, figs., REICHMUTH, 792; RENNIE, 796; *Acila*, SCHENCK, 858; SEMENKOWITSCH, 884; SWINNERTON, 953; *Littorina*, WRIGHT, 1067; YEN, 1072; *Tridacna*, YONGE, 1077.

Technique.—D. ATKINS, 54; Ultra-centrifuging, BEAMS, GATENBY & MULIYIL, 80; HOWELLS, 429; Rearing and collecting *Corbicula*, KURODA & FUJITA, 522; NAVEZ, 662; Length of Life, determination of, by means of concentric rings, NEWCOMBE, 668; ROTARIDES, 821.

Economics.—*Ostrea*, BRUCE, 150; Marine boring animals, CALMAN & CRAWFORD, 165; Bilharzia, CAWSTON, 168; Ostreiculture, CHAUX-SHEVENIN, 175; *Sinovacula constricta* culture, as food, CHEN & KAO, 181; The purification of shellfish, DODGSON, 249; ERLANSON, 267; GENSON, 327; *Agriolimax* in European Russia, GRIVANOV, 362; Red Sea and Suez Canal, GRUVEL, 365; Ostreiculture, HERMAN, 409; Protection of Timber from borers, JOHNSON & WATSON, 458; *Mytilus* culture, LAMBERT, 533; Diseases caused by Parasites of Mollusca, LANE, 545; Oyster fishery at Mumbles, MATHESON, 603; Narcotizing as a means of preserving *Ostrea* for consumption, PRYTHERCH, 776; RANSON, 783; Oyster culture, SENÔ, 885-890; Ostreiculture in Chile, SOLMINIHAC, 921; STEUER, 946; THACKWAY, 973; Ostreiculture: nutritive value of *Ostrea*, TULLY, 1000; Timbers and resistance to marine borer attack, WATSON, 1042; Mussel poison in relation to its spawning habits, WHEDON, 1053; WRIGHT, 1066; *Littorina*, WRIGHT, 1067.

Miscellaneous. — Australian shells, ALLAN, 13-15; Tables, BABNOFF, 62; Pearls, BERRY, 94; Pearl mussels, France, BOYER, 136; Erosion, BRANDT, 138; Giant Cephalopod, figs., CADENAT, 164; Death rate and sinistrality, *Campeloma rufum*, CLEAVE, 185; Sex ratios and changes, COE, 202; Teeth formulae, A. M. DAVIES, 231; Shellfish and the public health, DODGSON, 249; Oxygen consumption of *Anodonta imbecilis*, EDDY & CUNNINGHAM, 258; Fluorescence, FONTAINE & RAFFY, 290; Survival in sea water of varying concentration of *Mytilus*, FOX, MARKS & AUSTIN, 298; Relative growth of bivalves, HAMAI, 381; Survival during grass fires, J. HENDERSON, 395; Weight of snails with reference to health and parasitism, HURST, 433; Adaptation in *Coreanoceras*, KOBAYASHI, 487; Metamorphosis, KORSCHOLT, 495; Species of the Dogger in Franken,

KÜHN, 513; Production of sound by Molluscs, LAMY, 544; Early occurrence, *C. nemoralis*, LLOYD JAMES, 569; Tristram types, PELLE, 711; Nudibranchs of Risso, PRUVOT-FOL, 773; Temperature, James Bay, RICHARDS, 802; Salinity, James Bay, RICHARDS, 802; Tides, James Bay, RICHARDS, 802; Faecal pellets, *Acila*, SCHENCK, 858; Metabolism and temperature, SPÄRCK, 926; Faunal notes, TOLMER, 983; Notes from The British Museum, TOMLIN, 990; Timbers and resistance to boring, WATSON, 1042; Mussel poison, WHEDON, 1053; Epistellie body of Octopods, YOUNG, 1080.

STRUCTURE.

General. — *Zachryia trinitaria*, *scabrosa* figs., BONILLA, 128; *Ambigua fuscolabiata*, DEGNER, 239; Aplysiidae, ENGEL, 260; *Notarchus*, ENGEL, 262; *Aplysia fasciata*, JULLIEN, 462; Moll. of Lake Baikal, KOZOV, 497; Silicoderms, LABBÉ, 525; *Paludina*, figs., LI, 559; Cephalopoda, MARMET, 598; *Belemnites*, MÜLLER-STOLL, 655; OCHNER, 681; Genitalia *Eremina*, *Le Chateliera*, PALLARY, 699; *Succinea* of South Africa, QUICK, 777; *Galba truncatula*, *G. palustris*, REICHMUTH, 792; *Helix pomatia*, figs., ROSÉN, 819; *Acila*, SCHENCK, 858; Characters of the Cypraeacea, SCHILDER, 861; *Melania* (*Radina*) *crenulata tirouri*, SESHAIYA, 893; *Gonidomus*, STEENBERG, 940; SWINNERTON, 953; SZABÓ, 956; Opisthobranchiata of Tsingtao, TCHANG-SI, 966; Genital organs, WAGNER, 1034.

Nervous System. — ARVANITAKA, FESING & KRUTA, 46; KORSCHULT, 495; Silicoderms, LABBÉ, 525; *Paludina*, figs., LI, 559; *Succinea* of South Africa, QUICK, 777; *Kalinga*, figs., RAO, 787; *Littorina*, RISBEC, 809; Characters Cypraeacea, SCHILDER, 861; *Gonidomus*, STEENBERG, 940; Opisthobranchiata of Tsingtao, figs., TCHANG-SI, 966; *Pleurophyllidiopsis amoyensis*, figs., TCHANG-SI, 967; Structure of nerve fibres, J. Z. YOUNG, 1079; Giant nerve fibre of Cephalopods, YOUNG, 1080.

Sense Organs. — KORSCHULT, 495; Silicoderms, LABBÉ, 525; *Paludina*, figs., LI, 559; *Kalinga*, RAO, 787;

Gonidomus, STEENBERG, 940; Opisthobranchiata of Tsingtao, figs., TCHANG-SI, 966; Lamellibranchiata, YONGE, 1076.

Muscular System. — BIALASZEWICZ & KUPFER, 100; *Notarchus*, ENGEL, 262; *Paludina*, figs., LI, 559; MARCEAU, 597; Morphology of Molluscan foot, PRUVOT-FOL, 775; Foot, *Kalinga*, fig., RAO, 787; *Gonidomus*, STEENBERG, 940; Opisthobranchiata of the shores of Tsingtao, figs., TCHANG-SI, 966.

Vascular System. — Heart of *Murex trunculus* and action, BRUNET & JULLIEN, 154; Heart of *Pecten jacobaeus*, BRUNET & JULLIEN, 155; Structure of heart of *Venus gallina*, BRUNET & JULLIEN, 156; Structure heart in various Pulmonates, BRUNET & JULLIEN, 157; *Ostrea lurida*, gigas, HOPKINS, 424; Pulsating blood vessels in Oyster, HOPKINS, 425; Heart structure, *Pecten*, JULLIEN & VAIREL-BLANC, 465; Silicoderms, LABBÉ, 525; Blood of opposite sexes of *Sepia officinalis* chemical contents, PORA, 762; Vascular System, figs., *Kalinga*, RAO, 787; *Gonidomus*, STEENBERG, 940.

Alimentary System, Radula, Jaws. — Radula, *Marstoniopsis steinii*, ALTENA, 17; Radula Prosobranchia, ANKEL, 25; Radula, *Nassa mutabilis*, ANKEL, 26; Radula in *Helcion* and *Littorina*, W. Z. ANKEL, 28; Feeding mechanisms of Lamellibranchs, D. ATKINS, 54; Radulae, *Cryptophthalmus smaragdinus*, *Tethys dactylomela*, *hirasei*, *Dolabrifera tahitensis*, *Notarchus stimpsoni*, *Dolabella scapula*, *Cyerce nigricans*, *Placobranchus ocellatus*, *Elysia viridis*, *E. yaeyamana*, *Hexabranchus marginatus*, *Gymnodoris okinawae*, *Nembrotha luteolineata*, *Trippa intesta*, *Geitodoris ohshimai*, *Discodoris yaeyamensis*, *Asteronotus cespitosus*, *Argus tabulatus*, *Argus cruentus*, *Argus esakii*, *Dendrodoris nigra*, *D. tuberculosa*, *D. elongata*, *Coryphella ornata*, BABA, 61; Radula *Katayama tangi*, *lii*, *fausti*, *cantoni*, BARTSCH, 76; Radula *Gonaxis*, *Marconia*, BEQUAERT & CLENCH, 85; *Architeuthis harveyi*, CADENAT, 164; Radula *Viviparus*, CLEAVE & RICHEY, 186; Radula Aplysiidae, figs., ENGEL, 260; Radula *Notarchus*, ENGEL, 262; Radula *Paraplysia geographica scripta*, figs., ENGEL, 264; Radula *Cryptozona*

bistrialis, figs., FRÖBEL, 310; Alimentary System, *Cryptozona bistrialis*, figs., FRÖBEL, 310; Radula *Goniobasis*, GOODRICH, 341; Radula *Goniobasis*, GOODRICH, 345; Radula, movement in Gastropods, GUNTER, 370; Radula *Cymbulia peronii*, HOWELLS, 429; Alimentary Canal, *Cymbulia peronii*, HOWELLS, 429; Radula Nudibranchs of Holland, figs., JUTTING & ENGEL, 467; Alimentary Canal, KORSCHULT, 495; Radula *Baicalia*, *Micromelania*, *Benedictia*, KOŽOV, 497; Radula Silicoderms, LABBÉ, 525; Alimentary System, Silicoderms, LABBÉ, 525; Radula *Plaxiphora mercatoris* sp. n., *Chiton marquesanus* Pils., figs., LELOUP, 555; Radula, *Paludina*, figs., LI, 559; Jaws *Euparypha pisana* and variation form of jaw *Euparypha pisana*, MAGNE, 539; Radula *Macrochlamys glauca*, figs., PEILE, 713; Radula *Microstrophia*, *Gulella*, *Nesopupa* spp. n., PEILE, 714; Radula *Vexilla*, *Arcularia*, PEILE, 715; Radula some *Succinea* of S. Africa figs., QUICK, 777; Alimentary system figs., *Kalinga*, RAO, 787; Radula, *Kalinga* fig., RAO, 787; Radulae, RISBEC, 809; Alimentary system *Littorina*, RISBEC, 809; Radula, variation of lateral teeth of *Theodoxia*, ROGER, 813; Alimentary Canal *Polypus vulgaris*, SAWANO, 845; Radula characters in Cypraeaacea, SCHILDER, 861; Radula *Gonidomus*, STEENBERG, 940; Alimentary canal Opisthobranchiata of Tsingtao figs., TCHANG-SI, 966; Radula *Ballacta ecarata*, *Philine kinglipini*, *Pleurobranchaea novaezealandiae*, *Dendronotus arborescens*, *Linguella babai*, figs., TCHANG-SI, 966; Radula *Pleurophyllidiopsis amoyensis*, fig., TCHANG-SI, 937.

Respiratory Organs.—Gills of *Nuculana*, *Monia*, *Siliqua*, *Pteria*, D. ATKINS, 54; *Anodonta implicate*, EDDY & CUNNINGHAM, 258; Silicoderms, LABBÉ 525; Respiration *Littorina*, NEWCOMBE, MILLER & CHAPPELL, 669; *Succinea* of S. Africa, QUICK, 777; *Kalinga*, RAO, 787; Characters of, in Cypraeaacea, SCHILDER, 861.

Reproductive Organs.—*Neritina reclinata* spermatophores, ANDREWS, 23; *Zachrysia trinitaria*, *scabrosa*, BONILLA, 128; Genital organs, CHAULAUX, 171; *Ostrea virginica*, *lurida*, figs., COE, 202; *Notarchus*, ENGEL, 262; *Cryptozona bistrialis* figs., FRÖ-

BEL, 310; *Urocyclus kirkii*, *Vaginula maura*, GERMAIN, 335; North Sea Trochidae, GERSCH, 336; Genital organs *Zachrysia rangelina*, figs., JAUME, 452; Genital organs *Choanomphalus macki*, figs., KOŽOV, 497; Silicoderms, LABBÉ, 525; Genital organs *Campelema rufum*, MATTOX, 604; Organs S. African *Succinea*, QUICK, 777; *Kalinga*, figs., RAO, 787; *Galba palustris*, figs., REICHMUTH, 792; *Littorina*, RISBEC, 809; *Theodoxia* figs., ROGER, 814; *Gonidomus*, STEENBERG, 940; Of Opisthobranchiata of Tsingtao, figs., TCHANG-SI, 966.

Excretory and Secretory Organs.—Salivary gland *Mytilus gallo-provincialis*, BERNER, 92; Secretory organs, *Cymbulia peronii*, HOWELLS, 429; Secretive organs (Renal) *Kalinga*, figs., RAO, 787; Excretory glands *Ostrea edulis*, TAKATSUKI, 958; Secretory glands *Haliotis japonica*, TARAS, 962; Organs of secretion Opisthobranchiata of Tsingtao, figs., TCHANG-SI, 966.

Luminous Organs.—Fluorescence, FONTAINE & RAFFY, 290.

External Anatomy.—Tegument, DOUVILLÉ, 251; Silicoderms, LABBÉ, 525; *Kalinga*, RAO, 787; *Gonidomus*, STEENBERG, 940.

Shell Structure.—Operculum, *Parmacella*, GERHARDT, 329; Operculum *Goniobasis*, GOODRICH, 341; Shell structure (general), KESSEL, 478; *Buccinum*, *Chenopus*, *Gibbula*, *Natica*, *Trochus*, figs., KESSEL, 480; KORSCHULT, 495; Shell and operculum *Paludina*, figs., LI, 559; *Acila*, SCHENCK, 558; *Littorina*, WRIGHT, 1067.

Nacreous Growths.—Pearl Miocene from *Panopea americana*, BERRY, 94.

PHYSIOLOGY.

Glandular Secretions and Pigments.—Secretion, ANKEL, 25; AREY, 39, 40; Pigmentation, ROTARIDES, 822; Secretion, SCATIZZI, 846; Secretion of hypobranchial gland of *Haliotis japonica*, TARAS, 962.

Vascular System.—Pulsation of blood vessels in *Ostrea*, HOPKINS, 424; Blood in *Ostrea*, HOPKINS, 425.

Respiration and Respiratory Organs.—Gills and breathings of certain

species of Lamellibranchs, D. ATKINS, 54; Respiration *Anodonta imbecilis*, EDDY & CUNNINGHAM, 258; Respiration *Littorina irrorata*, NEWCOMBE, MILLER & CHAPPELL, 669; Respiration of water by *Lymnaea*, SONEHARA, 922; Respiration, WRIGHT, 1067; Breathing *Tridacna*, YONGE, 1077.

Muscular systems.—Relative to swimming habits of Lamellibranchia, YONGE, 1076.

Alimentary System and Alimentation.—W. E. ANKEL, 28; Food *Mytilus edulis californianus*, AUSTIN & FOX, 56; Food freshwater Mollusks Britain, BOYCOTT, 131; Food of *Mytilus californianus*, D. L. FOX, 295; Food of *Mytilus californianus*, FOX & MARKS, 297; *Ostrea* seaweed spores as food of larvae, LEWIS, 558; Food *Euparypha pisana*, MAGNA, 589; Alimentation *Polypus vulgaris*, SAWANO, 845; Food of *Bielzia coerulans*, SMOLEŃSKA, 918; Food, WRIGHT, 1067.

Nervous System.—Prosobranchia, ANKEL, 25.

Reproductive Organs.—*Crepidula aculeata walshi*, ISHIKA, 445; Genital organs and Parasitism (Trematode) in *Turritella communis*, PÉREZ, 719.

Tegument.—DOUVILLÉ, 251; *Cryptozona bistrialis*, figs., FRÖBEL, 310; *Laminaria*, KOHLER, 492; KORSCHULT, 495; *Oncis semperi*, *Elophilus ajuthiae*, *Oncidium leopoldi*, figs., LABBÉ, 525; *Paludina*, figs., LI, 559; Characters in Cypraea, SCHILDER, 861; *Tridacna*, YONGE, 1077.

Effect of Temperature.—Minimum temperature of life functions 5° C. for certain bivalves, APHLIN, 36.

Chemical Reactions.—Effect of Homocyanin on embryo, RABAUD, 347; Action of Chemicals on heart of Oyster, JULLIEN, 461; Effects of Toxins on Cardiac rhythm in *Anomia*, NAVEZ, 662; Narcosis in *Ostrea*, PRYTHERCH, 776.

Chemical Constituents.—BERTHOUMEYROUX, 96; Mineral contents of mussels, BIALASZEWICZ & KUPPER, 100; Mollusca relative to Calcium contents, BOYCOTT & OLDHAM, 135; *Sepia officinalis*, CORI, 208; Glycogen content in Unionidae, ELLIS & CALVIN,

259; Aplysiopurpurine, FONTAINE & RAFFY, 290; Vitamin-C *Unio pictorum*, *Anodonta cygnea*, *Dreissensia polymorpha*, KOKAS, 493; In Cephalopods, LÖNNBERG, 572; *Helix pomatia*, MENTZER, KASWIN, CORTEGGINI & GAUTRELET, 613; Chemical differences in the blood of opposite sexes of *Sepia officinalis*, PORA, 762; Water content of foot of *Helix pomatia*, POSTMA, 763; CO₂ and auto-narcosis in *Ostrea*, PRYTHERCH, 776; *Sepia officinalis*, RANZI, 785; ROUX, 828; Chemical composition *Acila*, SCHENCK, 858; *Venus mercenaria*, STARKEY & HICKS, 939; *Tridacna*, YONGE, 1077.

Experimental.—Sorting mechanisms of Lamellibranchs, D. ATKINS, 54; Experiment on the Ultra-centrifuging of *Helix aspersa* spermatocytes, BEAMS, GATENBY & MULIYIL, 80; Experiments, BERTHOUMEYROUX, 96; *Lymnaea stagnalis*, CHATZILLO, 174; *Sepia officinalis* proteid contents, CORI, 208; On the Glycogen content of Unionidae during prolonged starvation, ELLIS & CALVIN, 259; Experiments on the boring animals of Cochín Harbour, ERLANSON, 267; On secretions, FONTAINE & RAFFY, 290; Feeding of *Mytilus californianus*, D. L. FOX, 296; Survival in variously concentrated sea waters of *Mytilus*, FOX, MARKS & AUSTIN, 298; FROMMING, 312; Electrical potentials across rectal wall of *Cristaria*, IIDA, 434; Duration of life of *Ostrea*, JULLIEN & RICHARD, 463; nerves of Cephalopods, KRUTA, 506; Action of Alkaloids on heart nerves of Cephalopods, KRUTA, 507; LÖNNBERG, 571; Cephalopods re carotenoid substances, LÖNNBERG, 572; *Helix pomatia* chemical contents, MENTZER, KASWIN, CORTEGGIANI & GAUTRELET, 613; Infection by *Schistosoma* of *Bulinus truncatus*, MILLS, MACHATTIE & CHADWICK, 626; Division of eggs of *Nassa* (*Ilyanassa*), MOMENT, 637; On the formation of antipolar lobe of *Ilyanassa*, MORGAN, 640; Cardiac rhythm in *Anomia simplex*, NAVEZ, 662; Rate of flow of water through *Ostrea*, NELSON, 663; Respiration in *Littorina irrorata*, NEWCOMBE, MILLER & CHAPPELL, 669; PIEH, 733; Shape and slope of rest curves of foot of *Helix pomatia* and water content, POSTMA, 763; Determination of CO₂ content and auto-narcosis in *Ostrea*, PRYTHERCH, 776; Chemical contents of *Sepia*

ficinalis embryo, RANZI, 785; *Helix pomatia*, figs., ROSEN, 819; Eolidians, ROUSSEAU, 827; On the H ion concentration of alimentary tracts and alimentation in *Polypus vulgaris*, SAWANO, 845; Respiration of *Lymnaea japonica*, SONEHARA, 922; Metabolism and temperature, SPÄRCK, 926; *Venus mercenaria*, STARKEY & HICKS, 939; Buffering power of serum of *Helix pomatia*, TERROUX, 971.

DEVELOPMENT.

Oogenesis and Ovum.—Oology *Marstoniopsis steinii*, ALTENA, 17; Oology *Veronicella*, ANDREWS, 24; ANKEL, 25; Teredinidae, CALMAN & CRAWFORD, 165; *Crepidula*, ISHIKA, 445; Nudibranchs of Holland, figs., JUTTING & ENGEL, 467; Oology, KORSCHOLT, 495; Eyes of Silicoderms, LABBÉ, 525; Some Prosobranchs from Plymouth, LEBOUR, 554; *Sepiella japonica*, LIN, 562; *Paphia philippinarum*, MIYASAKI, 633; *Nassa (Ilyanassa)*, MOMENT, 637; *Ilyanassa*, MORGAN, 640; Oology, PELSENER, 717; SCHALLÉ, 853; *Gonidomus pagoda*, STEENBERG, 940; *Pholas*, TCHAKHOTINE, 935; Opisthobranchiata of Tsingtao, figs., TCHANG-SI, 996; *Pleurophyllidiopsis amoyensis*, figs., TCHANG-SI, 937.

Spermatogenesis.—*Neritina reclinata*, ANDREWS, 23; Spermatophore *Cryptozoa bistrialis*, figs., FRÖBEL, 310; Spermatophore, *Sepiella japonica*, LIN, 562; *Carinaria lamarcki*, figs., TUZET, 1001.

Embryology.—Propagation of *Cardium edule* in Caspian Sea and effects of salinity, BIRSTEIN, 104; Development *Ampullaria*, HEINE, 389; LI, 580; Embryonic stages, *Sepiella japonica*, LIN, 562; *Aplysia limacina*, RIES & GERSCH, 808; Development, I. & M. SZABÓ, 955.

Larval Stages.—ANKEL, 25; KORSCHOLT, 495; Larval forms of Plymouth Prosobranchs, LEBOUR, 554; MIYASAKI, 631; Marine bivalves, figs., MIYASAKI, 632; *Paphia philippinarum*, MIYASAKI, 633; *Littorina*, RISBEC, 809; Arctic marine bottom mollusca, THORSON, 979; YONGE, 1076; *Mytilus crassitesta*, YOSHIDA, 1078.

Post Embryonic Stages.—Development, KORSCHOLT, 495; Development marine bivalves, figs., MIYASAKI, 632; *Paphia philippinarum*, MIYASAKI, 633; Marine bottom mollusca, THORSON, 979.

Shell.—*Polygyra texasiana*, CHEATUM, 178; Shell growth, *Crepidula*, ISHIKA, 445; KESSEL, 478; *Buccinum*, *Chenopus*, *Gibbula*, *Natica*, *Trochus*, figs., KESSEL, 480; Shell growth *Trochus niloticus*, RAO & RAJA, 789; Shell growth *Acila*, SCHENCK, 858; Arctic marine bottom mollusca, THORSON, 979.

Growth.—*Cardium edule* in Caspian Sea, BIRSTEIN, 105; *Ostrea*, SPÄRCK, 929; Growth, I. & M. SZABÓ, 955; WRIGHT, 1067.

Parthenogenesis.—BRUMPT, 152; *Arion empiricorum*, LAMS, 535.

ETHOLOGY.

General.—Mollusca of Cheboygan County Michigan, ARCHER, 38; Ecological notes on Belgian Congo mollusca, VAN DEN BERGHE, 91; The Iranian Plateau, BIGGS, 102; Freshwater Mollusca of Britain, BOYCOTT, 131; Shropshire Union Canal, BOYCOTT & OLDHAM, 135; Frémur estuary, CAZALET, 169; *Ambigua fuscolabiata*, DEGNER, 239; Studies on Baltic waters of Poland, DEMEL, 243; FLOWER & CASTER, 282; Palao, HIRO, 418; Mussel beds of Blyth, Budle Bay and Holy Island, HOBSON, STORROW, LEACH & WRIGHT, 419; *Ampullaria cuprina*, INNES, 438; *Crepidula aculeata*, walshi, ISHIKA, 445; JAECKEL, 450; Percy Sladen Expedition, Kenya, JENKIN, 455, 456; Lake Baikal, KOZOV, 497; Mollusca of the Kaiserstuhl, LAIS, 531; Florida, LYMAN, 578; MCGINTY, 581; *Melanoides libertinus*, MORI, 646; N. Asia and L. & F. W. Mollusca, MOZLEY, 653; *Mya arenaria*, C. L. NEWCOMBE, 666; *Mya arenaria* on the Atlantic coasts of N. America, C. L. NEWCOMBE, 667; OVTSCHNIKOV, 693; Beaufort, N. Carolina, PEARSE, 710; PELSENER, 716; Sanibel Island, Florida, PERRY, 720; James Bay, Hudson Bay, Canada, RICHARDS, 802; SCHMIDT, 862; *Alderia modesta*, SCHULZ, 878; *Vertigo moulinsiana*, SEIDLER, 881; *Bielzia coerulans*,

SMOLINSKA, 918; Bottom fauna in Iceland and Greenland waters, SPÄRCK, 927; Arctic, North, and Mediterranean Seas, SPÄRCK, 930; S. Africa, T. A. STEPHENSON, 945; *Hydrobia*, *Scrobicularia*, *Mytilus*, *Macoma*, THAMDRUP, 974; Arctic marine bottom mollusca, THORSON, 979; Mollusca of Barra Island, Outer Hebrides, WATERSTON, 1040; Timber boring Mollusca, C. J. J. WATSON, 1041; *Tridacna*, YONGE, 1077.

Movements and Locomotion.—Ciliary movement, D. ATKINS, 54; Locomotion *Buccinum*, BROEK, 146; Locomotion, COATES, 196; Movement in sunshine of *Archidoris britannica*, FISHER, 278; Radular movement in gastropods, GUNTER, 370; Muscular functions, MARCEAU, 597; Cardiac rhythm, NAVEZ, 662; Locomotory movements, PRECHT, 770; Locomotion *Acila*, SCHENCK, 858.

Enemies.—As food of *Mus decumanus*, HOFFMANN, 422; Food of Birds, VERLAINE, 1015; Tagliata, Torre Maina, Nirano, VERONESI, 1018; Boring of shells by mollusca, VERLAINE, 1016.

Feeding and Feeding Habits.—Feeding tracks, ANKEL, 25; Feeding habits *Nassa*, ANKEL, 26; Feeding and radula function in *Helcion* and *Littorina*, W. E. ANKEL, 28; Feeding *Mytilus edulis*, *californianus*, AUSTIN & FOX, 56; Food of *Mytilus*, BULEY, 158; Feeding *Mytilus californianus*, D. L. FOX, 296; Feeding, KORSCHKEIT, 495; *Ostrea* larvae, LEWIS, 558; Feeding and water flow through Oyster, NELSON, 663; Food of *Mya arenaria*, C. L. NEWCOMBE, 666; Feeding *Tridacna*, YONGE, 1077.

Breeding Habits.—Teredinidae, CALMAN & CRAWFORD, 165; Spawning habits *Teredo*, COE, 199; Breeding habits *Ostrea*, COE, 200; *Stagnicola palustris*, FRÖMMING, 311; GERHARDT, 330; Breeding habits of North Sea Trochidae, GERSCH, 336; Breeding *Corbicula sandai*, KURODA & FUJITA, 522; Fertilization *Sepiella japonica*, LIN, 562; Reproduction of *Campeloma rufum*, MATTOX, 604; Breeding habits, MIYASAKI, 631; Spawning *Ostrea edulis*, ORTON, 692; Breeding habits, PRECHT, 769; Genetics *Galba truncatula*, *G. palustris*, REICHMUTH, 792; Breeding habits of *Bielzia coerulans*

[relative to Mollusca], SMOLÉNSKA, 918; Breeding habits Opisthobranchiata of Tsingtao, figs., TCHANG-SI, 966; *Pleurophyllidiopsis amoyensis*, figs., TCHANG-SI, 967; Spawning habits, WHEDON, 1053; Breeding habits, WRIGHT, 1067.

Sex, Sex Proportion and Sex Change.—Sexual differentiation *Ostrea gigas*, tables, AMEMIYA, 20; H. H. BLOOMER, 117; COE, 199, 200; Sexual phases in *Crepidula*, figs., COE, 201; Sex in *Valvata japonica*, figs., FURROW, 321; Sex changes *Lacuna pallidula*, GALLIEN & LARAMBERGUE, 323; Sex changes in *Teredo navalis*, GRAVE & SMITH, 351.

Boring and Burrowing Habits.—Boring shells, ANKEL, 25; Digging into sand *Natica*, ANKEL, 25; Boring habits Teredinidae, CALMAN & CRAWFORD, 165; Boring habits, ERLANSON, 267; Boring, MOLL, 635; Boring habits, PHILIPP & WEHRLI, 731; C. J. J. WATSON, 1041; WATSON, 1042; *Tridacna*, YONGE, 1077.

Special Habits.—*Veronicella*, ANDREWS, 24; *H. pomatia*, BOYCOTT, 134; Breathing habits *Ostrea angulata*, ORTON, 693; Patellidae, STEPHENSON, 945; Swimming habit in Lamellibranchs, YONGE, 1076.

Mode of Attachment.—*Tridacna*, YONGE, 1077.

Habitat.—Habitat of Pelagic Cephalopoda of the Atlantic, maps, BOUXIN & LEGENDRE, 122; Freshwater mollusca in Britain, BOYCOTT, 131; *Mytilus californianus*, D. L. FOX, 295; *Helminthoglypta cayamensis* groups, GREGG, 354; Type locality *Helisoma ammon*, HENDERSON, 394; *Cypraea moneta* W. Africa? LAMY, 539; Freshwater Mollusca, P[EARSELL], 708; *Trochus niloticus*, RAO, 788; *Acila*, SCHENCK, 858; *Dreissensia* on other Mollusks and Crustacea, WAGNER, 1033.

Association of Species.—Commensalism—Cephalopoda, CUENOT, 219; Coefficients of Association, MOZLEY, 652; Associated species on Sanibel Island, Florida, PERRY, 720; Associated species of land and freshwater Mollusks on Barra Island, WATERSTON, 1040.

Acclimatisation, Migration Dispersal and Distribution.—Distribution *Succinea* carried by bird, ANON, 32; Distribution of fossil pearls, BERRY, 94; Geographical distribution *Vertigo moulinsiana*, C. R. BOETTGER, 120; Dispersal Freshwater Molluscs in Britain, BOYCOTT, 131; Geographical distribution of *Dreissena polymorpha* in Russia, DECKSBACH, 238; Distribution *Melania* and *Neritina* Solomon Islands, EYERDAM, 269; Distribution of *Patella intermedia* in English Channel, FISCHER PIETTE, 275; Distribution *Pomacea*, HARPER, 384; Distribution Japanese Moll., HATAI, 385; Distribution Mollusca in Lake Baikal, KOZOV, 497; Geographic distribution of Silico-derms, LABBÉ, 525; Dispersal of Mollusca, LAMY, 536; Distribution of *Teredo*, MOLL, 633; Distribution Pond snails in Canada, MOZLEY, 652; Distribution *Kalinga*, RAO, 787; ROBSON, 811; *Acila*, SCHENCK, 858; Of snails in ponds on the Eastbourne Downs, SHRUBSOLE, 902; Land and freshwater shells in Soochow area, YEN, 1071.

Environmental Effects.—BOYCOTT, 131; Effect of environment on sex, *Ostrea*, COE, 230; Effects of environment on Sexual phases of *Crepidula*, COE, 231; Effects of environment on shell growth *Crepidula aculeata*, *walshi*, on sex, ISHIKA, 445.

Effect of Temperature.—APHLIN, 36; BOYCOTT, 131; On Cardiac rhythm in *Anomia*, NAVEZ, 662; *Mya arenaria*, C. L. NEWCOMBE, 666; PRECHT, 770; ROTARIDES, 822; *Lymnaea japonica*, SONEHARA, 922; WEIGMANN, 1043; WRIGHT, 1067.

Effect of Desiccation and Resistance.—Shell corrosion, BRUMPT, 152; Resistance to desiccation, WRIGHT, 1067.

Effect of Light.—On *Mytilus perna*, ROCHE & SILVA, 812; *Archidoris britannica*, N. FISHER, 278.

Effects of Salinity.—Max. and min. salt concentration 1,020–1,035 for certain bivalves to remain active, APHLIN, 36; Salinity effect on Cardium in Caspian Sea, BIRSTEIN, 105; C. J. J. WATSON, 1041; Variation of salt content of water on *Littorina*, WRIGHT, 1067.

Diseases of Mollusca and Causes of Death.—Mortality Freshwater Molluscs Britain, BOYCOTT, 131; Cause of death *Sinovacula constricta*, CHEN & KAO, 181; Death rate and sinistrality *Campeloma rufum*, CLEAVE, 185; Extinction of Mollusca at Beleva, Bulgaria, PETRBOK, 724; Diseases *Gryphaea angulata*, RANSON, 783; Causes of Death, SZABÓ, 957; Cause of death (Frost), TOMLIN, 986.

Effect of Acidity.—Freshwater mollusks, BOYCOTT, 131.

Autotomy and Regeneration.—ANKEL, 25; Shell repair *Polygyra texasiana*, CHEATUM, 178.

Rate of Growth.—*Veronicella*, ANDREWS, 24; *Cardium edule*, BUNTING, ESILICK, JONES & ORTON, 159; Rate of boring and growth *Bankia gouldii*, CALMAN & CRAWFORD, 165; Rate of growth *Trochus niloticus*, RAO & RAJA, 789; *Sinovacula constricta*, CHEN & KAO, 181; Boring Mollusca in Cochin Harbour, ERLANSON, 267; In Bivalves, HAMAI, 381; *Mya arenaria* in G. of St. Lawrence and Bay of Fundy, C. L. NEWCOMBE, 666; Variation in growth indices, C. L. NEWCOMBE, 667; Experiments on *Mytilus edulis*, WARREN, 1038; *Littorina*, WRIGHT, 1067.

Duration of Life and Vitality.—Survival of *Mytilus* in variously concentrated seawater, FOX, MARKS & AUSTIN, 298; Resistance to alcohol and formalin by *Ampullaria*, NETTING, 664; Duration of life *Trochus niloticus* (10 years +), RAO, 788; Duration of life *Lymnaea japonica* under water, SONEHARA, 922; Length of Life, WRIGHT, 1067.

Parasitism, Commensalism and Parasites.—Parasitism, ANKEL, 25; *Schistosoma japonica* in *Katayama tangi* sp. n. China, BARTSCH, 76; *Planorbis*, *Lymnaea* by *Schistosoma*, BRUMPT, 152; *Helix aspersa* and *Brachylaemus*, CHALAUX, 170; Commensalism, Cephalopoda, CUÉNOT, 219; Alga in *Clausilia*, GEITLER, 326; *Lymnaea* and *Physa* weight with reference to health, HURST, 433; *Musculium partumeium*, KRULL, 504; LANE, 545; *Bulinus*, *Planorbis*, LANE, 546; *Schistosoma haematobium* in *Bulinus truncatus* in Iraq, MILLS,

MACHATTIE & CHADWICK, 626; Parasitology, NEVEU-LEMAIRE, 665; *Tapes decussatus* and *Eugymnanthea*, PALOMBI, 701; *Turritella communis*, PÉREZ, 719; Parasite spp. on *Atrina* at Sanibel Island, PERRY, 720; *Kalinga*, RAO, 787; Infection of *Peringia ulvae* by larval Trematodes, ROTHSCHILD, 825; Parasitology, M. ROTHSCHILD, 826; *Achatina fulica* attacked by *Aphiochaeta xanthina*, SMEDLEY, 911; *Acroloxus lacustris*, VOLZ & FRÖMMING, 1027.

Geological Aspect.—British land and freshwater Mollusca, BOYCOTT, 131.

Nacreous Growths.—Concretions (pearls), RAO, 786; Secretions Pearls, fossil, ZITCH, 1088.

Effects of Water.—Effect of still and running water, BOYCOTT, 131.

Effect of Calcium Variation.—BOYCOTT, 131; Calcium carbonate assimilation of mollusks, ROUX, 828.

Colonization.—Land shells, BOYCOTT, 133.

Effect of Vegetation.—British land and freshwater shells, BOYCOTT, 131.

Effect of Altitude.—British land and freshwater shells, BOYCOTT, 131.

Production of Sound.—LAMY, 544.

VARIATION.

General.—*Venericardia planicosta*, CHAVAN, 176; *Unio*, CZOGLER & ROTARIDES, 220; *Littorina saxatilis* on Baita Island, FORREST, 292; Size, FOSTER, 294; *Theodoxus fluviatilis*, FRÖMMING, 313; *Galba truncatula, palustris* figs., REICHMUTH, 792; In lateral teeth of *Theodoxia*, ROGER, 813; In bone of *Sepia officinalis*, SOUCHÉ, 923; *Euhadra decorata*, TOBA & KURODA, 980; *Cochlicella acuta*, TOLMER, 983; WANDEL, 1037.

Teratology, Phylogeny and Relationship.—*Cassia cornuta*, BAYER, 79; Reversal *Campeloma rufum* 1.03 per cent. sinistral, Illinois, CLEAVE, 185; COEN, 203; Estland Moll., KRAUSP., 499; Abnormalities, figs., MORT, 650; *Limnaea stagnalis*, ROTARIDES, 823; Transposed hinge teeth of North

American Unionidae, SCHALIE, 849; Cypraeidae, SCHILDER, 860.

Evolution.—DECHASEAUX, 234; Of *Rudistes*, DOUVILLÉ, 250; FENTZER, 273; JORDAN, 459; In Stereoplasmoderatidae, KOBAYASHI, 488; Phylogenetic, PELSENER, 717; Pelecypoda, SCHENCK, 853; Cypraeacea, SCHILDER, 861; SHIMEK, 895; Evolution of swimming habit in Lamellibranchia, YONGE, 1076.

Variation in Form.—*Petricola pholidiformis*, ALTENA, 19; Of teeth—Radulae of spp. of *Viviparus*, CLEAVE & RICHEY, 186; Jurassic Pectinidae France, DECHASEAUX, 234; *Ambigua fuscolabiata*, DEGNER, 239; Ammonoidea "a group incertae sedis of the phylum Mollusca," FOSSA-MANCINI, 293; Mollusca of Lake Baikal, KOZEV, 497; Shell of *Ostrea angulata*, ORTON, 693; *Galba truncatula, palustris*, figs., REICHMUTH, 792; *Acila*, SCHENCK, 858; Form and size characters in Cypraeacea, SCHILDER, 861; *Inoceramus labiatus* Schloth., SEITZ, 883.

Sculpture and Ornament.—A. M. DAVIES, 231; *Ambigua fuscolabiata*, DEGNER, 239; Striate ornamentation in Pleuroceridae, GOODRICH, 344; Pleuroceridae, GOODRICH, 344; Spiral in Pleuroceridae, GOODRICH, 344; Ornamentation *H. nemoralis*, McCONNELL, 579; Ornament, Colour Characters in Cypraeacea, SCHILDER, 861; Ornament *Holcodiscus*, TZANKOV, 1062.

Colour.—*Ambigua fuscolabiata*, DEGNER, 239; Albinism, HENRARD, 399; 400; Coloration of Silicoderms, LABBÉ, 525; *H. nemoralis* Virginia, McCONNELL, 579.

Sexual Variation.—*Anodonta anatina*, H. H. BLOOMER, 117; *Teredo*, COE, 199; *Ostrea*, COE, 220; COE, 201; Sex ratios and changes, COE, 222; Sex ratios in *Teredo navalis*, GRAVE & SMITH, 351; Sex changes in *Crepidula aculeata, walshi*, JSHIKI, 446; Sexual phases in *Venus mercenaria*, LOOSANOFF, 573.

DISTRIBUTION.

(a) GEOGRAPHICAL.

(a) MARINE.

Arctic Ocean.—Iceland and Greenland waters, bottom fauna, SPÄRCK,

927; SPÄRCK, 930; Marine bottom mollusca, THORSON, 979.

Baltic.—*Alderia*, FELIKSIAS, 271.

Caribbean Sea.—Cuba, AGUAYO & JAUME, 7; Sanibel Island Lee County Florida associated species, PERRY, 720.

North Atlantic Ocean.—W. African *Crepidula*, ADAM & LELOUP, 5; Germany, ANKEL, 27; Belgium Molluscan notes, ANON, 29; Irish Sea oyster investigations, BRUCE, 150; Isle of Man, BRUCE, 151; Gulf of Gascony *Architeuthis harveyi*, CADENAT, 164; Yorkshire Cephalopoda, CLARKE, 184; Netherlands Nudibranchiata, ENGEL, 285; English Channel distribution of *Patella intermedia*, FISCHER-PIETTE, 275; North Wales, N. FISHER, 277; Ireland, *Facelina elegans*, N. FISHER, 279; Mersey side records of J. W. Whitehead, FISHER & JACKSON, 280; North Sea Cephalopods, HERTLING, 413; North Sea, JUTTING, 466; Netherlands Opisthobranchia, JUTTING & ENGEL, 467; Maryland, *Lucina*, McLEAN, 585; Glamorgan, Oyster fishery at Mumbles, MATHESON, 603; France, MAURY, 607; Germany *Chitonoteuthis*, MÜLLER STOLL, 655; *Mya arenaria*, C. L. NEWCOMBE, 666; *Mya arenaria* variations in growth indices, C. L. NEWCOMBE, 667; Blackwater, ORTON, 692; Fal Estuary, ORTON, 692; Denmark *Crepidula*, SPÄRCK, 928; North Sea, SPÄRCK, 930; Georges Bank Atlantic Cretaceous, L. W. STEPHENSON, 943; Luc-sur-Mer *Doris coccinea*, TOLMER, 982; Sussex *Cardium*, ABRA, TOMLIN, 934; South Wales Oyster Beds, WRIGHT, 1066.

South Atlantic Ocean.—S. Africa, T. A. STEPHENSON, 945.

Mediterranean.—Palestine Pteropods, AVNIMELECH, 58; Sardegna *Cyprina islandica*, BLANC, 109; ENGEL, 262; SPÄRCK, 930; Alexandria, STEUER, 946.

Black Sea.—Roumania and *Teredo*, CANTUNIARI, 166.

Red Sea.—GRUVEL, 365.

Indian Ocean.—ENGEL, 262; Cochín Harbour Boring Mollusca, ERLANSON, 267; Indian Amphineura, LELOUP,

556; PEILE, 715; Andaman Sea, RAO, 786; S. India and Ceylon Mollusca, WINCKWORTH, 1058.

Caspian Sea.—*Cardium edule* and effect of varying salinity on propagation, BIRSTEN, 105.

Pacific Ocean.—Australian marine shells, figs., ALLAN, 13-15; Japan Fauna of Akkeshi Bay, BABA, 60; Ryûkû (Okinawa) Islands Opisthobranchia, BABA, 61; Australia Collecting in Keppel Bay, BERNHARD, 93; California *Dimya* sp. n., S. S. BERRY, 95; W. Australia, CLENCH & McLEAN, 194; China, FULTON, 320; Australia, IREDALE, 443; Queensland Terebinidae, IREDALE, 444; Japan *Crepidula aculeata*, walshi sex changes, ISHIKA, 445; China Peitaho, *Dentalium* sp. n., KING & PING, 482; Hong Kong, KING & PING, 483; Northern Japan Buccinidae of, KURODA, 521; Marquesas Islands Chitons, LELOUP, 555; PEILE, 715; Chile Ostreiculture, SOLMINIHAC, 921; G. California Mexico Phos, STRONG & LOWE, 949; Acapulco Mexico Phos, STRONG & LOWE, 949; Taboga Is., Panama Phos, STRONG & LOWE, 949; China Sea Opisthobranchs, figs., TCHANG-SI, 966; Brisbane Terebinidae, C. J. J. WATSON, 1041; Great Barrier Reef, Tridacnidae life, feeding and ecology, YONGE, 1077; Panama Pholadidae, a new genus, ZETEK & McLEAN, 1085.

Southern Ocean.—Australia marine shells of, figs., ALLAN 13-15; Australia Loricates synonyms, ASHBY, 47; South Australia, Western Australia *Cheilea*, COTTON, 210; S. Australia Turritellidae, COTTON & WOODS, 212; Australia, IREDALE, 443.

(8) LAND AND FRESHWATER AND FOSSIL.

Greenland.—Kimmeridgian and Portlandian fossils of C. Leslie Milne Land, SPATH, 933.

Scandinavia. — Öland, Cambrian, WESTERGÅRD, 1049.

Denmark.—Pleistocene, TEICHERT, 968.

Great Britain and Ireland and British Isles.—Dorset Corallian, ARKELL, 43;

Oxford Oxfordian and horizons of Sowerby's and Buckman's types, ARKELL, 44; Brecon, Surrey *Anodonta*, H. H. BLOOMER, 117; Orkney *Neritina fluviatilis*, BOYCOTT, 132; Shropshire Union Canal, Mollusca of, BOYCOTT & OLDHAM, 135; Folkestone Albian fossils, CASEY, 167; Lancashire Carboniferous, CHALMERS, 172; Dorsetshire, Green Ammonite Beds, L. R. COX, 216; Sheppey, list of fossils, A. G. DAVIS, 232; Barra Island Outer Hebrides Marine Mollusca, FORREST, 292; Northumberland survey of the mussel beds at Blyth, Budle Bay and Holy Island, HOBSON, STORROW, LEACH & WRIGHT, 419; Windermere profundal and sublittoral fauna, HUMPHRIES, 431; Dorsetshire Lias, LANG, 547; Plymouth, LEBOUR, 554; Ulster, MACDONALD, 580; Yorkshire mollusca, MOREHOUSE, 639; Lancashire, MOORE, 641; Lincolnshire records, MUSHAM, 657; Hawes [PEARSALL & GRIST], 709; Orkney *Simnia patula*, RENDALL, 794; Yorkshire fossils, RICHARDSON, 807; Eastbourne Downs *Limnaea peregra*, SHRUBSOLE, 901; Eastbourne Downs, ponds, molluscan fauna of, SHRUBSOLE, 902; Beachy Head and *Hydrobia jenkinsi*, SHRUBSOLE, 903; Ruabon Marl, SIMPSON, 907; Northamptonshire Records, A. H. SMITH, 914; Pocklington Canal, nr. York, Mollusca of, SOWDEN, 924; Dorsetshire Ammonites of the Green Ammonite beds, SPATH, 935; Sussex Records, TOMLIN, 984; Barra Island Outer Hebrides Land and Freshwater Mollusca, WATERSTON, 1040; Scotland Freshwater fossil Lamellibranchs of the Coal Measures, WEIR & LEITCH, 1045; Bognor Regis—*Enigmonia*, WRIGLEY, 1068.

Holland.—Naardemeer Lists Gastropoda, ALTENA, 18; Netherlands *H. lapicida*, HENRAED & KOUMANS, 405.

Belgium.—*Arion intermedius*, ADAM, 3; *Helicella virgata*, ADAM, 4; Namur synclinal, ASSELBERGHS, 51; Jurassic, DECHASEAUX, 236; Carboniferous, DEMANET, 242; ENTZ, 266; Oligocene, GILLET & THÉOBALD, 338; Wemmels Belgium, GLIBERT, 340; Longlier Belgium, MAILLIEUX, 590; Devonian, MAILLIEUX, 591.

France.—New species of *Orbignya* from the Santonian, ANTOINNE, 35; Corallian *Lithodomus*, 82; Normandy Bathonian, BIGOT, 103; Cretaceous,

BLONDET, 115; Lower Cretaceous (Hauterivian) of Néron Chartreuse, BREISTROFFER, 140; BREISTROFFER, 142; Chartreuse Lower Cretaceous, BREISTROFFER, 145; CAZALET, 169; Trias Miocene, Oligocene, Cretaceous, Carboniferous, CORROY & DENIZOT, 209; Jurassic, DECHASEAUX, 234; Oxfordian, DECHASEAUX, 235; Hérault Dinantian, DELÉPINE, 240; Carboniferous, DELÉPINE, 241; Cretaceous, DREFFUSS, 253; Tertiary, FENAUX, 272; Ammonites of the *Peltoceras athleta* zone, GÉRARD & CONTAUT, 328; Mollusca of Angers and Chinon, GERMAIN, 333; Oligocene, GILLET & THEOBALD, 338; Bajocien (Jurassic), MARZLOFF CHAVANNE & MORET, 662; Normandy *Trochulus elegans*, MERCIER, 614; Lévisen fossils of the Nummulite sands, L. & S. MORELLET, 643; Havre Albian and *Exogyra latissima*, NICOLASCO & STIEGELMANN, 672; Devonian, PENAEU, 718; Vigny Montian *Velates*, PINARD, 754; Port de la Pallice, POIRION, 761; Lias, ROQUEFORT, 818; Lorraine, TÉTRY, 972; Mesozoic, VERNIORY, 1017; Paulhiac Tertiary, WENZ, 1046.

Germany.—Dogger, ALTHOFF, 21; S.W. Germany Fossils of the Dogger Oligocene, BESSLER, 97; Westfalia Cretaceous, BEYENBURG, 99; *Vertigo moulinsiana*, C. R. BOETTGER, 120; Dresden Lists of species, BÜTTNER, 163; Lias *Onychoceras*, FENTZER, 273; Potsdam, diluvial *Viviparus*, FRANZ, 300; Launsdorf Lists, GUGENBERGER, 366; Launsdorf Eocene, GUGENBERGER, 367; Eisen, KESSEL, 479; West Thuringia, KLETT, 485; KRUMBECK, 505; S. Germany (Franken) Lias, KÜHN, 512; Franken Dogger, KÜHN, 513; Kaiserstuhl Mollusca lists, LAIS, 531; Reutlingen, Germany, MÜLLER-STOLL, 655; Hultschin, Carboniferous, PATTEISKY, 707; Frankfurt fauna, ROHRBACH, 815; Frankfurt *Viviparus*, ROHRBACH, 816; Oberweser, SAUER-MILCH-HOLZMINDEN, 843; Lower Devonian, SCHINDEWOLF, 864; Rhenish Provinces, Devonian, SPRIESTERBACH, 938; Thuringia alluvial mollusca, WÜCHTLER, 1029; Rhineland Worms northward, WEILER, 1044.

Portugal.—Pliocene mollusca, L. R. COX, 214.

Spain.—Devonian, COMTE, 204; Devonian, COMTE, 206; Asturia fauna,

HAAS, 375; *Helicella* sp. n., HAAS, 378; Malaya, HERMÁNDEZ-PACHECO, 410; Fossils, MAROS, 648; Rioja Jurassic, OLAGÜE, 685; Trias, SCHMIDT, 863.

Italy.—BLANC, 107; *Ambigua furcolabiata*, DEGNER, 239; Permian, GRECO, 353; PARODI, 703; Miocene, PARONA, 704; Miocene, PARONA, 705; Central Appennines, Lias, RAMACCIONI, 782; Neogene, VENZO, 1014.

Czechoslovakia.—Bohemia Palaeozoic Planorbidae, BABOR, 63; Bohemia Pleistocene and *Corbicula fluminalis*, PETRBOK, 728, 729.

Yugoslavia.—Lists., KARAMAN, 471; Rudists of the Cretaceous, MILOVANOVIĆ, 628; Rudistes, MILOVANOVIĆ, 629; Belgrade Pleistocene, PETRBOK, 725; Belgrade, ZAZVORKA & SOUKUP, 1083, 1084.

Austria.—L. & F. Moll., HILDEBRANDT, 445; Walsertales Kleiner, SCHWIND, 880; Miocene Cancellariidae, SIEBER, 904.

Hungary.—*Unio tumidus*, CZÓGLER & ROTARIDES, 220; Oligocene, GÁBOR, 322; Trias, KUTASSY, 524; Trias, MEZNERICS, 616; Tertiary, NOSZKY, 679; Pleistocene, ROTARIDES, 824; THIRING, 976; Lower Pontian Miocene, VITALIS, 1019; Slugs, WAGNER, 1031; *Vallonia*, J. WAGNER, 1032.

Poland.—Miocene and †*Cerithium lignitarum*, FRIEDBERG, 305; Triocene Lamellibranchiata, FRIEDBERG, 306; Cretaceous, KONGEIL, 494; Miocene, KRACH, 498; List of fossils from Siwak, MATWIEJEWÓWNA, 606; Poland Lias and Jurassic, SIEMIRADZKI, 906.

Greece.—Rhodes Quaternary Mollusca, figs., ALBERICI & TAMINI, 11.

Bulgaria.—DIMITROW, 248; Holocene, PETRBOK, 723; PETRBOK, 724; Trias, STEFANOFF, 941; Rasgrad *Holcodiscus* spp. n., TZANDOV, 1002; Molluscan Notes and Lists, VALKANOV, 1010, 1011.

Rumania.—*Helix pomatia elsaie* Kob., GROSSU, 363; *Theodoxus prevostianus*, GROSSU, 364; *Daudebardia*, IONESCU, 439, 440.

European Russia.—*Dreissena polymorpha*, DECKSBACH, 238; Distribu-

tion of *Agriolimnaea*, GRIVANOV, 362; LICHAREW, 561; Neocomian, LUPPOR, 575; Novaya Zemlya Upper Devonian, NALIVKINA, 658; Silurian and Devonian, NALIVKINA, 659; S. Ural Devonian, NALIVKINA, 630; Crimea Cretaceous. SEMENKOWITSCH, 884; Lake Dikoye, TAUSON, 963.

Estland.—List and abnormalities, KRAUSP, 499; Molluscan fauna, KRAUSP, 501.

Europe.—Alps Dogger, BLANCHET, 112; Western Europe Carboniferous, BISAT, 106; Devonian, DAHMER, 222; Trias, FRANK, 299; Miocene *Turritella*, FRIEDBERG, 304; Lias, KUHN, 511; Jurassic Cretaceous, MAZENOT, 610; Montenegro Trias Cephalopods, PETKOVIĆ & MILHALOVIĆ, 772; Pištany postpleistocene (Holocene), PETRBOK, 726, 727; Basse-Alpes, SCHNEEGANS, 871; Dogger, SINDOWSKI, 909; STEUSLOFF, 947; Lias, TRAUTH, 995; Trias, TRAUTH, 997; Dalmatia, slugs of, WAGNER, 1031; Croatia, slugs of, WAGNER, 1031; Jurassic Europe, WETZEL, 1051; Lower Miocene, WBYL, 1052.

Mediterranean Islands.—Sicily Domerian, FUCINI, 317; Sicily Permian, GREGORIO, 355; Monte San Giuliano Lias, GREGORIO, 356; Palermo Trias, GREGORIO, 357; Sicily *Helicella*, HAAS, 378; Cyprus *Helicella* subsp. n., HAAS, 378; Alicante, Valencia and Balearic Is., HEINZ, 390.

Asia.—Asia Minor new *Clausilia*, BIGGS, 101; Transcaucasia, BOGHACHEV, 124; Asia Minor *Helicella* spp. et subsp. n., HAAS, 378; Altai, Devonian, HALFEEN, 379; Lake Baikal, KOZOR, 497; Iraq notes on mollusca, MILLS, MACHATTIE & CHADWICK, 626; Central Asia, Cretaceous, F. K. MORRIS, 649; N. Asia Freshwater and Land Mollusca, MOZLEY, 653; Permian and Carboniferous Nautiloids, SHIMIZU & OBATA, 897; Ferghana Turkestan, Eocene fossils, VJALOV & SOLUN, 1020.

Arabia.—Eocene, PIERAGNOLI, 735.

Palestine.—Cretaceous, ASTRE, 52; Cretaceous, AVNIMELECH, 57; *Helicella* subsp. n., HAAS, 378; Palestine, Cretaceous, Eocene, Oligocene, Pliocene, PICARD & SOLOMONICA, 732.

Persia.—Iran collecting, BIGGS, 102;
S. Persia fossils, L. R. COX, 213.

India.—Mayurbhanj State India
Lower Miocene, figs., F. E. EAMES, 255;
N. Daghestan, EBERSIN, 256; Indian
Land and Freshwater, PRASHAD, 767;
Karachi Miocene, SCHILDER, 859.

Indo-China.—Fossils, SAURIN, 844.

Asiatic Russia.—Kamchatka west
coast Tertiary, ILYINA, 436; Kolyma-
Indigerka Land Trias, KIPARISOVA,
484; Upper Palaeozoic, KRUGLOV,
502; Mejdusharsky Island Permian,
MILORADOVICH, 627; Kuzbass, RAGO-
ZIN, 780; Lawrence Bay, Tehukotka
Peninsula, figs., SLODKIEWITSCH, 910;
Kharaulakh Mountain Range, Siberia
Mesozoic, VORONETZ, 1028.

China.—*Sinovacula constricta*, CHEN
& KAO, 181; Tatung gastropods, PING,
755; SHIMIZU & OBATA, 898; S.W.
China Palaeozoic, WIRTH, 1060; West
China Prov. of Szechuan Trias, WIRTH,
1061; Eastern Szechuan China Quater-
nary mollusca, YEN, 1070; Soochow
land and freshwater molluscas, distri-
bution, YEN, 1071; Pei-Hai and Wei
Chow Islands, YEN, 1072; China
Upper Palaeozoic, YIN, 1074.

Manchuria.—Ordovician, KOBAYASHI, 488; SHIMIZU & OBATA, 898;
Ordovician species, new Nautiloids,
SHIMIZU & OBATA, 899; Ordovician,
SHIMIZU & OBATA, 900; Ozarkian,
ULRICH & FOERSTE, 1008.

Korea.—Neogene, KANEHARA, 469;
Ordovician, KOBAYASHI, 488; Meisen
Miocene, MAKIYAMA, 592; Ordovician,
SHIMIZU & OBATA, 900.

Japan.—Sex conditions in *Valvata japonica*, FURROW, 321; Conchological history, KANAMARU, 470; Ordovician, KOBAYASHI, 488; Jurassic (Naktong-Wakino Series), KOBAYASHI & SUSUKI, 489; *Euhadra* subsp. n., KURODA, 517; Hokkaidô, KURODA, 518; Japan spp. n., KURODA, 520; *Euhadra*, KURODA & NOBUZANE, 523; Cretaceous, MATUMOTO, 605; MORI, 646; *Sphaerium*, MORI, 647; Neogene *Arca* from Honsyû, NOMURA & HATAI, 674; Tugaru Oligocene, NOMURA & HATAI, 675; OTUKA, 696; Formosa Land shells of Taiwan, TAKETANI, 959; notes on shells, TAKI, 961; *Euhadra*,

TOBA & KURODA, 980; Karafto Is. Pliocene, YOKOYAMA, 1075.

Malaysia.—Papua, CLENCH, 191; Trobriand Island, New Guinea, *Papuina* sp. n., CLENCH & ARCHER, 193; Soerabaja, MARTIN, 599; Buton, K. MARTIN, 600; Borneo Miocene, SCHILDER, 859; Dutch E. Indies Miocene Cancellariidae, SIEBER, 904; East Indian Archipelago Jurassic mollusca (Misol, E. Celebes, Buton, Seran, Jamdena), WANDEL, 1037.

Australia.—South and Western Australian Plantagenet beds (Miocene), CHAPMAN & CRESPIN, 173; Western Australia fossil, CONDIT, RAGGATT & RUDD, 207; Viviparidae, COTTON, 211; Pliocene fossils, HOWCHIN, 427; W. Australia, Permian Ammonites, A. K. MILLER, 619; Western Australia Upper Palaeozoic fossils, PRENDERGAST, 772; Cambrian *Salterella*, SPATH, 932.

New Zealand.—Devonian, R. S. ALLAN, 16; Miocene and Pliocene, LAWS, 552; Paryphantidae, POWELL, 764.

Pacific Islands.—Philippines New subspecies of *Obba*, BARTSCH, 75; Tres Reyes Islands Philippines, CLENCH, 190; British Solomon Islands distribution of *Melania* and *Neritina* in, EYERDAM, 269; Etorof Island Kurile chain, KURODA, 518; Ryûkyû Islands Tertiary Lists and new species, NOMURA & ZINBÔ, 676; Java Neogene, OOSTINGH, 688; Java Pliocene, OOSTINGH, 689; Celebes, OOSTINGH, 690; Java Miocene, OOSTINGH, 691; Solomon Islands, Mollusca of, I. & B. RENSCH, 797.

North Africa.—Morocco, ARAMBOURG, 37; Tripolitania Cretaceous, CHECCHIA-RISPOLI, 170; Tripolitania Upper Cretaceous, CHECCHIA-RISPOLI, 180; DARTEVELLE, 224; DARTEVELLE-PUISSANT, 227; Lybia, DESIO, 245; Algeria, GAUTIER, 325; Tibesti, GERMAIN, 334; Suez, GRUVEL, 365; Algeria, Aquitanian, JODOT, 457; Algeria Jurassic, LAFFITTE, 529; Nile Valley fossils, LITTLE, 567; Egypt Mollusca of the Faiyûm, LITTLE, 567; Morocco Jurassic, MARCAIS & LECKWJCK, 596; Sahara Western, MENCHKOFF & MONOD, 612; Tunis, Barbary, mollusca of, and new species from, PALLARY, 699; S. Libyan Desert,

Deposits of Land and Freshwater Mollusca, SANDFORD, 841; Tripolitania Cretaceous, SERRA, 892; Tunis, SOLIGNAC, 919; Cirenaiica Miocene, TAVANI, 964.

East Africa.—Moll. of Province of Kivu new species, GERMAIN, 331; Africa E. Equatorial *Achatina* sp. n., GERMAIN, 332; Mozambique Mollusca, GERMAIN, 335; Portuguese E. Africa Upper Cretaceous Lamellibranchs, RENNIE, 796.

Central Africa.—Congo, BEQUAERT & CLENCH, 83; BEQUAERT & CLENCH, 84; Congo Land and Freshwater mollusca, BEQUAERT & CLENCH, 86; Congo, BEQUAERT & CLENCH, 89; Congo, BEQUAERT & CLENCH, 90; Cretaceous Congo, DARTVELLE, 225; Congo Eocene, DARTEVELLE, 226; Congo Mollusca, DARTEVELLE-PUISANT, 228; Senegal Cretaceous and Eocene, JACQUET, 448; Senegal Eocene, JACQUET, 449.

South Africa.—Spp. n., BEQUAERT & CLENCH, 87; HAUGHTON, 387; N. Zululand Lower Cretaceous, RENNIE, 795.

Mauritius.—PEILE, 714.

West Indies.—Cuba, *Pachychilus* sp. n., AGUAYO, 8; Physidae, CLENCH, 187; Bahamas *Cerion* sp. n., CLENCH, 188; Cuba Pleistocene *Mecoliotia*, CLENCH & AGUAYO, 192; Cuba *Megalomastoma* sp. n., GUITART, 369; Haiti *Cepolis* sp. n., PILSBRY, 740; Cuba, conchological expedition lists, *Pomacea* sp. n., RICHARDS, 806; Cuba Cretaceous Rudists, RUTTEN, 833; Cuba new *Urocoptis*, SPENCE, 937; Cuba Southern Santa Clara Rudistids of the Cretaceous of, THIADENS, 975; Cuba, *Aptychus*, TRAUTH, 996; Jamaica *Sagda*, *Poteria*, spp. n., VANATTA, 1012.

Canada.—*Helisoma corpulentum* and its relatives, F. C. BAKER, 64; Southampton Island, Hudson Bay Mollusca, BROOKS, 147; Canada, FAESSLER & LAVERDIERE, 270; Quebec Upper Ordovician, FOERSTE, 283; Eastern Canada Gaspé Peninsula Cephalopods, FOERSTE, 285; Hudson Bay, Silurian Cephalopods, FOERSTE, 286; Akpatok Island, Ungava Bay, N.W.T. Ordovi-

cian, FOERSTE & COX, 288; Hudson Bay drainage and *Lasmigona compressa* (Lea), LA ROCQUE, 549; Quebec shells of Blue-Sea Lake, LA ROCQUE, 550; Quebec and Ottawa *Arion circumscriptus*, LA ROCQUE, 551; British Columbia Permian Cephalopods, MILLER & CROCKFORD, 622; Alberta Devonian, MILLER & WARREN, 625; Canada pondsnails and their distribution, MOZLEY, 652; Canada Post-Pleistocene fossils of the Eastern Arctic regions [Lists], NICHOLS, 671; James Bay Hudson Bay, RICHARDS, 802; James Bay, Canada, Recent and Pleistocene L. & F.-W. Mollusca collected at, RICHARDS, 804; Alberta Canada Ozarkian, ULRICH & FOERSTE, 1008.

United States.—New vars. of *Lymnaeidae*, F. C. BAKER, 68; *Viviparus* variation in Radulae of spp., CLEAVE & RICHEY, 186; Cephalopods of Middle Devonian, Cherry Valley, FLOWER, 281; *Polygyra* variation size, FOSTER, 294; *Physa*, J. HENDERSON, 392; PESSON, 721; Pleistocene, RICHARDS, 801; Pleistocene, RICHARDS, 803; Tertiary Pectinidae, H. I. ROWLAND [= H. I. TUCKER], 829; N. American Unionidae hinge teeth abnormalities, SCHALIE, 849; Tertiary Pectinidae, TUCKER, 999; Ozarkian and Canadian, ULRICH & FOERSTE, 1008.

United States, N.E.—Cheboygan County, Michigan, ARCHER, 38; Illinois Pleistocene, F. C. BAKER, 65; (Pa.) *Anodonta implicata* expmts., EDDY & CUNNINGHAM, 258; Pennsylvania (N.W.) paleontology, FLOWER & CASTER, 282; Iowa Cephalopods of the Maquoketa Shale, FOERSTE, 284; Albany U.S.A. Geology and Faunal Lists, GOLDRING, 346; Iowa Devonian, MILLER, 620; Maine *Pomatia aspersa*, NORTON, 678; Illinois, POWERS, 765; S.W. Michigan Unionidae of the St. Joseph R. drainage, SCHALIE, 847; South Michigan Carpenters Lake *Lampsilis*, SCHALIE, 848; New York Devonian, Silurian, B. SMITH, 915; Pennsylvania Devonian Chemung group, WILLARD, 1055.

United States, S. E.—Alabama Eocene spp. n., ALDRICH, 12; Virginia, Carychiidae, S. T. BROOKS, 149; Alabama Eocene *Venericardia*, CHAVAN, 177; Fort Davis Texas *Hydrobia palomasensis* Pils., CHEATUM, 179; Coosa River, Alabama, *Goniobasis*,

GOODRICH, 341; Texas, *Bulinulus*, J. HENDERSON, 393; Florida *Helix axia*, LUCEA, J. HENDERSON, 396; Florida *Liguus*, MCGINTY, 582; Florida, *Panope*, McLEAN, 586; N. & S. Carolina Miocene *Eucrassatella*, MACNEIL, 588; Miocene, Pliocene and Pleistocene Pectinidae, MANSFIELD, 593; N. Carolina, MANSFIELD, 594; Florida Miocene *Crassatellites eoneensis* sp. n., MANSFIELD, 595; Mississippi *Goniolites* Carboniferous, MILLER, 617; Beaufort, N. Carolina, PEARSE, 710; Texas and New Mexico, PILSBRY, 738; Florida *Polygyra* subsp. n., PILSBRY, 741; Texas *Somarella*, PILSBRY, 742; Florida, PILSBRY, 748; Florida *Orystyla*, PILSBRY & GRIMSHAW, 751; Texas Fossil Molluscan Lists Palo Pinto Co., PLUMMER & HORNBERGER, 759; Texas Cretaceous, RENZ, 798; Carolina Pleistocene, H. G. RICHARDS, 805; Florida Tertiary, M. SMITH, 916; Florida and Bahamas marine deposits, THORP, 977; Virginia, VANATTA, 1013.

United States, W.—Utah Mollusca, BROOKS, 148; Wyoming Jurassic, CRICKMAY, 218; California Eocene, HANNA, 383; Utah, Montana, Idaho, Wyoming, HENDERSON, 397; Oregon and Washington Mollusca, HENDERSON, 398; Columbia Cretaceous, JAWORKI, 453; Kansas *Artinskia* sp. n., MILLER, 618; Wyoming Carboniferous, MILLER & THOMAS, 624; Nevada Triassic and Jurassic, MULLER & FERUGLIO, 654; Kansas and Oklahoma Carboniferous Cephalopods, NEWELL, 670; Oregon *Polygyra* var. n., PILSBRY & HENDERSON, 752; California, VOKES, 1024; California Miocene, WOODRING, 1063; California Miocene fossils Palor Verdes Hills, WOODRING, BRAMLETTER & KLEINPELL, 1065.

Mexico. — Yucatan mollusca lists, BEQUAERT & CLENCH, 88; Jurassic and Cretaceous formations of Coahuila Peninsula, KELUM, 477; Oaxaco, Mexico Pleistocene fossils, PALMER & HERTLEIN, 700; Mexico *Euglandina* spp. n., PILSBRY & VANATTA, 753; Cretaceous, RENZ, 798.

Central America.—Tertiary, RUTSCH, 831, 832.

Colombia.—Cordilleras, Cretaceous, BASSE, 77; Cretaceous Cephalopods,

ARLTJEFFER, 143; Bogota Cretaceous, KEHRER, 476.

Chili.—Concepcion lists, SCHNEIDER, 872; SCHNEIDER, 874.

Brazil.—New species, HAAS, 377; List fossils, REGO, 790.

Patagonia.—Cretaceous and Tertiary, FERUGLIO, 274.

Argentina. — Jurassic - Cretaceous, MAZENOT, 610.

(b) STRATIGRAPHICAL.

Quaternary.—Mollusca of Rhodes, ALBERICI & TAMINI, 11; U.S.S.R., BONDARCHUK, 127; Russia, MIRČINK, 630; Post-Pleistocene fossils of the Arctic regions of Canada, NICHOLS, 671; Holocene Bulgaria, PETRBOK, 723; Bohemia, PETRBOK, 728, 729; China, YEN, 1070.

Pleistocene.—Illinois, F. C. BAKER, 35; Pearls, BERRY, 94; BLANC, 108; Cuba, CLENCH & AGUAYO, 192; Extinct mollusca from Lake Edward, Uganda, FUCHS, 316; France, GLANGEAUD, 339; Pectinidae of the South-Eastern United States, MANSFIELD, 593; Ryūkyū Islands, NOMURA & ZINBŌ, 676; Marine mollusca from Oaxaco, Mexico, PALMER & HERTLEIN, 700; Belgrade, PETRBOK, 725; Bohemia with *Corbicula fluminalis*, PETRBOK, 728, 729; Mollusca associated with early man and climatic conditions, RICHARDS, 801; Postglacial James Bay, Canada, RICHARDS, 802; Land and freshwater fossils, RICHARDS, 802; U.S.A. S. Atlantic coastal, RICHARDS, 803; Mollusca of James Bay, Canada, RICHARDS, 804; Carolina, H. G. RICHARDS, 805; Hungary, ROTARIDES, 824; Lawrance Bay, Tchukotka Peninsula, figs., SLODKIEWITSCH, 910; Bohemia, SMETANA, 912, 913; Denmark, TEUCHERT, 938; Fossils of Karafto, YOKOYAMA, 1075; Lettland, ZĀNS & DREIMANIS, 1081.

Tertiary.—S. Persia, L. R. COX, 213; Tertiary Mollusca, A. M. DAVIES, 231; Evolution of Pecten, FENAUX, 272; Patagonia, FERUGLIO, 274; Marine Moll. of Japan, HATAI, 385; Kamchatka, ILYINA, 436; Ryūkyū Islands, NOMURA & ZINBŌ, 676; List Tertiary fossils from Ryūkyū Islands, NOMURA

& ZINBÔ, 676; (Cattien) Hungary, NOSZKY, 679; Celebes, OOSTINGH, 690; Frankfurt, ROHRBACH, 815; Pectinidae U.S.A., H. I. ROWLAND [= H. I. TUCKER], 829; Tertiary Central America, RUTSCH, 831; Central America, RUTSCH, 832; Florida, M. SMITH, 913, 917; Hungary, THIRING, 976; Pectinidae of U.S.A. Atlantic and Gulf Coast, TUCKER, 999; Neogene Italy, VENZO, 1014; Paulhiac France, WENZ, 1046; U.S.A. (re Conrad's work), WHEELER, 1054; London Clay *Enigmonia* Bognor Regis, WRIGLEY, 1068; Karafto, YOKOYAMA, 1075.

Pliocene.—Pearl, BERRY, 94; S. Persia, L. R. COX, 213; Mina nr. S. Pedro de Moel, Portugal, L. R. COX, 214; Upper Pliocene, N. Daghestan, EBERSIN, 256; Pontian N. Daghestan, EBERSIN, 256; Upper Pliocene, Adelaidean Australia, HOWCHIN, 427; Neogene Korea, KANEHARA, 469; New Zealand, LAWS, 552; Egypt, LITTLE, 567; Pectinidae of the South-Eastern United States, MANSFIELD, 593; N. Carolina, MANSFIELD, 594; Neogene Honeyû, Japan, NOMURA & HATAI, 674; Ryûkyû Islands, NOMURA & ZINBÔ, 676; ØDUM, 682; Neogene Java, OOSTINGH, 688; Java, OOSTINGH, 689; Anzio, SERRA, 891; Neogene Hungary, SULC, 952; VERONESI, 1018; Molluscan fauna Dutch East Indies, VLERK, 1022; Karafto, YOKOYAMA, 1075; Pearls, ZILCH, 1088.

Miocene.—Chitons Europe, ASHBY & COTTON, 49; Pearl, BERRY, 94; Plantagenet beds of Western and South Australia, CHAPMAN & CRESPIE, 173; France, CORROY & DENIZOT, 209; S. Persia, L. R. COX, 213; Lower Miocene *Ostrea gajensis* India, figs., F. E. EAMES, 255; Trans-Caucasus, EBERZIN, 257; Europe, *Turritella*, FRIEDBERG, 304; Poland *Terebralia bidentata* Deffr. (Grat.), FRIEDBERG, 305; Lamelli-branchiata of Poland, FRIEDBERG, 306; Kamchatka, ILYINA, 436; Neogene, Korea, KANCHARA, 469; Poland, KRACH, 498; New Zealand, LAWS, 552, 553; *Eucrassatella* sp. n., MACNEIL, 588; Korea, MAKIYAMA, 592; Pectinidae of the South-Eastern United States, MANSFIELD, 593; *Crassatellites* Florida, MANSFIELD, 595; Tortonian Montegibbio, MONTANARO, 638; Neogene Honsyû, Japan, NOMURA & HATAI, 674; Ryûkyû

Islands, NOMURA & ZINBÔ, 676; Pontian Lucano, OLJIC, 686; Neogene Java, OOSTINGH, 688; Java, OOSTINGH, 691; Italy, PARONA, 704; Helvétian of Bandignan, PEYROT, 730; Species of *Acila*, SCHENCK, 858; Borneo, Karachi, SCHILDER, 859; Cancellariidae of Lower Austria, SIEBER, 904; Cancellariidae Dutch East Indies, SIEBER, 904, 905; Neogene Hungary, SULC, 952; Cirenica, TAVANI, 964; Miocene Donets basin, USENKO, 1009; Neogene Italy, VENZO, 1014; Fossils list, VERONESI, 1018; (Lower Pontian) Hungary, VITALIS, 1019; Lower Miocene Europe, WEYL, 1052; California, WOODRING, 1063; *Cepaea*, ZÁZVORKA, 1082; Russia, ZHIZHENKO, 1086; Kostig (Banat), ZILCH, 1087; Pearls, ZILCH, 1088.

Oligocene.—BERHMANN, 81; Pearl, BERRY, 94; Dogger, S.W. Germany, BESSLER, 97; France, CORROY & DENIZOT, 209; S. Persia, L. R. COX, 213; Hungary, GÁBOR, 322; France and Belgium (Haut-Rhin), GILLET & THEÓBALD, 338; Aquitanian Algeria, JADOT, 457; Buton, K. MARTIN, 600; Tugatu N.-E. Japan, NOMURA & HATAI, 675; Species of *Acila*, SCHENCK, 858; Rhineland, WEILER, 1044; Pearls, ZILCH, 1088.

Eocene.—Alabama spp. n., ALDRICH, 12; Chitons Europe, ASHBY & COTTON, 49; Pearl, BERRY, 94; Alabama *Venericardia*, CHAVAN, 177; Western N. America, CLARK & VOKES, 183; S. Persia, L. R. COX, 213; Congo, DARTEVELLE, 226; Lybia, DESIO, 245; Belgium, GLIBERT, 340; Launsdorf, GUGENBERGER, 366, 367; Senegal, JACQUET, 448, 449; LITTLE, 567; Arabia, PIERAGNOLI, 735; Species of *Acila*, SCHENCK, 858; Ferghana Turkestan, VJALOV & SOLUN, 1020; U.S.A., VOKES, 1025; Pearls, ZILCH, 1088.

Mesozoic.—Japan E. Africa, DIE-TRICH, 247; Faucigny, Savoy, VERNIORY, 1017; Kharaulakh Mts. Siberia Carnian layers, VORONETZ, 1028.

Cretaceous.—Santonian and *Orbignya* sp. n. France, ANTONINE, 35; Marocco, ARAMBOURG, 37; Palestine, ASTRE, 52; Pyrenees, ASTRE, 53; Pleuroto-*maria*, ASTRE, 53; Palestine, AVNIME-LECH, 57; Turonien Palestine, AVNIME-LECH, 57; Cordilleras, BASSE, 77;

Pearl, BERRY, 94; Westfalia, BEYENBURG, 99; Hauterivian, BLONDET, 115; Vraconian S.-E. France, BREISTROFFER, 139; Lower Cretaceous (Hauterivienne), BREISTROFFER, 140; Chartreuse, BREISTROFFER, 141; Cephalopods of Colombia, BREISTROFFER, 43; Chartreuse, BREISTROFFER, 144; Hauterivian [Lower Cretaceous] Chartreuse, BREISTROFFER, 145; Folkestone Sands (Albian), CASEY, 167; Tripolitania, CHECCHIA-RISPOLI, 170; Upper Cretaceous Tripolitania, CHECCHIA-RISPOLI, 180; France, CORROY & DENIZOT, 209; S. Persia, L. R. COX, 213; Congo, DARTEVELLE, 225; Namurian Belgium, DEMANET, 242; Westphalian Belgium, DEMANET, 242; *Rudistes*, DOUVILLÉ, 250; Franck *Belemnosepia*, DREFFUSS, 253; Patagonia, FERUGLIO, 274; Domerian Sicily, FUCINI, 317; Upper Cretaceous fossils, HEINZ, 391; Malaga, HERMANDEZ-PACHECO, 410; HOUDARD, 426; Cenomanian, HOUDARD, 426; Senegal, JACQUET, 448; Columbia new species *Turritella*, JAWORSKI, 453; S. E. Bogota, KEHRER, 476; Mexico, KELLUM, 477; Lower Cretaceous Japan, KOBAYASHI & SUSUKI, 489; Fossils from Lablin, Poland, KONGIEL, 494; Marmarotrapeza, KRÉMAS, 508; Ile of Chio, 509; Neocomian Algeria, LAFFITTE, 530; Danienmontian sylvanien, LÉONOV, 557; Neocomian Russia, LUPPUS, 575; Japan on *Parapachydiscus*, MATUMOTO, 605; Poland, MATWIEJEWÓWNA, 606; Europe and Argentina, MAZENOT, 610; Serbia, MILOVANOVIĆ, 628; N. spp. of Rudists of the Santonian, Campanian and Maestrician of Serbia, MILOVANOVIĆ, 629; Vraconian and *Durania*, fig., MORET, 644; Vraconian Fauge near Grenoble, MORET, 644; Vraconian Grenoble, MORET, 645; Central Asia, F. K. MORRIS, 649; NAVAS, 661; Senonian Palestine, PICARD & SOLOMONICA, 732; Montian Vigny and *Velates*, PINARD, 754; Lower Cretaceous Northern Zululand, RENNIE, 795; Upper Cretaceous—Portuguese E. Africa, RENNIE, 796; Mexico, Texas, RENZ, 798; Rudists of Cuba, RUTTEN, 833; Kalaw (Identification correction), SAHNI, 824; Species of *Acila*, SCHENCK, 858; Crimea, SEMENKOWITSCH, 884; Maestritian Tripolitania, SEREA, 892; Upper Cretaceous fossils from Georges Bank Atlantic Ocean, L. W. STEPHENSON, 943; Britain, SWINNERTON, 953; Cuba,

Rudistids, THIADENS, 975; Lower Cretaceous *Aptychus*, TRAUTH, 993; Pectinidae, TUCKER, 999; Bohemia, ZAZVORKA & SOUKUP, 1083, 1084; Pearls, ZILCH, 1088.

Jurassic.—Callovian, ABRARD, 1; Corallian England, ARKELL, 41; Corallian Ardennes France, BENOIT, 82; Pearls, BERRY, 94; Bathonian Normandy, BIGOT, 103; Louviers, BIGOT & FORTIN, 104; Bathonian Europe, BLANCHET, 111; Dogger Alps, BLANCHET, 112; Upper Volgian in West Siberia, BODYLEVSKIJ, 118; S. Persia, L. R. COX, 213; Wyoming, CRICKMAY, 218; Oxfordian France, DECHASEAUX, 235; Belgium, DECHASEAUX, 236; *Rudistes*, DOUVILLÉ, 250; Maquoketa shale, Iowa, FOERSTE, 284; Lower Oxford, France, GÉRARD & CONTAUT, 328; S. Giuliano, GREGORIO, 359; Malaga, HERMANDEZ-PACHECO, 410; Kimmeridgian, HOUDARD, 426; Mexico, KELLUM, 477; Upper Jurassic Naktong-Wakino Series Japan, KOBAYASHI & SUSUKI, 489; Dogger Franken, KÜHN, 513; Berriasian Algeria, LAFFITTE, 529; Callovian, LANQUIRE, 548; Morocco, MARCAIS & LECKWILCK, 596; Middle Jurassic New Zealand, MARWICK, 601; Bajocian France, MARZLOFF, CHAVANNE & MORET, 602; Europe and Argentina, MAZENOT, 610; West Central Nevada, MULLER & FERGUSON, 654; Yorkshire, RICHARDSON, 807; Poland, SIEMIRADZKI, 906; Dogger, SINDOWSKI, 909; Upper Jurassic—Portlandian, SPATH, 933; Upper Jurassic—Kimmeridgian, SPATH, 933; Bajocian Ammonites and Belemnites of E. Persia, TRAUTH, 993; Upper Jurassic *Aptychus*, TRAUTH, 993; Cephalopods from Northern Bulgaria, TZANKOV & BONÓEV, 1003; East Indian Archipelago, WANDEL, 1037; Europe, WETZEL, 1051; Pearls, ZILCH, 1088.

Lias and Rhaetic.—N.-E. of Charleville, BESTEL, 98; Green Ammonite Beds, Dorsetshire, L. R. COX, 216; Germany, FENTZER, 273; FRENTZEN, 302; S. Giuliano, GREGORIO, 356; Ammonites, HOFFMAN, 421; Europe, KÜHN, 511; S. Germany, Franken, KÜHN, 512; Belemnites, MÜLLER-STOLL, 655; Italy, RAMACCIONI, 782; France, ROQUEFORT, 818; SCHNEEGANS, 871; Poland, SIEMIRADZKI, 906;

Green Ammonite beds of Dorsetshire, SPATH, 935; Europe, TRAUTH, 995; TRAUTH, 997.

Triassic.—BEHRMANN, 81; France, CORROY & DENIZOT, 209; Palermo, GREGORIO, 357; GREGORIO, 358; Kolyma-Indigerka Land, KIPARISOVA, 484; Budapest, KUTASSY, 524; Hungary, KUTASSY, 524; Upper Triassic New Zealand, MARWICK, 601; Hungary, MEZNERICS, 616; W. Central Nevada, MULLER & FERGUSON, 654; Montenegro, PETKOVIĆ & MIHAILOVIĆ, 722; Spain, SCHMIDT, 863; Bulgaria, STEFANOFF, 941; *Aptychus*, TRAUTH, 997; West China, WIRTH, 1061.

Palaeozoic.—Europe, BABOR, 63; Bulgaria, DIMITROW, 248; Upper Palaeozoic Russia, KRUGLOV, 502; Upper Palaeozoic New Zealand, MARWICK, 601; Upper Palaeozoic Western Australia, PRENDERGAST, 772; Canada, AULRICH & FOERSTE, 1008; S.W. China, WIRTH, 1060; Upper Palaeozoic China, YIN, 1074.

Permian.—W. Australia, CONDIT, RAGGATT & RUDD, 207; Upper Permian Africa, L. R. COX, 215; Italy, GRECO, 353; Sicily, GREGORIO, 355; Lower Permian Kansas *Artinskia* sp. n., A. K. MILLER, 618; Western Australia, A. K. MILLER, 619; British Columbia, MILLER & CROCKFORD, 622; Mejdusharsky Island Nova Zembla, MILORADOVICH, 627; Nautiloids Asia, SHIMIZU & OBATA, 897; N.S.W., VOISEY, 1023; China, YIN, 1074.

Carboniferous.—Western Europe, BISAT, 106; Lancashire, CHALMERS, 172; W. Australia, CONDIT, RAGGATT & RUDD, 207; France, CORROY & DENIZOT, 209; Dinantian Pyrenees, DELÉPINE, 240; France, DELÉPINE, 241; Dog Head Limestone, FOERSTE & COX, 288; Ferghana, LICHAREW, 561; MENCHIKOFF & MONOD, 612; Mississippi, MILLER, 617; Wyoming, MILLER & THOMAS, 624; Kansas and Oklahoma, NEWELL, 670; Germany, PATTESKY, 707; Oolite, SALIN, 833; Nautiloids Asia, SHIMIZU & OBATA, 897; N.S.W., VOISEY, 1023; Freshwater Lamellibranchs of Scotland, WEIR & LEITCH, 1045; Nova Zemlya, YERMOLAEV, 1073.

Devonian.—Reefton beds, New Zealand, R. S. ALLAN, 16; ASSELBERGHS, 51; Spain, COMTE, 204; Spain, COMTE, 205; Spain, COMTE, 206; Europe,

DAHMER, 222; Middle Devonian, Chery Valley Limestone, FLOWER, 281; Upper Devonian, Pennsylvania, FLOWER & CASTER, 282; Helderbergian Albany, GOLDRING, 346; Altai, HALFEEN, 379; Belgium, MAILLIEUX, 591; MENCHIKOFF & MONOD, 612; Iowa, MILLER, 620; Alberta, MILLER & WARREN, 625; Upper Devonian, Nova Zemlya, NALIVKINA, 658; Nova Zemlya, NALIVKINA, 659; S. Ural, NALIVKINA, 660; France, PÉNEAU, 718; Lower Devonian Germany, SCHINDEWOLF, 864; New York, B. SMITH, 915; ("Koblenzquarzsits") Mollusca Rhine and Mosel, SOLLE, 920; Rhenish Provinces, SPRIESTERBACH, 938; Pennsylvania, WILLARD, 1055, 1056; Nova Zemlya, YERMOLAEV, 1073.

Silurian.—Fezzan, DESIO, 244; Hudson Bay, FOERSTE, 286; Manlius-GOLDRING, 346; Nova Zemlya, NALIVKIN, 659; New York State, B. SMITH, 915; Nova Zemlya, YERMOLAEV, 1073.

Ordovician.—Whitehead formation Upper Ordovician Quebec, FOERSTE, 283; Akpatok Island, FOERSTE & COX, 288; GOLDRING, 346; Japan, KOBAYASHI, 488; New genera and species from Manchuria, SHIMIZU & OBATA, 899.

Cambrian.—Middle Cambrian *Hartites* nom. n. for *Harttia* Walcott preoc., HOWELL & KNIGHT, 428; Korea, SAITO, 835; *Salterella* Australia, SPATH, 932; Öland, WESTERGÅRD, 1049.

III.—SYSTEMATIC INDEX.

N.B.—FULL REFERENCES ARE GIVEN ONLY IN THE CASE OF A NEW GENUS, SPECIES OR VARIETY. IN OTHER CASES THE NUMBER IN "Large bold Clarendon" REFERS TO THE LIST OF TITLES WHERE THE FULL REFERENCE WILL BE FOUND. IN THE CASE WHERE THE REFERENCE IS GIVEN IN THE SYSTEMATIC PART, THE VOLUME NUMBER IS PRINTED IN **Smaller Clarendon**.

Note.—The following arrangement is based on Pelseneer.

Amphineura.

Amphineura, Netherlands, JUTTING & ENGEL 467; Amphineura Placophora (Netherlands), JUTTING 467.

POLYPLACOPHORA.

†*Acanthochiton planus* sp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 p. 19 pl. ii f. 33.

Callistochiton broomensis p. 213 pl. xiii f. 3; *C. clenchi* p. 214 pl. xiii f. 1; *C. occiduus* p. 215 pl. xiii f. 4; spp. n. Broome, Western Australia, ASHBY & COTTON J. Roy. Soc. W. Aust. 20 1934.

†*Callochiton zigzag* Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 p. 12 pl. 1 f. 17-19.

Chiton marquesanus Pils. figs. rad., LELOUP 555.—†*Chiton juttneri* sp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 p. 26 pl. ii f. 46, 47, 49. *C. dangeardi* p. 719 pl. xxxix, f. 8; pl. xlii f. 3: *C. broilusi* p. 720 pl. xxxix f. 6, 7 Bathonian Normandy BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935.

†“*Chiton*” descriptions of fossil “Chitons” from Europe, ASHBY & COTTON 49.

†*Cryptoconchus* (*Notoplax*) *schafferi* sp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 p. 15 pl. 1 f. 22-24.

Ischnochiton (*Haploplax*) *broomensis* sp. n. Broome, Western Australia, ASHBY & COTTON J. Roy. Soc. W. Aust. 20 1934 p. 216 pl. xiii f. 2.—*I. winckworthi* sp. n. Dutch Bay, near Trincomali, LELOUP Proc. Malac. Soc. London 22 2 1936 p. 51 pl. 6 f. 1-4, 12 text figs. 5-9.

†*Ischnochiton rudollicensis* sp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 p. 23 pl. ii f. 41-43.

Ischiton subgen. n., sp. *Ischnochiton*, type *Ischiton bardwelli* sp. n. Broome, Western Australia, ASHBY & COTTON J. Roy. Soc. W. Aust. 20 1934 p. 217 pl. xiii f. 5.

†*Lepidopleurus* (*Lepidopleurus*) *šrameki* p. 5 pl. 1 f. 3; *L. boettgeri* p. 5 pl. 1 f. 1, 2; *L. (Parachiton) thielei* p. 7 pl. 1 f. 4, 5; spp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936.

Loricates of Australia, ASHBY 47.

†*Middendorffia boravičensis* sp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 p. 11 pl. 1 f. 16.

Plaxiphora (*Poneroplax*) *mercatoris* sp. n. Hiva Oa Marquesas Islands, LELOUP Bull. Mus. Hist. nat. Belg. 12 No. 6 1936 p. 1 f. 1-9.

†*Pseudoacanthochiton* subgen. n. of *Cryptoconchus* type *C. (P.) steingbrunnensis* sp. n. Neogene Hungary, ŠULC Ann. naturh. Mus. Wien 47 1936 pp. 16, 17 pl. 1 f. 25-28 text-fig. 1.

Tonicia ceylonica sp. n. Dutch Bay, Trincomali, LELOUP Proc. Malac. Soc. London 22 2 1936 p. 57 pl. 6 f. 13-18 text-fig. 19-21.

Gastropoda.

Gastropoda monograph on the Composition of Tertiary faunas, A. M. DAVIES 231.

STREPTONEURA.

ASPIDOBANCHIATA.

DOCUGLOSSA.

ACMAEIDAE, PATELLIDAE, LEPETIDAE.

†*Cellana jutsoni* sp. n. Miocene Albany Western Australia, CHAPMAN & CRISPIN J. Roy. Soc. W. Aust. 20 1934 p. 122 pl. xi f. 28.

†*Cheilea postera* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 109 pl. 16 f. 68, 70.

Cocculina sp. radula fig., RISBEC 809.

†*Harttia* Walcott (non Steindachner) renamed *Harttites* q.v., HOWELL & KNIGHT 428.

†*Harttites* nom. nov. for *Harttia* Walcott 1884 non Steindachner (Pisces) 1887 p. 5 plate *Harttia matthewi* Middle Cambrian, HOWELL & KNIGHT Bull. Wagner Free Inst. Philad. 11 2 1936.

Helcion pellucidum (rad. fig.), ANKEL 28.

†*Helcionella acuticosta pacifica* subsp. n. Cambrian N.-W. Korea, SAITO J. Fac. Sci. Univ. Tokyo Geol. 4 3 1936 p. 358 pl. iii f. 1-5.

†*Oelandia pauciplicata* gen. et sp. n. Palaeacmaeidae? (= *Helcionella pauciplicata* nom. nud. Westergård 1929) Cambrian Öland: Borgholm, WESTERGÅRD Sverig. geol. Undersokn. Årsb. c. 30 1 1936 p. 25 pl. viii f. 6, 7.

Patella vulgata, BALLI 73.—*P. intermedia* its distribution in the English Channel, FISCHER-PIETTE 275.—*P. vulgata*, *intermedia*, *depressa*, HALTON 380.—*P. amussitata* Hong Kong fig., KING & PING 483.—*P. granularis*, *oculus*, *compressa*, *longicosta*, *cochlear* habits, STEPHENSON 945.

Patellidae, YEN 1072.

†*Scenella dotho* Walcott, SAITO pl. iii f. 18, 19 835.

Siphonariidae, YEN 1072.

RHIPIDOGLOSSA.

PLEUROTOMARIIDAE, BELLERO-PHONTIDAE, HALIOTIDAE, FISSURELLIDAE.

†*Bellerophon (Phragmostoma) tholus* sp. n. Devonian Rhens, SOLLE Senckenbergiana 18 3-4 1936 p. 182 figs. 6, 6a-c.—*B. asiaticus* sp. n. Trias, West China, WIRTH N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 p. 441 text-fig. 14.

†*Conradella gracillima* Koken fig., THORSUND 978.

Diadora jaumei sp. n. Varadero, Cuba, AGUAYO & REHDER mem. Soc. cubana Hist. nat. 9 1936 p. 263 pl. 24 f. 6.

†*Emarginula paucicostata* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 101 pl. 15 f. 48.

†*Eocryptaulina* non. nov. for *Cryptaulus*. Foerste (preoc.) J. sci. Labs. Denison Univ. 20 95 (1923) = *Foersteria Tomlin* (preoc.) Proc. Malac. Soc. London 18 255 (1929) type *Pleurotomaria filitexta* Foerste, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 92.

Haliotis tuberculata, lamellosa, shell structure, KESSEL 478.—*H. ziczac* Hong Kong, KING & PING 483.—*H. japonica*, TARAS 962.

†*Pleurotomaria praepyrenaica* sp. n. Cretaceous French Pyrenees, ASTRE Bull. Soc. Hist. nat. Toulouse 67 2 1935 p. 159 pl. 1 f. 1-6.—*P. propetctaria* p. 15 pl. 1 f. 30; *P. grata* p. 15 pl. 1 f. 37; *P. propeprocera* p. 16 pl. 1 f. 36; *P. superlegans* p. 16 pl. 1 f. 24; spp. n. Lias Mt. S. Giuliano Palermo GREGORIO Ann. Géol. Paléont. Palermo 53 1930.—*P. neumarktensis* p. 275 pl. viii f. 11a, b; *grandioides* p. 275 pl. viii f. 10a, b; pl. xiii f. 7; *bergensis* p. 276 pl. viii f. 12a, b; spp. n. Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*P. studeri* Münstr. v. *heminuda* var. n. p. 128 pl. 9 f. 31; *torulosoides* sp. n. p. 129 pl. 10 f. 19a, b; spp. n. Dogger in Franken, KÜHN

Paläont. Z. Berlin 17 3-4 1935.—*P. cotteana* Orb. *angalba* Greg. figs., GREGORIO 359.

†*Propemurchisonia* gen. n. for *Propemurchisonia giulianensis* sp. n. Lias Mt. S. Giuliano Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 pl. 1 f. 29.

†*Ptychomphalus banzensis* Haber (n. sp.) Dogger in Franken, KÜHN Paläont. Z. Berlin 17 3-4 1935 pl. 9 f. 36 a-c.

†*Puncturella hirasei* nom. nov. for *P. gigantea* Hirase 1913 non Schepman 1908, OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.

†*Tugalia formosa* sp. n. Tertiary Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 p. 297 pl. ii f. 11 & 12a-b.

†*Worthenia infraornata* p. 1018 pl. xii f. 3-4; *W. gigas* p. 1019 pl. xii f. 1-2; spp. n. *W. inzini rotundocarinata* var. n. p. 1019 pl. xi f. 16-18 Dachsteinkalk Trias Hungary, KUTASSY Math. term. Ert. Budapest 54 1936.

TROCHIDAE, STOMATELLIDAE, TURBINIDAE, DELPHINULIDAE, CYCLOSTREMATIDAE, COCCULINIDAE.

†*Amberleya* type *A. noddia* Dogger (Gt. Oolite) England, DACQUÉ 221.

Architectonica relata sp. n. N.S.W. p. 326 pl. xxiii f. 19; *perspectiva fressa* subsp. n. Dundas p. 325 pl. xxiii f. 20, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

Arene venustula sp. n. La Chorrera, Cuba, AGUAYO & REHDER Mem. Soc. cubana Hist. nat. 9 1936 p. 264 pl. 24 f. 1-3.

†*Argalista promicans* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 105 pl. 16 f. 56, 58.

†*Antisolarium conominolium* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 102 pl. 15 f. 50.

Bellastraea sirius abnormal figs., MORT 650.

Benthastelene gen. n. type *B. katherina* sp. n. [Australia], IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 285 pl. xxi f. 12.

Calliostoma conuloide sexual biology and genital organs figs., GERSCH 336.—*C. zizyphinum* eggs and larvae pl. 1 f. 1-5, LEBOUR 554.

†*Cirsonella aedacula* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 104 pl. 15 f. 53, 54.

Clanculus howeinsulae sp. n. Lord Howe Island, SALISBURY Proc. Malac. Soc. London 22 3 1936 p. 125 pl. 13A f. 3-6.

†*Clanculus moelensis* sp. n. Pliocene Mina nr. S. Pedro de Moel, Portugal, L. R. Cox Pub. Mus. Min. e geol. Univ. Coimbra Mem. e Notic. 1936 9 p. 50 pl. i f. 1a-c.

Claraxis illustris gen. et sp. n. Mangonuidae N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 327 pl. xxiv f. 16.

Cyphonochelus generosus sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 325 pl. xxiv f. 13.

Daronia subdisjuncta radula figs. PEILE 715.

†*Diaphorostoma* Fischer 1887 is synonym of *Platyostoma* not preoc. non *Platystoma* KNIGHT 486.

†*Discohelix schlosseri* sp. n. Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 282 pl. xiii f. 2.

†*Elachorbis subedomita* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 103 pl. 15 f. 52, 55.

†*Eucyclus penninicus* sp. n. Lias, Poland, SIEMIRADZKI Arch. Tow. nauk. Lwow. (3) 3 3 1923 p. 36 pl. 1 f. 17.—†*E. julianensis tuberculocrenulatus*, GREGORIO 359.

†*Flemingella* nom. nov. for *Flemingia* de Koninek 1881 non Johnston 1845; type *Trochella prisca* history, KNIGHT J. Paleont. Menashi Wis. 10 6 1936 p. 527.

Gibbula cineraria, tumida sexual biology and genital organs figs., GERSCH 336.—*G. divaricata* shell structure figs., KESSEL 480.

†*Gibbula ameghinoi* sp. n. Tertiary Patagonia, FORUGLIO Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 p. 294 pl. ii f. 9 & 10a-b.—*G. blainvillei*,

albo maculata, cordieriana, triformis tesovensis figs., KRACH 498.

Lioliaxis gen. n. [non descr.] *Omalaxis radiata* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 326.

Mazastele gen. n. type *Trochus glyptus* Watson, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 286.

†*Mecoliotia bermudezi* sp. n. Pleistocene Cuba, CLENCH & AGUAYO Nautilus Philad. 49 3 p. 92 pl. 5 f. 3.

Minolops gertruda sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 285 pl. xxi f. 11.

Monodonta lineata in N. Wales, N. FISHER 277.

†*Munditia proavita* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 102 pl. 15 f. 49, 51.

†*Nummocalcar masseroni* sp. n. Bathonian Normandy, BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935 p. 717 pl. xxxix f. 1, 2.

Partubiola gen. n. type *P. blancha* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 286 pl. xxi f. 3.

†*Phasianella* ? *buvignieropsis* sp. n. Trias Cave of Belliemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 14 pl. 1 f. 7.

†*Pseudamusium sinuosum* sp. n. = *Entolium aviculatum* Metz (pars) Carboniferous Belgium, DEMANET Mém. Inst. géol. Louvain 10 1936 p. 137 pl. xiii f. 20-24.

†*Rhaphischisma* nom. nov. for *Rotellina* de Koninek 1881 type *R. planorbiformis* De K. non Agassiz 1846, KNIGHT Paleont. Menashi Wis. 10 6 1936 p. 527.

†*Solarium cossmanni* sp. n. Bathonian Normandy, BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935 p. 718 pl. xxxix f. 3.

†*Thoristella chathamensis gracilis* subsp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 101.

Torinista gen. n. [sp. only descr.] type *T. popula*, sp. n. Sydney Harbour *laseronorum* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 327 pl. xxiv f. 15.

†*Trochotoma petrariae* sp. n. Bathonian Normandy, BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935 p. 719 pl. xxxix f. 4.

Trochus (Infundibulops) erythreus, GRUNEL 365.—*T. cinerarius* shell structure figs., KESSEL 480.—*T. niloticus* rate of growth, RAO 788.—*T. niloticus* statistical study of shell growth, RAO & RAJA 789.—*T. stellatus* Gmel, WINCKWORTH 1058.

†*Trochus brutus* p. 18 pl. 1 f. 41; *typicus* p. 18 pl. 1 f. 33; *subturbiformis* p. 18 pl. 1 f. 34; *speciosus* p. 18 pl. 1 f. 35; spp. n. Lias Mt. S. Giuliano Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.—*T. haberi* p. 284 pl. xii f. 11; *neumarkensis* p. 284 pl. ix f. 47; pl. xiii f. 33; spp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*T. subduplicatus* Orb. *münsteriana* var. n. Dogger in Franken, KÜHN Paläont. Z. Berlin 17 3-4 1935 p. 133 pl. 10 f. 2.—*T. (Solariella) oligoobscura* sp. n. Oligocene Hungary, NOSZKY Ann. hist. nat. Mus. Hung. 30 1936 p. 56 pl. vi f. 5.

†*Tulotoma magnifica* fig. pl. 4, WHEELER 1054.

Turbo intercostalis Menke, TOMLIN 990.

†*Turbo simplex* p. 16 pl. 1 f. 32; *argutus* p. 16 pl. 1 f. 40; *perspicuosus* p. 16 pl. 1 f. 39; spp. n. Lias Mt. San Giuliano Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.—†*T. yabei* sp. n. Tertiary Ryūkyū Islands, NOMURA & ZINBÔ Sci. Rep. Tōhokū Univ. 18 3 1936 p. 263 (35) pl. xi (i) f. 34a-b.

†*Turbonitella sigana* sp. n. Devonian Europe, DAHMER Abh. preuss. geol. LdAnst. 168 1936 p. 16 pl. 3 f. 8-10.

Zizyphinus monile Rev. confirmed as an Australian species, FULTON 319.

NERITOPSIDAE, NERITIDAE.

†*Nerita theodorii* sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 287 pl. xii f. 37; pl. xiii f. 26, 27.

Neritina (Theodoxus) vondeli sp. n. Beni Mallax p. 53, text-fig. 9; *N. (Theodoxia) seurati* sp. n. p. 54 Ain Serguin, N. (T.) s. major, undata "vars n." p. 55; N. Africa, PALLARY J. de Conchyliol. 80 1 1936.—*N. reclinata*, spermatophores of, ANDREWS 23.—*N. fluviatilis* in Orkney, BOYCOTT 132.—*N.* distribution, EYDERDAM 269.—*N. ualanensis* Hong Kong fig., KING & PING 483.—*N. fluviatilis*, POHL 760.—

N. fluviatilis killed by frost in Orkney, TOMLIN 986.

Neritinae Britain, BOYCOTT 131.

†*N[eritopsis] banzensis* sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 287 pl. xii f. 24.

Pictoneritina gen. n. [non descr.] type *Neritina oualanensis* Lesson, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 288.

Septariellina congolensis sp. n. Congo Estuary, BEQUAERT & CLENCH Mém. Mus. Hist. nat. Belg. (2) 3 1936 p. 163 figs. 1 A, B.

Smargadista gen. n. type *S. tragena* sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 288 pl. xxi f. 14.

Theodoxia fluviatilis, bourguignati, variation in lateral teeth of radula, ROGER 813.—*Theodoxia bourguignati* genital organs and style sac figs., ROGER 814.

Theodoxus fluviatilis variation figs., FLÖMMING 313.—*Theodoxus prevostianus*, GROSSU 364.

†*Velates perversus* fig., CLARK & VOKES 183.—*V. schmideliana* in the Montien Vigny, PINARD 754.

HELICINIDAE, HYDROCENIDAE.

†*Ampullina (Globularia) talegdi rothi* sp. n. Oligocene Hungary, GÁBOR Ann. hist. nat. Mus. Hung. 30 1936 p. 1 [3rd pagin.] pl. 1 f. 6.

†*Helicina vokesi* sp. n. Eocene (Domengine formation) Fresno Co., California, HANNA J. Paleont. Menasha Wis. 10 5 1936 p. 416 f. 1.

Palaeohelicina spinifera morasaënsis var. nov. New Georgia, Solomon Islands, I. & B. RENSCH Rev. suisse Zool. Genève 43 1936 p. 681.—*Palaeohelicina viberina*, I. & B. RENSCH 797.

PECTINIBRANCHIA.

TAENIOGLOSSA.

LITTORINIDAE, RISSOIDAE, HYDROBIIDAE, VIVIPARIDAE, VALVATIDAE, PILIDAE, CYCLOPHORIDAE, FOSSARIDAE.

Afroditropis gen. n. p. 102 type *A. strongi* sp. n. p. 103 pl. ii f. 8, 9; Congo,

BEQUAERT & CLENCH Rev. Zool. Bot. Afr. Tervuren 29 1936.

Alvania crassa larvae pl. 1 f. 11, 12, LEBOUR 554.

†*Amberleya couzonensis* sp. n. Bajocien (Jurassic) France, MARZLOFF Trav. Lab. Géol. Lyon. 28 9 1936 p. 74 pl. viii f. 41, 42.

Amnicola hendersoni Pils. f. 3 p. 277, HENDERSON 398.—*A. limosa* parasites, NEVEU-LEMAIRE 665.

Amnicolidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON, 397.

†*Amphithalamus ? tumukiensis* Cenozoic Noto peninsula Japan, OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.

Ampullaria canaliculata, paludosa figs., HEINE 389.—*A. cuprina, paludosa, gigas, canaliculata* figs., INNES 438.—*A. cumingii* resistance to Alcohol and Formalin, NETTING 664.—*A. luteostoma* parasites, NEVEU-LEMAIRE 665.

†*Awanuia tenuis* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 107 pl. 15 f. 31.

Barleria chasteri is ? *Estea*, TOMLIN 991.

Baicalia (Eubaicalia) herderiana laevis p. 60 pl. iii f. 12, 13; *B. (E.) h. parvula* p. 60 p. iii f. 14; vars. n.; *B. (E.) wereotschagini* sp. n. p. 63 p. iii f. 41, 42; *B. (Parabaicalia) felata dubiosa* var. n. p. 76 pl. v f. 10, 11; *B. (Korotnewia) korotnewi gracilis* var. n. p. 82 pl. v f. 31-33; *B. (K.) K. selengensis* var. n. p. 83 pl. v f. 40-42 pl. viii f. 9; *B. (Pseudobaicalia) zachvatkini* sp. n. p. 86 pl. iii f. 43-48 pl. xii f. 6-7.—*Baicalia (Baicalia) nana producta* var. n. p. 97 pl. v f. 48-49; *B. (Gerstfeldtia) wrzesniewskii olchonensis* var. n. p. 108 pl. iii f. 29-30; *B. (G.) bacilliformis* sp. n. p. 110 pl. iii f. 31-33; *B. (G.) godlewskii speciosa* var. n. p. 114; *B. (G.) pulchella intermedia* var. n. p. 115 pl. iv f. 37-40; *B. (Baicalia) dybowskiana carinatoides* var. n. p. 120 pl. iv f. 13-14; Lake Baikal, Kozov Trav. Sta. limnol. Lac Bajkal Leningrad 8 1936.

†*Badenia biangulata* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 113 pl. 16 f. 64.

Benedictia (Benedictia) limnacoides onguensis p. 44 pl. ii f. 30-32, *l. litoralis*

p. 45 pl. i f. 11, 27; vars. n. Lake Baikal, Kozov Trav. Sta. limnol. Lac Bajkal Leningrad 8 1936.

Bithynia tentaculata, leachii inflata, in N. Asia figs., MOZLEY 653.—*Bithynia tentaculata* Lake Dikoye, TANSON 963.

†*Buvignieria carixensis* sp. n. Lias Dorset, L. R. Cox Quart. J. Geol. Soc. London 92 4 1936 p. 459 pl. xxxiv f. 3a, b, 4.

Bythinia tentaculata, WEIGMANN 1043.

Bythinia fuschsiana, leachi, longicornis (Parafossalurus) sic [Parafossarulus] *striatula tentaculata, ventricosa*, parasites, NEVEU-LEMAIRE 665.—*Bythinia tentaculata*, SCATIZZI 846.

Campeloma rufum sinistrality 1.03% adults, among uterine young 5.83% "few sinistrals reach bearing age," CLEAVE 185.—*Campeloma rufum* sex organs and reproduction, MATTOX 604.

Centrapala gen. n. type *Paludina lirata* Tate Cooper Creek, Innamincka (Tate's fig. of type is inaccurate), COTTON Rec. S. Aust. Mus. Adelaide 5 3 1935 p. 343 f. 19-20.

Chamalycacus cyclophoroides kosuensis subsp. n. Japan, KURODA Venus 6 3 1936 p. 174.

Cingula fulgida eggs pl. 1 f. 7, LEBOUR 554.

Cleopatra lesnei sp. n. Mozambique: Bas Sangadze (Zambese), GERMAIN Mem. Mus. Zool. Univ. Coimbra (1) 80 1935 p. 68.—*Cleopatra bulimoides, cyclostomoides*, parasites, NEVEU-LEMAIRE 665.

†*Cleopatra ferruginea* (Lea) pl. 1 f. 13-14, FUCHS 316.

Cochlostoma (Auritus) patulum subsp. fig., HAAS 375.

†*Cyclophorus youngi* sp. n. Quaternary E. Szechwan China, YEN Bull. Geol. Soc. China Peking 15 3 1936 p. 339 pl. i f. 4a-b.

Cyclostoma mauretanicum pachya Aüs Aschbe, ORAN p. 51 pl. 2 f. 8; *C. (Ericia) multisulcatum rubicunda* C. de Garde, Bône vars. n. N. Africa, PALLARY J. de Conchyliol. Paris 80 1 1936.—*Cyclostoma carinifera* Sow, a synonym of *C. moulinsii* Grat., FULTON 319.

Diffalaba gen. n. type *D. opiniosa* Sydney Harbour [sp. descr. gen. non-deser.], IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 290 pl. xxi f. 16.

†*Ericia antiqua* (Brobn.) fig., WEILER 1044.

Fossaria modicella, parasites, NEVEU-LEMAIRE 665.

†*Fossariopsis insignis* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 16 pl. ii f. 4-7.

Hydrobia plena sp. n. Congo Estuary BEQUAERT & CLENCH Mém. Mus. Hist. Nat. Belge (2) 3 1936 p. 165 pl. i f. 5.—“*Hydrobia*” *steinii*, generic position [vide *Marstoniopsis*], ALTENA 17.—*H. palomasensis*, CHEATUM 179.—*Hydrobia*, HENRARD & KOUMANS 404.—*H. ulvae*, LINKE 465.—*H. ventrosa* in N. Asia, figs., MOZLEY 653.—*H. jenkinsi* on Beachy Head, SHRUBSOLE 933.—*H. ulvae* ecology, graphs, THAMDRUP 974.—*H. jenkinsi* killed by frost in Orkney, TOMLIN 986.

†*Hydrobia frauenfeldi* Hoern figs., FRIEDBERG 304.

Hydrobiidae Britain, BOYCOTT 131.

Iglica macedonica “n. sp.” p. 53 [non descr.] Jugoslavia, KARAMAN Verh. int. Vereinig. Limnol. Beograd 7 1 1935.

Japonica (?) *hedigeri*, I. & R. RENSCH 797.

†*Keilostoma minus* and new species figs., CLARK & VOKES 183.

Korotnewia subgen. n. of *Baicalia* type *B. korotnewi* Ldh. 1909 Lake Baikal, KOZOV Trav. Sta. limnol. Lac Bajkal Leningrad 8 1936 p. 78.

Lacuna pallidula sex changes, GALLIEN & LARAMBERGUE 323.

Lanistes (*Meladomus*) *ovum bangweolicus* subsp. n. N. end of Bangweolo Lake nr. Nsombo, N. Rhodesia, HAAS Abh. Senckenberg naturf. Ges. Abl. 431 1936 p. 36 pl. 2 f. 1.—*L. (Meladomus) ovum*, HAAS 371.

†*Lanistes* Lybian Desert, SANDFORD 841.

Larina, COTTON 211.

Larinopsis ostensis sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 287 pl. xxiv f. 17.

Lartetia sterkiana lauterborni subsp. n. Brunnenstuben, HAAS Senckenbergiana 18 3-4 1936 p. 146 (nom. et fig. p. 145) figs. 10-11.—*Lartetia rhenana*, LAIS 532.

Lindholmia subgen. n. for *Benedictia maxima* W. Dybowski 1875 Benedictiidae, KOZOV Trav. Sta. limnol. Lac Bajkal, Leningrad 8 1936 p. 37 pl. 1 f. 8-10 pl. viii f. 1 pl. x f. 10-11 pl. xi f. 1, 2.

†*Lioplax ecuriense* sp. n. Cretaceous France, SALIN Bull. Soc. géol. Fr. 5 v. 1-3 1935 p. 156 pl. vi f. 15, 16.

Littorina chaoi sp. n. Pok-hoy, YEN Notes Malac. Chinoise Shanghai 1 3 1936 p. 3.—*L. littorea radula* and its functions figs., W. E. ANKEL 23.—*L. saxatilis* Barra Island, FORREST 292.—*L. melanostoma* Hong Kong figs., KING & PING 483.—*L. irrorata* respiration, NEWCOMBE, MILLER & CHAPPELL 669.—*L. scabra* figs., RISBEC 809.—*L. littorea* ecological graphs, THAMDRUP 974.—*L. littorea* Economics and Conservation, Biology, WRIGHT 1067.

†*Littorina groenlandica* (= *rudis*), RICHARDS 802.

Littorinidae, YEN 1072.

Lobogenes schoutedeni p. 164 pl. 1 f. 1, 2; *L. zairensis* p. 165 pl. 1 f. 4; spp. n. Congo Estuary, BEQUAERT & CLENCH Mém. Mus. Hist. Nat. Belge (2) 3 1936 figs.

Maizania zanzibarica p. 100 pl. 1 f. 5-7; *M. (Maizaniella) lukolelensis* p. 100 pl. ii f. 10, 11; spp. n. *l. chapini* p. 101 var. n.; *M. (Maizaniella) chondrocycloides* p. 101 sp. n. Central Africa BEQUAERT & CLENCH Rev. Zool. Bot. afr. Tervueren 29 1936.—*Maizania*, BEQUAERT & CLENCH 90.

Maizaniella subgen. n. [of *Maizania*] type *Cyclophorus leonensis* Morelet 1873, BEQUAERT & CLENCH Rev. Zool. Bot. afr. Tervueren 29 1936 p. 99.

Marstoniopsis gen. n. Hydrobiidae for *Hydrobia steinii* von Martens, ALTENA Basteria 1 4 1936 p. 68.

Megalomastoma torrei sp. n. Santa Clara, Cuba, GUITART Mem. Soc. cubana Hist. nat. 10 2 1936 p. 105 f. 1, 2.

†*Merelina kaawaensis* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 106 pl. 16 f. 60, 61.

Microbaicalia subgen. n. of *Baicalia* for *Baicalia pulla* Dybowski 1875 Lake Baikal, KOŽOV Trav. Sta. limnol Lac Bajkal Leningrad 8 1936 p. 91.

†*Neothauma dubium* (Cox) pl. 1 f. 1-9 pl. 3 f. 3-5, FUCHS 316.

Notopala gen. n. Viviparidae type *Paludina hanleyi* Frauenfeld Lower Murray River, S. Australia, COTTON Rec. S. Aust. Mus. Adelaide 5 3 1935 p. 339.—*Notopala wanjakalda* sp. n. Upper Pleistocene ? R. Murray nr. Sunnyside S. Australia, COTTON Rec. S. Aust. Mus. Adelaide 5 3 1935 p. 340.

†*Notosetia tantilla* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 106 pl. 16 f. 59.

Oncomelania fausti, *formosana*, *hukensis*, *nosophora*, *quadrasi*, parasites, NEVEU-LEMAIRE 665.

Paludestrinidae Britain, BOYCOTT 131.

Paludina monograph on the anatomy figs., LI 559.—*Paludina* embryology, LI 560.—*Paludina* (*P. vivipara* L.), SCATIZZI 846.

†*Paludina* [vide *Vivipara*] *diluviana* figs., BONDARCHUK 127.

Peringia ulvae Gigantism and variations, ROTHSCHILD 825.

Pila luzonica fig. parasite, NEVEU-LEMAIRE 665.

†*Pila* Lybian Desert, SANDFORD 841.

Pleuroceridae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Pomacea paludosa garciae subsp. n. near Mendoza, Cuba, RICHARDS Proc. Penn. Acad. Sci. 7 1933 p. 169 text-fig. 21.—*Pomacea flagellata*, *yucatanensis* figs., BEQUAERT & CLENCH 88.—*P. paludosa*, HARPER 384.

Pomatias maroccanus minor "var. n." Marrakech, PALLARY J. de Conchyliol. 80 1 1936 p. 53.—*P. elegans*, ROTARIDES 822.

Pomatiopsis lapidaria, parasite, NEVEU-LEMAIRE 665.

Poteria (Crocidopoma) bondi sp. n. Jamaica, VANATTA Nautilus Philad. 49 3 p. 98.

†*Prososthenia schwartzi transitans* forma nov. Pontian Lucano, OLUJIC Archiv Molluskenk. 68 3 1936 p. 119 pl. 4 f. 1-2.—†*Prososthenia schwartzi semi-*

costata forma nov. Pontian Lucano, OLUJIC Archiv Molluskenk. 68 3 1936 p. 119 pl. 4 f. 5-6.

Pseudomegalovalvata sec. n. for *Valvata (Megalovalvata) bathybia* Lo. Dybowski 1886 Valvatidae, KOZOV Trav. Sta. limnol Lac Bajkal, Leningrad 8 1936 p. 29 pl. i f. 45-47.

Rissoa sarsii eggs pl. 1 f. 13, LEBOUR 554.

Rissoella diaphana eggs and larvae pl. 1 f. 17, LEBOUR 554.

Rissoina (Folinia) bermudezi sp. n. 16 fms. off Tortugas, Florida, AGUAYO & REHDER Mem. Soc. cubana Hist. nat. 9 1936 p. 265 pl. 24 f. 5 text-fig. 1.—*Rissoina zonula* = var. of *catholica*, TOMLIN 991.

†*Saulea* ? sp. n. Pleistocene Kaiso Lake Albert figs. from specimens in Brit. Mus., FUCHS 316.

Scalex petrolii, WOODRING 1064.

†*Scrobs kaawaensis* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 107 pl. 16 f. 62.

Thomeomaizania subgen. n. [*Maizania*] type *Cyclophorus vandellii* Nobre 1886, BEQUAERT & CLENCH Rev. Zool. Bot. afr. Tervueren 29 1936 p. 99.

Valvata (Cincinna) aliena ssorensis W. Dyb. fig., *a. brevicula* var. n. p. 18 pl. 1 f. 30; *V. (Megalovalvata) lauta parvula* p. 25, KOŽOV Trav. Sta. limnol. Lac Bajkal Leningrad 8 1936.—*V. japonica* sex conditions, FURROW 321.—*V. piscinalis*, HUMPHRIES 431.—*V. piscinalis*, *antiquilina*, *aliena*, *macrostoma*, *siberica* in N. Asia figs., MOZLEY 653.—*V. macrostoma* parasite, NEVEU-LEMAIRE 665.—*Valvata* experiments on, OVTSCHNIKOV 698.—*V. pulchella* Lake Dikoye, TAWSON 963.

†*Valvata (Cincinna) balizacensis*, WENZ 1046.

Valvatidae Britain, BOYCOTT 131.—Valvatidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

†*Vivipara diluviana*, BONDARCHUK 127.—*V. fasciata*, I. & M. SZABO 954.

†*Viviparus edwardianus* p. 95 pl. 3 f. 9, 10 text-fig. 2; *carinatus* p. 94 pl. 3 f. 11, 12 text-fig. 1; *semlikiensis* p. 96 pl. 1 f. 10, 11 text-fig. 3; *nodulosus* p. 97 pl. 2 f. 1-16; spp. n. *V. turris con-cavus* p. 98 pl. 2 f. 23-27 var. n. Pleistocene Lake Edward, Uganda,

FUCHS J. Linn. Soc. London 40 1936.—*V. fasciatus* figs., A. V. BRANDT 138.—*Viviparus* studies on radula of spp. figs. *V. intertextus*, *contectoides*, *subpurpureus*, *georgianus*, CLEAVE & RICHEY 185. — *V. fasciatus* transportation, HUCKE 430.—*V. fasciatus* in N. Asia figs., MOZLEY 653.—*V. fasciatus*, ROHRBACH 816.

†*Viviparus menzelii*, FRANZ 300.

TRUNCATELLIDAE, ACICULIDAE, ASSIMINEIDAE.

†*Crosseola munditia* p. 104 pl. 16 f. 57; *tenuisculpta* p. 104 pl. 15 f. 30a-b; spp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936.

Katayama tangi sp. n. China, BARTSCH Proc. Biol. Soc. Washington 49 1936 p. 139.

Sigaretornus gen. n. [non descr.] type *Adeorbis sigaretinus* Pilsbry, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 294.

Tornus subcarinatus larvae pl. 1 f. 14-16, LEBOUR 554.

Tropidorbis gen. n. type *T. mendicus* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 294 pl. xxiv f. 1.

Valvatorbis gen. n. Synceridae (Assimineidae) type *Valvatorbis mauritii* sp. n. Congo Estuary, BEQUAERT & CLENCH Mem. Mus. Hist. Nat. Belg. (2) 3 1936 p. 166 pl. 1 f. 6 text-figs 2A-C.

CERITHIIDAE, PLANAXIDAE, THIARIDAE, PLEUROCERIDAE, PSEUDOMELANIIDAE, NERI- NEIDAE.

Ataxocerithium conturbatum sp. n. Sydney Harbour p. 290 pl. xxi f. 17; *A. scruposum* p. 291 pl. xxi f. 18 N.S.W.; *A. applenum* N.S.W. p. 291 pl. xxi f. 19, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

†*Ataxocerithium kaawaensis* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 108 pl. 16 f. 63.

Bittium reticulatum eggs and apex pl. 11, f. 6-8, LEBOUR 554.

†*Brotia wakinoensis* sp. n. Upper Jurassic Japan, KOBAYASHI & SUSUKI Japan J. Geol. Geogr. 13 3-4 1936 p. 256 pl. xxix f. 14-15.

†*Cerithidea* (*Cerithideopsis*) *sirakii* sp. n. Miocene N. Korea, MAKIYAMA Mem. Coll. Sci. Kyoto B. 11 4 8 1936 p. 221 pl. v f. 10, 15.

Cerithiidae, YEN 1072.

†*Cerithinella geisfeldensis* sp. n. Dogger in Franken, KÜHN Paläont. Z. Berlin 17 3-4 1935 p. 145 pl. 9 f. 11, 14.

Cerithiopsis tubercularis eggs pl. ii f. 9-10, LEBOUR 554.

Cerithium bornii Hong Kong fig., KING & PING 483.—*C. gemmulatus* figs., RISBEC 809.

†*Cerithium egerense* sp. n. Oligocene Hungary, GÁBOR Ann. hist. nat. mus. Hung. 30 1936 p. 2 [3rd pagn.] pl. 1 f. 5.—†*Cerithium* (*Cerithinella* ?) *dorni* sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 297 p. xii f. 19; pl. xiii f. 20.—†*Cerithium* (*Proclava*) *meisense* sp. n. Miocene N. Korea, MAKIYAMA Mem. Coll. Sci. Kyoto B. 11 4 8 1936 p. 220 pl. v f. 20.—†*Cerithium ecuriense* p. 156 pl. vi f. 1, 2; *minutum* p. 157 pl. vi f. 3, 4; *merkelii* p. 158 pl. vi f. 7, 8, 11-12; spp. n. Cretaceous France, SALIN Bull. Soc. géol. Fr. 5 v 1-3 1935.—†*Cerithium georgesensis* sp. n. Upper Cretaceous Georges Bank, Atlantic, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 384 pl. 3 f. 9, 10.—†*C. nanum*, *gibbosum* figs., KRACH 498.

†*Coelochrysalis rotundatus* sp. n. Dachsteinkalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1028 pl. xii f. 28.

†*Cyclozyga* Knight 1930 type here designated *Cyclozyga mirabilis* Knight (Knight 1930 p. 74) [Designated in Zool. Rec. 67 p. 61], KNIGHT J. Paleont. Menasha Wis. 10 6 1936 p. 520.

†*Dicroloma bigoti* "Antoine" sp. n. Bathonian Normandy, BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935 p. 713 text-fig 4 pl. xl f. 1, 2.

†*Eastonia rugosa* Canal Mussolini BLANC 107.

Geminataxum subgen. n. type *Ataxocerithium applenum* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 291.

Goniobasis jonesi nom. nov. p. 31 pl. i f. 27 for *G. wheatleyi* Lea Pr. Acad. Nat. Sci. Philad. 20 1868 151 non *Lithasia wheatleyi* Lea op. cit. 18 1866 133 a *Goniobasis*; *gibbera* "H. H. Smith" sp. n. p. 41 pl. i f. 9; *macglameriana* sp. n. p. 48 pl. i f. 20; *pygmaea* "H. H. Smith" sp. n. p. 49, pl. i f. 17; Coosa R., Alabama, GOODRICH Misc. Pub. Mus. Zool. Univ. Mich. 31 1936.—*Goniobasis gibbera* p. 41 pl. i f. 9; *pygmaea* p. 49 pl. i f. 17; spp. n. "H. Smith" *onesi* nom. nov. p. 31 pl. i f. 27 for *G. wheatleyi* Lea Pr. Acad. Nat. Sci. Philad. 20 1868; 151 (nom. 18 1866 133), GOODRICH Univ. Michigan Mus. Zool. Misc. Publications 31 Ann Arbor Michigan 1936.—*Goniobasis hemphilli* Henderson f. 1 h. *dalleseensis* Henderson f. 2, *grekaensis* Henderson f. 3, 4, 5, *coquillensis* Henderson f. 6, *silicula shastaensis* Lea f. 7, *chasei* Henderson f. 8, 9, *orickensis* Henderson f. 10, *acutifilosa pittensis* Henderson f. 11, HENDERSON 398. — *G. troostiana*, *crenatella*, *impressa*, GOODRICH 344.

Gonidomus pagoda (Fér.) Anatomy and systematics figs., STEENBERG 940.

Melania distribution in British Solomon Islands, EYERDAM 269.—*Melania*, GOODRICH 342.—*Melania* Embryology, LI 560.—*Melania* (*Radina*) *crenolata tirouri* anatomy, SESHAIYA 893.—*M. ebenina*, *extensa*, *gottschei*, *hahajimana*, *honkongensis libertina* fig., *multicincta*, *nodiperda*, *nodocincta*, *obliquegranosa*, *paucicincta*, *reiniana*, *tuberculata*, parasite, NEVEU-LEMAIRE 665.

†*Melaniptyxis sharmanni* fig., BLANCHET 112.

Melanoides, GOODRICH 342.—*M. (Semisulcospira) libertinus*, MORI 646.

Melanopsis delmasi Marrakech p. 55 pl. 3 f. 3; *liocephala* Grefait p. 56 pl. 3 f. 5; *l. major sabulosa*, *villica*, p. 57 spp. et vars. n. N. Africa, PALLARY J. de Conchyliol. 80 1 1936.—*Melanopsis brachymorpha* p. 58 pl. 3 f. 4 Agadir; *vanrossomi* p. 58 pl. 3 f. 7 Souk el Häd; *tiaraeformis* p. 60 pl. 3 f. 2 Agadir; *monteli* p. 60 pl. 2 f. 10 Agadir; spp. n.: *M. vanrossomi minor*, *semilaevigata*, *polita* "vars. n." p. 59; *M. monteli minor-stricta*, *innodata*, *emaciata*, "vars. n."; N. Africa, PALLARY J. de Conchyliol Paris 80 1 1936.—*Melanopsis bedei* pl. 57 pl. 3 f. 6, PALLARY 699.

†*Nerinea pilgrimi* sp. n. Cretaceous Khamir, S. Persia L. R. Cox Palaeont. Ind. Calcutta 22 2 1936 p. 22 pl. iii f. 1a-b.

Pachychilus fuentesi sp. n. Cuba. AGUAYO Mem. Soc. cubana Hist. nat. 10 3 1936 p. 169 f. 1-3 (p. 170).

Pirenella conica parasite, NEVEU-LEMAIRE 665.

Planaxis sulcatus Hong Kong figs., KING & PING 483.

†*Potamides nullarboricum* sp. n. Lower beds, Aldinga, South Australia (Miocene), CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 123 pl. xi f. 31-33.—†*Potamides (Ptychopotamides) pappi* sp. n. Oligocene Hungary, GÁBOR Ann. hist. nat. Mus. Hung. 30 1936 p. [23rd pagination] pl. 1 f. 2.—†*P. wyemurai* sp. n. "Sandy Shale" S. of R. Kongas Karafto, YOKOYAMA J. Fac. Sci. Univ. Tokyo (Geol.) 2 1929 9 p. 383 pl. lxxi f. 3.—†*Potamides carbonicola*, *tristriatus* figs., CLARK & VOKES 183.

†*Procerithium langi* p. 461 pl. xxxiv f. 5a-b; *P. werthayensis* p. 461 pl. xxxiv f. 7; *P. (Rhabdocolpus) auricipitis* p. 462 pl. xxxiv f. 8; spp. n. Lias Dorset, L. R. Cox Quart. J. Geol. Soc. London 92 4 1936.—†*Procerithium (Cosmocerithium)* sp. ? fig. pl. xl f. 4, BIGOT 103.

†*Promathildia (Clathrobaculus) bathonica* sp. n. Bathonien Normandy, BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935 p. 716 pl. xl f. 9.—†*Promathildia krumbecki* p. 146, pl. 9 f. 2a-b; *forthensis* p. 146 pl. 9 f. 1a-b; *haberi* p. 146 pl. 10 f. 17 spp. n. Dogger in Franken, KÜHN Paläont. Z. Berlin 17 3-4 1935.

†*Pseudomelania (Brifa) pulchellopsis* p. 12 pl. 2 f. 8-9; *P. (Omphaloptycha) gemmellaroii* p. 12 pl. 1 f. 5, 6 bis. spp. n. Trias Cave of Belliemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*P. sendelbachensis* p. 294 pl. xii f. 31; pl. xiii f. 9; *frankei* p. 294 pl. xiii f. 11; spp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.

Pyrazus ebeninus abnormal figs., MORT 650.—*P. cyngulatus* parasite NEVEU-LEMAIRE 665.

†*Pyrgozyga* Knight 1930, KNIGHT 486.

†*Tateiwaia* subgen. n. Potamididae, type *Tateiwaia tateiwaia* MAKIYAMA 1926 Miocene Korea, MAKIYAMA Mem. Coll. Sci. Kyoto (B) 11 4 1936 p. 219.

†*Telescopium koolhoveni* sp. n. Miocene Bantam Java, OOSTINGH De Ingenieur Ned-Indië IV Mijnbouw en Geol. de Mijngeng 2 9 1935 IV p. 79 f. 1a-b.

†*Telleria gigantea* sp. n. Dachsteinkalk Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1023 pl. xii f. 12-13.

†*Terebralia bidentata* Deifr. (Grat.) = *Cerithium lignitarum* Eichw. Miocene Europe, FRIEDBERG 305.

Triphora figs., ALLAN 15.

Velacumantus gen. n. [non descr.] type *Cerithium australe* Q. & G., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 292.

†*Vicarya formosa* sp. n. Miocene Bantam Java De Ingenieur Ned-Indië IV Mijnbouw en Geol. de Mijngeng. 2 9 1935 IV p. 80 f. 2a-b.—*V. calossa* Jenkins p. 36 pl. x f. 10, 11, KANEHARA 469.

STROMBIDAE, APORRHAIIDAE, STRUTHIOLARIIDAE, TRICHOTROPIDIDAE, VERMETIDAE, TURRITELLIDAE, CAECIDAE, XENOPHORIDAE.

†*Alaria subbicarinata* p. 297 pl. ix f. 37; *A. ? banzensis* p. 298 pl. ix f. 38; sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.

Anafossarus gen. n. [non descr. in Siriidae!] type *Fossarus sydneyensis* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 289.

†*Anchura pontana* sp. n. Upper Cretaceous Atlantic eastern port of Banquereau, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 401 pl. 23 f. 15, 16.

Caecum imperforatum larvae pl. 11 f. 1-5, LEBOUR 554.

Chenopus pes-pelecani shell structure figs., KESSEL 480.

†*Chenopus callosus latialatus* var. n. Oligocene Hungary, NOSZKY Ann. Inst. nat. mus. Hung. 30 1936 p. 60.

†*Dicosmos sigaretoides* sp. n. Dachsteinkalk, Trias Hungary, KUTASSY

Math. term. Ért. Budapest 54 3 1936 p. 1024 pl. xii f. 14-15.

Gazameda decoramen sp. n. off Sydney, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 292 p. l xxi f. 20.

Glyptozaria columnaria sp. n. Cape Pillar 100 fms. S. Australia, COTTON & WOODS Rec. S. Aust. Mus. Adelaide 5 3 1935 pp. 377, 382 f. 6.

†*Ispharina* subgen. n. of *Turritella* subgenotype *T. (I.) erro* sp. n. Eocene Ferghana, Turkestan, VJALOV & SOLUN C. R. Acad. Sci. Moscow N.S. 1936 4 4 p. 193.

Kimberia subgen. n. of *Turritella* type *Turritella kimberi*, COTTON & WOODS Rec. S. Aust. Mus. Adelaide 5 3 1935 p. 370.

Lambis aurantia, *lambis*, *scorpio* figs., ALLAN 13.

†*Mathilda pagoda* sp. n. Miocene Aldinga Bay South Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 122 pl. xi f. 29, 30.

Pleurocera annuliferum, *prasinatum*, *moniliferum*, GOODRICH 344.

†*Pugilina aequalis lathyroides* var. n. Oligocene Hungary, NOSZKY Ann. Inst. nat. mus. Hung. 30 1936 p. 65 pl. vi. f. 13.

Separatista fraterna sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 293.

Sirius meracus sp. n. p. 292 pl. xxi f. 21 N.S.W. *S. m. desponsus*, *chrestus* subsp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

†*Stiracolpus kaawaensis* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 108 pl. 16 f. 65.

Strombus bubonius, BLANC 108.—*S. canarinus* rudimentary strip fig., RISBEC 809.

†*Terebra schréteri* sp. n. Oligocene Hungary, GÁBOR Ann. hist. nat. Mus. Hung. 30 1936 p. 8 [3rd pagination] pl. 1 f. 1.

Turritella terebra occidua subsp. n. Southern Australia, COTTON & WOODS Rec. S. Aust. Mus. Adelaide 5 3 1935 p. 370.—*T. (Kimberia)*, (*Maoricolpus*), (*Stiracolpus*), (*Gazameda*), (*Ctenocolpus*), (*Colpospira*), (*Platycolpus*), COTTON & WOODS 212.—*T. communis* and parasitism, PÉREZ 719.

†*Turritella murrayana subrudis* subsp. n. p. 371 f. 1; *T. acricula adelaidensis* subsp. n. pp. 371, 376 f. 2; *T. subacricula* sp. n. pp. 371, 376 f. 3; Upper Pliocene *T. acricula victoriensis* p. 376; *T. acricula tasmaniensis* p. 376; subspp. n. Lower Miocene, *T. trilix* sp. n. Upper Pliocene p. 377 f. 4; *T. latissima* sp. n. pp. 372, 377 f. 6 Lower Miocene: S. Australia, COTTON & WOODS Rec. S. Aust. Mus. Adelaide 5 3 1935.—*T. harrisoni* sp. n. Neogene Nur Mohammadi, eastern Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 39 pl. viii f. 25-29.—*T. (Haustator) columbiana* p. 513 pl. xxx f. 1a-d; *T. (H.) scheibei* p. 518 pl. xxx f. 2a-c; spp. n. Cretaceous Columbia, JAWORSKI N. Jahrb. Min. Geol. Paläont. Stuttgart 76 3 1936.—*T. bergensis* p. 292 pl. ix f. 51; *altdorfensis* p. 293 pl. ix f. 39; *münsteriana* p. 294 pl. ix, f. 34; spp. n. Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*T. macneili* p. 399 pl. 5 f. 13; *T. thomsonina* p. 400 pl. 5 f. 14 spp. n. Upper Cretaceous, Atlantic, eastern part of Banquereau, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936.—*T. boussaci* pp. 192, 193; *alaica* p. 192; *T. ferganensis*, *erro*, *sumsarica* p. 193; spp. n. *erro asiatica* var. n. Eocene Ferghana Turkestan, VJALOV & SOLUN C.R. Acad. Sci. Moscow N.S. 1936 4 4.—*T. subangulata* (Brocchi) pl. i f. 8. 9, L. R. COX 214.—*T. scalaria*, *bicarinata* figs., FRIEDBERG 304.

Turritellidae figs., ALLAN 14.

Vermicularia figs., ALLAN 14.

Xenophora Palm Beach, Florida, LYMAN 577.

HIPPONYCIDAE, CALYPTRAEIDAE, CAPULIDAE, VANIKORIDAE, LAMELLARIIDAE, NATICIDAE.

†*Ampullina* (*Globularia*) *telegdi rothi callosa* var. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. mus. Hung. 30 1936 p. 62 pl. v f. 14.

†*Billiemia* [subgen. non descr.] for *Natica* (*B.*) *diblasii* sp. n. Trias Cave of Belliemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 14 pl. 1 f. 11-12a-b.

Calyptraea chinensis eggs and larvae pl. ii f. 23-25, LEBOUR 554.

Cheila err. pro *Cheilea* p. 154, COTTON 210.

Cheilea flindersi sp. n. Daly Head Spencer Gulf, South Australia p. 153 f. 1, 2; *C. occidua* sp. n. Ellensbrook, Western Australia p. 154 f. 4, 5, COTTON J. Roy. Soc. W. Aust. 21 1935.

†*Colpites* gen. n. (Ex Girty MSS.) type *Naticopsis monilifera* White 1880, KNIGHT J. Paleont. Menashi Wis. 10 6 1936 p. 529.

Crepidula in West Africa, *C. hepatica aculeata*, *adpersa lentiginosa*, *capensis*, *porcellana*, *adansonii*, *goreensis*, ADAM & LELOUP 5.—*C. fornicata* Germany, ANKEL 27.—*C. fornicata*, ANON 29.—*C. fornicata* sexual phases figs. graphs, COE 201.—*C. aculeata*, *walshi* sex changes and relations of sex and size, ISHIKA 445.—*C. aculeata*, *walshi*, ISHIKI 446.—*C. fornicata* in America, PESSOU 721.—*C. fornicata*, SPÄRCK 928.

†*Discohelix strangulatus* sp. n. Lias Mt. S. Giuliano, Palermo, GREGORIO Ann. géol. Paléont. Palermo 53 1930 p. 17 pl. 1 f. 50.

†*Drepania* gen. n. for *D. pulchra* sp. n. Lias S. Giuliano, Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 17 pl. 1 f. 26.

†*Glycymeris* Time range, SCHENK 857.

Hipponyx australis Biologie figs., RISBEC 809.

†*Horiostoma involutum* Barrois pl. ii f. 14, MAILLIEUX 590.

†*Janacus crepidulus elongata* var. n. Neogene, Italy, VENZE Palaeontogr. ital. Siena 35 1935 p. 217 pl. xvii (v) f. 25.

Mammilla plumatilis sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 312 pl. xxiii f. 18.

Marseniopsis innominatus sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 313 pl. xxiv f. 8.

Nalica [*Natica*] *pila* sp. n. Lias, Mt. S. Giuliano, Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 16 pl. 1 f. 31.

Natica pieli sp. n. Pok-hoy, YEN Notes Malac. Chinoise Shanghai 1 3 1936 p. 5.—*N. josephinia*, KESSEL 479.—*N. josephinia*, alderi, monilifera shell structure figs., KESSEL 480.—*N. maculosa* Hong Kong fig., KING & PING 483.—*N. catena* pl. ii f. 26, 27; *poliana* pl. ii f. 28, 29 larval forms, LEBOUR 554.—*Natica* boring shells, VERLAINE 1016.

†*Natica* (*Billiemia*) *diblassii* p. 14 pl. 1 f. 11–12a–b; *N. (Dicosmos) panormensis* p. 15, pl. 1 f. 13 spp. n. Trias Cave of Belliemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*N. (Polinices) praeformata* sp. n. Oligocene Island of Buton (S.-E. of Celebes), K. MARTIN Leidsche Geol. Mededeel. Leiden 7 1 1935.—*N. (Helicina) achattensis* fig., GILLET & THÉOBALD 338.—*N. (Dicosmos) arduini* fig., GREGORIO 358.—*N. catena* pl. 19 f. 2, 11, PALMER & HERTLEIN 700.

Naticidae, YEN 1072.

†*Neritaria comensis* fig., PARODI 703.

Notocochlis cothurnata sp. n. Botany Bay p. 312 pl. xxiv f. 6; *N. schoutanica diathea* subsp. n. N.S.W. p. 312, pl. xxiv f. 7, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

†*Polinices crickmayi* sp. n. Pliocene Mexico, PALMER & HERTLEIN Bull. S. Calif. Acad. Sci. 35 2 1936 p. 77 pl. 19 f. 12, 14.—*Polinices intemerata* Phil. pl. 19 f. 3, PALMER & HERTLEIN 700.

Quantonatica subgen. n. [non descr.] type *Natica subcostata* T.-W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 311.

Sigaretus laevigatus Hong Kong, KING & PING 483.

†*Sinum polandi* sp. n. Tertiary Clewiston, Florida, M. SMITH Nautilus Philad. 49 4 1936 p. 136 pl. 9 f. 10 10a.

†*Strophostylus* Hall 1859 type *S. andrewsi* Hall *Heliostylus* Knight is a synonym, KNIGHT 486.—*S. naticoides* (Roemer) pl. ii f. 3, MAILLIEUX 590.

†*Trachynereita quadrata praeacuta* var. r. Dachsteinkalk Trias Hungary, KUTASSY Math. term Ért. Budapest 54 3 1936 p. 1023 pl. xii f. 11.

Zegalers err. pro. *Zegalerus* p. 110, LAWS 553.

CYMATIIDAE, CASSIDIDAE TONNIDAE, CYPRAEIDAE, ARCHITECTONICIDAE.

Annuperenna gen. n. [non descr.] type *Ranella verrucosa* Sow, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 311.

Apollon facetus sp. n. Sydney Harbour p. 309 pl. xxiv f. 3; *A. deliberatus* sp. n. off Lindeman Is. p. 310 pl. xxiv f. 4, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

Cabestanimorpha gen. n. [non descr.] type *Triton exaratus* Rev. IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 307.

Cassis cornuta deformity caused by Balanus, BAYER 79.—*C. glauca* Hong Kong fig., KING & PING 483.

†*Cassis nupera* fig. pl. 4, WHEELER 1054.

Charonia rubicunda abnormal figs., MORT 650.

Cymatilesta gen. n. [non descr.] type *Septa spengleri* Perry, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 307.—*Cymatilesta waterhousei tepida* subsp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 308.—*Cymatilesta spengleri* abnormal, figs., MORT 650.

†*Cymatium* (*Ranularia*) *heptagonum* (Broechi) p. i f. 6, L. R. COX 214.

Cypraea annae Roberts, *polita* Roberts = *C. semiplota* Migh., INGRAM 437.—*Cypraea moneta* W. Africa as a habitat? LAMY 539.

†*Cypraea* (*Pustularia*) *gubbiana* (?) *loxahatchiensis* subsp. n. Tertiary Loxahatchee Florida, M. SMITH Nautilus Philad. 49 4 1936 p. 137 pl. 9 f. 3, 3A.

Cypraeidae, YEN 1072.

†*Cypraeopsis* gen. n. Cypraeacea, type *C. vandervlerki* sp. n. Miocene Borneo, SCHILDER De Ingenieur Ned-Indië IV Mijnbouw en Geol. De Mijneng. 3 12 1936 (iv) p. 207 f. 1.—†*Cypraeopsis* gen. n., Amphiperatidae, type *C. vandervlerki* sp. n. Miocene Borneo, SCHILDER Proc. Malac. Soc. London 22 2 1936 pp. 81, 87.

Diminovula manifesta sp. n. Caloundra, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 313 pl. xxiv f. 10.

Dolium [Tonna] *maculatum* Hong Kong, KING & PING 483.—*Dolium quemanju*, WINCKWORTH 1059.

†*Distorsio tortuosa* (Borson) pl. i f. 7, L. R. Cox 214.

†*Erato cypraeola* (Brocchi) pl. 1 f. 3a-c, L. R. Cox 214.

†*Gisortia tuberculosa* and "new species" figs., CLARK & VOKES 183.

Gyrineum natator Röding *robusta* var. n. Hong Kong, FULTON Proc. Malac. Soc. London 22 1 1936 p. 10 pl. ii f. 4.

Monetaria annulus, camelorum monstrosities, SCHILDER 860.

†*Palaeocypraea primigenia* nom. nov. for *Cypraea antiqua* Sayn non Lk., SCHILDER Proc. Malac. Soc. London 22 2 1936 p. 87.

Particymatium gen. n. [non descr.] type *Tritonium strangei* Ad. & Ang., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 307.

Phanozesta gen. n. type, *P. remensa* sp. n. Australia Cymatiidae, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 309 pl. xxiii f. 4.

†*Pseudotrivia* gen. n. p. 208 *Cypraea-cea* type *Trivia sibogae* Schepm., *P. coxi* sp. n. p. 209 f. 2, 3 Miocene Karachi (in Brit. Mus.), SCHILDER De Ingenieur Ned-Indië IV Mijnbouw on Geol. De Mijngeng. 3 12 1936 (iv).

Ranularia sinensis defrenata subsp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 308.

†*Semicypraea* gen. n., Amphiperatidae, type *S. koninckii* (Rouault), SCHILDER Proc. Malac. Soc. London 22 2 1936 pp. 81, 87.

Septa? blacketi sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 307 pl. xxiii f. 3.

Simnia patula in Orkney, RENDALL 794.

†*Triton* (*Lampusia*) *stefaninii* "n.f." [sp. n.] Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935 p. 76 pl. vi f. 21.

Triton albocingulatus larval stages, RISBEC 809.

Tritonocauda caudata vulticula subsp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 308.

†*Trivia parvosphaera* Sacco pl. i f. 2a-c, L. T. Cox 214.

Vernotriton gen. n. [non descr.] type *Lotorium pumilio* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 308.

P'TENOGLLOSSA.

IANTHINIDAE, EPITONIIDAE.

†*Aclisina* *Dekoninck*, KNIGHT, 486.

Acutiscala minora sp. n. Sydney Harbour p. 297 pl. xxii f. 6; *A. ampacta* sp. n. Sydney Harbour p. 298 pl. xxii f. 7; *A. fabia* sp. n. off Green Cape p. 298 pl. xxii f. 8; *A. coreta* sp. n. p. 298 pl. xxii f. 9; *A. christyi* sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

†*Coelochrysalis hypertropha* fig., PARODI 703.

Crenuliscala subgen. n. type *Folaceiscala pindasa* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 301.

Dannevigena gen. n. type *D. martyri* sp. n. S. of Gabo Island, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 303 pl. xxii f. 25.

Dissopalma gen. n. type *Scala turrisphari* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 302 pl. xxii f. 20.

Folaceiscala carchedon p. 300 pl. xxii f. 13; *barissa* p. 300 pl. xxii f. 15; *antisoa* p. 300 pl. xxii f. 16; *pindasa* p. 301 pl. xxii f. 17 spp. n. N.S. Wales, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

Ianthina figs., ALLAN 14.

Laeviscala tacita sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 297 pl. xxii f. 5.

Limiscala helicornua sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 299 pl. xxii f. 11.

Mazescala gen. n. "Scalidae" type *M. thrasys* sp. n. off Green Cape, N.S.W. p. 296 pl. xxii f. 2, *heloris* sp. n., Sydney Harbour p. 296 pl. xxii f. 3, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

Murdochella macrina sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 302 pl. xxii f. 19.

Narvaliscala gen. n. [sp. only descr.] type *N. dorysa* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 301 pl. xxii f. 8.

Nodiscala apostolorum sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 304 pl. xxii f. 27.

Obstopalia gen. n. type *O. lixa* sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 299 pl. xxii f. 12.

Platiscala gen. n. type *Scala morchi* Angas p. 302 pl. xxii f. 21, *m. bentha*, *m. profundior* subspp. n., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 302.

Pomiscala gen. n. type *Scala perplicata* Iredale, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 303 pl. xxii f. 24.

Pudentiscala subgen. n. type *Acutiscala christyi* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 299.

Rectacirsa gen. n. type *R. fregata* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 305 pl. xxii f. 28.

Solvaclathrus gen. n. type *S. jacobiscala* sp. n. [sp. descr. only] Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 299 pl. xxii f. 14.

GYMNOGLOSSA.

PYRAMIDELLIDAE, STROMBIFORMIDAE.

†*Balcis geoffreyi* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 112 pl. xvi f. 67.

Chrysallida decussata eggs and larvae p. ii f. 11–15, LEBOUR 554.

Colsyrnola decolorata sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 332 pl. xxiv f. 14.

Eulima nitida Hong Kong fig., KING & PING 483.

†*Lithoglyphus naticoides* Fér., HARANGHY 382.

†*Menestho (Pseudoscilla) cylindrata* Btg. fig., ZILCH 1087.

†*Stephanocosmia (Tyrsoecus) montiaurensis* sp. n. Bajocien (Jurassic) France, MARZLOFF Trav. Lab. Géol. Lyon 28 9–1936 p. 73 pl. viii f. 33–36.

Stylifer thurstoni sp. n. Tuticorin, WINCKWORTH Proc. Malac. Soc. London 22 1 1936 p. 18 text-fig.

Syrnola mossiana = *Odostomia lutea* Garrett = *O. rufula* Souv.; *Syrnola violacea* = *Odostomia bulimoides* Souv., TOMLIN 991.

†*Trajanella fraasi, japonica, amphora* figs., DIETRICH 247.

Turbonilla (Careliopsis) bartschi sp. n. La Chorrera, Cuba, AGUAYO & REHDER Mem. Soc. cubana Hist. nat. 9 1936 p. 267 pl. xxiv f. 7.—*T. (Pyrgiscus) palmerae* sp. n. La Chorrera, Habana, Cuba, AGUAYO & JAUME Mem. Soc. cubana Hist. nat. 10 2 1936 p. 119 text-figs. (p. 126) 1–3.—*Turbonilla kermadecensis* sp. n. Kermadec Islands, SALLISBURY Proc. Malac. Soc. London 22 3 1936 p. 124 pl. xiii f. 1, 2.—*T. elegantissima* larvae pl. ii f. xvi, xvii, LEBOUR 554.

†*Turbonilla (Strioturbonilla) nihona, T. hiradokoensis*; *T. (Pyrgiscus) matunamiensis* spp. n. Japan, OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.

†*Virgella* gen. n. for *V. jucunda* sp. n. Lias, S. Giuliano Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 pp. 17, 18 pl. i f. 27, 28.

†*Zygopleura (Anoptychia) westhayensis* sp. n. Lias Dorset, L. R. COX Quart. J. Geol. Soc. London 92 4 1936 p. 463 pl. xxxiv f. 6.

†*Zygopleura modesta angulata* var. n. Dolomite Trias Hungary, KUTASSY Math. term. Ert. Budapest 54 3 1936 p. 1014 pl. xi f. 9.

NUCLEOBRANCHIATA.

PTEROPODA.

†*Aspidotheca schrieli* gen. et sp. n. Devonian Europe, DAHMER Abh. preuss. geol. LdAnst. 168 1936 p. 15 pl. No. 4, pl. ii pl. iii f. 1–6 text-fig. 1a.—†*Aspidotheca fuchsi* “sp. n.” Lower Devonian Germany, TEICHERT Paläont. Z. Berlin 17 3–4 1935 p. 171.

Carinaria lamarchi spermatogenesis figs., TUZET 1001.

Clione limacina in Arctic plankton, THORSON 979.

†*Cyclothea* gen. nov. type *Pterotheca bohémica* Barrande, TEICHERT Paläont. Z. Berlin 17 3–4 1935 p. 169 f. 2.

Limacina helicina in Arctic plankton, THORSON 979.

Pneumodermopsis paucidens, SANDERSON, 840.

Pteropoda Syria and Palestine, AVNIMELECH 58.

STENOGLOSSA.

(a) RHACHIGLOSSA.

ORALLOPHILIDAE, BUCCINIDAE, NASSARIIDAE, MURICIDAE, THAIDIDAE, PYRENIDAE.

†*Anachis clewistonensis* sp. n. Tertiary Clewiston, Florida, M. SMITH Nautilus Philad. 49 4 1936 p. 138 pl. ix f. 8.

Ancistrolepis kinoshitai N. Japan, KURODA 521.

Arctularia gibbosa radula figs. PIELE 715.

Benthindsia gen. n. p. 317 type, *B. problematica* sp. n. off Sydney Harbour p. 318 pl. xxiii f. 7, Rec. Aust. Mus. Sydney 19 5 1936.

Beringius of Northern Japan, KURODA 521.

†*Brachytrema mazetieri* sp. n. Bathonian Normandy, BIGOT Bull. Soc. géol. Fr. 5 iv 8-9 1935 p. 714 pl. xl f. 5, 6.

Buccinum undatum, BROCK 146.—*B. undatum*, KESSEL 479.—*B. undatum* shell structure figs., KESSEL 480.—*B. proteus* Hong Kong fig., KING & PING 483.

†*Buccinum leucostoma sachalinensis* var. n. Upper Sandstone (Nutovo beds) Karafto, YOKOYAMA J. Fac. Sci. Univ. Tokyo (Geol.) 2 9 1929 p. 382 pl. lxxii f. 1, 2.

Choreotyphis subgen. n. [non descr.] type *Typhina pavlova* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 324.

†*Chrysodomus dobói* sp. n. p. 66 pl. v f. 5; *C. leganyii* sp. n. p. 66 pl. v f. 8 Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936.—*C. despectus tuberculata* var. n. Pleistocene S. Karafto YOKOYAMA J. Fac. Sci. Univ. Tokyo (Geol.) 2 9 1929 p. 383 pl. lxxi f. 1.

Colus genticus sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 316 pl. xxiii f. 5.—*Colus* of Northern Japan, KURODA 521.

†*Cominella iheringi* sp. n. Tertiary Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 p. 294 pl. ii f. 4a-b.—*C.* (= *Buccinum*) *hungarica* sp. n. Oligocene Hungary, GÁBOR Ann. hist. nat. Mus. Hung. 30 1936 p. 3 [3rd pagination] pl. i f. 4.—*C. hungarica acuta* p. 67 pl. vi f. 4; *h. simplex* p. 67; *h. elongata* p. 67 pl. vi f. 6; vars. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936 p. 67.

†*Coraeophos* subgen. n. p. 224 of *Phos*, type *P. (C.) meisensis* sp. n. p. 225 pl. v f. 18, 19, Miocene Korea, MAKIYAMA Mem. Coll. Sci. Kyoto (B) 11 4 1936.

Cuma turbinoides larval stages figs., RISBEC 809.

Cyphonocheilus generosus sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 325 pl. xxiv f. 13.

Dicathais gen. n. type *Buccinum orbita* Gmelin, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 325.

†*Euthria kochi* sp. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936 p. 65 pl. v f. 6.

†*Hadriana (Pseudomurex) renieri* Michtti., *inflata* f. n. p. 60 pl. iii f. 26, *H. (P.) becki* Michtti., *obliquecostata* f. n. p. 51 pl. iii f. 28; Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935.

Halotapada gen. n. type *H. nubila* sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 293 pl. xxi f. 22.

Ilyanassa oology of, MORGAN 640.

†*Ilyanassa (Paranassa) floridana* sp. n. Tertiary Clewiston Florida, M. SMITH Nautilus Philad. 49 4 1936 p. 138 pl. 9 f. 5.

Liomesus of Northern Japan, KURODA 521.

†*Macrochilina* Bayle type *Buccinum acutum* Sow. 1827 not *Buccininites arcuatum* Schlotheim = *Soleniscus* M. & W. (Subulitidae), KNIGHT J. Paleont. Menasha Wis. 10 6 1936 p. 522.

Mohnia of Northern Japan, KURODA 521.

Murex heros sp. n. loc.? FULTON Proc. Malac. Soc. London 22 1 1936 p. 9 pl. ii f. 2.—*M. trunculus*, BRUNET & JULLIEN 153.—*M. trunculus* anatomy and heart action, BRUNET & JULLIEN 154.

†*Murex egerensis* sp. n. p. 3 pl. i f. 10; *M. sedgwicki depressus* var. n. p. 4 pl. i f. 12; *M. trigonalis* sp. n. p. 4 pl. i f. 7; *M. t. spinatus* var. n. p. 5 pl. i f. 11 [3rd paginations] Oligocene Hungary, GÁBOR Ann. hist. nat. Mus. Hung. 30 1936. — *Murex (Muricantha) trunculus* L. *protrunculoides* var. n. p. 21 pl. i f. 11; *M. (M.) rudis* Bors. *minima* forma n. p. 24 pl. ii f. 3, 4; *M. (Favaria) excisus* Grat. *peyroti* var. n. p. 27 pl. ii f. 11; Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935. — *Murex (Chicoreus) cirratus* Bell., *obtusa* forma nov. Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935 p. 16 pl. i f. 9. — *Murex (Tubicauda) spinicosta* Brn. *convexior* n. f. Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935 p. 14 pl. i f. 5. — *M. trigonalis nudus* var. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. mus. Hung. 30 1936 p. 63 pl. v f. 9.

†*Muricopsis carvalhoi* sp. n. Pliocene Mina, nr. S. Pedro de Moel Portugal, L. R. COX Pub. Mus. Min. e geol. Univ. Coimbra Mem. e Notic 1936 9 p. 58 pl. i f. 11a-c.

Nassa reticulata, mutabilis figs., ANKEL 28. — *N. ravida, isabellei, crenulata, hirta thesites, venusta*, Hong Kong figs., KING & PING 483. — *N. (Ilyanassa)* experiments on divisions in the egg, MOMENT 637. — *N. suturalis* figs., RISBEC 809.

†*Nassa (Telasco) neuvillei elongata* var. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936 p. 68. — *N. reticosa, granulata gracilis*, figs., ØDUM 682.

†*Nassarina (?) proctorae* sp. n. Tertiary Clewiston, Florida, M. SMITH Nautilus Philad. 50 1 1936 p. 21 pl. ix f. 14.

Nassarius (?) immersus, kraussianus, horridus, radula figs., PEILE 715.

†*Nassarius persicus* sp. n. Neogene Nur Mohammadi eastern Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 40 pl. viii f. 19a, b. — *Nassarius (Hima) pontis-novi* sp. n. Pliocene Mina nr. S. Pedro de Moel, Portugal, L. R. COX Pub. Mus. Min. e geol. Univ. Coimbra Mem. e Notic. 1936 9 p. 62 pl. ii f. 1a-c, 2a-c.

Neptunea of Northern Japan, KURODA 521. — *N. antiqua* presence of caro-

tenoids in liver-organs, LÖNNBERG 571. — †*Neptunea (Neptunea) despecta borealis* fig., SŁODKEWITSCH 910.

Niotha hawleyi sp. n. Sydney N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 322 pl. xxiv f. 11.

†*Nucella (Acanthinucella) sundaica* sp. n. Miocene Bantam, Java, OOSTINGH De Ingenieur Ned-Indië IV Mijnbouw en Geol. De Mijngeng. 2 9 1935 (iv) p. 82 f. 3a, b.

Ocenebra (Ocinebrellus) modesta sp. n. Kii, Japan, FULTON Proc. Malac. Soc. London 22 1 1936 p. 10 pl. ii f. 3.

†*Ocenebra sowerbyi* (Michtti.) *per-varicosa* forma nov. p. 31 pl. ii f. 16; *O. s. tetragulata* forma n. p. 32 pl. ii f. 17; *O. lassaignei* (Bast.) *subariosiana* var. n. p. 34 pl. ii f. 22; *O. edwardsi* (Peyr.) *brevior* forma n. p. 35 pl. ii f. 23; *O. dertonensis* (May) *mutinensis* forma n. p. 37 pl. iii f. 4; *O. inflexa* Dod. *zibinica* forma n. p. 39 pl. ii f. 7; *O. anellii* "n. f." [sp. n.] p. 41 pl. iii f. 11; *O. anellii* sp. n. *plericostulata* forma n. p. 42 pl. iii f. 12; *O. friedbergi* sp. n. p. 43 pl. iii f. 13 Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935. — *O. sowerbyi* (Michtti.) *elongata* Dod. in sch. p. 31 pl. ii f. 15; *exoleta* (Bell) *larvata* Dod. in sch. p. 33 pl. ii f. 19; *O. dertonensis* May. *crassa* Dod. in sch. p. 36 pl. iii f. 3; *O. brignolii* Dod. in sch. p. 39 pl. iii f. 8; Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935. — *O. (Ocinebrina) imbricata* (Brocchi) p. i f. 4, 5a, b, L. R. COX 214.

†*Palaeotriton (?) globularis* sp. n. Dachsteinkalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1026 pl. xii f. 21-23.

Parcanassa gen. n. [non descr.] type, *P. ellana* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 322.

Phos articulatus, chelonina, cocosensis, crassus, fusoides, gaudens, minusculus veraguensis figs., STRONG & LOWE 949.

†*Phos thayerae* sp. n. Tertiary Clewiston, Florida, M. SMITH Nautilus Philad. 50 1 1936 p. 20 pl. ix f. 7.

Pisania igniflua (Reeve) described as a *Pleurotoma*, FULTON 319.

†*Pisania (Tritonidea) lymani* sp. n. Tertiary Florida, M. SMITH Nautilus Philad. 49 4 1936 p. 138.

Plicifusus of Northern Japan,
KURODA 521.

†*Polia moraisi* sp. n. Pliocene Mina,
nr. S. Pedro du Moel, Portugal, L. R.
Cox Pub. Mus. Min. e geol. Univ.
Coimbra Mem. e Notic. 1936 9 p. 60
pl. i f. 10a-c.

†*Pseudoliva nanafaliaensis* sp. n.
Eocene Alabama, ALDRICH Mus. Pap.
Alabama Mus. Nat. Hist. 12 1931 p. 8.

†*Pyrene (Mitrella) perminuta* Blg.
fig., ZILCH 1087.

Pyrulofusus of Northern Japan,
KURODA 521.

Rapana bezoar Hong Kong figs.,
KING & PING 483.

†*Rapana mekranica* sp. n. Neogene
Nar Mohammadi S. Persia, L. R. Cox
Palaeont. Ind. Calcutta 22 2 1936 p. 40
pl. viii f. 17, 18a, b.

Reticunassa gen. n. type *Nassa*
paupera Gould, *mobilis plankta* subsp. n.
Australia, IREDALE Rec. Aust. Mus.
Sydney 19 5 1936 p. 322.

†*Searlesia kurodai* sp. n. p. 223 pl. v
f. 12, 14, *S. k. kinseiensis* subsp. n.
p. 224 pl. v f. 16; Miocene N. Korea,
MAKIYAMA Mem. Coll. Sci. Kyoto B 11 4
8 1936.

Sydaphera obnixa sp. n. N.S.W., IRE-
DALE Rec. Aust. Mus. Sydney 19 5 1936
p. 318 pl. xxiii f. 6.

Tarazeuxis subgen. n. [non descr.]
type *Nassa mucronata* A. Ad., IREDALE
Rec. Aust. Mus. Sydney 19 5 1936
p. 322.

Tavaniothia gen. n. [non descr.] type
Nassa optata Gould, IREDALE Rec.
Aust. Mus. Sydney 19 5 1936 p. 321.

Thaididae, YEN 1072.

†*Thais (Stramonita) martini* sp. n.
Pliocene Java, OOSTINGH De Ingenieur
Ned-Indië IV Mijnbouw en Geol.
Mijneng. 1 2 1934 (iv) p. 28 f. 1-4.—*T.*
(*Cymia*) *imperialis* Blainv., *T. (C.)*
carinifera Lk., *T. (C.) costata* Blainv.,
T. (C.) javanica Phil., OOSTINGH 689.

Torramurex gen. n. type *Murex*
denudatus Perry p. 323 pl. xxiii f. 13,
extraneus sp. n. *denudatus immunitus*
subsp. n. Australia, IREDALE Rec. Aust.
Mus. Sydney 19 5 1936.

Trophon muricatus larvae, LEBOUR
554.

Typhina pavlova sp. n. Sydney N.S.W.,
IREDALE Rec. Aust. Mus. Sydney 19
5 1936 p. 324 pl. xxiv f. 12.

Vexilla vexillum exasperatum, *sanguisuga*, *radula* figs., PEILE 715.

Volutopsius of Northern Japan,
KURODA 521.

**TURBINELLIDAE, FASCIOLARIIDAE,
MITRIDAE, VOLUTIDAE, MAR-
GINELLIDAE, HARPIDAE, OLI-
VIDAE.**

Anaulax Koissy for *Ancilla* Lk. 1799
non *Ancylus* Geoffroy 1767; *Ancillaria*
Lk. for *Ancilla* Lk. 1799 non *Ancylus*
Geoffroy 1767; Mont. 1910 *A. buc-
cinoides* as type of *Ancilla* but in 1801
A. cinnamomea Lk. was cited as
example by Lk. and becomes mono-
type, VOKES 1026.

Ancilla Lk., *A. cinnamomea* type;
not *A. buccinoides* Lk., VOKES 1026.

†*Ancillaria altile*, *scamba*, *staminea*,
subglobosa figs. pl. iii, WHEELER 1054.

Ancillista gen. n. type *A. relesiana*
sp. n. off C. Hawke, IREDALE Rec.
Aust. Mus. Sydney 19 5 1936 p. 314
pl. xxiii f. 9.

Cancilla circula radula figs., PEILE
715.

†*Clavilithes scalaris*, *tabulatus*, *parisi-
ensis* and new species figs., CLARK &
VOKES 183.

†*Egerea* gen. n. Volutidae, type *E.*
collectiva sp. n. Oligocene Hungary,
GÁBOR Ann. hist. nat. Mus. Hung. 30
1936 p. 7 [3rd pagination] pl. i f. 13.

†*Euthriofusus szontaghi* sp. n. p. 70
pl. v f. 2; *s. alternans* var. n. p. 70 pl. v
f. 4; Oligocene Hungary, NOSZKI
Ann. Inst. nat. Mus. Hung. 30 1936.

Fasciolaria gigantea movement of
radula, GUNTER 370.

†*Fasciolaria legányii* p. 6 pl. i f. 9;
F. fusiformis p. 7 pl. i f. 14 [3rd pagina-
tions] spp. n. Oligocene Hungary,
GÁBOR Ann. hist. nat. Mus. Hung. 30
1936.—*F. scalarina maccintyi* subsp. n.
Tertiary Clewiston, Florida, M. SMITH
Nautilus Philad. 50 1 1936 p. 21 pl. ix
f. 9.—*F. (Pleuroploca) fimbriata*
(Brocchi) pl. ii f. 3a-b, L. R. Cox 214.

Fractolaturus gen. n. type *F. normalis* sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 317 pl. xxiv f. 19.

Fusus ficula Hong Kong fig., KING & PING 483.

†*Fusus reguloroides* [as *Levifusus* r. in explanation of plate p. 18] sp. n. Eocene Alabama, ALDRICH Mus. Pap. Alabama Mus. Nat. Hist. 12 1931 p. 8 pl. v f. 9.—*F. columbelliformis gradatus* var. n. p. 5 pl. i f. 8; *F. valenciennesi depressus* var. n. p. 6 pl. i f. 3: [3rd paginations] Oligocene Hungary, GÁBOR Ann. hist. nat. Mus. Hung. 30 p. 36.—*F. longiroster* (?) Br. *excellens forma* n. Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935 p. 55 pl. iv f. 4.—*F. (Aptyxis) löczyi* sp. n. p. 71 pl. v f. 1; *l. densicostatus* var. n. p. 71 Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936.—*F. watermani* sp. n. Tertiary Clewiston Florida, M. SMITH Nautilus Philad. 50 1 1936 p. 22 pl. ix f. 16.—*F. elongatus* fig., GILLET & THÉOBALD 338.

†*Harpa* (*Ecithara*) *mutica* fig., CLARK & VOKES 183.

Imbricaria acuta radula figs., PEILE 715.

Latirus zealandicus, L. (*Peristernia*) *scabrosus* Rve. and its varieties, FULTON 319.

†*Latirus tessellatus seminolensis* subsp. n. Tertiary, Clewiston, Florida, M. SMITH Nautilus Philad. 50 1 1936 p. 22 pl. ix f. 2.

†*Lathyrus* (*Ascolathyrus*) *crassicostatus* Michitti, *glabra* var. n. Miocene Montegibbio, MONTANARO Palaeontogr. ital. Siena 35 1935 p. 65 pl. i v. 5, 6.

†*Levifusus bispinosus* sp. n. Eocene Alabama, ALDRICH Mus. Pap. Alabama Mus. Nat. Hist. 12 1931 p. 7 pl. v f. 4 [vide etiam *Fusus*].

†“*Liracraea*” *sata* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 119 pl. xvii f. 77.

†*Lyria andersoni*, *maga*, figs., CLARK & VOKES 183.

Marginella muscaria abnormal figs., MORT 650.

†*Marginella clenchi* sp. n. Tertiary, Clewiston Florida, M. SMITH Nautilus Philad. 50 1 1936 p. 22 pl. ix f. 12.

Melongenella corona Santa Rosa Is., Florida, P[ILSBRY] 748.

†*Microvoluta vetusta* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 118 pl. xvii f. 74.

Mitra mariae radula figs., PEILE 715.

†*Mitra melanopsiformis* sp. n. Pliocene Mina nr. S. Pedro de Moel Portugal, L. R. Cox Pub. Mus. Min. e Geol. Univ. Coimbra Mem. e Notic. 1936 9 p. 66 pl. ii f. 4a, b.—†*Mitra bicornis* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 113 pl. xvi f. 66.—†*Mitra* cf. *fusca* Swainson pl. ii f. 5a, b, L. R. Cox 214.

†*Oliva alabamensis*, WHEELER 1054.

†*Pachymelon* (*Palomelon*) *powelli* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 118 pl. xvii f. 75.

†*Pyrula penita* fig. pl. iv, WHEELER 1054.

Relegamoria gen. n. Volutidae, type *R. mollerii* sp. n. Manley N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 314 pl. xxiii f. 10.

†*Sipho islandicus* figs., ASKLUND 50.

†*Spirancilla* subgen. n. of *Ancilla* type *A. buccinoides* Lk., with *A. gabbi* Cossmann = *elongata* Gabb not Gray nor Michelotti, VOKES Proc. Geol. Soc. Amer. (1935) 1936 p. 414.

†*Turbinella pyruloides* fig., pl. iii, WHEELER 1054.

Vexillum cubanum sp. n. Cuba, AGUAYO & REHDER Mem. Soc. cubana Hist. nat. 9 1936 p. 267 pl. xxiv f. 4.

†*Vexillum* (*Costellaria*) *moelensis* sp. n. Pliocene Mina nr. S. Pedro de Moel Portugal, L. R. Cox Pub. Mus. Min. e Geol. Univ. Coimbra Mem. e Notic. 1936 9 p. 68 pl. ii f. 6a-c.—*V. (Pusia) gabusoganum* sp. n. Tertiary Ryūkyū Islands, NOMURA & ZINBÔ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 254 (26) pl. xi (i) f. 23.

Vicimitra contermina sp. n. Sydney Iredale p. 320; *V. exposita* sp. n. Sydney p. 320 pl. xxiii f. 16, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

Voluta loroisi Val. fig., *V. acuminata*, WINCKWORTH 1058.

†*Voluta* (*Lyria*) *gárdonyi* sp. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hungary 30 1936 p. 72 pl. v f. 15.

†*Volutilithes* (*Athleta*) *ficulina bistriata* var. n. p. 72 pl. v f. 7; *V. (Neoathleta) consanguineus humilis* var. n. p. 72 pl. v f. 11 Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936.—*V. ventricosa* sp. n. Eocene near Cairo, PIERAGNOLI Bol. Soc. geol. ital. 54 2 1936 p. 181 pl. viii f. 10.

STENOGLOSSA.

(b) TOXOGLOSSA.

TURRIDAE, TEREBRIDAE, CONIDAE,
CANCELLARIIDAE, HALIIDAE.

Arizelostoma gen. n. [Cancellariidae] type *A. laseroni* sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 318 pl. xxiv f. 9.

†*Asthenotoma yokoyamai notoensis* var. n. *A. komakimonos* sp. n. Sajanie Bay, Japan, OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.

†*Austrodrillia consequens* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy Soc. N.Z. 66 2 1936 p. 121 pl. xvii f. 76, 78.

Bela harpularia rosea, ØDUM 682.

Benthofascis gen. n. type *Bathytoma biconica* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 319.

†*Borsonia rotundata* sp. n. Oligocene Island of Buton (S.E. of Celebes), K. MARTIN Leidsche Geol. Mededeel. Leiden 7 1 1935 p. 115 pl. ii f. 7, 7a.

Cancellaria, SIEBER 904.

†*Cancellaria* (*Sveltia*) *inermis angulata* var. n. Miocene Niederkreustetten, SIEBER Archiv Molluskenk. 68 3 1936 p. 98 [pl. iii f. 7a, b, op. cit. 68, 2].—*C. (Ventrilia) exvestiana pötzeleinsdorfensis* var. n. Pötzeleinsdorf Miocene, SIEBER Archiv Molluskenk. 68 3 1936 p. 91 [pl. iii fig. 5a, b op. cit. 68 2].—*C. (Ventrilia) exvestiana pötzeleinsdorfensis* var. n. Miocene, Dutch East Indies, SIEBER Archiv Molluskenk. 68 2 1936 p. 73.—*C. (Sveltia) dertovaricosa*, *C. (Ventrilia) exvestiana* variations, *C. (Ventrilia) acutangula*, *C. (Sveltia) varicosa miocenica*, *C. (Calcarata) calcarata*, *C. (Trigonostoma) spinifera*, *C. (T.) puschi* [figs. in 68 3], SIEBER 905.

†Cancellariidae Lower Austrian, Miocene, SIEBER 904.—Cancellariidae, YEN 1072.

Clathurella episema = *euzonata* Herv. *longa* = *Glyphostoma trigonostomum* Herv., TOMLIN 991.

†*Clavatula tipperi* sp. n. Neogene Nur Mohammadi Eastern Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 41 pl. viii f. 16.—*C. (Perrona) sundaica* sp. n. Miocene Bantam Java, OOSTINGH De Ingenieur Ned-Indië IV Mijabouw en Geol. De Mijngeng. 2 9 1935 p. 82 f. 4a, b.

†*Clavus* (*Brachytoma*) *simazirianus* sp. n. Tertiary Ryūkyū Islands, NOMURA & ZINBÔ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 252 (24) pl. xi (i) f. 20a, b.

Columbarium hedleyi sp. n. E. of Sydney N.S.W. p. 316 pl. xxiv f. 18, 18a; *trabeatum* sp. n. E. of Sydney p. 316 pl. xxiii f. 17, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

Conus schepmani nom. nov. for *Conus elegans* Schepman Rés. Explor. Siboga 64 p. 393 1913, non Sow. Proc. Malac. Soc. 1 p. 215 1895, FULTON Proc. Malac. Soc. London 22 1 1936 p. 7.—*C. mulderi* sp. n. Mindoro Island, Philippines, FULTON Proc. Malac. Soc. London 22 1 1936 p. 9 pl. ii f. 1.—*C. hopwoodi* nom. nov. for *Conus gracilis* Sow. iii P.Z.S. 1875 p. 125 pl. xxiv f. 6, TOMLIN J. Conch. London 20 8 1936 p. 254.—*Conus gloria-maris*, TOMLIN 989.

†*Conus* (*Leptoconus*) *plagiarius* sp. n. Oligocene Buton I., K. MARTIN Leidsche Geol. Mededeel. Leiden 7 1 1935 p. 112 pl. ii f. 1, 1a.—*C. (Leptoconus) dujardini brevispiratus* var. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. mus. Hung. 30 1936 p. 81 pl. vi f. 13.

†*Cryptoconus cooperi*, *priscus* figs., CLARK & VOKES 183.

†*Daphnella jickelii* Btg., ZILCH 1087.

†*Drillia collectiva* sp. n. p. 74 pl. v f. 22; *D. obtusa elongata* var. n. p. 74 pl. v f. 18; *D. crispata oligocenica* var. n. p. 74 pl. vi f. 12 Oligocene Hungary, NOSZKI Ann. Inst. nat. mus. Hung. 30 1936.

†*Gemmula disjuncta* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 120 pl. 17 f. 82.

Haedropleura septangularis larvae pl. iii f. 8–18, LEBOUR 554.

†*Inglisella hirta* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 116 pl. xvi f. 69.

†*Kaweika bartrumi* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 122 pl. xvii f. 79, 81.

Lucerapex gen. n. [non descr.] type *Pleurotoma casearia* Hedley, *C. regilla* subsp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 320.

Mangelia coarctata larvae p. iii f. 5-7, LEBBOUR 554.

†*Mangelia makiyamai* sp. n. Japan, OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.

Mangelia agna = ? *hexagonalis* Rve. *orophoma* = *Clathurella perangulata* Herv.; *M. (Cythara) euselma* = *M. eudeli* Sow.; *signum* = *eumerista*; *M. (Glyphostoma) chrysolitha* = *Clathurella punctifera* Garrett; *M. (G.) dialitha* = *Clathurella papillosa* Garrett; *M. (G.) latirella* = *G. gaidei* Herv., *M. (G.) thepalea* = *Clathurella caelata* Garrett; *thesaurista* = *parthenicum* Herv.; *Mangelia (Glyphostoma) cremonilla* = *lamproideum* Herv.; *Mangelia (Defrancia) albifuniculata* Rve. = *tincta* Rve. *albifuniculata* of Melv. & Stand. = *maculosa* Pease, TOMLIN 991.

†*Mazatlaniana fulgurata* Phil. pt. 19 f. 13, PALMER & HERTLEIN 700.

Micanapex gen. n. type *B[athytoma] agnata* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 319.

Pleurotoma igniflua Reeve & Pisania, FULTON 319.—*Pleurotoma (Drillia) hadfieldi* syn. = *Clathurella ephela* Herv., TOMLIN 991.

†*Pleurotoma tricineta* f. 2, 2a, *nudata* f. 3 spp. n. p. 113 pl. ii; *P. (Hemipleurotoma) ktolemandoënsis* p. 114 pl. ii f. 4 sp. n., Oligocene Island of Buton (S.-E. of Celebes), K. MARTIN Leidsche Geol. Mededeel. Leiden 7 1 1935.—*P. duchatelli incostata* var. n. p. 75 pl. v f. 19; *P. flexicostata ventricosa* var. n. p. 75 pl. vi f. 10; *P. rotata gracilis* var. n. p. 76 pl. vi f. 11 Oligocene Hungary, NOSZKI Ann. Inst. nat. mus. Hung. 30 1936.—“*Pleurotoma*” *rostrata* figs., CLARK & VOKES 183.—*P. selysi*, *regularis belgica*, figs., GILLET & THÉOBALD 338.

†*Pseudoraphitoma nakosiensis* sp. n. Tertiary Ryūkyū Islands, NOMURA & ZINBÔ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 253 (25) pl. xi (i) f. 21.

†*Raphitoma gabusogana* sp. n. Tertiary Ryūkyū Islands, NOMURA & ZINBÔ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 253 (25) pl. xi (i) f. 22a, b.

†*Surcula beyrichi gracilis* var. n. p. 77 pl. v f. 20; *S. b. simplex* var. n. p. 77 pl. vi f. 8; *S. lörenthei* sp. n. p. 77 pl. v f. 16; *S. telegdi Rothi* sp. n. pl. v f. 10.—*S. regularis robusta* p. 78 pl. vi f. 5; *S. regularis arcuatospirata* p. 78 pl. vi f. 9; *S. regularis bulbiformis* p. 79 pl. vi f. 1; Vars.: *S. bulbosa* sp. n. p. 79 pl. vi f. 2 Oligocene Hungary, NOSZKI Ann. Inst. Nat. Mus. Hung. 30 1936.—*S. izermani* p. 114 pl. ii f. 5, 5a; *guttata* p. 115 pl. ii f. 6, 6a spp. n. Oligocene Island of Buton (S.E. of Celebes), K. MARTIN Leidsche Geol. Mededeel. Leiden 7 1 1935.

Trigonaphera gen. n., type *Trigonostoma vinnulum*, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 319.

Trigonostoma, SIEBER 904.

†*Turricula bicatenata* p. 116 pl. 2 f. 8, 8a; *T. indistincta* p. 117 pl. 2 f. 9, 9a; spp. n. Oligocene Island of Buton (S.E. of Celebes), K. MARTIN Leidsche Geol. Mededeel. Leiden 7 1 1935.—*Turricula cowlitzensis* figs., CLARK & VOKES 183.

†*Turriculina* gen. n. for *T. unica* sp. n. Lias Mt. S. Giuliano Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 pp. 18, 19 pl. 1 f. 38.

†*Zeacuminia parva* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 122 pl. 17 f. 80, 85.

Opisthobranchiata.

Acanthodoris uchidai sp. n. Akkeshi Bay Japan, BABA J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 p. 115 119 pl. 7 f. 8-10.

Acteon torrei sp. n. La Chorrera Cuba, AGUAYO & REHDER Mem. Soc. cubana Hist. nat. 9 1936 p. 268 pl. 24 f. 8.—*A. dolichoroseus* sp. n. N.S.W. p. 330 pl. xxiv f. 27; *A. subroseus* sp. n. Cape Hawke p. 330 pl. xxiv f. 25; *A. fructuosus* sp. n. p. 330 pl. xxiv f. 28, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

†*Actaeonella patagonica* sp. n. Cretaceous Patagonia, FERUGLIO *Notas prelim. Mus. La Plata (Palaeont.)* 1 6 1936 p. 290 pl. i f. 1a, b.

Actaeonina, LABBÉ 526.

†*Actaeonina submoorei* sp. n. Lias Franken, KUHN *N. Jahrb. Min. Geol. Paläont. Stuttgart* 75 2 1936 p. 299 pl. xii f. 28.—*A. (Ovactaeonina) groenlandica* sp. n. Portlandian C. Leslie Milne Land, SPATH *Medd. Grønland* 99 3 1936 p. 96 pl. xl f. 2a-c.

Adamnestia gen. n. [non descr.] type *A. peroniana* sp. n., IREDALE *Rec. Aust. Mus. Sydney* 19 5 1936 p. 333.

Aeolidiella glauca, croisicensis, ROUSSEAU 827.

Aeolis glauca, MAURY 607.

Aglaja cyanea fig., BABA 61.

Aglaja iwasai sp. n. Misaki Japan, HIRASE *J. Conch. London* 20 9 1936 (25th Nov.) p. 258 pls. x, xi [vide etiam].—*Aglaja iwasai* sp. n. Japan, HIRASE *Zool. mag. Tokyo* 48 1936 pp. 731, 732 pls. xxix, xxx.—*A. gigliottii* fig., TAKI 961.

Alderia modesta figs., FELIKSIK 281; SCHULZ 878.

Aplysia punctata and *fasciata*, experiments on, BERTHOUMEYROUX 96.—*A. dactylomela, cervina, A. (Pruvotaplysia)*, ENGEL 260.—*Aplysia* or *Tethys* a question of nomenclature, ENGEL 263.—*A. limacina, punctata* and *Aplysiopurpurine*, FONTAINE & RAFFY 290.—*A. fasciata*, JULLIEN 462.—*A. limacina*, RIES & GERSCH 808.

Aranucus bifidus Gilbert Ids. sp. n., ODHNER *Mém. Mus. Hist. nat. Belge* (2) 3 1936 p. 1091 figs. 22-28.

Archidoris britannica, N. FISHER 278.

Argus esakii sp. n. Dorididae, Ryûkû (Okinawa) Islands, BABA *J. Rept. Agr. Kyushu Univ.* 5 1 1936 pp. 4, 36 pl. iii f. 10 text-figs. 21.—*Argus tabulatus, cruentus* figs., BABA 61.

Asteronotus cespitosus figs., BABA 61.

†*Avellana pelagana* sp. n. Upper Cretaceous Atlantic sea, eastern part of Banquerean, L. W. STEPHENSON *Bull. Geol. Soc. Amer. Washington D.C.* 47 3 1936 p. 403 pl. v f. 19, 20.

Berthella gotoi sp. n. Japan, HIRASE *Zool. Mag. Tokyo* 48 1936 pp. 731, 734 pls. xxix, xxx.

Berthellina engeli nom. nov. [gen. et sp. nov.] for *Pleurobranchus (Berthella) plumula* of Engel; gen. nov. includes also *brocki* Vayss, *citrina* Lk., *edwardsi* Vayss, *granulata* Krauss, GARDINER *J. Conch. London* 20 7 1936 p. 198.

Bornella excepta, digitata, ODHNER 681.

†*Bulla delpiasi* sp. n. Upper Cretaceous Tripolitania, CHECCHIA-RISPOLI *Bol. Soc. geol. ital.* 55 1 1936 p. 39 pl. i f. 1-3.

Bullacta exarata (Philippi) nov. comb. Scaphandridae = *B. caurica* Benson, Bay of Kiao-chow, Ningpo, Amoy and Japan Sea, TCHANG-SI *Contr. Inst. Zool. Peiping* 2 2 1934 pp. 1, 3 f. 1-13 pl. i f. 1-4, pl. iii f. 1-3, pls. iv-vii.

†*Bullinella (Millosevichia) sanfilippoi* Upper Cretaceous Tripolitania, CHECCHIA-RISPOLI *Bol. Soc. geol. ital.* 55 1 1936 p. 40 pl. i f. 4-7.

†*Coreospira rugosa* gen. et sp. n. Cambrian Rhipidoglossa fam. nova? *Pelagiella* sp. Saito 1933 N.-W. Korea, SAITO *J. Fac. Sci. Univ. Tokyo Geol.* 4 3 1936 p. 360 pl. iii f. 6-12.

Cryptophthalmus smaragdinus fig., BABA 61.

Cyerce nigricans figs., BABA 61.

Cyliclona incisula figs., ÔTUKA 697.

Cymbulia peronii Anatomy, HOWELLS 429.

Dendrodoris (Dendrodoris) elongata sp. n. Ryûkû (Okinawa) Islands, BABA *J. Rept. Agr. Kyushu Univ.* 5 1 1936 pp. 4 39 pl. 2 f. 5 text-fig. 23.—*D. nigra* figs., BABA 61.

Dendronotus frondosus, robustus, ODHNER 681.

Diniatys gen. n. type *Atys dentifera* A. Ad., IREDALE *Rec. Aust. Mus. Sydney* 19 5 1936 p. 329.

Discodoris ūeyamensis sp. n. Ryûkû (Okinawa) Islands, BABA *J. Rept. Agr. Kyushu Univ.* 5 1 1936 pp. 3 30 pl. iii f. 11 text-fig. 17.

Dolabella scapula figs., BABA 61.

Dolabrifera tahitensis figs., BABA 61.—*D. dolabrifera*, ENGEL 260.

Doridium depictum minor var. nov. Tsingtao, TCHANG-SI Contr. Inst. Zool. Peiping 2 2 1934 pp. 1 49 text-figs. 25-31 pl. ii f. 1-3, pl. iii f. 7-8, pl. x and xi.

Doris coccinea at Luc-sur-Mer, TOLMER 982.

Doto japonica Sagami, Japan p. 1121 pl. i f. 11-16 text-figs. 47, rad.: *apiculata* sp. n. 24° 43' N., 119° 31' E, spp. n., ODHNER Mem. Mus. Hist. nat. Belg. (2) 3 1936; *D. coronata*, *fragilis*, *apiculata*, ODHNER 681.

Duvauceliidae, ODHNER 681.

Elophilus ajuthiae Labbé nov. gen., nov. sp., LABBÉ Ann. Inst. Océanogr. Paris N.S. 16 2 1936 p. 215 (adds. et rects. à la Prem. Partie); *E. ajuthiae* anatomical figs., LABBÉ 525.

Elysia yaeyamana sp. n. Ryûkû (Okinawa) Islands, BABA J. Rept. Agr. Kyushu Univ. 5 1 1936 pp. 3 21 pl. ii f. 2 text-fig. 10.—*E. viridis* rad. fig., BABA 61.—*E. viridis* purplish-brown var. Barra Island, FORREST 292.

Eubranchus "[= *Galvina*]" *exigenes* figs., ENGEL 265.

Facelina elegans, N. FISHER 279.

Fimbria fimbria figs., ODHNER 681.

Geitodoris ohshimai sp. n. Ryûkû (Okinawa) Islands, BABA J. Rept. Agr. Kyushu Univ. 5 1 1936 pp. 3, 29 pl. iii f. 5 text-fig. 16.

Gymnodoris okinawae sp. n. Ryûkû (Okinawa) Islands, BABA J. Rept. Agr. Kyushu Univ. 5 1 1936 pp. 3, 25 text-fig. 13.

Hancockia eudactylota, ODHNER 681.

Hexabranchus marginatus figs., BABA 61.

Hydatina physis, LYMAN 578.

Hydatoria subgen. n. [non descr.] type *Bulla cinctoria* Perry, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 334.

†*Hyalithus kotô* p. 361 pl. iii f. 20-23; *globiger* p. 361 pl. iii f. 13-17; *teretapex* p. 362 pl. iii f. 24-31; spp. n. Cambrian N.-W. Korea, SAITO J. Fac. Sci. Univ. Tokyo Geol. 4 3 1936.

Kalinga ornata morphology figs., RAO 787.

Lessonia ferruginea anatomical figs., LABBÉ 525.

Linguella babai sp. n. Pleurophyllidiadae Tsingtao, TCHANG SI Contr. Inst. Zool. Peiping 2 2 1934 pp. 2 100 text-figs. 47-55 pl. ii f. 7-10 pl. iii f. 12 pl. xv.

Limulatys gen. n. Ellobiidae type *L. reliquus* sp. n. Sydney, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 328 pl. xxiv f. 20.

Lomanotus genei, OHDNER 681.

Marionia pustulosa p. 1088 pl. i f. 4-5 Queensland; *granularis* p. 1090 pl. i f. 6 Persian Gulf; spp. n., ODHNER Mém. Mus. Hist. nat. Belg. (2) 3 1936.

Marionapsis cyanobranchiata figs., ODHNER 681.

Melibe pilosa (= *papillosa*); *M. leonina*, ODHNER 681.

Merica, SIEBER 904.

Nembrotha luteolineata sp. n. Euphuriidae, Ryûkû (Okinawa) Islands, BABA J. Rept. Agr. Kyushu Univ. 5 1 1936 pp. 3, 26 pl. 3 f. 7 text-fig. 14

Noalda gen. n. [non descr.] type *Hydatina exigua* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 334.

Notarchus (*Stylocheilus*) *stimpsoni* figs., BABA 61.—*Notarchus indicus*, *punctatus* anatomical figs., ENGEL 262.

Notobryon gen. n. Scyllaeidae type *N. wardi* sp. n. off Gatecombe Hd. Port Curtis Queensland, ODHNER Mém. Mus. Hist. nat. Belg. (2) 3 1936 p. 1099 pl. i f. 1-3 text-figs. 31-38.

Nudibranchiata of the Netherlands, ENGEL 265.—Nudibranchiata (Netherlands) eggs figs., JUTTING & ENGEL 467.—Nudibranchiata of Risso, identification of, PRUVOT-FOL 774.

Oncidiella celtica leopoldi, anatomical figs., LABBÉ 525.

Oncidiella armadilla, *celtica*, LABBÉ 526.

Oncidium repugnatorial glands AREY 39.—Respiration, AREY 40.—*Oncidium*, LABBÉ 525.—*Oncidium tonga* oology fig., RISBEC 809.

Oncis semperi figs., LABBÉ 525.

Opisthobranchia Netherlands figs., JUTTING & ENGEL 467.

Otina ovata at Berwick, BRUCE 151.

Paraperonia gondwanae anatomical figs., LABBÉ 525.

Paraplysia Pilsbry; *P. geographica scripta* Bergh. figs., ENGEL 264.

Peronia gaimardi anatomical figs., LABBÉ 525.

Petalifera petalifera, ENGEL 260.

Philine kinglipini sp. n. Bays of Tsangkow and Nukukow, TCHANG-SI Contr. Inst. Zool. Peiping 2 2 1934 pp. 1, 31 text-figs. 14-24 pl. i f. 5-7, pl. iii figs. 4-6, pl. viii & ix.—*Philine aperta* radula fig., JUTTING & ENGEL 467.

Phyllaplysia lafonti figs. *paulini*, *brongniarti*, *ornata*, *depressa*, *viridis* figs. *varicolor*, ENGEL 261.

Phyllidia (*Phyllidiella*) *pustulosa nobilis*, *P. (Phyllidia) varicosa* figs., BABA 61.

Phylliroe lichtensteini (= *atlantica*) figs., ODHNER 681.

Placobranchus ocellatus figs., BABA 61.

Pleurophyllidiopsis amoyensis gen. et sp. n. *Pleurophyllidiadae* on rocks by semaphore of Amoy, TCHANG-SI Contr. Inst. Zool. Peiping 2 2 1934 p. 149 figs. 1-9 pl. i f. 11-13, pl. xvii.

Pruvotaplysia subgen. nov. of *Aplysia* for *Aplysia parvula* Mörch 1863, ENGEL *Capita* zool. 's-Gravenhage 8 pt. 1 1936 pp. 15, 27.

Pteraeolidia semperi, BABA 61.

Pterochelus duffusi sp. n. Broken Bay N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 323 pl. xxiii f. 11.

Pupa roseomaculata sp. n. Sydney Harbour (Triton Dredgings) p. 331 pl. xxiv f. 20, *tragulata* sp. n. Sydney p. 331 pl. xxiv f. 23, IREDALE Rec. Aust. Mus. Sydney 19 1 1936.

Ringiculadda gen. n. type *Ringicula semisculpta* Hedley p. 332; *S. frigidula* subsp. n. p. 332, IREDALE Rec. Aust. Mus. Sydney 19 5 1936.

†*Scaphander hiulca* sp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936 p. 123 pl. xvii f. 83, 84.

Scaphis, astridae, viridis anatomical figs., LABBÉ 525.

†*Schismope ngatutura* p. 100 pl. xv f. 43, 44; *koruahina* p. 100 pl. xv f. 45-47; spp. n. Miocene New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 2 1936.

Scyllaea pelagica, ODHNER 681.

Spissitydeus gen. n. [non descr.] type *Atys pransa* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 329.

Stiliger (Ercolania) akkeshiensis sp. n. Akkeshi Bay, Japan, BABA J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 pp. 115, 116 pl. vii f. 1-4.

Stylocheilus longicaudus, ENGEL 260.

Tepidatys gen. n. [non descr.] type *T. tremens* sp. n., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 329.

Tethys hirasei sp. n. Ryûkû (Okinawa) Islands, BABA J. Rept. Agr. Kyushu Univ. 5 1 1936 pp. 2, 10 text-fig. 3.—*Tethys dactylomela* (Rang) "as *Aplysia fimbriata* from Miyako-shima" Ad. & Reeve figs., BABA 61.—*Tethys* or *Aplysia* a question of nomenclature, ENGEL 263.

†*Tornatellaea schmidtilli* sp. n. Dogger in Franken, KÜHN Paläont. Z. Berlin 17 3-4 1935 p. 147 pl. ix f. 6a, b.

Tritoniopsisilla elegans figs., ODHNER 681.

†*Trochactaeon salomonis*, AVNIMELECH 57.

Tyrodina citrina fig., LABBÉ 525.

Ventomnestia gen. n. type *V. colorata* sp. n. Sydney, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 333 pl. xxiv f. 21.

Ventrilia, SIEBER 904.

Volvurella parata sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 332.

PULMONATA.

ELLOBIIDAE, SIPHONARIIDAE, CHILINIDAE, LYMNŌEIDAE, PLANORBIDAE, ANCYLIDAE, PHYSIDAE.

Acroloxus lacustris baicalensis var. n. Lake Baikal, KOZOV Trav. Sta. limnol. Lac Baikal Leningrad 8 1936 p. 184 pl. vii f. 39.—*Acroloxus lacustris* parasitism, VOLZ & FRÖMMING 1027.

Afroplanorbis type *Planorbis sudanicus* Marts. Thiele Handb. 1920 p. 480, HAAS 371.

Ancylidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Ancylus lacustris in N. Asia, MOZLEY 653.

Anisus leucostoma fig., ROTARIDES 824.

Aplexa marmorata (Guilding) pl. xxv f. 6 = *Limnaea* (*Physa*) *rivalis* Sow. 1822 non *Bulla rivalis* Turton 1807 and of Mat. & Rack. 1807 non *Physa rivalis* Pot. & Mich. 1838, CLENCH 187. — *A. mauergeriae*, *princeps*, *aurantia*, *impluviata laeta*, *spiculata*, s. *abbreviata*, from Yucatan figs., BEQUAERT & CLENCH 88. — *A. hypnorum pilsbryi* fig., BROOKS 148. — *A. hypnorum*, MOZLEY 652. — *A. hypnorum* in N. Asia, MOZLEY 653.

†*Bathyomphalus contortus* fig., ROTARIDES 824.

Bulinus (*Diastrophia*) *contortus bullaeus* subsp. n. Madagascar, HAAS Abh. Senckenberg. Naturf. Ges. Abh. 431 p. 31 pl. i f. 17. — *Bulinus* (*Bulinus*) *senegalensis*, *hemprichii*, (*Pyrgophysa*) *forskali*, *cernicus*, (*Diastrophia*) *contortus*, *broccii*, *romondianus*, HAAS 371. — *Bulinus broccii*, *contortus* fig., dybowskyi fig. *B.* (*Pyrgophysa*) sic [*Pyrgophysa*] *forskali*, *innesi*, *schakoi*, *tropicus*, parasites, NEVEU-LEMAIRE 665. — *Bulinus truncatus* and *Schistosoma haematobium* in Iraq., MILLS, MACHATTIE & CHADWICK 626.

Bullinus as food of *Mus decumanus*, HOFFMANN 422. — *Bullinus contortus*, *dybowskii*, *innesi*, *truncatus* and *Schistosoma*, LANE 546.

Carinifex newberryi, *atopus*, *ponsonbyi* figs., J. HENDERSON 397.

Carychiidae in W. Virginia, S. T. BROOKS 149.

Choanomphalus (*Ch.*) *amourenius tumidus* var. n. p. 173 pl. vi f. 30–32; *Ch.* (*Ch.*) *dybowskianus parvus* var. n. p. 178 pl. vi f. 35, 36; *Ch.* (*Ch.*) *gerstfeldtianus striatus* var. n. p. 180; *Ch.* (*Ch.*) (*Sulcifer*) *annuliformis* sp. n. p. 183 pl. vi f. 42–43, 59, 66–68a; Lake Baikal, Kožov Trav. Sta. limnol. Lac. Bajkal Leningrad 8 1936.

†*Choanomphalus* (*Palaeorbis*) *fričii* sp. n. Palaeozoic Bavaria, BABOR Sborn. Kl. přír. Praze 1913 2 1914 p. 12 fig. p. 13.

Coretus corneus figs., A. V. BRANDT 138. — *Coretus corneus* figs., PRECHT 769.

†*Eriptycha sanfilippoi* p. 244 pl. xii f. 1–4; *E. millosevichi* p. 246 pl. xii f. 5–8 Upper Cretaceous Tripolitania, CECCHIA-RISPOLI Bol. Soc. geol. ital. 54 2 1936.

Galba (*Galba*) *palustris scalaris* nov. Estland, KRAUSP Archiv f. Molluskenk. 63 1 p. 28 pl. ii f. 2. — *Galba truncatula*, *palustris* genetics and variation, figs. and graphs, REICHMUTH 792.

Gyraulus prashadi fig. parasite, NEVEU-LEMAIRE 665.

†*Gyraulus laevis* fig., ROTARIDES 824.

Helisoma corpulentum, c. *vermillionense*, c. *multicostatum*, *whiteavesi*, *infracarinatum*, *pilsbryi*, *trivolvis*, *plexatum*, *subcrenatum*, t. *macrostomum*, figs., F. C. BAKER 64. — *Helisoma ammon*, HENDERSON 394. — *Helisoma tumidum*, BÜTTNER 161. — *Helisoma occidentale occidentale* (Cooper) pl. i f. 1; *binneyi* Tryon pl. i f. 2; *traskii* Lea pl. i f. 3, HENDERSON 398.

Limnaea (*Radix*) *ovata petricola* forma *kultukiana* B. Dyb. 1913 L. (R.) *ovata petricola angarensis* p. 13 o. p. *tschivirkuenensis* p. 13 pl. ii f. 10, 14 morf. n.: L. (R.) *peregra angarensis* var. n. p. 139 pl. ii f. 16–19 pl. viii f. 10, Lake Baikal, Kožov Trav. Sta. limnol. Lac. Bajkol, Leningrad 8 1936. — *L. luteola* and *Schistosoma*, BRUMPT 152. — *L. stagnalis* experiments, CHATZILLO 174. — *L. peregra* in Windermere, HUMPHRIES 431. — *Limnaea* embryology, LI 560. — *Limnaea acuminata*, *bulimoides emarginata*, *humilis*, *japonica*, *limosa*, *luteola*, *natalensis* figs., *oankensis*, *palustris*, *peregra*, *pervia*, *reflexa*, *rubella*, *stagnalis*, *swinhoei*, *tenuistriatus*, *traski*, *truncatula* fig., *viatrix*, parasites, NEVEU-LEMAIRE 665. — *L. peregra* Eastbourne Downs, SHRUBSOLE 901. — *L. stagnalis*, *auricularia*, *limosa*, TÉTRY 972. — *L. stagnalis*, WEIGMANN 1043.

Limnaea natalensis undussumae figs., V. d. BERGHE 91. — *L. experiments* on, FROMMING 312. — *L. stagnalis* weight with reference to health and parasitism, HURST 433. — *L. stagnalis scalaris* figs., KRAUSP 501. — *L. palustris*, *stagnalis*, *caperata*, MOZLEY 652. — *L. stagnalis*, (*Radix*) *auricularia*, (R.) *peregra*, *peregra ovata*, (R.) *zazurnensis*, (*Galba*) *palustris*, p. *saridalensis*, p. *kazakensis*, p. *draverti*, p. *bolotensis*, *truncatula*, (*Leptolimnaea*) *glabra*, in N. Asia, MOZLEY 653. — *L. stagnalis*, ROTARIDES 823. — *L. tenera euphratica* infested by *Cercaria*, M. ROTHSCILD 826. — *L. (Radix) japonica* respiration of, SONEHARA 922.

†*Lymnaea magister, palustris wyomingensis, impedita, palustris buttoni, elrodi, palustris nuttalliana, hemphilli* figs. (*Stagnicola*) *idahensis, utahensis*, HENDERSON 397.

Lymnaeidae Britain, BOYCOTT 131.—Lymnaeidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Melampus bidemtatus, HAUSMAN 388.

Melosidula gen. n. type *Cassidula zonata* H. & A. Ad., *granosula* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 328.

Menetus planulatus figs., HENDERSON 397.

†*Microconchus carbonarius* Daws var. n., BABOR 63.

Myxas glutinosa in N. Asia, MOZLEY 653.

Parapholix related to *Helisoma* subfam. Helisomatinae, F. C. BAKER 66.—*Parapholix solida* Dall pl. i f. 5; *effusa nevadensis* Henderson pl. i f. 6-7; *effusa effusa* (Lea) pl. i f. 8, HENDERSON 398.

†*Paraspira septemgyrata* Ziegler & Rssm., Syn. *Planorbis calculiformis* Sandberger, PETRBOK 728, 729.

Physa acuta, BÜTTNER 161.—*P. cubensis* Pfr. = *P. acuta* Orb. 1841 = *P. orbigny* Mazs 1883; *P. peninsulæ* Pils. 1889 nom. nud. = *P. jamaicensis* Clessin, non C.B. Ad. = *P. soverybyana* C.B. Ad. (= *soverybyana* Orb.) = *P. guadeloupensis* Cless. = *P. caliban* Vanatta; pl. 24 f. 2; *P. bermudezi* Aguayo 1935 pl. 24 f. 3; *P. jamaicensis* C.B. Ad. pl. 24 f. 4; *P. (Plesiophysa) pilsbryi* Aguayo = *striata* Orb. non Menke, non Lea = *granulata* "Shutt." Sow. Conch. Icon. pl. 24 f. 5; *P. (Haitia) elegans* Clench & Aguayo pl. 24 f. 1., CLENCH 187.—*P. ampullacea, nuttallii, columbiana*, J. HENDERSON 392.—*P. ampullacea* Gould f. 2, *columbiana* Hemphill f. 2a, HENDERSON p. 269 398.—*P. fontinalis* Windermere, HUMPHRIES 431.—*P. occidentalis* weight with reference to health and parasitism, HURST 433.—*P. gyryna*, MOZLEY 652.—*P. fontinalis, sartlandinensis*, in N. Asia, MOZLEY 653.—*P. fontinalis, gyryna, occidentalis, parkeri, saziioneida*, parasites, NEVEU-LEMAIRE 665.

Physidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Physopsis, africana globosa figs., V. d. BERGHE 91.—*Physopsis africana* and *Bilharzia*, CAWSTON 168.—*Physopsis africana* fig., *conica, globosa*, parasites, NEVEU-LEMAIRE 665.

Planorbina olivaceus, guadaloupensis, centimetralis antiquensis and *Schistosoma*, LANE 546.

Planorbis (Gyraulus) umbiliciferus sp. n. Lake Baikal, Kožov Trav. Sta. limnol. Lac Bajkal, Leningrad 8 1936.—*Planorbis obstructus*, generic position of, F. C. BAKER 67.—*P. adowensis, sudanicus, ruppellii, costulatus, gibbonsi*, VAN DEN BERGHE 91.—*P. exustus, boissyi* and *Schistosoma*, BRUMPT 152.—*P. corneus* var. *albina* fig., HENRIARD 399.—*Planorbis* as food of *Mus decumanus*, HOFFMANN 422.—*P. contorta* Windermere, HUMPHRIES 431.—*P. dufourii* and *Schistosoma*, LANE 546.—*Planorbis* Embryology, LI 560.—*P. corneus* in Ulster, MACDONALD 580.—*Planorbis trivolvis, exacoccus, umbilicatellus, arcticus, campestris*, MOZLEY 652.—*P. planorbis, (Planorbarius) corneus, (Gyraulus) acronicus, (G.) borealis, (G.) crista, (Spiralina) spirorbis, (S.) leucostoma, (G.) compressus, (S.) johanseni*, in N. Asia, MOZLEY 653.—*P. antiquensis, boissyi* fig. *centimetralis coenosus* fig. *corneus, cultratus, exustus, guadeloupensis, mareoticus, metidjensis dufouri* fig., *nitidus, olivaceus* fig., *pfeifferi* fig. *planorbis, rotundatus, sudanicus, trivalvis*, parasites, NEVEU-LEMAIRE 665.—*Planorbis*, PRECHT 770.—*Planorbis* syn. gen. *Tropidiscus* Stein 1858, PETRBOK p. 34 723, 729.

†*Planorbis ludwigii* sp. n. (= *P. sp.* R. Ludwig 1859, ref to fig.) Palaeozoic Europe, BABOR Sbor. Kl. prir. Praha 1913 2 1914 p. 6.—*Planorbis (Gyraulus) dallonii* sp. n. Ancient crater of Bégour, GERMAIN Mém. Acad. Sci. Paris 62 1936 p. 60 f. 6-8.—†*Planorbis corneus* fig., ROTARIDES 824.

Planorbidae in Britain, BOYCOTT 131.—Planorbidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Planorbula boissyi, pfeifferi and *Schistosoma*, LANE 546.

Pseudosuccinea columella, parasites, NEVEU-LEMAIRE 665.

Pyrgophysa (Bulinus) forskalii figs., V. d. BERGHE 91.

Radix (Radix) ovata balthica scalaris [!] nov. Estland, KRAUSP Archiv f. Molluskenk. 68 1 p. 27 pl. i f. 4.—*Radix natalensis*, HAAS 371.—*Radix (Radix) ovata sinistrorsa* fig., KRAUSP 501.

Segmentina nitida in N. Asia figs., MOZLEY 653.—*S. haemisphaerula* fig., *nitidella*, *schmackeri*, parasites, NEVEU-LEMAIRE 665.

Siphonaria atra eggs figs., RISBEC 809.

†*Spiridina vortex* fig., ROTARIDES 824.

Stagnicola emarginata bryantwalkeri var. n. Michigan p. 127 pl. vii f. 9; *S. e. magnifica* var. v. Minnesota p. 128 pl. vii f. 8; F. C. BAKER Nautilus Philad. 49 4 1936.—*S. palustris* figs., A. v. BRANDT 138.—*S. palustris* breeding, FRÖMMING 311.

†*Tropidiscus planorbis* fig., ROTARIDES 824.

SELENITIDAE, ZONITIDAE, LIMACIDAE, PHILOMYCIDAE, ARIONIDAE, ARIOPHANTIDAE.

Agriolimax agrestis, reticulatus distribution in U.S.S.R., GRIVANOV 362.—*A. agrestis* fig. Parasites, NEVEU-LEMAIRE 665.—*A. agrestis* I. & M. SZABÓ 955.—*A. planarioides*, WAGNER 1034.

†*Archaeoplecta lapidaria* (Tho.), WEILER 1044.

Arion intermedius in Belgium, ADAM 3.—*A. empiricorum*, LAMS 535.—*A. circumscriptus* new to Quebec and Ottawa, LA ROCQUE 551.—*A. circumscriptus* fig., *empiricorum*, *hortensis*, *intermedius*; parasites, NEVEU-LEMAIRE 665.—*A. empiricorum*, *subfuscus*, *circumscriptus*, genital organs, figs., WAGNER 1031.

Ariophantidae, SCHMIDT 862.

Bielzia coerulans feeding and breeding habits figs., SMOLÉNSKA 918.

Daudebardia langi Pfeiffer in Roumania, IONESCU 439.—*D. (Libania) langi* Pfr., *D. (Carpatica) kimakowiczi* Wagner; *D. (C.) calophana* West.; *D. (Cibinia) transsylvanica* Bielz, Roumania, IONESCU 440.—*D. transsylvanica* Bielz figs., IONESCU 441.

Deroceras laeve copulation, GERHARDT 330.

Diastole, H. B. BAKER 71.

Euconulus fulvus in N. Asia, MOZLEY 653.

†*Euconulus trochiformis* figs., ROTARIDES 824.

Helicolimax diaphanus copulation fig. GERHARDT 330.

Lehmannia marginata, parasites, NEVEU-LEMAIRE 665.

Limacidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Limax cinereoniger, GERHARDT 329.—*Limax cinereus* fig., *L. flavus* = *L. variegatus*, *tenellus*, parasites, NEVEU-LEMAIRE 665.

Macrochlamys glauca, *radula* figs., PEILE 713.

Megomphix hemphilli lestrarius Baker figs., HENDERSON 398.

Milacidae fam. n. subfam. Milacinae L. Germain, WAGNER Ann. hist. nat. mus. Hung. 30 1936 German summary p. 92.

Nanina Gray (preoc. by Risso) = *Naninia* "Gray" Sow. Conch. Man. 1842 ed. 2 pp. 198, 302, H. B. BAKER 70.

Naninia, H. B. BAKER 70.

Orpiella keppelli fig., I. & B. RENSCH 797.

"*Oxychilus*" (*Oxychilus*) *cellarius* fig., HAAS 375.

Parmacella deshayesi, GERHARDT 329.

Paryphanta hochstetteri consobrina subsp. n. p. 29, pl. 7 f. 3; *P. annectens* sp. n. p. 30 pl. vii f. 4, 5, 7; *P. mouatae* sp. n. p. 31 pl. viii f. 7, 8; *P. gilliesi kahurangi* subsp. n. p. 33 pl. 8 f. 1, 2; *P. g. montana* subsp. n. p. 33 pl. viii f. 9, 10; *P. jamesoni* sp. n. p. 36 pl. viii f. 3, 4; New Zealand, POWELL Rec. Auckland Inst. & Mus. 2 1 1936.

Philomycus bilineatus, parasites NEVEU-LEMAIRE 665.

Retinella radiatula in N. Asia, MOZLEY 653.

Sitala concavispira sp. n. S. Slope of Ngorongoro Mt. 1800 m. Regenwald, E. Africa, HAAS Abh. Senckenberg Naturf. Ges. Abl. 431 1936 p. 19 pl. 1 f. 6.

Testacella germaini sp. n. (near *T. haliotidea* Drap. v. *flavescens* Moq. Tandon.) Jouet-sur-Aubois, PITON Rev. sci. Bourbonnais 1935 3-4 p. 43.

Thapsia (Gudeella) submixta sp. n. Mozambique, GERMAIN Mem. mus. zool. Univ. Coimbra (1) 80 1935 p. 22 f. 5-7.—*Thapsia kitemboensis* sp. n. Kitembo (Kivu) Equatorial Africa, GERMAIN Bull. Mus. Hist. nat. Paris (2) 8 2 1936 p. 149 f. 44-45.

Trochomorpha (Matura) serena; *T. (Matura) matura* figs.; *T. godeti* rad. fig.; *T. xiphias crustulum* genitalia (fig.), I. & B. RENSCH 797.

Trochonanina, H. B. BAKER 71.—*Trochonanina helicinioides tenera* fig., I. & B. RENSCH 797.

Vaginula boviceps, *djiloloensis*, *melo-tomus*, FORCART 291.

Vaginulidae, Revision of, in Basle Museum, FORCART 291.

Veronicella laevis, ANDREWS 24.

†*Vitrea crystallina* figs., ROTARIDES 824.

Vitrina maior copulation fig., GERHARDT 330.

Vitrinidae, SCHMIDT 862.

Wainuia clarki sp. n. New Zealand, POWELL Rec. Auckland Inst. and Mus. 2 1 1936 p. 36 pl. 9 f. 4, 5.

Xesta, H. B. BAKER 70.

†*Xestina chrysoraphe krejci* Haas fig., YEN 1070.

†*Zonites (Aegopis) verticilloides* (Tho.) figs., WEILER 1044.

Zonitidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.—Zonitidae, SCHMIDT 862.

Zonitoides suppressus virginicus subsp. n. Virginia, VANATTA Nautilus Philad. 49 3 1936 p. 99.—*Zonitoides nitidus* in N. Asia, MOZLEY 653.

†*Zonitoides hammonis*, *nitidus* figs., ROTARIDES 824.

HELICIDAE.

Alabastrina skouraensis sp. n. Skoura p. 20 pl. ii f. 5; "vars. ex forma et ex colore" major, minor, trifasciata, quadri-fasciata, alba p. 21, PALLARY J. de Conchyliol Paris 80 1 1936.—[*Alabastrina*] (*Atlasica*) *illirensis* sp. n. Illir

p. 23 pl. i f. 3; *A. (Atlasica) tamanarensis* p. 22, pl. 2, f. 3. sp. n. *iterica minor*, major "vars. n." p. 24, PALLARY J. de Conchyliol. Paris 80 1 1936.—*Alabastrina marmouchana*, *tilmiratensis*, *rufa* figs.—[*Alabastrina*] *Le Châtelieria mikaelae* Pall. pl. ii f. 4 genitalia f. 5 p. 26, PALLARY 699.

Albea didoniana sp. n. Tunis, PALLARY J. de Conchyliol 80 1 1936 p. 6.

Aegista tenuissima omorii subsp. n. Japan, KURODA Venus 6 3 1936 p. 171.—*A. (Plectotropis) diversa* Kuroda & Mieyanga "n. sp." Kuroda Venus 6 3 p. 172.

†*Aegista accrescens* (Heude), YEN 1070.

Ambigua fuscolabiata Rosm. *tegianica* subsp. n. p. 42 figs. 6, 7; *serpentinorum* subsp. n. p. 48 fig. 9; S. Italy, DEGNER Mitt. zool. Staatsins. Hamburg 46 1936.—*Ambigua fuscolabiata sirinensis*, f. *spinata*, f. *saprensis*, Kobelt figs., DEGNER 239.

Archelix (Dupotetia) russadisensis p. 44 pl. ii f. 6 vars. *major*, *minor*, *subdentata*, *lucida* "vars. n."; *A. (D.) vanrossomi* p. 45 pl. ii f. 5 vars. *subplicata*, *depressa*, *major*, *minor*, *conica*, *alba*, *fusca*, *bizonata*, *unifasciata*, *lacticolor*, *quinquefasciata* "vars. nov." N. Africa, PALLARY J. de Conchyliol. 80 1 1936 pp. 44-47.

Arianta arbustorum, parasites, NEVEU-LEMAIRE 665.

†*Arianta arbustorum* fig., ROTARIDES 824.

Atlasia vide *Alabastrina*.

Bulinus (Bulinus) hemprichii depressus subsp. n. Canal from Nsombo village to Bangweolo, N. Rhodesia, HAAS Abh. Senckenberg Naturf. Ges. Abl. 431 1936 p. 28 pl. 1 f. 15a-c.—*Bulinus striatus japonicus*, parasites, NEVEU-LEMAIRE 665.

†*Cathaica constaniae vestita* Pils. fig., YEN 1070.

Cepaea hortensis, *nemoralis* hybrids and albinos, HENRARD 400.—*C. nemoralis* early occurrence, LLOYD JAMES 569.—*C. nemoralis*, parasites, NEVEU-LEMAIRE 665.—*C. nemoralis*, *hortensis* ROTARIDES 822.

†*Cepaea eversa larteti* (Boissy) fig. Miocene S. Bohemia, ZAZVORKA 1082.

Cepolis (Plagioptycha) imperforata sp. n. Terre Rouge, Haiti, PILSBRY Nautilus Philad. 49 3 1936 p. 105.

Chilometra sic [*Chilotrema*] *lapidica*, parasite NEVEU-LEMAIRE 665.

Cochlicella acuta variation, TOLMER 983.—*C. acuta* Barra Island, WATERSTON 1040.

Cryptozona bistrialis Anatomy and Histology figs., FRÖBEL 310.

Cunula subgen. nov. of *Pomatia* for *melanostoma*, *pachya*, *nucula*, PALLARY J. de Conchyl. 80 1 1936 p. 47.

Dupotetia vide *Archelix*.

Elgonella = *Halolimnohelix* HAAS, 371.

Eremina vermiculosa inflata pl. 1 f. 4, *depressa* vars. n. N. Africa, PALLARY J. de Conchyl. 80 1 1936 p. 17.—*Eremina vermiculosa* genitalia fig., PALLARY 699.

Euhadra herklotsi hyagana p. 82 pl. iv f. 1, 2; *E. h. kirishimensis* p. 83 pl. iv f. 3, 4 Kyūshū Japan, KURODA Venus 6 2 1936.—*Euhadra quaesita heguraensis* subsp. n. Hegurajima Japan, KURODA & NOBUZANE Venus 6 2 1936 p. 87 pl. iv f. 5, 6.—*Euhadra decorata diminuta* subsp. n. p. 90 pl. iv f. 9 text-figs. 1–3; *E. iwadensis* sp. n. p. 91 pl. iv f. 10 text-figs. 4–6 Iwade Prefecture, Japan, TOBA & KURODA Venus 6 2 1936.—*Euhadra peliomphala*, parasites, NEVEU-LEMAIRE 665.—*Euhadra decorata* and its varieties, TOBA & KURODA 980.

Euomphalia (Lindholmo mneme) rhyssota altaica West., *E. (Harmozica) aristata* Krynn., HAAS 377.

Euparypha pisana food plants, form of jaw and variation, habitats, MAGNE 589.

Eulota schrenkii, *nordenskiöldi* in N. Asia, MOZLEY 653.—*E. sieboldiana minor* parasite, NEVEU-LEMAIRE 665.

†*Eulota fruticum* fig., ROTARIDES 824.

Fruticicola (Karatohelix) chishimana sasamorii subsp. n. Etorof I. Kurile chain p. 93 pl. iv f. 11; *F. (K.) ishikawai* sp. n. Wakkanai, N. W. Hokkaidō p. 94 text-figs. 1–3, KURODA Venus 6 2 1936.—*F. lantzi* figs., HAAS 377.—*F. bicallosa* in N. Asia, MOZLEY 653.

†*Fruticicola striolata* fig., ROTARIDES 824.

Fruticicolidae, SCHMIDT 862.

†*Galactochilus brauni* (Tho.) fig., WEILER 1044.

†*Gonyodiscus (Gonyodiscus) disculus girundicus* subsp. n. Tertiary Paulhiac, WENZ Archiv Molluskenk. 68 6 1936 p. 229.

Halolimnohelix late-aperta sp. n. South slope of Ngoro-ngoro Mt. 1800 m. (Regenwald) E. Africa, HAAS Abh. Senckenberg Naturf. Ges. Abh. 431 1936 p. 10 pl. 1 f. 1.

Hawaiiia minuscula = *Helix minuscula*, PEILE 712.

Helicella (Xerocincta) ammonis acrenoica subsp. n. Mt. Miletto, Naples, p. 297 figs. 1–2; *H. (Jacosta) maximella* sp. n. Castelvetro, Sicily, p. 298 f. 3–4, *H. (J.) syrensis aulostoma* subsp. n. Zypern p. 298 f. 5; *H. (J.) multigradata* sp. n. N.W. Kleinasien p. 299 f. 6; *H. (J.) crenimargo convexior* subsp. n. Asia Minor p. 300 f. 7; *H. (Xerotracha) conspurcata distinguenda* subsp. n. Zypern p. 300 f. 8; *H. (Xeroplexa) amnesta* sp. n. Sierra de Cabra Spain p. 301 f. 9–11; *H. (Xerocrassa) seetzeni scharonica* subsp. n. Palestine p. 301 f. 12–13: Types and/or Paratypes in Senck.-Mus., HAAS Zool. Anz. Leipzig 114 1936 pl. (p. 303).—*Helicella paulhessei* sp. n. Krim S.W. Jalta, LINDHOLM Trav. Inst. zool. Acad. Sci. U.S.S.R. 3 1936 p. 439.—*H. virgata* in Belgium, ADAM 4.—*H. (Helicella) ericetorum* figs., HAAS 375.—*H. (Candidula) profuga tringa* f. 14; *H. (C.) p. duinensis* f. 15–16; *H. (Xerocincta) neglecta*, *H. (X.) protea*, HAAS 378.—*H. candidula* fig., *itala*, parasites, NEVEU-LEMAIRE 665.—*H. itala* Barra Island, WATERSTON 1040.

Helicidae Angers, GERMAIN 333.—*Helicidae* of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.—*Helicidae*, SCHMIDT 862.

Helicigona lapidica in the Netherlands, HEURARD & KOUMANS 405.

†*Helicodonta involuta* (Tho.), (*Canariella*) *lapicidella* (Tho.) figs., WEILER 1044.

Helicostyla subcarinata archeri subsp. n. Tres Reyes Islands, Philippines, CLENCH Nautilus Philad. 49 4 1936 p. 140 pl. viii f. 5.

Helix aspersa ultra-centrifuging the spermatocytes, BEAMO, GATENBY & MULIYIL 80.—*H. pomatia*, BOYCOTT 133.—*H. pomatia* habits of young, BOYCOTT 134.—*H. pomatia*, *nemoralis*, *aspersa*, on heart structure, BRUNET & JULLIEN 157.—*H. aspersa* and *Brachylaemus*, CHALAUX 170.—*H. aspersa* genital organs anomaly in, CHALAUX 171.—*H. pomatia*, FRÖMMING 314.—*H. pomatia elsa* Rumania, GROSSU 363.—*H. axia*, *lactea* in Florida, J. HENDERSON 396.—*H. nemoralis*, MCCONNELL 579.—*H. pomatia* experiments on chemical contents, MENTZER, KASWIN, CORTEGGIANI & GAUTRELET 613.—*H. (Trochoida) elegans*, MERCIER 614.—*H. (Euparypha) pisana*, parasite, NEVEU-LEMAIRE 665.—*H. pomatia*, NOMURA 673.—*H. minuscula*, PEILE 712.—*H. pomatia* experiments relative to water content and rest curves of foot, POSTMA 763.—*H. pomatia*, ROSÉN 819.—*H. pomatia* anatomy, SZABÓ 956.—*H. pomatia* experiments on buffering power of blood, TERROUX 971.—*H. ericetorum*, *nemoralis*, VERLAINE 1015.—*H. aspersa* Barra Island, WATERSTON 1040.—*H. pomatia*, WEIGMANN 1043.

†*Helix crassa* p. 181 pl. viii f. 11; *H. orbiculata* p. 192 pl. viii f. 12; *H. inflata* p. 182 pl. viii f. 13 spp. n. Eocene Tebaide, PIERAGNOLI Bol. Soc. geol. ital. 54 2 1936.

Helminthoglypta cayamacensis group records, GREGG 354.

Hojeda inaguensis, H. B. BAKER 72.

†*Josephinella* subgen. n. of *Campylaea* type *Helix hemonica* Thiesse, HAAS Archiv Molluskenk. 68 3 1936 p. 130.

Le Châtellerie vide *Nabestrina*.

†*Leucochroa baumbergeri* sp. n. Tertiary Paulhiac, WENZ Archiv Molluskenk. 68 6 1936 p. 229 figs. 1-3.

Lindholmomneme subgen. n. of *Euomphalia* (?) for *Helix (Trichia) rhyssota altaica* West., HAAS Senckenbergiana 18 3-4 1936 p. 144 f. 3-7.

Massylaea derbesi minor f. 2, *depressa* "vars. n." N. Africa p. 29; *bisseyana minor*, *depressa* "vars. n." N. Africa p. 30, PALLARY J. de Conchyl. Paris 80 1 1936.—*Massylaea bournazeliana* p. 27 pl. ii f. 6; *derbesi* p. 28 pl. ii f. 1; *bisseyana* p. 29 pl. i f. 2. PALLARY 699.

Microphysula "gen. n." Cockerell in Pils. P. Acad. N. Sc. Phil. 78 107 type *Helix ingersolli* Maud Baker ibid 72 235 says it does not include *hornii plagioptycha*, etc., ibid 79, 251, 1929 puts genus in Sagdidae, J. HENDERSON 397.

†*Monacha bidens* fig., ROTARIDES 824.

Obba listeri webberi p. 64 f. 1; *O. l. catanduanensis* p. 65 f. 2 subsp. n. Philippine Islands, BARTSCH J. Wash. Acad. Sci. 26 2 1936.

Opica fuscolabiata consigliana Kob. figs., DEGNER.

Sagda bondi sp. n. Jamaica, VANATTA Nautilus Philad. 49 3 p. 98 pl. 7 f. 6.

Sagdidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Sonorella hachitana orientis subsp. n. Sierra Blanca, Texas, PILSBRY Nautilus Philad. 49 4 p. 110.

Papuina williamsi atalanta subsp. n. Kiriwina Id. Trobriand Islands, CLENCH Naut. 50 2 1936 p. 54.—*Papuina williamsi* sp. n. Central Kiriwina Trobriand Islands, New Guinea, CLENCH & ARCHER Nautilus Philad. 49 3 1936 p. 88 pl. v f. 4.—*Papuina tayloriana*, CLENCH & ARCHER 193.—*Papuina complanata* Gude, synonym of *P. suprapicta* Fulton, FULTON 319.

Plurodontidae, SCHMIDT 862.

Pomatia (Cunula) melanostoma dolium around Tunis, PALLARY J. de Conchyl. Paris 80 1 1936 p. 47 p. 1 f. 1.—*Pomatia aspersa* in Maine, NORTON 678.

Polygyra chisosensis sp. n. p. 100; *P. c. disobolus* subsp. n. p. 101, Texas, PILSBRY Nautilus Philad. 49 3 1936.—*Polygyra columbiana depressa* subsp. n. The Dallas Oregon, PILSBRY & HENDERSON Nautilus Philad. 49 4 1936 p. 134.—*Polygyra uvulifera margueritae* subsp. n. Pompano Florida, PILSBRY Nautilus Philad. 49 4 1936 p. 109.—*P. texasiana* shell repair, CHEATUM 178.—*P. thyroides*, *elevata*, graphs showing variation in size FOSTER 294.—*P. surviving* grass fires, J. HENDERSON 395.—*Polygyra* Say type, REHDER 791.—*P. profunda*, SHIMEK 895.—*Polygyra*, SHIMEK 896.

Polygyridae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Praticolella martensiana, PILSBRY 744.

Punica group nom. nov. for *H. punica* Mrlt. 1851 Malac. Alg. pl. ix f. 10-14, PALLARY J. de Conchyliol. Paris 80 1 1936 p. 31.

Tingitana liasana inflata, *keblina minor*, *k. angulata*, *T. bonjeani major*, *minor*; *T. mangini depressa*; *T. phar-biana minor*, *anoëurensis major*, *a. conica*, *a. minor*, *a. lerouafensis* "vars. n." PALLARY J. de Conchyliol. Paris 80 1 1936 [It must be seen that many, if not all, of these varietal names are pre-occupied.].—*Tingitana gharbiana minor*, *major*; *lyauteyi minor*; *anoëurensis major*, *conica*, *lerouafensis*, *minor*; *T. minettei major*, *elata*, *minor*, *depressa*, *cristaria zonata*, *decussata*, PALLARY 699.—*Tingitana keblina* vars. *conglobata*, *major* and *minor*, *angulata* [non descr.]; *T. bonjeani major*, *minor* [non descr. and preoc.]; *T. laffitteana* vars. *cretata*, *major*, *minor*, *umbilicata*, *fasciata* *T. mangini depressa*, *Tingitana tingitana* vars. *minor*, *slessica*, *lacunata pullata*, *punctulata*, *interrupta*, *lacti-color angulosa*, *minor angulosa* and *inflata* [non descr.], PALLARY 699.

Torquilla frumentum, parasite, NEVEU-LEMAIRE 665.

Urguessella planulata, *esau*, HAAS 371.

Xeroleuca (Disculus) antoinei between Casablanca and Gued Zem sp. n., PALLARY J. de Conchyliol. 80 1 1936 p. 16 text-fig. 3 [vide etiam *Xerophila*.]

Xerophila jolensis Algiers p. 7 pl. 4 f. 3; *X. (Xeroamanda) arnaizi* Tigorfaten p. 9 pl. iii f. 8; *X. (Polytrichia) carrossei* Zagora p. 11 text-fig. 2; *X. tigorfatensis* Tigorfaten p. 13 pl. iii f. 9; *X. t. minor* p. 13 f. 10; *X. (Xeroleuca) gouliminensis* Goulimin Morocco p. 14 pl. iii f. 1; *X. (Xeroleuca) depressiuscula* Imonzer N.E. Agadir p. 15 pl. ii f. 11 spp. et var. n. N. Africa, PALLARY J. de Conchyliol. Paris 80 1 1936.—*Xerophila vigiliana* Monterosato ? f. 17. What is it? HAAS 378.

Zachrysia trinitaria, *scabrosa* figs., BONILLA 128.—*Z. rangelina* genital organs figs., and anatomy of, JAUME 452.

Zebrina detrita fig., parasite, NEVEU-LEMAIRE 665.

Zenobiella subrufescens Fairwood Common, Swansea, QUICK 778.

ENDODONTIDAE.

Endodontidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.—Endodontidae, SCHMIDT 862.

†*Goniodiscus ruderatus* fig., ROTARIDES 824.

Gonyodiscus angulosus, *ruderatus* in N. Asia, MOZLEY 653.

ORTHALICIDAE, BULIMULIDAE, UROCOPTIDAE.

Bor- -os and -us, PILSBRY 749.

Bulimulidae, SCHMIDT 862.

Bulimulus alternatus mariae in Texas, J. HENDERSON 393.

Bulimulus (Rhinus) obeliscus sp. n. St. Catherine Brazil, HAAS Senckenbergiana 18 314 1936 p. 150 (nom. et fig. p. 148) f. 15, 16.

Drymaeus (Drymaeus) limicolarioides sp. n. São Paulo Brazil, HAAS Senckenbergiana 18 1936 p. 150 (nom. et fig. p. 148) f. 12, 13.—*Drymaeus multilineatus latizonatus* subsp. n. Lower Matcumbe Key, Fla., PILSBRY Naut. 50 2 1936 p. 69.

Liguus, MCGINTY 581.—*Liguus* Florida, MCGINTY 582.

Odontostomus (Spixia) pervarians sp. n. Sierra de Aehala, nr. Candelaria, Salta, Argentina p. 151 (nom. et fig. p. 148) f. 17-23, *costellifer* sp. n. Hierazuela, Argentina p. 152 (nom. et fig. p. 148) f. 24-26, HAAS Senckenbergiana 18 314 1936.—*Odontostomus (Scalarinella) cordovanus* (Pfr.) v. *steltzneri* Doer., HAAS 377.

Oxystyla undata undata Florida, PILSBRY & GRIMSHAW 751.

Strophocheilus (Megalobulimus) roseus (King & Brod.) *particeps* var. n. Chili, FULTON Proc. Malac. Soc. London 22 1 1936 p. 10 pl. ii f. 5.

Urocoptidae, SCHMIDT 862.

Urocoptis corpulenta p. 13 f. 1, 3; *semicolorata* p. 13 f. 2, 4 spp. n. Cuba, SPENCE Proc. Malac. Soc. London 22 1 1936.

OLEACINIDAE, STREPTAXIDAE, TESTACELLIDAE, RHYTIDIDAE.

Diaphera (Huttonella) kohl-larseni sp. n. S. side of Ngoro-ngoro Mt. 1800 m.

Regenwald E. Africa, HAAS Abh. Senckenberg Naturf. Ges. Abl. 431 1936 p. 18 pl. i f. 4.

Edentulina, SCHOUTEDEN 876.

Ennea bequaerti Dautz & Germain fig. 41 Middle Congo, GERMAIN 331.

Euglandina jacksoni sp. n. p. 97 pl. vii f. 4; *E. texasiana angustior* subsp. n. p. 97 pl. vii f. 4a; *E. pygmaea* sp. n. p. 98 pl. vii f. 5: Gonzales, Tamaulipas, Mexico, PILSBRY & VANATTA Nautilus Philad. 49 3 1936.

Gonaxis (*Macrogonaxis*) *loveridgei* sp. n. Bagilo, Uluguru Mts. Tanganyika Territory, BEQUAERT & CLENCH J. Conch. London 20 9 1936 p. 271 f. 1-3. *Gonaxis* (*Gonaxis*) *ordinarius obliquior* subsp. n. W. of Bumbuli W. Africa, HAAS Abh. Senckenb. Naturf. Ges. 431 1936 15 pl. i f. 5.—*Gonaxis* Taylor list of species and suggestions re classification, BEQUAERT & CLENCH 85.—*Gonaxis elongatus* (Fulton) figs., BEQUAERT & CLENCH 85.

Gonidomus pagoda Fér. anatomy, STEENBERG 940.

Gulella pilsbryi sp. n. Africa, BEQUAERT & CLENCH Nautilus Philad. 49 3 1936 p. 95 pl. vi f. 5-7.—*Gulella* (*Paucidentina*) *sankuruensis* sp. n. Kondué Africa, DARTEVELLE-PUISSANT Basteria 1 4 1936 p. 6a fig. 2-5 p. 63.—*Gulella* (*Gulella*) *subsellae* sp. n. p. 17 pl. i f. 3, S. slope of Ngoro-Ngoro Mt.; *G. (Primigulella) satura* sp. n. p. 16 pl. i f. 2a, b Usambara E. Africa, HAAS Abh. Senckenb. Naturf. Ges. 431 1936.—*Gulella antelmeana* sp. n. Mauritius, PEILE Proc. Malac. Soc. London 22 3 1936 p. 122 f. 4, 5.—*Gulella lamyi* Dautz & Germain f. 42, 43 Lukonzolwa edge of Lake Moero, GERMAIN 331.

Lamelliger Ancy sec. of *Streptaxis* monotypic for *Helix troberti* Petit, BEQUAERT & CLENCH 85.

Marconia type *Ennea lata* Smith (des. Kob. 1906) not *M. gibbosa* Bgt. as given by Pilsbry, BEQUAERT & CLENCH 85.

Microstrophia nana sp. n. Mauritius, PEILE Proc. Malac. Soc. London 22 3 1936 p. 121 f. 1-3.

Oleacinidae, SCHMIDT 862.

Ptychotrema degneri sp. n. Africa, BEQUAERT & CLENCH Nautilus Philad. 49 3 1936 p. 96 pl. vi f. 3, 4.—*Ptychotrema quadrinodatum* Marts. v. *puissanti*

var. n. Kondué Africa, DARTEVELLE. PUISSANT Basteria 1 4.—*Ptychotrema* (*Ennea*) *lafontainei* sp. n. Lobito Bay, Africa, DARTEVELLE-PUISSANT Basteria Lisse 1 4 1936 p. 59 f. 6 p. 63.

†*Poiretia Pseudoleacina*) *producta* (Res.) figs., WEILER 1044.

Streptaxidae Africa, BEQUAERT & CLENCH 85.

PUPILLIDAE, ENIDAE, CLAUSILIDAE, CERIONIDAE, ACHATINIDAE, STENOGYRIDAE, HELICTERIDAE.

Achatina (*Pintoa*) *thermalis* sp. n. Belgian Congo, BEQUAERT & CLENCH Bull. mus. roy. Hist. nat. Belg. 12 32 1936 p. 1 f. 1-10.—*Achatina* (*Pintoa*) *pfeifferi peyeri* var. n. Moanda-Senza Congo, DARTEVELLE-PUISSANT Rev. Zool. Bot. Afr. 1936 29 1 p. 8.—*Achatina yalensis* sp. n. (near *A. pfeifferi* Dkr.) Banks of R. Yala British E. Africa, GERMAIN Bull. Mus. Hist. nat. Paris (2) 8 3 1936 p. 260 f. 48.—*Achatina pfeifferi*, *wehwietschi*, *glutinosa*, HAAS 371.—*Achatina achatina* and CaCO₃ assimilation, ROUX 828.—*Achatina fulica* as a possible source of disease, SMEDLEY 911.

Achatinellidae, SCHMIDT 862.

Archachatina marginata egregiella var. n. Kribi Cameroon p. 83 pl. i f. 3; *A. adelinae candefacta* var. n. Cameroon p. 87; *A. camerunensis amplior* var. n. French Congo p. 89 pl. i f. 2; *A. gaboonensis aequatorialis* var. n. Belgian Congo p. 90 pl. i f. 4, BEQUAERT & CLENCH Rev. Zool. Bot. Afr. Tervueren 29 1936.—*Archachatina* (*Megachatina*) *degneri* sp. n. ? Duma, Ubangi District Belgian Congo, BEQUAERT & CLENCH Rev. Zool. Bot. Afr. Tervueren 29 1936 p. 78 pl. i f. 1.

Armenica (*Creniclavis*) *euprepes* sp. n. near Maçka, Trebizond Province, Asia Minor, BREGS J. Conch. London 20 8 1936 p. 253 text-fig.

Bocageia (*Liobocageia*) *elata* sp. n. South slope of Ngoro-ngoro Mt. 1700 m. Regenwald E. Africa, HAAS Abh. Senckenberg Naturf. Ges. Abh. 431 1936 p. 13 pl. i f. 10.

Callistopepla babaulti sp. n. Kitembo (Kivu) Equatorial Africa, GERMAIN Bull. Mus. Hist. nat. Paris (2) 8 2 1936 p. 151 f. 46.

Cerastus (*Cerastus*) *lymnaeiformis* sp. n. E. Africa, HAAS Abh. Senckenb. Naturf. Ges. 431 1936 p. 21 pl. i f. 8a, b.

Cerion (*Strophiope*) *juliae* sp. n. Great Rugged Cay, Bahamas, CLENCH Nautilus Philad. 49 4 1936 p. 112 pl. viii f. 6.

Chondrina circumplicata, c. *gredleriana* distribution, SCHROTT 877.

†*Chondrula tridens* fig., ROTARIDES 824.

Clausilia biplicata, BOYCOTT 133.—*C. corynoides* and *Trypanochloris* figs., GETTLER 326.—*C. (Delima) itala*, PIER-SANTI 737.

†*Clausilia cruciata slovenica* Janděčka var. n. Quaternary Slovakia, PETRBOK Bull. int. Acad. Prague 35 1934 p. 113 and Rogpr. české Akad. Praha 44 15 1935 p. 14.—*C. dubia* fig., ROTARIDES 824.

Clausiliida eAngers, GERMAIN 333; SCHMIDT 862.

†*Clavator* (*Clavator*) *kantarensis* pl. viii f. 1-4 sp. n.; *C. (C.) k. angulosus* pl. viii f. 5; *C. (C.) k. laffittei* pl. viii f. 6; vars. n. Aquetanian, Selloum, nr. El Kantara, Sud-Constantinois, Algeria, JODOT Bull. Soc. géol. Fr. 5 vi 1-3 1936 p. 70.

Cochlicopa hinkleyi from Yucatan fig., BEQUAERT & CLENCH 83; *Cochlicopa lubrica* in N. Asia, MOZLEY 653.

†*Cochlicopa lubrica* fig., ROTARIDES 824.

Cochlicopidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.—Cochlicopidae, SCHMIDT 862.

Cochlodina laminata fig., ROTARIDES 824.

Edentulina ulugurensis Vituri, Uluguru Mts. p. 213 f. 11, 12; *E. usambarensis* Lutindi, Usambara Mts. p. 215 f. 13; spp. n. Tanganyika Territory, BEQUAERT & CLENCH J. Conch. London 20 7 1936.—*Edentulina affinis* Btg. *ovoidea* Brug. figs.; *Edentulina* synopsis of, BEQUAERT & CLENCH 84.

Ena montana, KRAUSP 501.

†*Ena gracilis* (Tho.) fig., WEILER 1044.

Enidae, SCHMIDT 862.

Ferussacia haouziana sp. n. Marra-kech and environs, PALLARY J. de. Conchyliol. Paris 80 1 1936 p. 50 text-fig. 8.

Ferussaciidae, SCHMIDT 862.

†*Girtyspira* gen. n. (Subulitidae) type *Bulimella canaliculata* Hull 1858, KNIGHT J. Paleont. Menasha Wis. 10 6 1936 p. 524.

Hemiphaedusa miyanagai sp. n. Japan KURODA Venus 6 3 1936 p. 170.

Iphigena latestriata Schmidt pl. i f. 6-8 and map pl. ii, KRAUSP 499.—*I. latestriata borealis*, KRAUSP 501.

†*Iphigena tumida* var. fig., ROTARIDES 824.

†*Leptotytygma* gen. n. (Subulitidae) type *Auriptygma virgatum* Knight 1931, KNIGHT J. Paleont. Menasha Wis. 10 6 1936 p. 523.

Limicolaria subconica Marts. *henneberti* var. n. Congo, DARTEVILLE-PUISANT Rev. Zool. Bot. Afr. 1936 29 1 p. 9.

†*Limicolaria* Lybian Desert, SANDFORD 841.

Mastus solignaci sp. n. Zaghouan near Tunis p. 48 text-fig. 6; *M. pupa claveli* var. n. near La Calle p. 50 text-fig. 8, PALLARY J. de Conchyliol. Paris 80 1 1936.

†*Mastus bielzi* (*reversalis* Bielz) fig., ROTARIDES 825.

Megachatina subgen. n. *Archachatina* type *A. marginata* Swainson, BEQUAERT & CLENCH Rev. Zool. Bot. Afr. Tervueren 29 1936 p. 76.

Megachatinopsis subgen. n. *Archachatina* type *A. knorrii* (Jonas), BEQUAERT & CLENCH Rev. Zool. Bot. Afr. Tervueren 29 1936 p. 76.

Nesopupa (*Indopupa* ?) *madgei* sp. n., PEILE Proc. Malac. Soc. London 22 3 1936 p. 123 f. 6, 7.

†*Protorcula subcylindrica* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 11 pl. ii f. 5.

Pseudoglessula (*Kempioconcha*) *zulu* sp. n. Umfolozi Game Reserve Zululand, HAAS Abh. Senckenberg Naturf. Ges. Abl. 431 1936 p. 14 pl. i f. 9.—*Pseudoglessula intermedia* Thiele f. 47 Kadjudju (Kiva), GERMAN 331.

Pseudotrochus janssensi fig. 7 var. *unifasciata* var. n. Luébo, DARTEVELLE-PUISSANT Basteria Lisse 1 4 p. 57 fig. 8 p. 63.

Pupilla muscorum, m. *lundströmi*, in N. Asia, MOZLEY 653.

†*Pupilla muscorum* fig., ROTARIDES 824.

Pupillidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Rachis gracillima sp. n. Buiko S. base of Pare. Gebirges E. Africa, HAAS Abh. Senckenberg naturf. Ges. Abh. 431 1936 p. 21 pl. i f. 7.

Subulinidae, SCHMIDT 862.

Vallonia costata, pulchella, tenuilabris, in N. Asia, MOZLEY 653.—*Vallonia sub-pulchella* Sbgr., *pulchella* Müll, p. f. *excentrica*, p. f. *csórensis* Korm., p. *enniensis* Gredl. *costata, tenuilabris* figs., J. WAGNER 1032.

†*Vallonia costata* fig., ROTARIDES 824.

Valloniidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Vertiginidae, SCHMIDT 862.

Vertigo moulinsiana in Germany, C. R. BOETTGER 120.—*Vertigo substriata* in Swansea District, QUICK 778.—*Vertigo moulinsiana*, SCHMIERER 870; SEIDLER 881, 882.

Zebrina detrita [photo of group nat. size], LAIS 531.

SUCCINEIDAE.

Succinea transported by bird, ANON., 32.—*S. pfeifferi, putris* in N. Asia, MOZLEY 653.—*S. hungarica, connollyi, lauzanni, patentissima, pseudomalonyx, delalandei, striata, planti, australis, concisa* anatomy, figs., QUICK 777.

†*Succinea putris, oblonga* fig., ROTARIDES 824.

Succineidae, SCHMIDT 862.

Succineidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Scaphopoda.

Dentalium peitaihoensis sp. n. Peitaiho China, KING & PING Chinese J. Zool. 1 1936 p. 103 f. 1, 2.

†*Dentalium limatuloides* p. 126 pl. viii f. 6a-c; *dehmi* p. 127 pl. viii f. 7a-c spp. n. Dogger in Franken, KÜHN

Paläont. Z. Berlin 17 3-4 1935.—†*Dentalium (Antalis) motidukii* sp. n., OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.—†*Dentalium* "sp. n." Trias Spain fig. 111 p. 94, SCHMIDT 863.—†*Dentalium thalloide* fig. pl. iv, WHEELER 1054.

Fustaria err. pro *Fustiaria*, NOSZKI Ann. Inst. nat. mus. Hung. 30 1936 p. 83.

Scaphopoda, monograph on composition of Tertiary Faunas, A. M. DAVIES 231.

Scaphopoda, Netherlands, JUTTING & ENGEL 467.

Pelecypoda or Lamellibranchiata.

Lamellibranchia monograph on the Composition of Tertiary Faunas, A. M. DAVIES 231.—Lamellibranchiata, Miocene of Poland, FRIEDBERG 306.

Pelecypoda Geological distribution Kuzbass, RAGOZIN 780.—Pelecypoda distribution, SCHENCK & KEEN 851.

PROTOBRANCHIA.

Acila divaricata Hinds v. *vigilia* var. n. Japan 175 fms. off S. coast of Yesso "Albatross" Sta. 5038 p. 101 pl. xvii f. 1-6; *A. d. balabacensis* subsp. n. Philippines "Albatross" Sta. 5353 Balabac Strait 148 fms. p. 102 pl. xviii f. 10-12, SCHENCK Spec. Pap. Geol. Soc. America 4 1936.

†*Acila banquereanensis* sp. n. Upper Cretaceous Atlantic E. of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 387 pl. 3 f. 13, 14.—†*Acila* type *Nucula divaricata* Hinds species of Cretaceous, Eocene, Oligocene, Miocene, SCHENCK 858.

†*Cleodoforus perdubius* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 17 pl. iii f. 12.

†*Ctenodonta follmanni* sp. n. Devonian Oberlahnstein, SOLLE Senckenbergiana 18 3-4 1936 p. 198.

†*Leda pylonoti* sp. n. Lias Europe, KÜHN Jh. Ver. vaterl. Naturk. Württemberg 91 1935 p. 11 pl. iii f. 8.—*L. banzensis* sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 258 pl. x f. 5.—*L. aff. claviformis* Sow. fig., SAURIN 844.

Nucula delphinodonta, MIYASAKI 631.

†*Nucula* ? *lucens* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 21 pl. iv f. 22.—*N. (Nucula) hokoensis* sp. n. Neogene Shōkaku-dō Korea, KANEHARA Jap. J. Geol. Geogr. 13 1-2 1936 p. 31 pl. x f. 1, 2.—*N. expansa abbreviata* p. 1009 (*abrevita* p. 1038) var. n. Dachstein-kalk. Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1038 pl. xiii f. 26.—*N. ngatutura* sp. n. Waitotaran Pliocene Kaawa Creek, New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 1 1936 p. 45 pl. ix figs. 1, 4.—*N. (Acila) yanagawaensis* "sp. n." p. 105 text-figs. 1a, b, 2a, b nom. nov. for *N. (A.) insignis* Nomura & Zinbo, non Gould; *N. (A.) osawaensis* sp. n. p. 106 text-figs. 3a, b, N.E. Honsyū, NOMURA & ZINBO Venus 6 2 1936.—*N. andradei* sp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Trans. Mus. 13 4 1936 p. 326 pl. xvii f. 1, 2.—*N. hammeri* Deffr. fig., SAURIN 844.—*N. (Acila) ?* sp. indet. fig., SLODKEWITSCH 910.

Nuculana gordonis takaoensis subsp. n. S. Taiwan, ŌTUKA Venus 6 3 1936 p. 155 f. 5, 6.—*Nuculana minuta* ciliary sorting mechanism of gills, figs., D. ATKINS 54.

†*Nuculana fujiformis* sp. n. Neogene Koken-ri, Korea, KANEHARA Jap. J. Geol. Geogr. 13 1-2 1936 p. 32 pl. x f. 3, 4.—*N. piscatoria* sp. n. Upper Cretaceous Atlantic E. part of Banquereau Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 388 pl. iii f. 15, 16.

†Nuculidae Miocene Poland, FRIEDBERG 306.—Nuculanidae of Wemmel Sands, GLIBERT 340.

Nuculid pelecypods revision, SCHENK 852.

†*Nuculites dahmeri* p. 191 Laubach near Coblenz; *N. persulcatus* p. 197 f. 5, Oberstadtfeld spp. n. Devonian, SOLLE Senckenbergiana 18 3-4 1936.—†*Nuculites sibiricus* "n.sp." [?nom.nud.] p. 20, HALFEEN 379.

†*Palaeoneilo lecomptei* sp. n. (Lediidae) Siegenian of Longlier Belgium, MAILLIEUX Mém. Mus. Hist. nat. Belg. 73 1936 pp. 27, 129 pl. iii f. 5.

†*Portlandia arctica portlandica*, a. *siliqua* figs., ASKLAND 50.—*P. (Yoldia) arctica* Gray Lettland, ZÄNS & DREIMANIS 1081.

†*Solenomya hollisteri* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 93 f. 110.

Truncacila type *Nucula castrensis* Hinds, SCHENCK 858.

Yoldia lepidula figs., ŌTUKA 697.—*Yoldia* community in Iceland and Greenland waters, map, SPÄRCK 927.

†*Yoldia abyssicola* Torell figs., RICHARDS 802.

FILIBRANCHIA.

ANOMIAEAE.

Anomia descripta sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 270 pl. xx f. 6.—*Anomia ephippium*, *squamula*, JUTTING 466.—*A. ephippium*, MARCEAU 597.—*A. simplex* and Cardiac rhythm, NAVEZ 662.

†*Anomia meridiana* sp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Transv. Mus. 18 4 1936 p. 336 pl. xv f. 13-16.—*A. ephippium* L. pl. ii f. 7a-b, L. R. COX 214.—*A. convexa* p. 38, OOSTINGH 690.

Anomiidae, Miocene Poland, FRIEDBERG, 306.

†*Enigmonia bognoensis* sp. n. London Clay Rose Green, near Bognor Regis, WRIGLEY Proc. Malac. Soc. London 22 1 1936 p. 24 pl. v f. 1-3.

†*Gerlus* [subgen. non des.] for *Placuncopsis* (f.) *histris* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 21 pl. iv f. 1-9.

Heteranomina squamula ciliary feeding mechanism, D. ATKINS 54.

Monia deliciosa sp. n. Baer Strait Australia, IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 269 pl. xx f. 7, 7a.—*M. squama*, *patelliformis* ciliary feeding mechanism; *Monia* The hypo-branchial gland, D. ATKINS 54.

†*Myoconcha jaënsis* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 62 fig. 62 pl. iv f. 32.

†*Placuncopsis histris* f. *anomiopsis* p. 22 pl. iv f. 12; *P. h. f. ostreiformis* p. 22 pl. iv f. 10-12; *P. h. f. cardiopsis* p. 22 pl. iv f. 13; *P. h. f. disparatus* p. 23 pl. iv f. 14 spp. n. Triassic Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*P. terne-lensis latiphix* var. n. p. 64 pl. v f. 4-7;

P. flabellum sp. n. p. 64 pl. v f. 4-7, Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936.

ARCAEAE.

Anadara granosa, Conchometry, ÔINOMIKADO 683.—*A. gubernaculum luzonica, nodifera, multiformis* figs., ÔTUKA 697.

†*Anadara*, Oligocene; *A. sulcicosta, mediainpressa, delicatula, triphera, mikula*, SCHENCK & REINHART 855.

Arca tetragona ciliary feeding mechanism figs., D. ATKINS 54.—*Arca* L., Reinhart's nomenclatorial views on genus, KURODA 519.

†*Arca bonplandiana* Orb. *chubutensis* var. n. Tertiary Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) 16 1936 p. 299 pl. ii f. 5 & 6a-b.—*Arca ? perpectinata* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 18 pl. iii f. 14-15.—“*Arca*” *subsecans* sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 262 pl. ix f. 1; pl. xii f. 31, pl. xiii f. 5.—*A. tatunokutiensis* sp. n. Neogene Honsyû Japan, NOMURA & HATAI Jap. J. Geol. Geogr. 13 1-2 1936 p. 68 pl. xii f. 1, 2.—*A. pectunculoides* Scacchi v. *minutissima* Kautsky (Miocene) figs., FRIEDBERG 306; *A. trilineata* Conrad, *amicula* Yokoyama pl. xii f. 3-5, *ninohensis* Ôtuka pl. xiii f. 1-6 Neogene Honsyû Japan, NOMURA & HATAI 674.—*A. sinuata* p. 34, OOSTINGH 690.—*A. gordita* Lowe pl. 19 f. 1, 4, PALMER & HERTLEIN 700.—“*Arca*” *tehamaensis* Stanton, “*A.*” *textrina* Stanton, “*Barbatia*” q.v. placed in the fam. Parallelodontidae, REINHART 793.

Arcidae Miocene Poland, FRIEDBERG 306.

Barbatia incomatensis p. 331 pl. xiii f. 9-13, *coxi* p. 333 pl. xiv f. 1, 2 spp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Transv. Mus. 18 4 1936.

†*Breviarca scotiensis* sp. n. Upper Cretaceous Atlantic E. part of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 388 pl. iii f. 17, 18.

†*Cratis pliocenica* p. 48 pl. ix f. 13-15 sp. n. Pliocene Kaawa Creek; *miocenica*

p. 49 pl. 10 f. 18, 20 sp. n. Miocene Clifden Southland, New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 1 1936.

†*Cucullaea ardassiensis* sp. n. Corallian Brora Sutherland, ARKELL Mon. Pal. Soc. Nov. 1936 Corallian Lamellibranchia p. 357 pl. lii f. 7, 8.—*C. farsensis* sp. n. Neogene near Chinahr Rahdar S.-W. Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 44 pl. v f. 6a, b.—*C. moenana* p. 260 pl. ix f. 3; *wersndorfensis* p. 260 pl. xiii f. 12; spp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*C. contracta*, ARKELL 43.—*Cucullaea* aff. *inaequivalvis* Goldf. fig., SAURIN 844.

†*Cypricardites frechi* sp. n. Devonian Miellen, SOLLE Senckenbergiana 18 3-4 1936 p. 189 f. 8.

Destacar gen. n. type *Arca metella* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 268.

Glycymeris glycymeris ciliary feeding mechanism figs., D. ATKINS 54.

†*Grammatodon inaequivalve* Goldf. fig., WANDEL 1037.

†*Iotrigonia*, RENNIE 795.

Limopsidae Miocene Poland, FRIEDBERG 306.

†*Lyriodon moorei* Lyc. fig., WANDEL 1037.

†*Megacucullaea* subgen. n. type, [*Cucullaea*] *kranosi* Tate Lower Cretaceous N. Zululand, RENNIE Ann. S. Afr. Mus. 31 1936 p. 305.

†*Megalodus böckhi latiumbonata* var. n. Dolomite, Trias Hungary, KUTASSY Math. term. Ert. Budapest 54 1936 p. 1016 pl. xi f. 13a, b.—*M. kutassyi* sp. n. p. 52 pl. i f. 2-3, *M. complanatus* Guemb. *dudarensis* p. 53 pl. i f. 4-5; *M. c. inflata* p. 54 pl. i f. 1; vars. n. Tertiary Hungary, THIRRING Mag. K. földt. Int. Eok. Pest. 66 1-3 1936.

†*Megatrigonia*, RENNIE 795.

†*Myophoria sublaevis* sp. n. p. 78 pl. v f. 27-30; *M. kiliani* nom. nov. for *M. vestita* Kil. non Alb. p. 79 pl. v f. 31, 32 Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936.—*M. goldfussi* Alb. *M.* aff. *mülleri* Gieb. figs., SAURIN 844.

†*Myophoriopsis conspicua* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 86 pl. v f. 39.

†*Nordenskjöldia* Wilckens 1910, *REN-*
NIE 796.

†*Nuculella* type *Pectunculus nysti*
Galeotti, GLIBERT 340.

†*Pectunculus kilosus*, AUGUSTA &
REMES 55.—*P. stamineus*, WHEELER
1054.

†*Pseudomonotis tas-aryensis* sp. n.
Mesozoic Kharaulakh Mountains,
VERONETZ Trans. arctic. Inst. Leningrad
37 1936 p. 19 pl. iv f. 49a, b. (p. 33
English summary).

Samacar gen. n. type *Arca strabo*
Hedley, IREDALE Rec. Aust. Mus.
Sydney 19 5 1936 p. 268.

†*Sphenotrigonia* subgen. n. type
Trigonia frommurzei sp. n. Lower Cre-
taceous Northern Zululand, RENNIE
Ann. S. Afr. Mus. 31 1936 pp. 365, 369
pl. xlv f. 1-3, pl. xlvii f. 1-4, pl. xlviii
f. 1-4.

†*Trigonia* (*Clavotrigonia*) *interrupti-*
costa sp. n. Dogger Bielefeld, ALTHOFF
Cbl. Min. Geol. Paläont. Stuttgart 4
1936 p. 154 155 f. 1-3.—*T. maltonensis*
sp. n. Malton Oolite Sedgwick Museum,
ARKELL Mon. Pal. Soc. Nov. 1936 p. 362
pl. lvi f. 1.—*T. (Scabrotrigonia) in-*
comatensis sp. n. Upper Cretaceous,
Portuguese E. Africa, RENNIE Ann.
Transv. Mus. 18 4 1936 p. 334 pl. xiv
f. 5-9.—*T. (Iotrigonia) haughtoni* sp. n.
Lower Cretaceous Northern Zululand,
RENNIE Ann. S. Afr. Mus. 31 1936 p. 340
pl. xli f. 1-4.—*T. (Rutitrigonia) pon-*
golensis sp. n. Lower Cretaceous
Northern Zululand, RENNIE Ann. S.
Afr. Mus. 31 1936 p. 359 pl. xli f. 5, 6
pl. xlii f. 5-7.—*T. clavellata* Beds of
Dorset Perisphinctids, ARKELL 41.—
T. clavellata, ARKELL 43.—*Trigonia*
"nov. sp. ind. aff." *Trigonia zlam-*
bachiensis figs. Kitzberger, ROSENBERG
820.—*T. striata* Miller fig., SAURIN 844.

†*Trigonioides* gen. n. Trigoniidae
p. 248 type *T. kodairai* sp. n. Upper
Jurassic Japan, KOBAYASHI & SUSUKI
Japan. J. Geol. Geogr. 13 3-4 1936 p.
249 pl. xxvii f. 1-4, pl. xxix f. 13.

Trisidos semitorta figs., OTUKA 697.

†*Verticpronus stirps* sp. n. Waito-
taran (Miocene) Kaawa Creek, New
Zealand, LAWS Trans. Proc. Roy. Soc.
N.Z. 66 1 1936 p. 52 pl. 10 f. 25, 26.

MYTILACEA.

†*Actinoceramus* (*Taenioceramus*) *con-*
centricus pl. xiii f. 6, HEINZ 390.

†*Actinodesma* (*Asselberghsia*) *annae*
Frech pl. ii f. 17, MAILLIEUX 590.

†*Actinopterella subcrenata* Kon. fig.,
PÉNEAU 718.

†*Ambonychia* ? *importans* sp. n. Lias
Palermo, GREGORIO Ann. Géol. Paléont.
Palermo 53 1930 p. 28 pl. v f. 31.

†*Ambonychinia corrugata* (Lindstr.)
fig., THORSLUND 978.

†*Anningia* gen. nov. (? Myalinidae)
for *Anningia carixensis* sp. n. Lias
Dorset, L. R. COX Quart. J. Geol. Soc.
London 92 4 1936 p. 468 pl. xxxiv f. 9, 10.

Anthraconauta phillipsi, SIMPSON 907.

†*Arcomytilus oxfordianus* sp. n. Ox-
fordian France, DECHASEAUX Bull. Soc.
géol. Fr. 5 IV 6-7 1935 p. 595 pl. xxxi
f. 1, 2.

†*Aucella malayomaorica* Krumb. 1923
fig. variation, WANDEL 1037.

†*Avicula caudataeformis* p. 231 pl. i
f. 1; *pseudofrederici* p. 232 pl. i f. 3;
gallensteini p. 233 pl. i f. 4; *geyeri*
(p. 168 pl. xix f. 3 of Broili *Pachy-*
cardienstufe 1904) p. 234; *nodosa*
p. 235 pl. i f. 5; *plicatostriata* p. 235
pl. i f. 34a, b; *kautzkyi* p. 236 pl. i f. 6;
sturoides p. 237 pl. i f. 8; *launsdorfiensis*
p. 239 pl. i f. 10; *kutassyi* p. 239 pl. i
f. 11; *carinthiaca* p. 240 pl. i f. 12;
lineata p. 240 pl. i f. 13 spp. n. *kokeni*
wilkensi var. n. p. 238 pl. i f. 9 Eocene
Launsdorf, GÜGENBERGER SitzBer.
Akad. Wiss. Wien (I) 144 (5-6) 1935.—
A. postinterlaevigata sp. n. Lias Franken,
KUHN N. Jahrb. Min. Geol. Paläont.
Stuttgart 75 2 1936 p. 244 pl. x f. 17.—
Avicula cf. *caudata* fig. 41 pl. iv f. 6, 7;
gansingensis f. 42 pl. iv f. 8; *hallensis*
f. 44 pl. iv f. 9, SCHMIDT 863.

Bathmoceramus rhenanus sp. n. Upper
Cretaceous, HEINZ SitzBer. naturh.
Ver. Preusse Rheine Westf. 19x-33
1934 p. 32 fig. 2.

Brachydontes emarginatus Benson v.
eudeli (ex Jousseume MSS.) var. n. =
Modiola emarginata Bens. Clessin
Conch. Cab. 2nd ed. 1889 p. 120 pl. 25
f. 7-8, LAMY J. de Conchyliol. Paris 80
2 1936 p. 163.—*Brachydontes* (*Hor-*
momya), (*Ischadium*), *Brachydontes*
Swainson 1840, LAMY 542.—*Br[achy-*
dontes] Mus. Nat. Hist. nat. Paris,
LAMY 543.

†*Boehmiceramus bantu* pl. xiii f. 4,
HEINZ 390.

†*Camptoceramus gregarius* pl. xiii
f. 5, HEINZ 390.

†*Cassianella angustula* nom. nov. p. 244, *C. angusta directa* p. 244 pl. i f. 14; *C. angustula compressa* p. 244 pl. i f. 15; *C. angustula latecostata* p. 245 pl. i f. 16; vars. n. *C. symmetrica* p. 245 pl. i f. 17; *gallensteini* p. 245 pl. i f. 18; *avicularaeformis* p. 246 pl. i f. 19; *pseudo-avicularis* p. 246 pl. i f. 20; *carinthiaca* p. 246 pl. i f. 21; *robusta* p. 247 pl. i f. 22; *bicostata* p. 247 pl. i f. 23; *elegantula* p. 248 pl. i f. 24; *planata* p. 248 pl. i f. 25; *launsdorfensis* p. 248 pl. i f. 26; *lineata* p. 249 pl. i f. 27 spp. n. Launsdorf (Middle Eocene), GUGENBERGER SitzBer. Akad. Wiss. Wien (1) 144 5-6 1935.

†*Cassianella* cf. *decussata* f. 45 pl. iv f. 10; *transiens* f. 47 pl. iv f. 11, 12, SCHMIDT 863.

†*Ceromya columba* fig., BLANCHET 112.

Cosa kaawaensis sp. n. Waitotarian (Miocene) Kaawa Creek, New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 1 1936 p. 48 pl. ix f. 9, 12 16.

†*Dacrydium simulator* sp. n. Waitotarian (Miocene) Kaawa Creek, New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 1 1936 p. 50 pl. ix f. 17.

†*Echinotus* gen. n. type *Avicula echinata* W. Smith, Middle Jurassic Europe, MARWICK Trans. Proc. Roy. Soc. N.Z. 65 3 1935 p. 301 pl. xxxv f. 7, 8; pl. xxxvi f. 25-27.

†*Entomonotis* gen. n. type *Monotis salinaria richmondiana* Zittel Noric New Zealand, MARWICK Trans. Proc. Roy. Soc. N.Z. 65 3 1935 p. 298 pl. xxxiv f. 4; pl. xxxv f. 9, 11, 13-17; pl. xxxvi f. 18-24.

†*Gervillea lithodomopsus* sp. n. Triassic Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 23 pl. iv f. 15.—*Gervillea joleaudi* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 53 f. 51 pl. iv f. 17, 18 20.—†*Gervillea* cf. *exporrecta* Leps. fig., SAURIN 844.—*Gervillea goldfussi* Strmbk. fig., WIRTH 1061.

†*Gervillia elianae* p. 39 pl. iv f. 7-11; *stockleyi* p. 40 pl. iv f. 12-16; *kidodiensis* p. 41 pl. iv f. 18, 19; *piriformis* p. 41, pl. iv f. 17; *tealei* p. 42 pl. iv f. 20; spp. n. Ruhembe beds Tanganyika (Permian), L. R. Cox Quart. J. Geol. Soc. London 92 1 1936.—†*Gervillia*

dolabrata sp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936 p. 556 pl. ii f. 6.

†*Gervilliopsis*, RENNIE 796.

†*Gingillum* [gen. n.] for *G. lindum* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 27 pl. v f. 5, 39.

†*Goniophora hendersoni* sp. n. Devonian New Zealand, R. S. ALLAN Palaeont. Bull. N.Z. 14 1935 p. 25 pl. iii f. 6.

†*Halobia obruchevi* sp. n. Kolyma-Indigerkaland, KIPARISOVA Trans. arctic Inst. Leningrad 30 1936 pp. 97, 121 pl. iii f. 1, 3, 4.

†*Hochstetteria pinctagrina* p. 47 pl. ix f. 2, 3, 6; *tela* p. 47 pl. ix f. 5, 7, 8; *kaawa* p. 47 pl. ix f. 1B, 11; spp. n. Waitotaran (Miocene) Kaawa Creek, New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 1 1936.

†*Hoernesiella* gen. nov. (Paraviculidae) with *H. horrida* pl. i f. 32, and *H. carinthiaca* pl. i f. 33 spp. n. Middle Eocene Launsdorf, GUGENBERGER SitzBer. Akad. Wiss. Wien (1) 144 5-6 1935 p. 250.

†*Inoceramus patvotensis media* var. n. p. 109 pl. xxv f. 1-3; *I. p. angusta* var. n. p. 110 pl. xxv f. 4 Cretaceous Westfalia, BEYENBURG Z. deuts. geol. Ges. Berlin 88 2 1936.—*I. mytiloides arcuata* f. nov. p. 439 fig. 3a-d; *I. labiatus submytiloides* var. n. p. 444 pl. xxxvii f. 1-3 text-figs. 6-8; *I. labiatus opalensis elongata* n. forma p. 458 f. 14, 15; *I. l. subhercynica* var. n. p. 465 pl. xl f. 1-5 text-figs. 17, 18; *I. l. s. transiens* n. forma p. 468, Cretaceous, SEITZ Jahrb. preuss. geol. LdAnst. 55 1 1935.—*I. subhaasti* sp. n. Middle Oxford, Misol East Indies, WANDEL N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 p. 469 pl. xv f. 1, 2; pl. xvi f. 5a, b; pl. xviii f. 1-3 text-fig. 3.—*I. subhaasti lateplicata* text-fig. 3, s. *densiplicata* pl. xv f. 2; pl. xvi f. 5a, b; s. *intermedia* pl. xviii f. 3a, b vars. n. Jurassic East Indies, WANDEL N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 p. 471.—*I. subundatus*, BERRY 94.—*I. cuvieri* fig., MOROS 648.—*I. dubius* Sow. fig., SAURIN 844.—*I. galoi* Boehm, *haasti* Hochst. Zittel figs., WANDEL 1037.—*Inoceramus* pearls, ZITON 1088.

†*Klinoptera* gen. n. (Aviculidae Limopertinae) type *K. rhenana* sp. n. Lower Coblenze, Nelleuköpfchen, DIENST Jahrb. preuss. geol. LdAnst. 55 1 1935 p. 388 text-fig. 1.

†*Leiopteria* ? *elegans* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 17 pl. iii f. 19, 20.—*Leiopteria* (*Leiopteria*) *pseudolaevis* (Oehlert) pl. iii f. 2, MAILLIEUX 590.

†*Leptodesma saleei* sp. n. Frasnian Devonian Ardennes, MAILLIEUX Mém. Mus. Hist. nat. Belg. 77 1936 p. 32 pl. 1 f. 4.

†*Lithodomus corallinus*, *opisoides*, *textus*, *anticus*, *ellipsoides*, *gradatus*, *sinuatus*, *censoriensis*, BENOIT 82.

Lithophaga lithophaga rock boring by chemical means, CALMAN & CRAWFORD 165.

Meleagrina occa Rve. = *Pinctada vulgaris* Schum., GRUVEL 365.—*Meleagrina margaritifera* byssus filaments, PELSENEER 716.

†*Miocardiopsis* gen. n. Isocardiidae type *Anisocardia eocaenica* Bayan, GILBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 94 f. 37.

Modiola burbata, POIRION 761.

†*Modiola württembergica* p. 8 pl. ii f. 2; *M. ebensfeldensis* p. 8 pl. i f. 4; spp. n. Lias Europe, KUHN Jh. ver. vaterl. Naturk. Württemb. 91 1935.—*M. suevica* p. 7 pl. iii f. 13; *striae* p. 7 pl. i f. 7 spp. n. Lias Europe, KUHN Jh. ver. vaterl. Naturk. Württemb. 91 1935.—*M. burghannensis* p. 254 pl. xii f. 2; *trimeuoli* p. 254 pl. x f. 1, 2a, b; *dehmi* p. 255 pl. xii f. 32 spp. n. Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*M. norica* sp. n. Dachsteinkalk Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 pl. xiii f. 16.—*M. minutaeformis* sp. n. Trias Spain, SCHMIDT Abh. Heidelberg Akad. Wiss. 22 1936 p. 68 f. 72 pl. v f. 12, 13.—*Modiola* cf. *cuneata* Sow; aff. *striatula* Goldf. figs., SAURIN 844.

Modiolaria laevigata metabolism and temperature, SPÄRCK 926.

†*Modiolopsis stockleyi* p. 42 pl. iv f. 21–25, 27, 28; *kidodiensis* p. 44 pl. iv f. 26?, 29 spp. n. Ruhembé Beds, Tanganyika (Permian), L. R. COX Quart. J. Geol. Soc. London 92 1 1936.

†*Modiomorpha* ? *nana* “n. sp.” sub-*regularis* sp. n. Devonian Altai, HAL- ZEEN Rec. Geol. West Siberian Region 20 1935 pp. 19, 20 pl. vi f. 3.

Modiolus Mus. Hist. Nat. Paris, LAMY 543.

†*Monotis giulianensis* p. 24 pl. iv f. 1; *proposalinaria* p. 24 pl. iv f. 3; *illa* p. 25 pl. iii f. 44; *intermedia* p. 25 pl. iii f. 45; *pluricosta* p. 25 pl. iii f. 46, 47, 49; *limopsis* p. 25 pl. iii f. 35–37; *cardiformis* p. 25 pl. iii f. 34, 38–40; *cardiopsis* p. 25 pl. iii f. 41–48; *planulata* p. 25 pl. xiv f. 25 spp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.

Musculus ulmus sp. n. Sydney Harbour, IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 271 pl. xxi f. 10.

Mytilaster Mus. Hist. Nat. Paris, LAMY 543.

†*Myoconcha concentrisculpta* p. 256 pl. xi f. 4; *quadricosta* p. 257 pl. xii f. 15; *banzensis* p. 257 pl. ix f. 4; spp. n. Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*M. berckhemeri* sp. n. Lias, KUHN Jh. ver. vaterl. Naturk. Württemb. 91 1935 p. 6 pl. ii f. 1.—*M. alata* sp. n. Dachsteinkalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1035 pl. xiii f. 15.—*Myoconcha angulata* d'Orb., ZAZVORKA & SOUKUP 1083, 1084.

Mytilus desolationis “n. sp.” [nom. nov.] for “*canaliculus* Dall [non Martyn] in Kidder,” *edulis* *ungulatus* L. Kerguelen, LAMY J. de Conchyliol. Paris 80 2 1936 p. 112.—*M. californianus* shell movement, APHLEN 36.—*M. edulis*, *californianus* food and method of capture, AUSTIN & FOX 56.—*M. galloprovincialis* salivary gland fig., BERNER 92.—*M. edulis*, BIALASZEWICZ & KUPFER 100.—*M. Diatoms* and dinoflagellates as food of, BULEY 153.—*M. purification*, DODGSON 249.—*M. californianus* habitat and food, D. L. FOX 295.—*M. californianus* properties physical and chemical of fecal pellets, D. L. FOX 296.—*M. experiments* on the survival in sea water of various concentrations, FOX, MARKS & AUSTIN 298.—*M. californianus* food of, FOX & MARKS 297.—*M. edulis*, FROUTIN 315.—*M. galloprovincialis*, FULINSKI 318.—*M. pharaonis* Fischer = *Brachydontes variabilis* Krauss, GRUVEL 365.—*M.*

Beds at Blyth, Budle Bay and Holy Island, HOBSON, STORROW, LEACH & WRIGHT 419.—*M. edulis* culture in Holland, LAMBERT 533.—*M. (Chloromya), M. (Aulacomya)*, LAMY 542.—*M. edulis* byssus filaments, PELSENER 716.—*M. edulis*, PIEH 733.—*M. galloprovincialis*, PORION 761.—*M. perna* and effect of light, ROCHA E SILVA 812.—*M. edulis* metabolism and temperature, SPÄRCK 926.—*M. edulis* ecology graphs, THAMDRUP 974.—*M. edulis* ecology and growth, WARREN 1038.—*M. californianus* spawning habits and mussel poison, WHEDON 1053.—*M. crassitesta* veligers and growth of teeth figs., YOSHIDA 1078.

Mytilidae, Miocene Poland, FRIEDBERG 306.—Mytilidae Revision of recent species in the Muséum national d'histoire naturelle de Paris, LAMY 541.—Mytilidae Mus. Nat. Hist. nat. Paris, LAMY 543.

†*Mytilus persicus* sp. n. Oligocene Karun river, Bakhtiari country, Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 34 pl. v f. 5.—*M. simplex* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 20 pl. 4 f. 21.—*M. liasioides* sp. n. Lias, Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 255 pl. xii f. 38.—*M. k-sakurai* sp. n. Oligocene Tuguru Japan, NOMURA & HATAI Japan J. Geol. Geogr. 13 3-4 1936 p. 278 pl. xxxiii f. 1-3, 12.—*Mytilus* pearls, ZITCH 1088.

†*Otapiria* gen. n. type *Pseudomonotis marshalli* Trechmann, Middle Jurassic, New Zealand, MARWICK Trans. Proc. Roy. Soc. N.Z. 65 3 1935 p. 302 pl. xxxv f. 10, 12; pl. xxxvi f. 28-32, 34, 35.

†*Oxytoma omolonense* sp. n. Kolyma-Indigirka Land, KIPARISOVA Trans. arctic Inst. Leningrad 30 1936 pp. 93, 120 pl. ii f. 16, 18.—*O. scythicum* sp. n. Trias Sechuan W. China, WIRTH N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 p. 429 fig. 56.

†Paraviculidae fam. n. *Cassianella*, *Hoernesia*, *Lilangula*, *Reubenia*, *Hoernesia*, GUGENBERGER SitzBer. Akad. Wiss. Wien (I) 144 5-6 1935 p. 241.

†*Perna seeleyi* nom. nov. = *P. oblonga* Seeley 1861 non *P. o.* Römer-Büchner 1827, ZITCH Archiv Molluskenk. 68 6 1936 p. 241.

Platyceramus kahrzi sp. n. Upper Cretaceous Oberturon, HEINZ SitzBer. naturh. Ver. Preuss. Rheine Westf. (1932-33) 1934 p. 30 fig. 1.

†*Plethomytilus anularis* sp. n. Devonian Europe, DAHMER Abh. preuss. geol. LdAnst. p. 18 pl. iv f. 5, 6.

†*Posidoniella angulata* sp. n. Dinantian [Carboniferous] France, DELÉPINE Bull. Soc. géol. Fr. 5 v 1-3 1935 p. 180 pl. viii f. 13, 14 test-fig. 5.

†*Posidonomya daonellopsis* p. 24 pl. v f. 9-11; *P. sghemba* p. 24 pl. v f. 10; *spatula* p. 24 pl. v f. 8 spp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.—*P. demaneti* sp. n. Franian Devonian Ardenne, MAILLIEUX Mém. Mus. Hist. nat. Belg. 77 1936 p. 33 pl. i f. 10-13.

†*Pseudomonotis modeli* sp. n. Lias Europe, KUHN Jh. Ver. vaterl. Naturk. Württemb. 91 1935 p. 3 pl. iii f. 15.—*P. beneckeii* Bittner, *tenuistriata* Bittner, *aurita* Hauer, *clarai* Emmrich. figs., WIRTH 1061.—*P. scutiformis kolymica* var. n. pp. 84, 120 pl. i f. 8, 11, 14.—†*Pseudomonotis scutiformis typica* var. n. pp. 82, 118 pl. i f. 6, 7, 9, 10 Kolyma-Indigirka Land, KIPARISOVA Trans. arctic Inst. Leningrad 30 1936.

Pteria hirundo ciliary sorting mechanism of gills, D. ATKINS 54.

†*Pteria africana* sp. n. Ruhembe beds, Tanganyika (Permian), L. R. COX Quart. J. Geol. Soc. London 92 1 1936 p. 37 pl. iv f. 5, 6.—*Pteria* (?) *dalli* sp. n. Upper Cretaceous Atlantic, Eastern part of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 390 pl. iii f. 19, 20.

Quendreda gen. n. [non descr.] type *Dacrydium fabale* Hedley, IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 271.

†*Rachidoceramus* (*Oncoceramus*) *hispanicus* pl. xiii f. 1, HEINZ 390.

†*Rebusum* [gen. n.] for *R. drepanense* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 27 pl. v f. 3-6.

†*Selenoceramus* (*Selenoceramus*) *ibericus*, pl. xiii f. 1, (*Cataceramus*) *europaeus* pl. xiii f. 3, HEINZ 390.

Septifer Mus. Nat. Hist. nat. Paris, LAMY 543.

Sinomytilus, LAMY 543.

†*Spathella faniensis* sp. n. Frasnian Devonian Ardenne, MAILLIEUX Mém. Mus. Hist. nat. Belg. 77 1936 p. 37 pl. i f. 22.

Volsella modiolus presence of Carotenoids in Liver-organs, LÖNNBERG 571.

†*Volsella tugaruana* sp. n. Oligocene Tugaru, Japan, NOMURA & HATAI Japan. J. Geol. Geogr. 13 3-4 1936 p. 279 pl. xxxiii f. 4, 6, 8.

Vulsellidae *euphenax* Cox 1931 p. 29, L. R. Cox 213.

PECTINACEA.

†*Aequipecten buvigneri* sp. n. Jurassic France, DECHASEAUX Ann. Paléont. Paris 25 1-3 1936 p. 58 pl. viii f. 2.—*A. romanus* sp. n. Pliocene Italy, SERRA Bol. Soc. geol. ital. 54 2 1936 pl. xiii f. 1.—*A. maximiliani* "sp. n." (*Pecten m. n. sp. Theodori*, Proft 1840) Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 249 pl. xi f. 3.—*Aequipecten histrix* fig., SERRA 891.

†*Amussium* (*Variamussium*) *felsenium styriaca* var. n. Trias Hungary, MEZNERICS Mag. K. földt. Int. Évk. Pest. 65 10-12 1935 p. 334 pl. xii f. 3-6.—*A. concentricum hindi* var. n. Carboniferous Belgium, DEMANET Mém. Inst. géol. Louvain 10 1936 p. 133 pl. xiii f. 13-15.

†*Anatipoecten* sec. nov. [non des.] type *Pecten anatis* Morton, Tertiary, HERTLEIN Nautilus Philad. 50 1 1936 p. 26.

†*Aviculopecten delépinei* sp. n. p. 125 pl. xii f. 7-10 Carboniferous Belgium, DEMANET Mém. Inst. géol. Louvain 10 1936.—*A. minutum* p. 17 pl. iii f. 10, 11; *A. problematica* p. 17 pl. iii f. 13; spp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 17.—*A. directus* p. 20 "n. sp." [? nom. nud.] *limatus* pl. vi f. 1; *A. pluma* pl. v f. 9-10 spp. n. Devonian Attai, HALFEEN Rec. Geol. West Siberian Region 20 1935 pp. 19, 20.—*A. omnicostatus* p. 509 pl. xlvii f. 5; *arcuatus* p. 510 pl. 47 f. 6, 7; spp. n. Devonian Rhine province, SPRIESTERSBACH Jahrb. preuss. geol. LdAnst. 55 1 1935.—*A. losseni* Koen., *semicostatus* Portl., *gentilis* Sow.

dorlodoti Del., DEMANET 242.—*A. (Pterinopecten) follmanni* Frech pl. iii f. 6, MAILLIEUX 590.

†*Camptonecles richei* p. 32 pl. iv f. 12, 13, 15; pl. v f. 1, 2; *C. mairei* p. 37 pl. v f. 8-10: spp. n. Jurassic East of Paris basin, DECHASEAUX Ann. Paléont. Paris 25 1-3 1936.—*C. praecinctus* sp. n. Portlandian Cape Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 104 pl. 6 f. 6; pl. 41 f. 1.

†*Chlamys* (*Radulopecten*) *tipperi* sp. n. Jurassic, E. of Kerman, Persia, L. R. Cox Palaeont. Ind. Calcutta 22 2 1936 p. 18 pl. 1 f. 1-5.—*C. neumarktensis* sp. n. Lias Franken, KUHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 247 pl. xii f. 40.—*C. (Chlamys) dansvillensis* (Weisbord MS.) sp. n. Jackson formation (Eocene) Dansville Landing U.S.A., H. I. ROWLAND [= H. I. TUCKER] Amer. Midl. Nat. Notre Dame 17 6 1936 p. 999 pl. vi f. 4, 6, 12.—*C. qualicosta*, ARKELL 43.—*C. pictus* fig., GILLET & THÉOBALD 338.—*C. (Chlamys) rigbyi*, greggi, caini, sheldona, choctawensis, johnsoni, clarkeanus, wantubeanus, w. willcoxi, dehayesi, d. tirmus, d. dennisoni, cacawensis, kneiskerni, beverlyi, membronosus, cushmani, cookei, nuperus, cocoanus, biddleanus, indecisus, anatis, tricenarius, trentensis, rogersi, decemnarius, harrisi, exasperatus Tertiary fossils figs., ROWLAND [= TUCKER] 829.—*C. Tertiary*, ROWLAND [= TUCKER] 829.

†*Daonella elegantula* p. 23 pl. iii f. 24, 30-32; *subtipica* p. 23 pl. iii f. 25; *elegantissima* p. 23 pl. v f. 12-14; *D. ? blanda* p. 23 pl. iii f. 27-29 pl. iv f. 2; *D. ? gibba* p. 24 pl. iii f. 31; spp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.

†*Dendopecten* sec. nov. [non descr.] type *Pecten dendyi* Hutton New Zealand, HERTLEIN Nautilus Philad. 50 1 1936 p. 26.

Dimya californiana sp. n. off Santa Monica, California, S. S. BERRY Proc. Malac. Soc. London 22 3 1936 p. 126 pl. xlii B f. 1-4.

Dimyarina gen. n. type *Dimya corrugata* Hedley, IREDALE Rec. Austr Mus. Sydney 19 5 1936 p. 269.

†*Hinnites patagonicus* sp. n. Tertiary Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 p. 295 pl. ii f. 1-3.

†*Lyriopecten prior* sp. n. Devonian Altai, HALFEEN Rec. Geol. West Siberian Region 20 1935 p. 19 pl. vi f. 2.

Manupecten Monts. antedates *Felipes* Loc., HERTLEIN 411.

†*Obliquipecten*, DEMANET 242.

Pecten sinomarinus nom. nov. type *P. ambiguus* BAVAY, non Münster in Goldfuss, HERTLEIN Nautilus Philad. 50 1 1936 p. 27.—*P. circularis* shell movement, APHLIN 36.—*P. jacobaeus* heart structure, BRUNET & JULLIEN 155.—*P. Fishing and cooking*, GENSON 327.—*P. recent and fossil distribution in Japan*, HATAI 385.—*P. heart structure and action*, JULLIEN & VAIERL-BLANC 465.—*P. maximus* Carotenoids in Liver-organs LÖNNBERG 571.—*P. maximus*, MARCEAU 597.—*P. groenlandicus, varius*, metabolism and temperature, SPÄRCK 926.—*P. maximus*, THACKWAY 973.—*P. jacobaeus, tenuicostatus*, swimming habit figs., YONGE 1076.

†*Pecten pascoei* p. 50 pl. viii f. 9-13; West end of Qishm Island Pliocene, *pilgrimi* p. 52 pl. viii f. 4, 5; Kharag. Persian Gulf, Pliocene or Pleistocene, spp. n. Neogene Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936.—*P. (Pseudamusium) ericensis* p. 19 pl. ii n. 1-10; *P. (P.) propeleucus* p. 20 pl. ii f. 19, 20; *P. (P.) progegius* p. 20 pl. ii f. 16-17b; *P. (P.) perincertus* p. 20 pl. ii f. 12; *Pecten infans* p. 21 pl. iii f. 20; *P. binatus* p. 22 pl. iii f. 14-17; *P. perelegans* p. 22 pl. 3 f. 18; *P. ovatocostatus* p. 22 pl. iii f. 1 spp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.—*P. blandus* p. 18 pl. ii f. 21; *P. elegantulus* p. 18 pl. iii f. 23-25; *P. minutestriolatus* p. 18 pl. iii f. 15; *P. rudesculus* p. 19 pl. iii f. 17-18; *P. alternatus* p. 19 pl. iii f. 12-14; *P. triseriatus* p. 19 pl. iii f. 9-11; *P. carolinopsis* p. 20 pl. ii f. 19-31; *P. c. propinquus* p. 20 pl. iii f. 2 spp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*P. (Chlamys) proto-tranquebaricus noeltingi* nom. nov. = *P. (C.) p. paucicostatus* Vredenburg non Carpenter p. 54; *P. (C.) vredenburgi* nom. nov. = *P. middlemissi* Das-Gupta non Diener p. 55; *P. (C.) tauroperstriata dasguptai* nom. nov. = *Chlamys tauroperstriata spinosa* Das Gupta non Brown p. 55; *P. möricekei* nom. nov. = *P. tenuicostatus* Hupé non Migh. & Ad.

p. 55; *P. cambodicus* nom. nov. = *P. fimbriatus* Mansuy non Phil. p. 56; *P. phoeniciensis* nom. nov. = *P. irregularis* Blanckenhorn non Sow. nec McCoy p. 58; *P. mandannaensis* nom. nov. = *P. (Variamussium) yukonense* Lees non Smith p. 58; *P. notosyriacus* nom. nov. = *P. syriacus* Blanck. non Conrad ("Janira = *Pecten*.") p. 58, HERTLEIN Nautilus Philad. 50 2 1936.—†*P. dujardini kutassyi* var. n. Cretaceous Hungary, JASKÓ [Abstract] Geol. Zbl. Leipzig 8 1 1936 p. 15.—*P. (Chlamys) pigmaeus* sp. n. Dachstein-kalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1033 pl. xiii f. 10.—*P. (Chlamys) skiptonensis* sp. n. Skipton, Maryland p. 186 pl. xxiii f. 12; *P. (C.) clintonius rappahannockensis* subsp. n. Jones Point, Virginia p. 186 pl. xxii f. 1-3; *P. (C.) santamaria middlesexensis* subsp. n. Urbanna Middlesex, Virginia p. 187 pl. xxii f. 5, 6; *P. (C.) jeffersonius palmyrensis* subsp. n. N. Carolina p. 187 pl. xxiii f. 3; *P. (C.) eboreus watsonensis* subsp. n. Florida p. 188 pl. xxiii f. 1, 2.—*P. (C.) gladiensis* sp. n. p. 188 pl. xxiii f. 4; *P. (C.) gibbus anteamplicostatus* subsp. n. p. 189 pl. xxiii f. 5-7; *P. (C.) evergladensis charlottensis* subsp. n. p. 189 pl. xxiii f. 8, 9; *P. (C.) charltonius* sp. n. p. 190 pl. xxiii f. 10, 11: Tertiary South Eastern United States, MANSFIELD J. Paleont. Menasha Wis. 10 3 1936.—†*P. (Chlamys) kautskyi* sp. n. Trias Hungary, MEZNERICS Mag. K. Földt. Int. Évk. Pest. 65 10-12 1935 p. 335 pl. xii f. 1, 2.—*P. (Aequipecten) gabusogaensis* sp. n. Pliocene Ryūkyū Islands, NOMURA & ZINBÔ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 236 pl. xif. 3a, b, 4a, b.—*P. (Aequipecten) schreiteri* sp. n. Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936 p. 84 pl. v f. 3.—*P. (Streblopteria) sp. n.* Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 58 pl. iv f. 24, 25.—*P. discites filamentosa* var. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 60 pl. iv f. 28, 29.—*P. (Camptonectes) microcancelli* sp. n. Upper Cretaceous Atlantic eastern part of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 391 pl. iii f. 21, 22.—*P. ocklockoneensis violae* subsp. n. Jackson Bluff Fla. Miocene, TUCKER Amer. Midl. Nat. Notre Dame 17 2 1936 p. 481 pl. 1 f. 1, 2.—*P. watanabei* sp. n. Nampi Beds Karafto, YOKOYAMA J. Fac. Sci.

Univ. Tokyo (Geol.) 9 9 1929 p. 393 pl. lxxvi f. 4.—*P. davidis*, *rotundatu*, *praescabriusculus*, *subbenedictus*, *restituensis*, *biarritzensis*, *jacobaeus*, FENAU 272.—*P. pumilus* *ergolus*, *erpus*, *rari-costatus*, figs., GREGORIO 359.—*P. muricatus*, LÖSCHER 574.—*P. hallensis* fig., PARODI 703.—*P. (Entolium) discites* Schlot.; *P. (E.)* cf. *subdemissum* Munst.; *P. (E.) demissum* Philipps, *P. (Camptonectes) aalensis* Paris & Richardson, *P. (Amussium) pumilus* Lk. v. *donaiensis* Mansuy figs., SAURIN 844.—*P. (Pecten) ochlockoneensis*, *smithi*, *poulsoni*, *leonensis*, *kathrinepalmerae*, *raveneli*, *hemicyclicus*, *brouweri*, *humphreysi*, *macdonaldi*, *elizatus*, *burnsi*, *biformis* *wendelli* Tertiary U.S.A. figs., TUCKER 999.—*P. (Chlamys) aff. elongatus* Lam., ZAZVORKA & SOUKUP 1083, 1084.

Pectinidae, Miocene Poland, FRIEDBERG 306.

†*Pethopecten* sec. nov. type *Pecten (Chlamys) széremensis* Pethő Senouien, Hungary, HERTLEIN *Nautilus* Philad. 50 1 1936 p. 27.

†*Plicatula weberi* sp. n. Lower Dogger Jurassic, Misol, East Indies, WANDEL N. Jahrb. Min. Geol. Paläont. Stuttgart. 75 3 1936 p. 485 pl. xvi f. 3, 4.

†*Propeamussium (Propeamussium) tateiwa* sp. n. Neogene Ennichi Series Chōsen, KANEHARA Jap. J. Geol. Geogr. 13 1-2 1936 p. 33 pl. x f. 5, 6.

†*Pseudamussium condrustinse* sp. n. Carboniferous Belgium, DEMANET Mém. Inst. géol. Louvain 10 1936 p. 140 text-figs. 4-7.

†*Pterinopecten papyraceus* Sow, *carbonarius* Hind, *elegans* Jackson, *speciosus* Jackson, *rhythmicus* Jackson, *moensis* Kon. figs., DEMANET 242.

Spondylidae, Miocene Poland, FRIEDBERG 306.

†*Spondylus sanfilippoi* sp. n. Maestritian Tripolitania, SERRA Bol. Soc. geol. ital. 55 1 1936 p. 124 pl. iii f. 6, 6a.

Swiftopecten, HERTLEIN 411.

†*Syncyclonema carboniferum* Hind, fig., DEMANET 242.

†*Velata hettangiensis* sp. n. Jurassic France, DECHASEAUX Ann. Paléont Paris 25 1-3 1936 p. 71 pl. ix f. 1.

†*Ventalium* [gen. n.] for *V. insigne* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 23 pl. 3 f. 23.

EULAMELLIBRANCHIA.

OSTRACEA.

†*Alectryonia ramosa* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 29 pl. 5 f. 18, 19.—*A. coma* sp. n. Neosaxonian (Cretaceous) near Bahtschisarei, SEMENKOWITSCH Trav. Sta. sci. nat. Karadagh 2 1 1918 p. 22 pl. iii f. 6, 27.—*A. gregarea*, DECHASEAUX 237.

Atrina twenty-five kinds of animal life living upon shell of, at Sanibel Island, PERRY 720.

†*Bleta* gen. n. for *B. elegans* sp. n. p. 17 pl. ii f. 10-13; Trias Cave of Belliemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.

†*Dimya checcchiai* sp. n. Maestritian Tripolitania, SERRA Bol. Soc. geol. ital. 55 1 1936 p. 125.

†*Endocostea falki* sp. n. Cretaceous Westfalia, BEYENBURG Z. deuts. geol. Ges. Berlin 88 2 1936 p. 112 pl. 26 f. 1, 2.

†*Exogyra latissima* Lk. (*Gryphaea aquila*) in the Albian near Havre, NICOLESCO & STIEGELMANN 672.

Gryphaea arcuata, ANON 30.—*G. angulata* experiments on, BERTHOUMYROUX 96.—*Gryphaea*, BORDE, 121.—*G. angulata*, BRUNET & JULLIEN 153.—*G. angulata*, POIRION 761.—*G. angulata* disease of, RANSON 783.—*G. angulata*, RANSON 784.—*G. angulata* metabolism and temperature, SPÄRCK 926.

†*Gryphaea arcuataeformis* sp. n. Upper Trias Kolyma-budigirkhand, KIPARISOVA Trans. arctic Inst. Leningrad 30 1936 pp. 100, 123 pl. iv f. 1, 2, 4, 6-10.

Lima hians, *loscombi*, N. FISCHER 276.—*L. inflata*, MARCEAU 597.—*Lima* fig., ROBSON 811.—*L. inflata*, *hians*, metabolism and temperature, SPÄRCK 926.—*L. hians* swimming figs., YONGE 1076.

†*Lima (Plagiostoma) ringsteadensis* sp. n. Upper Calcareous Grit, Ringstead Bay, Dorset, ARKELL Mon. Pal. Soc. Nov. 1936 p. 365 pl. liv f. 5, 5a.—*L. majuscula* p. 17 pl. ii f. 17, 18.—*L.*

percostata p. 17 pl. i f. 14.—*L. bicostrulata* p. 17 pl. ii f. 15, 16 sp. n. Trias Cave of Belliemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930.—*L. (Mantellum) labáni* sp. n. Trias Hungary, MEZNERICS Mag. K. Földt. Int. Erk. Pest. 65 10–12 1935 p. 336 pl. xii f. 7–10.—*L. vilasecai* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 57 pl. iv f. 22, 23.—*L. cardiformis*, *L. (Plagiostoma) schimperi* figs., BLANCHET 112.—*L. striata* Schlot.; *L. costata* Goldf.; *L. subpunctata* Orb.; *L. (Plagiostoma) aff. subpunctatae* Orb.; *L. (P.) semicircularis* Goldf. figs., SAURIN 844.

Limidae, Miocene Poland, FRIEDBERG 306.

†*Limoptera schmidti* sp. n. Devonian, SPIESTERBACH Jahrb. preuss. geol. Ld. Anst. 55 1 1935 p. 511 pl. f. 8.

†*[Liogryphea] arcuata* v. *suilla* Schl. fig., DECHASEAUX 236.

Lopha hyotis notina subsp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 269 pl. xx f. 2.

Ostrea kamehameha nom. nov. for *O. bryani* Pils. Waianae, Oahu, PILSBRY Nautilus Philad. 49 3 1936 p. 103.—*O. gigas* sex differentiation, tables, AMEMIYA 20.—*O. circumspecta* shell movement, APHLIN 36.—*O. edulis* experiments on, BERTHOUMEYRoux 96.—*O.* ecology and economics, BRUCE 150.—*O.* culture, CHAUX-THEVELIN 175.—*O.* protandry, W. R. Cox 198.—*O. virginica* sex and environment, COE 200.—*O. lurida, virginica* sex ratios and changes figs., COE 202.—*O. lurida, virginica*, spermatocytes and spermatozoa figs., COE 202.—*O.* purification, DODGSON 249.—*O. edulis*, DOUVILLÉ 251.—*O.*, HERMAN 409.—*O. lurida, gigas* pulsation of blood vessels figs., HOPKINS 424.—*O. lurida* pulsating blood vessels in walls of mantle, HOPKINS 425.—*Ostrea* effects of Cicutine, Curare, Veratrin and Digitalin on heart, JULLIEN 461.—*Ostrea* experiment on duration of life, JULLIEN & RICHARD 463.—*Ostrea* and resistance to chemical action, JULLIEN & RICHARD 464.—*O. edulis*, KESSEL 479.—*Ostrea* larvae seaweed spores as food of, LEWIS 558.—*O. edulis*, MARCEAU 597.—*Ostrea* fishery at Mumbles, MATHESON 603.—*O. virginica* rate of flow, and quantity, of water through, NELSON 663.—*O. edulis*

sex change, ORTON 692.—*O. angulata* variation in littoral and deep water forms and probable cause thereof, ORTON 693.—*O. virginica* and auto-narcosis, PRYTHERCH 776.—*O.* culture, SENÔ 885–890.—*Ostrea* and Ostreiculture, SENÔ 885–890.—*Ostrea* culture and sale in Chile, SOLMINIHAC 921.—*O. edulis* metabolism and temperature, SPÄRCK 926.—*Ostrea* biological investigations, SPÄRCK 929.—*O. edulis* excretory system and its functions, TAKATSUKI 958.—*O. lurida, virginica, gigas* on the nutritive value, TULLY 1000.—*Ostrea* electrical inhibition in heart, WALZL 1035.—*Ostrea* effects of Ca and K. on the heart, WALZL 1036.—*O. sellaeformis* = *Ostra* [*Ostrea*] *radians* figs. pl. iii, WHEELER 1054.—*O. edulis* report on beds in South Wales, WRIGHT 1066.—*O. virginica* and free swimming larva figs., YONGE 1076.

†*Ostrea khamirensis* sp. n. Oligocene Khamir S. Persia, L. R. Cox Paleont. Ind. Calcutta 22 2 1936 p. 39 pl. v f. 2–4.—*O. nigrimontana* sp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936 p. 556 pl. iii f. 6, 7.—*O. wemmelensis* sp. n. (E. Vincent MSS.) = *flabellula* Galcotti 1837 non Lk. = *cymbula* Galcotti non Lk. = *cubitus* Vincent & Rutot 1879 non Desh. = *plicata* Vincent and Conturnieaux 1896 non Solander Wemmel Sands, Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 60 pl. ii f. 4.—*O. (Alectryonia) pappi* sp. n. Cretaceous Hungary, JASKÓ [Abstract] Geol. Zbl. Leipzig 8 1 1936 p. 15 no. 17.—*O. dainellii* p. 166 pl. vii f. 1, 1a; *gessii* p. 167 pl. viii f. 3–6; *undulata* p. 167 pl. viii f. 5; *stephaninii* p. 168 pl. viii f. 4; *sestini* p. 168 pl. vii f. 2, 2a spp. n. Eocene Arabia, PIERAGNOLI Bol. Soc. geol. ital. 54 2 1936.—*O. battensis* nom. nov. for *Ostrea johnsoni* Stephenson U.S. Geol. Surv. Prof. Pp. 186 A p. 5 1936 non Aldrich 1886, STEPHENSON J. Paleont. Menasha, Wis. 10 7 1936 p. 669.—*O. multicostata*, DESIO 245.—*O. cochlear* shell structure, DOUVILLÉ 252.—*O. (Crassostrea) gajensis* Vrendenburg Lower Miocene India, F. E. EAMES 255.—*O. hippopodium* Nilsson, SCHNEIDER 873.—*O. sellaeformis* fig. pl. iv, WHEELER 1054.—*Ostrea* pearls, ZITCH 1088.

Ostreidae, Miocene Poland, FRIEDBERG 306.

Pinna list, emendations, WINCK-WORTH 1058.

Pinnidae, Miocene Poland, FRIEDBERG 306.

†*Pinna calnensis* sp. n. Corallian Calne, Wilts, ARKELL Mon. Pal. Soc. Nov. 1936 p. 367 pl. lv f. 2.—*P. billiemiensis* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 20 pl. iv f. 17.—*P. folium*, RICHARDSON 807.

†*Pycnodonta lomnickii* [sp. n.] Miocene Poland, FRIEDBERG Mioczański mioc. ziem Polskich, Kraków 1936 p. 260 pl. xlv f. 7.—*Pycnodonta* shell structure, DOUVILLÉ 252.

Saxostrea gen. n. [non descr.] type *Ostrea commercialis* Iredale & Roughley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 269.

SUBMYTILACEA.

Abra tenuis in Sussex, TOMLIN 984.

Afroparreysia gen. n. (Unionidae) type *Parreysia lobensis* Frierson, HAAS Abh. Senckenb. Naturf. Ges. 431 1936 p. 84.

Ambuscintilla gen. n. [non descr.] type *A. praemium* sp. n. Watson's Bay, N.S.W., IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 275 pl. xxi f. 4.

Anadonta [*Anodonta*] *cygnea*, MOREHOUSE 639.

†*Anatina balearica* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 2 1936 p. 92 f. 109 pl. v f. 45.

Anisomyaria Miocene Poland, FRIEDBERG 306.

Anodonta anatina, sex of, H. H. BLOOMER 117.—*Anodonta* and pearls, BOYER 136.—*A. implicata* experiments on oxygen consumption by, EDDY & CUNNINGHAM 258.—*A. cygnea* and *Dreissensia polymorpha* figs., ENTZ 266.—*A. cygnea* Vitamin C, KOKAS 493.—*A. cataracta*, MIYASAKI 631.—*A. cygnea*, *anatina*, in N. Asia, MOZLEY 653.—*A. cygnea*, WAELE 1030.

†*Anisodonta wemmelensis* sp. n. Wommel Sands, Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 105 f. 44 p. 106.

†*Anodonta arzniana* sp. n. Miocene, nr. Arzui, Transcaucasia, BOGHACHEV Trudy Azerbaijan Neft. Elmitad. Inst. 1936 p. pl. ii f. 6.—*Anodonta* in Holland, KRUIZINGA 503.

Anodontophora fassäensis Wissmann, *münsteri* Wissmann, *tonkinensis* Mansuy *trapezoidalis* Mansuy figs., SAURIN 844.

†*Anoplophora tacuturna* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 21 pl. iv f. 23.—*A. plana* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 74 pl. v f. 24.

†*Arthritica elongata* sp. n. Waitotaran (Miocene) New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 53 pl. x f. 28.

Aspatharia (*Spathopsis*) *dautzenbergi* sp. n. N. Rhodesia, HAAS Abh. Senckenberg Naturf. Ges. Abh. 431 1936 p. 93 pl. viii f. 2a, b.—*Aspatharia*, HAAS 371.

†*Aspatharia* Lybian Desert, SANDFORD 841.

Astarte borealis, *elliptica*, *montagui* metabolism and temperature, SPÄRCK 926.

†*Astarte morion* sp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936 p. 559 pl. iii f. 1, 2.—*A. nystana laekensis* var. n. p. 69 f. 31 p. 70; *A. inaspecta* sp. n. (E. Vincent MSS.) p. 71 f. 32 p. 72; Wommel Sands, Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936.—*A. subtetragona* Münster. *brevis* p. 123 pl. x f. 20a, b; *A. s. krumbecki* p. 123 pl. ix f. 20a, b; spp. n. Dogger in Franken, KÜHN Paläont. Z. Berlin 17 3-4 1935.—*A. voltzi* Hoen. aff. *cincta* Goldf. figs. SAURIN 844.—*A. borealis* fig., SLODKIEWITSCH 910.

Byssobornia subgen. n. [non descr.] type *Bornia filosa* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1936 p. 274.

Caelatura (*Caelatura*) *choziensis* bangweolica subsp. n. Bangweolo Lk., N. Rhodesia, HAAS Abh. Senckenberg Naturf. Ges. 431 1936 p. 56 pl. v f. 1a-r.—*C. (Mweruella)* p. 63 (*Kistinaia*) p. 64 (*Rhytidonaia*) p. 65 (*Kalliphenga*) p. 72 subgen. n., HAAS Abh. Senckenberg Naturf. Ges. 431 1936.—*C. (Caelatura) aegyptiaca* subsp. p. 74 pl. vi f. 7, HAAS 371.

Cafferia caffra Krauss. pl. iii f. 4a-b
pl. iv f. 1a-c, HAAS 371.

†“*Carbonicola*” *tealei* p. 49 pl. v
f. 20-22; *kidodiensis* p. 50 pl. v f. 17,
18; *carinata* p. 50 pl. v f. 23, 24;
haughtoni p. 51 pl. v f. 19; Calcareous
Bed Tanganyika Territory (Permian),
L. R. Cox Quart. J. Geol. Soc. London
92 1 1936.—*C. planitumida* Trueman,
polmontensis Brown figs., WEIR &
LEITCH 1045.

†*Cardita* (*Venericardia*) *laekenensis*
sp. n. = *imbricata* Nyst 1843 non
Gmel. = *acuticosta* Lyell 1852 non Lk.,
= *deltoides* Vincent & Rutot 1879 non
Sow. = *acuticostata* Couturieaux 1896
Wemmel Sands, Belgium, GLIBERT
Mém. Mus. Hist. nat. Belg. 78 1936
p. 86 pl. iii f. 4; pl. iv f. 11.—*C.*
banzensis, *C. dorni* spp. n. Lias Franken,
KUHN N. Jahrb. Min. Geol. Paläont.
Stuttgart 75 2 1936 p. 266.—*C. coquandi*,
DESIO 245.

†*Cardinia* *ovula* *polaris* var. n. p. 13
pl. ii f. 18, 20, 21, 26; *Cardinia* *sibirica*
sp. n. p. 15 pl. ii f. 19; *C. tas-aryensis*
sp. n. p. 15 pl. ii f. 27; *C. subtrapezoides*
p. 16 pl. ii f. 22, Mesozoic Kharaulakh
Mountains, VORONETZ Trans. arctic.
Inst. Leningrad 37 1936 (p. 32 English
summary).

Carditellona gen. n. [non descr.] type
Carditella angasi Smith, IREDALE Rec.
Aust. Mus. Sydney 19 5 1936 p. 272.

Carditellopsis gen. n. [non descr.] type
Carditella elegantula Tate & May,
IREDALE Rec. Aust. Mus. Sydney 19 5
1936 p. 272.

†*Codakia* (*Jagonia*) *okinawazimana*
sp. n. Tertiary, Gebusoga Ryûkyû
Islands, NOMURA & ZINBÔ Sci. Rep.
Tôhoku Univ. 18 3 1936 p. 241 (13) pl.
xi (i) f. 9a-b.

†*Coelopsis* *ceratoides* pl. xli f. 5, BIGOT
103.

Condylocuna gen. n. [non descr.] type
Condylocardia projecta Hedley, *C.*
cambrica sp. n. Australia, IREDALE Rec.
Aust. Mus. Sydney 19 5 1936 p. 272.

Corbicula sandae, KURODA & FUJITA
522.

†*Corbicula albida rosini* subsp. n.
Hunyani Drift nr. Salisbury, S Rhodesia,
HAAS Abh. Senckenb. Naturf. Ges. 431
1936 p. 41 pl. viii f. 2.—*C. (Leptesthes ?)*

coreanica sp. n. Upper Jurassic Japan,
KOBAYASHI & SUSUKI Japan. J. Geol.
Geogr. 13 3-4 1936 p. 255 pl. xxix f.
1-10.—*C. cowlitzensis*, R. E. COATS 197.
—*C. fluminalis* in Bohemian Pleistocene
at Cilec near Nymburk, PETRBOK 728,
729.—*C. fluminalis* Pleistocene Bohemia,
SMETANA 913, 913.

†*Corbis elegans* p. 28 pl. v f. 26;
grata p. 28 pl. v f. 26a spp. n. Lias
Palermo, GREGORIO Ann. Géol. Paléont.
Palermo 53 1930.

†*Crassatella alta protexta*, figs. pl. iii,
iv, WHEELER 1054.

†*Crassatellites* (*Hybolophus ?*) *leo-*
nensis sp. n. Miocene Florida, MANSFIELD
J. Wash. Acad. Sci. 26 10 1936 p. 395.

Cristaria pricata spatiosa Experiments
on electrical effects of flow of solutions
on rectal wall NaCl, KCl, CaCl₂, MgCl₂,
MgSO₄, and Na₂SO₄, IIDA 434.

†*Cristaria ? “Leptesthes” chingsha-*
nensis Grabau p. 254 pl. xxix f. 9-12,
KOBAYASHI & SUSUKI 489.

†*Cuna fitilia* p. 50 pl. x f. 19, 23;
crassicardo p. 51 pl. x f. 21, 22; *kaawa*
p. 51 pl. x f. 24, 27; spp. n. Waitoturan
(Miocene) Kaawa Creek, New Zealand,
LAWS Trans. Proc. Roy. Soc. N.Z. 66 1
1936.

Cunanax gen. n. [non descr.] type
Cuna pisum Hedley, IREDALE Rec.
Aust. Mus. Sydney 19 5 1936 p. 272.

†*Cypricardella quartzitica* sp. n. Devon-
ian Mühlthal, SOLLE Senckenbergiana 18
3-4 1936 p. 200 f. 9, 9a.

†*Cypricardinia crenistria* (Sandberger)
pl. iii f. 3, MAILLIEUX 590.—*Cypricardia ?*
alicantina sp. n. Trias Spain, SCHMIDT
Abh. heidelberg Akad. Wiss. 22 1936 p.
88 f. 103 pl. v f. 34.

†*Cyprina islandica* Sardegna G. of
Terranova, BLANC 109.

†*Dicranodonta groenlandica* sp. n.
(Rosenkrantz MS.) Upper Jurassic C.
Leslie Milne Land, SPATH Medd.
Grønland 99 3 1936 p. 177 pl. 41 f. 11.

Divalucina gen. n. type *Lucina*
cumingii Ad. and Ang. *D. c. cardwelli*
subsp. n., IREDALE Rec. Austr. Mus.
Sydney 19 5 1936 p. 273.

Dreissena polymorpha, ANON 29.—*D.*
polymorpha in Russia, DECKSBACH 238.
—*D. polymorpha* larvae, KÓZMINSKI
496.

Dreissensia polymorpha figs., ENTZ 266.—*D. polymorpha* Vitamin C, KOKAS 493.—*D. polymorpha* fig., MIYASAKI 631.—*D. polymorpha*, POHL 760.—*Dreissensia* upon *Unio pictorum bala-tonicus*, WAGNER 1033.

Dreissensiidae Miocene Poland, FRIEDBERG 306.

Epicodakia kennethi sp. n. Narrabeen beach N.S.W., IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 273 pl. xx f. 10.

Eucrassatella cumingii wardiana p. 271; *c. baxteri* p. 272; *kingicola veronis* p. 271; *E. genuina* sp. n. p. 271 pl. xx f. 4 subsp. n. Australia, IREDALE Rec. Austr. Mus. Sydney 19 5 1936

†*Eucrassatella mansfieldi* sp. n. Miocene Cape Fear R. 5 m. N.E. of Acme, North Carolina, MACNEIL J. Wash. Acad. Sci. 26 12 1936 p. 529 f. 1-3.

†*Fimbria billiemincola* sp. n. Triassic Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 23 pl. ii f. 22.

†*Goniophora scalpellum* "n. sp." [? nom. nud.] p. 20, HALFEEN 379.

Grandidieria Bgt. type *Unio burtoni* Woodward = *Ruellania* Bgt., HAAS 371.

Gyrena [*Cyrena* in expl. of plate] *subspheica* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 29 pl. v f. 27, 28.

†*Hindsiella wemmelensis* sp. n. Wemmel Sands, Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 106 f. 45 p. 107.

Indonaiia ratidota (Charmes) figs., HAAS 371.

†*Isocardia novensis* sp. n. Upper Cretaceous Atlantic, eastern part of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 393 pl. 4 f. 7, 8.—*Isocardia* sp. (nov.?) fig., PANNEKOEK 702.

†*Joannisiella meisensis* sp. n. Miocene, N. Korea, MAKIYAMA Mem. Coll. Sci. Kyoto B. 11 4 8 1936 p. 209 pl. v f. 8, 9.

Kalliphenga subgen. n. of *Caelatura* type *Unio ruellani* Bgt., HAAS Abh. Senckenb. Naturf. Ges. 431 1936 p. 72.

†*Kidodia* gen. nov. [Unionidae], type *K. stockleyi* sp. n. Calcareous Beds,

Tanganyika Territory (Permian), L. R. COX Quart. J. Geol. Soc. London 92 1 1936 p. 52 pl. v f. 25-29 text-fig. 1.

Kistinaia subgen. n. of *Caelatura* type *Caelatura* (*Kistinaia*) *schoutedeni* sp. n. (*Unio mweruensis* E. A. Smith Pr. Malac Soc. 8 p. 1 1908) HAAS Abh. Senckenb. naturf. Ges. 431 1936 p. 64 pl. v f. 4a-d.

Lampsilis ovata, MIYASAKI 631.—*L. ventricosa, canadensis*, SCHALIE 848.

Lasmigona compressa in the Hudson Bay drainage, LA ROCQUE 549.

Leptodea fragilis, SCHALIE 847.

Loripes lacteus metabolism and temperature, SPÄRCK 926.

†*Lucina dalikiensis* sp. n. Neogene, Vindobonian, Daliki bridge S.-W. Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 57 pl. v f. 9-13.—*L. meisensis* sp. n. Miocene N. Korea, MAKIYAMA Mem. Coll. Sci. Kyoto B. 11 4 8 1936 p. 210 pl. iv f. 5.—*L. olssoni* sp. n. Upper Cretaceous Atlantic, eastern part of Banquereau, Nova Scotia, L. W. STEPHENSON, Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 392 pl. iv f. 5, 6.—*L. kunigamiensis* sp. n. Tertiary, Ryûkyû Islands, NOMURA & ZINBÔ Sci. Rep. Tôhoku Univ. 18 3 1936 p. 241 (13) pl. xi (i) f. 10a-b, 11a-b.—*L. (Dentilucina) doderleini* p. ii f. 5a-b, PARONA 705.

Margaritana margaritifera, BOYER 136.—*M. glochidium* fig., MIYASAKI 631.—*M. margaritifera*, MODÉN 634.

Marikellia gen. n. [non descr.] type *Kellia solida* Angas, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 274.

†*Mellteryx angulata* sp. n. Waitotaran (Miocene) New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 53 pl. xi f. 32, 33.

Mesafra gen. n. (Unionidae) type *Caelatura mesaficana* Pils. & Beqt. p. 83; *M. m. stappersi* subsp. n. Congo Museum p. 84 pl. 7 f. 2a-b, HAAS Abh. Senckenb. Naturf. Ges. 431 1936.

Musculium partumeium Say. rearing parasite-free, KRULL 504.—*M. lacustre* in N. Asia, MOZLEY 653.

Mutela hargerii schomburgki subsp. n. Bangweolo N. Rhodesia, HAAS Abh. Senckenb. Naturf. Ges. 431 1936 p. 98 pl. 8 f. 3a-e.

Mweruella subgen. n. of *Caelatura* (Unionidae) type *Unio mweruensis* E. A. Smith, HAAS Abh. Senckenberg Naturf. Ges. Abh. 431 1936 p. 63.

†*Myllitella fragilis* sp. n. Waitotaran (Miocene) New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 54 pl. xi f. 34, 35, 37.

†*Myrtea laekenensis* sp. n. Wemmelsands Eocene Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 118 f. 51, 52.

Mysella japonica development of shelled larvae figs., MIYAZAKI 632.

Nitia Pallary, HAAS 371.

Nyassunio gen. n. (Unionidae) type *Unio nyassaensis* Lea, HAAS Abh. Senckenberg Naturf. Ges. Abh. 431 1936 p. 85 pl. vii f. 3a-d.

†*Opis* (*Coelopsis*) *upwarensis* sp. n. Coral Rag Upware, Sedgwick Museum, Cambridge, ARKELL Corallian Lamellibranchia Mon. Pal. Soc. Nov. 1936 p. 369 pl. li f. 5, 6.

†*Oriocrassatella stokesi* Eth. jr. figs., PRENDERGAST 772.

†*Palaeomutela* ? *tanganyicensis* sp. n. Calcareous Beds Tanganyika Territory (Permian), L. R. Cox Quart. J. Geol. Soc. London 92 1 1936 p. 49 pl. v f. 14, 15.

†*Palaeonodonta wadei* p. 48 pl. v f. 8; *stockleyi* p. 48 pl. v f. 16; spp. n. Calcareous Beds, Tanganyika Territory (Permian), L. R. Cox Quart. J. Geol. Soc. London 92 1 1936.

†*Paranodonta* gen. n. Unionidae type *P. otai* sp. n. Upper Jurassic Japan, KOBAYASHI & SUSUKI Japan J. Geol. Geogr. 13 3-4 1936 p. 253 pl. xxvii f. 7-10.

†*Perrierina sola* sp. n. Waitotaran (Miocene) New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 52 pl. x f. 29.

Pisidium lilljeborgii, *nitidum*, *hibernicum*, *caserianum*, *personatum*, *pulchellum*, *miliun*, in Windermere, HUMPHRIES 431.—*P. korotnewi minutum* var. n. Lake Baikal, KOZOV Trav. Sta. limnol. Lac Baikal. Leningrad 8 1936 p. 200 pl. vii f. 15-16.—*Pisidium* [sic] *maroccanum* nom. nov. for *P. rotundatum* Pallary 1922 non Temple Prime 1851, PALLARY J. de Conchyliol. Paris 80 1

1936 p. 61.—*P. amnicum*, *caserianum*, *nitidum*, *henslowianum*, *subtruncatum*, *supinum*, *steenbachii*, *lilljeborgii* in N. Asia, MOZLEY 653.—*Pisidium*, experiments on, OVTSCHNIKOV 698.—*P. henslowianum*, SHADIN 894.—*P. casertanum*, *henslowianum*, Lake Dikoye TAUSON 963.

†*Pisidium astartoides* in N. Asia, MOZLEY 653.

Pisidiidae Britain, BOYCOTT 131.

†*Pleurodapis carinata* (Kegel) pl. iii f. 4, MAILLIEUX 590.

†*Plicatounio* gen. n. Unionidae p. 250 type *P. naktongensis* sp. n. Upper Jurassic Japan, KOBAYASHI & SUSUKI Japan J. Geol. Geogr. 13 3-4 1936 p. 252 pl. xxviii f. 1-4 6-8.—*Plicatounio triangularis* sp. n. Upper Jurassic, KOBAYASHI & SUSUKI Japan J. Geol. Geogr. 13 3-4 1936 p. 252 pl. xxviii f. 5a-b.

Potomida versus *Parreysia*, PRASHAD 767.

†*Praeconia* (*Theveninia*) *gibbosa* Orb. *rhomboidalis*, BIGOT 103.

Proptera alata, SCHALIE 847. ●

†*Prosocoelus crassinatus* sp. n. Devonian Mühltal, SOLLE Senckenbergiana 18 3-4 1936 [pp. 202-203 nom. et fig.] p. 204 f. 10.

Pseudanodonta minima klettii norden-skjöldi, KRAUSP 501.

†*Pseudohyria* gen. n. (Unionidae, Hyriinae) p. 1514 for *gobiensis* sp. n. p. 1515 [ex F. S. MacNeil MSS.] Cretaceous Iren Dabasu formation, Inner Mongolia, F. K. MORRIS Bull. Geol. Soc. Amer. Washington D.C. 47 9 1936 pp. 1514, 1515 pl. 2.

†*Pseudotrapezium groenlandicum* sp. n. Portlandian C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 125 pl. 49 f. 7a-c.

Quadrula ebena, MIYASAKI 631.

Radicondyla arizela gen. et sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 272.

Regozara gen. n. type *R. olivifer* sp. n. Sydney Harbour, IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 275 pl. xx f. 8.

Rhytidonaiia subgen. n. of *Caelatura* type *Caelatura graneri* Haas. (*Parreysia leopoldvillensis* Pils. & Beqt., HAAS Abh. Senckenb. Naturf. Ges. 431 1936, p. 65 pl. 6 f. 2a-b.

†*Rocheportia obsoleto radiata* sp. n. Tertiary, Ryūkyū Islands, NOMURA & ZINBŌ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 242 (14) pl. xi (i) f. 12a, b.

Saltocuna gen. n. [non descr.] type *Cuna particula* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 272.

Sphaeriidae Britain, BOYCOTT 131.—Sphaeriidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.

Sphaerium hartmanni conigum subsp. n. = *S. stuhlmanni* Pilsbry & Bequaert 1927, non Martins, HAAS p. 46; *S. hartmanni bangweolicum* subsp. n. Canal Nsombo to Bangweolo N. Rhodesia, HAAS p. 47 pl. iii f. 3a-c Abh. Senckenberg Naturf. Ges. Abl. 431 1936.—*Sphaerium*, BANZHAF 74.—*S. corneum* Windermere, HUMPHRIES 431.—*Sphaerium* of Japan Classification, MORI 647.—*S. corneum* in N. Asia, MOZLEY 653.—*S. japonicum biwaense* Gastrulation figs., OKADA 684.—*S. corneum* Lake Dikoye, TAUSON 963.

Talocodakia subgen. n. type *Epicodakia kennethi* sp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 237.

†*Tancredia hartzi* sp. n. Portlandian C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 121 pl. 48 f. 4, 5a, b; pl. 50 f. 2.

†*Taras* (*Phlyctiderma*) *puncturata* (Nyst. MSS.) = *transversaria* Cossmann pars. p. 108 pl. iii f. 10; *T. (Felaniella) wemmelensis* p. 110 pl. iii f. 11; *T. (F.) laekenensis* p. 111 f. 46 spp. n. Wemmel Sands Eocene Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936.

Tellimya, BOESMAN 119.

Thecalia concamerata, MIYASAKI 631.

†*Thyasira wemmelensis* (E. Vincent MSS.) sp. n. Wemmel Sands Eocene Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 112 f. 47.

Toralimysia gen. n. type *T. excentrica* sp. n. = "*Joannisiella sphaericula*" Hedley Pr. L.S. N.S.W. xxx 1906 pl. xxxii f. 18-21, IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 273.

†*Trigonopsis lycetti* pl. xli f. 6-8, BIGOT 103.

Truncilla donaciformis, SCHALIE 847.

Unio (*Limnium*) *subpictorum* nom. nov. for *U. pictorum* f. 6 pl. xxii Malac. l'Alg. Bgt. p. 62; *U. (L.) foucauldiana*

Agadir sp. n. p. 63 pl. iv f. 2; *U. (L.) seurati* La Nahr Ouassel sp. n. p. 64 pl. iv f. 1 N. Africa, PALLARY 80 1 1936.—*U. elongatus*, BOYER 136.—*U. tumidus*, *crassus bosnensis ondavensis*, *crassus bosnensis serbicus*, *pictorum balatonicus*, *pictorum platyrhynchus* figs., CZÓGLER & ROTARIDES 220.—*U. pictorum* figs., ENTZ 266.—*U. dembeae* Sow = *alfierianus* Bgt., *hamyanus* Bgt., *soleilleti* Bgt., *meneliki* Bgt., *ilqi* Bgt. figd. ex types Mus. Nat. d'Hist. Nat. Paris, HAAS text-figs. p. 87 371.—*U. superstes*, HAAS 373.—*U. pictorum* Vitamin-C, KOKAS 493.—*U. crassus*, KRAUSP 501.—*U. tumidus*, TÉTRY 972.

†*Unio* (*Grandidieria*) *abruptus* sp. n. Pleistocene Kazinga Lake Edward, Uganda, FUCHS J. Linn. Soc. London 40 1936 p. 101 pl. 3 f. 6-8.—*U. cf. menkei* Dunker pl. xxvii f. 5, 6, KOBAYASHI & SUSUKI 489.—*Unio* in Holland, KRUIZINGA 503.

Unionidae in Britain, BOYCOTT 131.—Unionidae during prolonged starvation, ELLIS & CALVIN 259.—Unionidae and Glycogen content during prolonged starvation, ELLIS & CALVIN 259.—Unionidae of Colorado, Utah, Idaho, Wyoming, J. HENDERSON 397.—*Unionidae*, Transposed hinge teeth of North American, SCHALIE 849.

†*Venericardia ryukyensis* sp. n. Pleistocene Ryūkyū Islands, NOMURA & ZINBŌ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 240 pl. xi f. 7a, b, 8a, b.—*V. tonosiensis* sp. n. Upper Eocene Panama, RUTSCH Eol. geol. Helv. 29 1 1936 p. 168 pl. xvi f. 1-4.—*V. denoata* Conrad, ABRARD 2.—*V. planicosta* variation, CHAVAN 176.—*V. planicosta*, RUTSCH 831.—*V. ameliae* Peron v. *maracensis* Harris figs., RUTSCH 832.

Volupicuna subgen. n. [non descr.] type *Carditella delta* Tate & May, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 272.

Zairia Rochebrune figs., HAAS 371.

TELLINACEA.

Arcopagia? given as *Acropagia*, *Pinguitellina kurodai* sp. n. Japan, OTUKA Abstract in Geol. Zbl. Leipzig 8 4 1936 p. 221.

†*Arcopagia faba* fig., GILLET & THÉOBALD 338.

†*Cardilia krawangensis* p. 20 f. 1a, b; *ludwigi* p. 21 f. 2a, b spp. n. Neogene Java, OOSTINGH De Ingenieur Ned-Indië IV Mijnbouw en Geol. De Mijngeng 1 1 1934 (iv).

†*Ceroniola australis* Gabb, SCHNEIDER 873.

Corbicula albina rosini subsp. n. R. Hunyani nr. Hunyani Drift 20 km. S. of Salisbury, S. Rhodesia, HAAS Abh. Senckenberg Naturf. Ges. Abh. 431 1936 p. 41 pl. iii f. 2.

Donax trunculus and *Asteria*, PRENANT 771.

†*Donax senonica* sp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Transv. Mus. 18 4 1936 p. 344 pl. xvii f. 10, 11.

†*EGerea collectiva pyruloides* var. n. p. 73, *nassaeformis* var. n. p. 73 pl. v f. 12 Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936.

Freila subgen. n. of *Lucina* for *ericensis* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 28 pl. xiv f. 26.

†*Goniophora montana* sp. n. Devonian Rhine provinces, SRIESTERBACH Jahrb. preuss. geol. LdAnst. 55 1 1935 p. 520 pl. 48 f. 5, 6.

Laminaria flexicaulis, KÖHLER 492.

†*Linearia incomatensis* sp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Transv. Mus. 18 4 1936 p. 344 pl. xvii f. 14-16.

Lucina (*Lucinoma*) *atlantis* sp. n. N. Atlantic, off Maryland, McLEAN Nautilus Philad. 49 3 1936 p. 87 pl. v f. 1, 2.

†*Lucina drilla* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo, 35 1930 p. 29 pl. iv f. 12-15.

Macoma balthica (= *M. fragilis*, = *fusca*, = *groenlandica*, = *tenera*) *calcareae* Gmel. = *proxima* Sow., RICHARDS 802.—*M. balthica* metabolism and temperature, SPÄRCK 926.—*M. community* in Iceland and Greenland waters map, SPÄRCK 927.—*M. balthica* ecology graphs, THAMDRUP 974.

†*Macoma calcarea, fragilis* (= *balthica*), RICHARDS 802.—*M. calcarea* fig., SLODKIEWITSCH 910.

Macra sulcataria, veneriformis development of shelled larvae figs., MIYAZAKI 632.

†*Macra exigua* sp. n. Tertiary Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 p. 293 pl. ii f. 7 & 8a, b.—*Macra? incomatensis* sp. n. Upper Cretaceous E. Africa, RENNIE Ann. Transv. Mus. 18 4 1936 p. 345 pl. xvii f. 6, 7.

†*Metis* [*Apolymetis*] *kehreri* sp. n. Neogene Java, OOSTINGH De Ingenieur Ned. Indië N. Mijnbouw en Geol. De Mijngeng. 1 1 1934 iv p. 20 f. 4-6.—*M. grimesi, niasensis*, Neogene Java, OOSTINGH 688.

†*Perampliata* nom. nov. for *Ampliata* Arkell, type *Tellina ampliata* Phillips Lucinidae Mon. Pal. Soc. Dec. 1934 p. , non Wagner, ARKELL Mon. Pal. Soc. Nov. 1936 p. xx.

Pinguimacoma henicilla gen. et sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 282 pl. xxi f. 7.

Pristipaglia gemonia gen. et sp. n. [Tellinidae] Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 281 pl. xxi f. 6.

Scrobicularia plana metabolism and temperature, SPÄRCK 926.—*S. plana* ecological graph, THAMDRUP 974.

Standella (*Eastonia*) *solanderi* figs., HAAS 377.

†*Syndesmya bosqueti*, GILLET & THÉOBALD 338.

Tellina, BOERMAN 119.—*T. malayensis* p. 34, OOSTINGH 690.—*T. cruenta*, P[ILSBRY] 743.—*T. planata* metabolism and temperature, SPÄRCK 926.—*T. balthica* bored by *Natica* figs., VERLAINE 1016.

†*Tellina pilgrimi* sp. n. Oligocene Kuh-i-Namek 24 m. N. of Bandar Abbas, L. R. Cox Palaeont. Ind. Calcutta 22 2 1936 p. 36 pl. iv f. 11, 12a, b.—*T. (Arcopagiopsis) brabantica* (E. Vincent MSS.) p. 164 pl. vi f. 3 = *A. carinulata* Cossmann pars non Lk.; *T. vincenti* p. 172 pl. vi f. 7 = *canaliculata* G. Vincent [non Edwards] spp. n. Wommel Sands Eocene Belgium, GLIBERT Mém. Mjs. Hist. nat. Belg. 78 1936.—*T. alasa* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 21 pl. iv f. 18.—*T. scabritessulata* sp. n. Tertiary Simaziri beds Ryûkyû Islands, NOMURA & ZINBÔ Sci. Rep. Tôhoku Univ. 18 3 1936 p. 246 (18) pl. xi (i) f. 16a, b,

17a, b.—*T. perryae* sp. n. Tertiary Clewiston, Florida, M. SMITH Nautilus Philad. 49 4 1936 p. 136 pl. ix f. 6.—*T. mysti* fig., GILLET & THÉOBALD 338.

Tellinota gen. n. [Tellinidae] type *T. roseola* sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 281 pl. xx f. 18.

VENERACEA.

Acritopaphia gen. n. [non descr.] type *A. transfusa* sp. n. N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 280 pl. xx f. 12.

†*Aphrodina marina* sp. n. Upper Cretaceous Atlantic, Eastern part of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 393 pl. iv f. 9–12.

Chione undatella shell movement, APHLIN 36.

†*Chione* (*Circomphalus*) *giulianensis* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 28 pl. 5 f. 1, 2, 33.

†*Circe dertonensis* Tortonian Stazzano (Bocca d'Asino) p. 30 fig. 1a, b; *rhodiensis* Upper Pliocene Mt. S. Stefano (Villaggio Cretese) p. 31, spp. n., ZUFFARDI - COMERCI Giorn. Geol. Bologna 10 1935.

†*Clausinella persica* sp. n. Neogene Upper Burdigalian, N.-W. of Chinar Rahdar, S.W. Persia, L. R. COX Palaeont. Ind. Calcutta 22 2 1936 p. 60 pl. vii f. 12, 13.

†*Clementia aintiensis* sp. n. Oligocene Tuguru Japan, NOMURA & HATAI Japan. J. Geol. Geogr. 13 3–4 1936 p. 280 pl. xxxiii f. 5.

Cyclina sinensis rate of growth, fig. and graph, HAMAI 381.

Cytherea callosa Conrad 1837 J.A.N. Sc. Philad. vii p. 252 type of *Amiantis* 1864 Sup. Rep. Moll. W. coast N. Amer. pp. 526–640 = *Dione nobilis* Rve. *Venus callosa* auct. (Sow. non Rve. non Conrad) = *V. nuttalli* Carpenter non Conrad, LAMY 538.

†*Cytherea* (*Callista*) *auca* D'Orbigny, SCHNEIDER 873.

Dosinia, HENRARD 401.—*D. exoleta* figs., MARCEAU 597.—*D. exoleta* metabolism and temperature, SPÄRCK 926.

†*Dosinia sirakii* sp. n. Miocene N. Korea, MAKIYAMA Mem. Coll. Sci. Kyoto B 11 4 8 1936 p. 212 pl. iv f. 3, 4.

†*Dosinula marwicki* sp. n. Miocene New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 56 pl. xi f. 36, 38.

†*Gafrarium* (*Circe*) *hanzarwai* sp. n. Tertiary Ryūkyū Islands, NOMURA & ZINBŌ Sci. Rep. Tōhoku Univ. 18 3 1936 p. 245 (17) pl. xi (i) f. 14a, b, 15a, b.

†*Gibboconcha* [gen. n.] for *G. sicula* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 30 pl. v f. 25.

Glauconometta plankta gen. et sp. n. [gen. non descr. sp. descr.] N.S.W., IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 281 pl. xx f. 16.

Gomphina melanaegis rate of growth, fig. and graph, HAMAI 381.

Granicorium attonitum sp. n. Sydney, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 19 5 1936 p. 278 pl. xx f. 17.

†*Grateloupia hydana*, WHEELER 1054.

†*Kaneharaia* subgen. n. of *Dosinia* type *D. kaneharai* Yokoyama Miocene of Siobara, Japan, MAKIYAMA Mem. Coll. Sci. Kyot B 11 4 8 1936 p. 213.

Katelsysia enigma sp. n. Manby Cove Beach, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 278 pl. xx f. 13.

†*Liocyma aomori* sp. n. Oligocene Tuguru Japan, NOMURA & HATAI Japan. J. Geol. Geogr. 13 3–4 1936 p. 280 pl. xxxiii f. 7.

Macrocallista (*Paradione*) *nioba* nom. nov. for *Venus costata* Chemnitz 1795 Conch. Cab. 11 p. 226 t. 202 f. 1975, CLENCH & MCLEAN J. Conch. London 20 7 1936 p. 201.

Macrocallista (*Paradione*) *bardwelli* sp. n. Broome, Western Australia, CLENCH & MCLEAN J. Conch. London 20 7 1936 [text-fig. unnamed].

Marcia (*Katelsysia*) *rhytiphora* nom. nov. for *Venus strigosa* Sow. non Lk. Victoria, LAMY Bull. Mus. Hist. nat. Paris (2) 7 6 1935 p. 358.

†*Marcia* (?) *pupilla* sp. n. Tertiary Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) 1 6 1936 p. 292.

†*Meisenia* gen. n. type *M. tateiwai* sp. n. (near *Pitar*) Miocene Korea, MAKIYAMA Mem. Coll. Sci. Kyoto (B) 11 4 1936 p. 215 pl. iv f. 6, 7.

Meretrix meretrix rate of growth, fig. and graph, HAMAI 381.

†*Meretrix persica* p. 58 pl. vii f. 9a, b; *M. (Pitar) dalikiensis* p. 59 pl. viii f. 2; spp. n. Neogene Vindobonian Daliki Bridge, S.-W. Persia, L. R. Cox Palaeont. Ind. Calcutta 22 2 1936.—*Meretrix splendida*, *M. (Cordiopsis) in-crassata* fig., GILLET & THÉOBALD 338.

†*Notirus caudex* sp. n. Waitotaran (Miocene) New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 57 pl. xi f. 39.

Notocallista Iredale "an absolute synonym of *Paradione* Dall," CLENCH & McLEAN 194.

Paphia philippinarum development of shelled larvae, figs., MIYAZAKI 632, 633.

†*Paphia persica* sp. n. Neogene Vindobonian near Chinari Rahdar, S.-W. Persia, L. R. Cox Palaeont. Ind. Calcutta 22 2 1936 p. 62 pl. vii f. 10, 11.

Paratapes scordalus sp. n. Sydney Harbour, IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 279 pl. xx f. 11.

Petricola pholadiformis variation in form, ALTENA 19.—*P. pholadiformis*, ANON 29.—*P. pholadiformis* and rock boring habits fig., CALMAN & CRAWFORD 165.

Pitarina osmunda sp. n. N.S.W., IREDALE Rec. Austr. Mus. Sydney 19 5 1936 p. 277 pl. xx f. 9, 9a.

Redicirce gen. n. type *R. mistura* sp. n. Sydney Harbour p. 276 pl. xxi f. 3; *R. consola* sp. n. off Newcastle N.S.W. p. 277 pl. xxi f. 5, IREDALE Rec. Austr. Mus. Sydney 19 5 1936.

Tapes decussatus, *pullastra*, BOAXIN 129.—*T. decussatus*, MARCEAU 597.—*T. decussatus* and *Eugymnanthea*, PALOMBI 701.—*T. decussatus* metabolism and temperature, SPÄRCK 926.

†*Thetironia* Stoliczka 1871 "Family uncertain," RENNIE 795.

†*Trigonocallista woodsi* sp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Transv. Mus. 19 4 1936 p. 342 pl. xvi f. 1-8.

Veneracea genera, FRIZZELL 307; Veneracea Classification, FRIZZELL 310.—Venerid pelecypods, phylogeny, FRIZZELL 308.

Venus gallina fig. of animal, BRUNET & JULLIEN 158.—*V. corrugata*, *obsoleta*, *strigosa* nomenclature, LAMY 537; *V. callosa* auct. [vide note under *Cytherea*], LAMY 537.—*V. mercenaria* sexual phases in, LOOSANOFF 573.—*V. gallina*, *verrucosa* metabolism and temperature, SPÄRCK 926.—*Venus* community in Iceland and Greenland waters, map, SPÄRCK 927.—*V. mercenaria* Phosphatase in, STARKEY & HICKS 939.

CARDIACEA.

†*Buchiola kaisini* sp. n. Frasnian Devonian Ardenne, MAILLIEUX Mém. Mus. Hist. nat. Belg. 77 1936 p. 42 pl. i f. 6-8.

Cardiidae-Cardiinae, Trachycardiinae, Fraginae, Laevicardiinae, KEEN 474.

Cardium edule growth and propagation and effects of salinity, BIRSTEIN 105.—*C. edule* v. *lamarcki* figs., BRAKMAN; *C. edule* rate of growth, BUNTING, ESILICK, JONES & ORTON 159.—*C. echinatum* presence of Carotenoids in Liver-organs, LÖNNBERG 571.—*C. ciliatum*, *edule* metabolism and temperature, SPÄRCK 926.—*C. edule* figs. and graphs, THAMDRUP 974.—*C. edule* and var. *lamarckii* in Sussex, TOMLIN 984.

†*Cardium arcaeiformis* sp. n. Miocene Albany, Western Australia, CHAPMAN & CRESPIN J. Roy. Soc. W. Aust. 20 1934 p. 121 pl. xi f. 25-27.—*Cardium* ? *innovatum* p. 25 pl. iii f. 33; *perincertum* p. 26 pl. iii f. 26; *supraelegans* p. 26 pl. iii f. 32; *prope-semicostatum* p. 26 pl. v f. 35; *gentosum* p. 26 pl. v f. 15, 16; *pusillum* p. 26 pl. iii f. 42-44; spp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930.—*C. (Clinocardium) mutuale* sp. n. Oligocene Tuguru Japan, NOMURA & HATAI Japan J. Geol. Geogr. 13 3-4 1936 p. 279 pl. xxxiii f. 11.—*C. (Ringicardium) bukkanum serratum* var. n. p. 88; *C. (R.) grateloupi oligocenicum* var. n. p. 88 pl. vi f. 7: Oligocene Hungary, NOSZKI Ann. Inst. nat. Mus. Hung. 30 1936.—*C. rogersi* sp. n. Lower Cretaceous Northern Zululand, RENNIE Ann.

S. Afr. Mus. **31** 1936 p. 382 pl. xlix f. 3-8.—*C. haughtoni* sp. n. Upper Cretaceous Portuguese E. Africa, RENNIE Ann. Transv. Mus. **18** 4 1936 p. 341 pl. xvii f. 12, 13.—*C. nixicollis* nom. nov. for *C. (Protocardia) vaughani* Stephenson 1923 Invert. pos. Upper Cret. N. Carol. Geol. & Econ. Surv. **5** 1923 p. 287 non Shattuck, STEPHENSON J. Paleont. Menasha Wis. **10** 7 1936 p. 669.—*Cardium (Ringicardium) acuticostatum* D'Orb., SCHNEIDER **873**.

†*Clinocardium* gen. n. for genotype *Cardium nuttallii* Conrad 1837 also *blandum* Gld. 1850, *Bilowi* Rolle 1896, *californiense* Desh. 1839, *ciliatum* Fab. 1780, *coosense* Dall 1909, *comocense* Dall 1900, *decoratum* Grewingk 1850, *fucanum* Dall 1907, *meekianum* Gabb 1866, *yakatagense* Clark 1932, KEEN Trans. San Diego Soc. nat. Hist. **8** 17 1936 p. 119.

†*Dicerocardium drepanense* p. 26 pl. v f. 20, 22-24; *alterum* p. 26 pl. v f. 21; *trombosum* p. 26 pl. xiv f. 24; *elegans* p. 26 pl. xiv f. 27; spp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo **53** 1930.

Hippopus Life, feeding and symbiosis with Zooxanthellae, YONGE 1077.

†*Laevicardium putzeysi* (E. Vincent MSS.) p. 130 pl. iv f. 8; text-fig. 59; *L. (Plagiocardium) infimum* (G. Vincent MSS.) = *obliquum* Vin. & Cout. non Lk. p. 132 f. 60; spp. n. *L. (Trachycardium) porulosum keeni* nom. mut. = *belgicum* Glibert 1933 Wemmel Sands, Eocene, Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. **78** 1936.—*L. cingulatum*, *scobinula* figs., GILLET & THÉOBALD 338.

†*Limnocardium donginki, fischerianum*, figs., KRACH 498.

Myacites crebrus [crebrus] sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo **53** 1930 p. 29 pl. v f. 29-30.

†*Protocardia shehuenensis* sp. n. Cretaceous Patagonia, FERUGLIO Notas prelim. Mus. La Plata (Palaeont.) **1** 6 1936 p. 289 pl. i f. 2a, b, 3a-c.

Tridacna elongata, GRUVEL 365.—*T. loczyi* p. 34, OOSTINGH 690.—*T. crocea, derasa* life, feeding, digestion and symbiosis with Zooxanthellae, YONGE 1077.

CHAMACEA.

†*Barrettia monilifera* Woodward, *B. multilirata* Whitfield Cuba, figs., RUTTEN 833.—*B. sparcilirata* Cretaceous, Santa Clara, Cuba, figs., THIADENS 975.

†*Biradiolites* cf. *lameracensis* Toucas, *B. cubensis* Douvillé Cuba figs., RUTTEN 833.—*B. aquitanicus* Cretaceous, Santa Clara, Cuba, THIADENS 975.

†*Bournonia planasi, thiadensi*, and a n. sp. pl. f. 7, 9 text-fig. 3 Cretaceous, Santa Clara Cuba figs., THIADENS 975.

†*Caprina*, DOUVILLÉ 250.

†*Chama figarii-Beyi* sp. n. Eocene Arabia, PIERAGNOLI Bol. Soc. geol. ital. **54** 2 1936 p. 171 pl. viii f. 8, 9.—*C. cossmanni* sp. n. Maestritian Tripolitania, SERRA Bol. Sol. geol. ital. **55** 1 1936 p. 122 pl. iii f. 1-4.

†*Chiapasella cubensis* sp. n. Cretaceous N. Santa Clara, Cuba, RUTTEN J. Paleont. Menasha Wis. **10** 2 1936 p. 140 text-figs. 4a, e, h, l.

†*Diceras* Jurassic, DOUVILLÉ 250.

†*Durania delphinensis* sp. n. Vraconian (Cretaceous) Fauge, nr. Grenoble, MORET Bull. Soc. sci. Dauphiné **55** 1935 p. 509 pl. i f. 1-3 and text-figs.—†*Durania delphinensis* sp. n. Vraconian Fauge near Grenoble, MORET Trav. Lab. Géol. Univ. Grenoble **18** 1936 p. 159 pl. i f. 1-3 text-figs. 1, 2 [vide etiam Bull. Soc. sci. Dauphiné **55** 1935].—†*Durania* Douvillé revision and classification; *D. blayaci, flicki*, figs., MORET 644.—*D. cornupastoris*, PARONA 705.

†*Hippurites* (Orbigny) *praetoucasi* from Palestine figs., ASTRE 52.—†*Hippurites* evolution; *H. petrocoriensis* figs., DOUVILLÉ 250.—†*Hippurites* (*Vaccinites*) *loftusitimaensis* "var. n."; *H. (V.) ultimus* "sp. n."; *H. (V.) orientalis* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.

†*Lapeirousia syriaca* figs., DOUVILLÉ 250.—*Lapeirousia jouanneti*, MORET 644.

†*Neoradiolites* "gen. n." *Serbicus* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.

†*Orthoceras* Bruguière type *Hippurites bioculata* Lk., TEICHERT & MILLER 970.

†*Parabournonia hispida* Douvillé, Cuba figs., RUTTEN 833.

†*Parastroma sanchezi* Cretaceous, Santa Clara, Cuba figs., THIADENS 975.

†*Pironaea corrugata transitoria* "var. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.

†*Plagiptychus antillarum* (Douvillé) Cuba figs., RUTTEN 833.

†*Praeradiolites kühni* sp. n. pp. 286, 304 pl. ii f. 1, 2; *P. ponsianus vrbovacensis* var. n. pp. 289, 305: Santonian E. Servia, MILOVANOVIC Ann. géol. Pén. balkan Belgrade 12 2 1935.—†*Praeradiolites orientalis* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.

Pseudochama exogyra shell movement, APHLIN 36.

†*Pseudopolyconites mirabilis* sp. n. Maestrichian, E. Servia, MILOVANOVIC Ann. géol. Pén. balkan Belgrade 12 2 1935 pp. 293, 307 pl. v f. 1, 2.—*Pseudopolyconites* "gen. n." *serbicus* "sp. n." *parvus* "sp. n." *ovalis* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.

†*Radiolites aurigerensis serbicus* var. n. pp. 280, 304 pl. i f. 1, 2; *R. nouleti timacensis* var. n. pp. 282 pl. iii f. 1, 2 Campanian E. Servia, MILOVANOVIC Ann. géol. Pén. balkan Belgrade 12 2 1935.—†*Radiolites* evolution, DOUVILLÉ 250.—†*Radiolites submusculus* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.—†*R. giganteus* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.—†*Radiolites angeiodes*, PARONA 705.—*R. macroplatus* Cretaceous, Santa Clara, Cuba, THIADENS 975.

†*Rudistes* evolution, DUVILLÉ 250.

†*Sauvagesia nicaisei* fig., MORET 644.

†*Sphaerulites bacevicensis* "sp. n." ["To be described in pubn. of Acad. Roy. Serb."], MILOVANOVIC 628.—†*Sphaerulites bacevicensis* sp. n. Maestrichian, E. Servia, MILOVANOVIC Ann. géol. Pén. balkan Belgrade 12 2 1935 pp. 291, 306 pl. iv f. 1, 2.

†*Tampsia rutteri* Cretaceous, Santa Clara, Cuba figs., THIADENS 975.

†*Titanosarcolites giganteus* Cretaceous, Santa Clara, Cuba, THIADENS 975.

†*Torreites sanchezi* (Douvillé) Cuba figs., RUTTEN 833.

MYACEA.

†*Amphichaena kindermanni* Phil. pl. xviii f. A.—C. p. 72 pl. xix f. 5–10, PALMER & HERTLEIN 700.

†*Anthraco-myia glotae* sp. n. left bank of R. Clyde $\frac{1}{2}$ m. W. of Bothwell Bridge, Barren Red Measure, WEIR & LEITCH Trans. roy. Soc. Edinb. 53 3 1396 pp. 714, 746 f. 15 i, j.

†? *Arcomya* (*Pleuromya*) *berkhmeri* sp. n. Lias Europe, KUHN Jh. ver. vaterl. Naturk.-Württemb. 91 1935 p. 11 pl. i f. 18.

†*Ceromya psilonoti* sp. n. Lias Europe, KUHN Jh. Ver. vaterl. Naturk. Württemb. 91 1935 p. 10 pl. i f. 6.

†*Corbula latona* p. 397 pl. v f. 1–3; *C. tethys* p. 398 pl. v f. 4–7: spp. n. Upper Cretaceous Atlantic, Eastern part of Banquereau Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936.—*C. subpisum*, *longirostris* figs., GILLET & THÉOBALD 338.

Cuttellus pellucidus ciliary sorting mechanism, D. ATKINS 54.

†*Cuneocorbula torreyensis*, *biangulata*, figs., CLARK & VOKES 183.

Distugonia gen. n. type *D. inopinata* sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 284 pl. xxi f. 6.

Ensia [subgen. n. non des.] for *Pleuromya* (*Ensia*) *purpura* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 21 pl. iv f. 19–20.

Ensiculus hiliaris sp. n. Sydney Harbour, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 284 pl. xx f. 15.

Ensis siliqua, *arcuatus* Ciliary sorting mechanism, D. ATKINS 54.

Flavomata gen. n. type *Solen biradiatus* Wood, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 283 pl. xx f. 19.

Florisarka gen. n. with *F. onuphria* "sp. n." = *Soletellina florida* Gould, IREDALE Rec. Aust. Mus. Sydney 19 5 1936 p. 283 pl. xx f. 14.

†*Glycimeris chitanii* sp. n. Sandy Shale S. of R. Petroleum Karafto, YOKOYAMA J. Fac. Sci. Univ. Tokyo (Geol.) 29 1929 p. 394 pl. lxxv f. 3.

†*Goniomya quenstedti* sp. n. Lias Europe, KUHN Jh. Ver. vaterl. Naturk. Württemb. 91 1935 p. 10 pl. i f. 8, 9.—*G. dumortieri* sp. n. Bajocien (Jurassic) France, MARZLOFF Trav. Lab. Géol. Lyon 28 9 1936 p. 94 pl. xi f. 3-5.

Hiatella arctica [*Saxicava rugosa*] fig. and rock boring habits, CALMAN & CRAWFORD 165.

†*Legumen intermedium* sp. n. Upper Cretaceous Atlantic eastern part of Banquereau, Nova Scotia, L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 396 pl. iv f. 17-19.

Milligaretta venta gen. et sp. n. N.S.W. IREDALE Rec. Aust. Mus. Sydney 19, 5 1936 p. 282 pl. xxi f. 8.

Mya arenaria in G. of St. Lawrence and Bay of Fundy abundance and rate of growth, C. L. NEWCOMBE 666.—*M. arenaria* variations in growth indices, C. L. NEWCOMBE 667.—*M. arenaria* validity of concentric rings as indicating age, NEWCOMBE 668.—*M. truncata*, *arenaria* metabolism temperature, SPÄRCK 926.—*M. arenaria* ecological graphs, THAMDRUP 974.

†*Orbignyia meridionalis* sp. n. Santonian Auriol, ANTONINE C.R. Séances Soc. géol. Fr. 7 1936 p. 118.

Panope Florida, McLEAN 586.

†*Panopea loei* sp. n. (G. Vincent MSS.) Wemmel Sands, Eocene, Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 180 pl. vii f. 2.—*P. americana* Chaptank formation (Miocene) N. of Jones Wharf, S. Mary Co., Maryland—blister pearl, BERRY 94.

†*Pholadomya idea* Orb. fig., SAURIN 844.

†*Pleuromya hectica* p. 557 pl. i f. 6; pl. ii f. 11; pl. iii f. 5: *P. autolytus* p. 558 pl. i f. 1, 2, 4 pl. ii f. 1, 2, 4, 7 spp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936.—*P. lata hungarica* var. n. Dachsteinkalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1037 pl. xiii f. 25.—*P. unioides* Goldf. fig., SAURIN 844.

†*Postligata schalki* sp. n. Upper Cretaceous Georges Bank, Atlantic,

L. W. STEPHENSON Bull. Geol. Soc. Amer. Washington D.C. 47 3 1936 p. 374 pl. i f. 8.

Psammobia vespertina metabolism and temperature, SPÄRCK 926.

†*Quenstedtia polaris* sp. n. p. 17 pl. ii f. 35; *Q. leda* sp. n. p. 18 pl. ii f. 17a, b, Mesozoic Kharaulakh Mountains "Tellinidae" [Psammobiidae], VORONETZ Trans. arctic. Inst. Leningrad 37 1936 (pp. 32, 33 English summary).

†*Quenstedtia* err. pro *Quenstedtia* (Engl. summary p. 33), VORONETZ 1028.

Sanguinolaria bertini Pilsbry & Lowe and *Tellina cruenta*, P[ILSBRY] 743.

Saxicava rugosa, RICHARDS 802.—*S. arctica* metabolism and temperature, SPÄRCK 926.—*S. arctica* development of larva figs., THORSON 979.

Sinonovacula constricta as food, its culture and growth, CHEN & KAO 181.

Solen marginatus ciliary sorting mechanisms, D. ATKINS 54.—*S. gouldi* rate of growth fig. and graph, HAMAI 381.

†*Solen* (*Plectosolen*) *brabanticus* sp. n. Wemmel Sands, Eocene Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 177 pl. vi f. 9.

ADESMACEA.

Bactronophorus subaustralis sp. n. South Queensland, IREDALE Destr. Timber Port of Brisbane 1936 p. 41 pl. ii f. 15-21.

Bankia grenningi sp. n. South Queensland, IREDALE Destr. Timber in Port of Brisbane 1936 p. 37 pl. ii f. 1-7.—*B. setacea*, ERLANSON 267.—*B. syriaca*, MOLL 637.

Barnea candida and rock boring habits fig., CALMAN & CRAWFORD 165.

Dicathifer caroli sp. n. [nom. nov.] for *Teredo mannii* Calman non *Kuphus*? *mannii* Wright, IREDALE Destr. Timber in Port of Brisbane 1936 p. 38 pl. i f. 16-25.

Glumebra gen. nov. p. 42 (Teredinidae) with type *G. elegans* sp. n. p. 43 pl. ii f. 22-28 N. Queensland, IREDALE Destr. Timber Port of Brisbane 1936.

Hiata gen. n. Pholadidae for *H. infelix* sp. n. Panama, ZETEK & McLEAN Nautilus Philad. 49 4 1936 p. 111 pl. viii f. 1-4.

Martesia striata, CALMAN & CRAWFORD 165.—*Martesia* certain forms can grow in almost fresh water, ERLANSON 267.

Nausitora queenslandica sp. n. South Queensland, IREDALE Destr. Timber in Port of Brisbane 1936 p. 37 pl. ii f. 8-14.

†*Pholadidea finlayi* sp. n. Waitotaran (Miocene) New Zealand, LAWS Trans. Roy. Soc. N.Z. 66 1 1936 p. 57 pl. ii f. 41, 42.

Pholas dactylus and rock boring habits, CALMAN & CRAWFORD 165.—*Pholas* borings, PHILIPP & WEHRLI 731.—*Pholas candida*, TCHAKHOTINE 965.

Teredinidae pp. 11, 15, 17-20, 21-23, 29, C. J. J. WATSON 1041.

Teredo (*Pingoteredo*) *poculifer* sp. n. p. 33 pl. i f. 1-9; *T. (P.) tristi* p. 35 pl. i f. 10-15; spp. n. South Queensland, IREDALE Destruction Timber in Port of Brisbane 1936.—*T. navalis*, *norvegica*, *megotara*, boring habits figs., CALMAN & CRAWFORD 165.—*T. navalis*, CANTUNIARI 166.—*T. navalis* sex and sex changes, COE 199.—*Teredo* very slow in growth owing to low salinity, COCHIN Harbour, ERLANSON 267.—*T. navalis* sex ratio and sex changes, GRAVE & SMITH 351.—*T. indomalacca*, *infundibulata*, *singaporeana*, *malaccana*, MOLL 635.—*T. jaffaensis*, *helleniensi*, *arabica*, *aegyptica*, *adanensis* *massa*, MOLL 636.

Xylophaga dorsalis, CALMAN & CRAWFORD 165.

ANATINACEA.

†*Anthracomya prolifera*, WATERLOT 1039.

†*Capillimya* gen. nov. Cercomyacidae, type *Capillimya capillifera* sp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936 p. 558 pl. ii f. 3, 9.

†*Ceromya krumbecki* sp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936 p. 268 pl. x f. 9; pl. xii f. 13.

†*Cuneomya* ? *minuscule* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 29 pl. v f. 36.

†*Eximiothracia pusillior* sp. n. Waitotaran (Miocene) Kaawa Creek, New Zealand, LAWS Trans. Proc. Roy. Soc. N.Z. 66 1 1936 p. 58 pl. xi f. 40.

Kennerlia (= *Pandora*) *glacialis*, RICHARDS 802.

†*Pholadomya virgulosa wemmelensis* var. n. Wemmel sands Eocene Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 190 pl. vii f. 8.—*P. exaltata*, OLAGÜE 685.

†*Pleuromya* ? *parvula* sp. n. Lias Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 29 pl. v f. 32.—*P. geyeri* p. 269 pl. x f. 12; *trimeuseli* p. 270 pl. x f. 18, 20; pl. xiii f. 4a-b; *banzensis* p. 271 pl. x f. 21, 22; pl. xiii f. 14; spp. n. Lias Franken, KÜHN N. Jahrb. Min. Geol. Paläont. Stuttgart 75 2 1936.—*P. claviformis* p. 90 f. 106 pl. v f. 44; *P. catalanica* p. 90 f. 107 spp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936.

†*Thracia globulosa* sp. n. (Vincent & Rutot MSS.) Wemmel Sands Eocene Belgium, GLIBERT Mém. Mus. Hist. nat. Belg. 78 1936 p. 195 pl. vii f. 11.—*T. merkelii* sp. n. Cretaceous France, SOLIN Bull. Soc. géol. Fr. 5 v 1-3 1935 p. 155 pl. v f. 9-13.—*T. incerta*, SALIN 836.

†*Trichomya* gen. nov. Pholadomyacidae, type *Trichomya amphitrite* sp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936 p. 558 pl. i f. 7, 8.

SEPTIBRANCHIA.

POROMYACEA.

†*Cuspidaria precuspidata* sp. n. Oligocene Upper Rhine, GILLET & THÉOBALD Bull. Serv. Carte géol. Alsace-Lorraine 3 1936 p. 56 pl. iii f. 13.

Cephalopoda.

(a) RECENT.

Cephalopoda Pelagic of The Atlantic, BOUXIN & LEGENDRE 122.—Cephalopoda the Composition of Tertiary Faunas, A. M. DAVIES 231.

Alloteuthis media, HERFURTH 406.

Architeuthis harveyi captured in the Gulf of Gascony 1935, CADENAT 164.

Argonauta argo figs., MARMET 598.—*A. argo* fig., ROBSON 811.

Bathypolypus arcticus, GRIEG 360.

Benthoctopus piscatorum, GRIEG 360.

Bolitaenella diaphana geographic distribution map, BOUXIN & LEGENDRE 122.

Brachiotheuthis riisei geographic distribution, map BOUXIN & LEGENDRE 122.

Calliteuthis reversa geographic distribution map, BOUXIN & LEGENDRE 122.

Chiroteuthis geographic distribution map, BOUXIN & LEGENDRE 122.

Cirrotheuthis mülleri, GRIEG 360.

Corynomma geographic distribution map, BOUXIN & LEGENDRE 122.

Ctenopteryx siculus geographic distribution map, BOUXIN & LEGENDRE 122.

Desmoteuthis geographic distribution map, BOUXIN & LEGENDRE 122.

Eledone cirrosa geographic distribution map, BOUXIN & LEGENDRE 122.

Eledone on Yorkshire coast not *Octopus*, CLARKE 184.—*E. cirrosa* in North Sea, HERTLING 413.—*E. cirrosa* carotenoid contents, LÖNNBERG 572.—*E. moschata* figs., MARMET 598.—*E. moschata* stellate ganglion and epistellar body figs., YOUNG 1080.

Galiteuthis armata geographic distribution map, BOUXIN & LEGENDRE 122.

Gonatus fabricii geographic distribution map, BOUXIN & LEGENDRE 122.—*G. fabricii*, GRIEG 360.

Grimalditeuthis geographic distribution map, BOUXIN & LEGENDRE 122.

Heteroteuthis dispar geographic distribution map, BOUXIN & LEGENDRE 122.—*H. dispar*, HERFURTH 406.

Histioteuthis bonelliana geographic distribution, BOUXIN & LEGENDRE 122.—*H. ruppelli* figs., MARMET 598.

Illex coindetii, *illecebrosus* geographic distribution map, BOUXIN & LEGENDRE 122.

Joubiniteuthis geographic distribution map, BOUXIN & LEGENDRE 122.

Loligo vulgaris, BIALASZEWICZ & KIEFFER 100.—*L. vulgaris* figs., MARMET 598.—*L. officinalis*, GRUVEL 365.—*L. forbesi* in Madrid market fig., REY 800.—*L. forbesi* stellate ganglion showing giant nerve fibres figs., YOUNG 1080.

Mastigoteuthis geographic distribution map, BOUXIN & LEGENDRE 122.

Nautilus err pro *Nautilus* p. 149, STEFANOFF Bull. Inst. Roy. Hist. nat. Sophia 9 1936.

Octopodoteuthis sicula, *banksi* geographic distribution map, BOUXIN & LEGENDRE 122.

Octopus vulgaris experiments on, BERTHOUMEYRoux 96.—*O. vulgaris* geographic distribution map, BOUXIN & LEGENDRE 122.—*O. americanus*, COATES 196.—*O. vulgaris*, *macropus*, GRUVEL 365.—*O. vulgaris* in North Sea, HERTLING 413.—*O. vulgaris* action of certain alkaloids on heart nerves, KRUTA 507.—*O. vulgaris*, *variabilis*, *ocellatus* and autophagy figs., TAKI 960.—*O. vulgaris* stellate ganglion and epistellar body figs., YOUNG 1080.

Ocythoe tuberculata figs., MARMET 598.—*O. tuberculata* epistellar body figs., YOUNG 1080.

Ommatostrephes sagittatus geographic distribution, map, BOUXIN & LEGENDRE 122.—*O. bartrami* figs., MARMET 598.

Oppelia, SCHWARZBACH 879.

Polypus vulgaris experiments re enzymes in, and chemical contents of Alimentary Canal, SAWANO 845.

Rossia glaucopsis, *palpebrosa* Comensalism, CUÉNOT 219.—*R. müleri*, *glaucopsis*, GRIEG 360.—*R. macrosoma* carotenoid contents, LÖNNBERG 572.

Rossia macrosoma, HERFURTH 406.

Sepia prashadi sp. n. Madras, WINCKWORTH Proc. Malac. Soc. London 22 1 1936 p. 17 pl. iv.—*S. officinalis* experiments on nerve system, ARVANITAKI, FESSARD & KRUTA 45.—*S. officinalis* visceral nerves, under electrical influence, ARVANITAKI, FESSARD & KRUTA 46.—*S. officinalis*, *filliouxii* experiments on, BERTHOUMEYRoux 96.—*S. officinalis*, BIALASZEWICZ & KUPFER 100.—*S. filliouxii* abnormal

"bone," COEN 203.—*S. officinalis*, CORI 208.—*S. orbignyana*, *elegans*, commensalism, CUÉNOT 219.—*S. officinalis* Bacteria symbiosis, HERFURTH 406.—*S. officinalis* action of certain alkaloids on heart nerves, KRUTA 507.—*S. officinalis*, KÜHN 510.—*S. officinalis* MACHADO 533.—*S. officinalis* figs., MARMET 598.—*S. officinalis* chemical differences in the blood of opposite sexes, PORA 762.—*S. officinalis* embryo chemical contents, RANZI 785.—*S. officinalis* figs., ROBSON 811.—*S. officinalis* alteration shown in the "bone," SOUCHÉ 923.—*S. officinalis* structure of nerve fibres figs., J. Z. YOUNG 1079.

Sepiella japonica figs., development Oology, LIN 562.

Sepietta oweniana geographic distribution map, BOUXIN & LEGENDRE 122.—*S. oweniana*, HERFURTH 406.

Sepiola ligulata, *affinis rondeleti*, *robusta*, *atlantica*, HERFURTH 406.—*S. scandica* carotenoid contents, LÖNNBERG 572.—*S. rondeleti* figs., MARMET 598.

Taonidium geographic distribution map, BOUXIN & LEGENDRE 122.

Taonius geographic distribution map, BOUXIN & LEGENDRE 122.

Teuthowenia geographic distribution map, BOUXIN & LEGENDRE 122.

Thysanoteuthis rhombus figs., MARMET 598.

Todaropsis eblanae geographic distribution map, BOUXIN & LEGENDRE, 122.—*T. eblanae* in North Sea, HERTLING 413.

Tremoctopus violaceus figs., MARMET 598.

Vampyromorpha status as an order of Cephalopods, PICKFORD 734.

Vitreledonella geographic distribution map, BOUXIN & LEGENDRE 122.

Cephalopoda.

(b) FOSSIL.

†*Acanthoceras* (*Mantelliceras*) *mantelli* (Sow.), ZAZVORKA & SOUKUP, 1083, 1084.

†*Acroteuthis subquadratoidea* p. 6 pl. iii f. 2-5 Speeton Clay Yorkshire; *A. acmonoides* p. 8 pl. iv f. 1-6 Speeton Clay

Yorkshire; *A. paracomonoides* p. 10 pl. iii f. 6-9 Speeton Clay; *A. partneyi* p. 12 pl. v f. 1-8 Spilsby Sandstone Lincolnshire; *A. acrei* p. 14 pl. iv f. 7, 8; pl. v f. 9-13 Claxby Ironstone Lincolnshire, SWINERTON The Cretaceous Belemnites Mon. Pal. Soc. 1936.

†*Adrianites warreni* sp. n. Middle Permian British Columbia, MILLER & CROCKFORD Trans. roy. Soc. Can. IV (3) 30 1936 p. 25 pl. i f. 1-3.

†*Agoniatites intermedius* sp. n. Middle Devonian Cherry Valley, U.S.A., FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 78 pl. i f. 11.

†*Albertoceras* gen. n. genotype *A. walcottii* sp. n. Mons formation, Upper Ozarkian, Alberta, Canada, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 261 pl. xxxviii f. 11, 12.

†*Alcidia diversicostata* sp. n. Lower Oxford France, GÉRARD & CANTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 23 pl. ii f. 2, 2a-b text-fig. 2.

†*Allopiloceras* gen. n. genotype *A. tennesseense* sp. n. Cotter formation Eastern Tennessee, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 262 pl. xxxviii f. 6.

†*Amaltheus margaritatus*, *A. (Palto-pleuroceras) spinatus* figs., GILLET & SCHNEEGANS 337.

†*Ammonites* (*Craspedites*) *okensis* in West Siberia, BODYLEVSKIY 118.—*Ammonites semicostatus*, *ruricostatus oxynotus*, *gagasteus*, *capricornus*, *jamesoni*, RICHARDSON 807.—*Ammonites* *ruricostatus*, *armatus densinodus* Lias, HOFFMAN 421.

†*Amphicyrtoceras cooperi* sp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 10-78 pl. xvi f. 2a-b.

†*Amphoroceras* gen. n. genotype *Gomphoceras minimum* Whitfield Fort Cassin formation Vermont, Canada, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 263.

†*Anaptychus lunzensis forma nov.* p. 468 pl. i f. 7 bis 10; *A. l. lata* p. 470 pl. i f. 11, 12; *A. l. longa* p. 472 pl. i f. 13, 14; *A. l. carinifera* p. 472 pl. i f. 15 vars. n. Trias Europe, TRAUTSCHITZBER. Akad. Wiss. Wien abt. I 144 9-10 1935.—*A. bickensis* n. n. p. 50

pl. ii f. 1-3; pl. iii f. 17; *A. b. curvex-cisa* var. n. p. 52 pl. ii f. 4; *domanicus* n. f. p. 55 pl. ii f. 24, 25; *A. d. asymme-trica* var. n. p. 55 pl. ii f. 26; *A. clarkei* n. n. = *Spathiocaris emersoni* Clarke in Hull, pars. p. 56 pl. ii f. 15; *A. c. bipartita* var. n. p. 57 pl. ii f. 16; *A. woodwardi* n. n. p. 57 pl. ii f. 17 = *Cardioceras veneris* Woodward pars; *A. uchtensis bipartita* var. n. p. 59 pl. ii f. 14; *A. petschorae* n. f. p. 60 pl. ii f. 23; *A. subtrigonalis* n. f. p. 61 pl. ii f. 20; *A. timanus* n. f. p. 61 pl. ii f. 21, 22; *A. (?) chemungensis* n. n. = *Spathiocaris lata* Rued. 1916; *A. ruedemanni* n. n. p. 64 pl. ii f. 10; *A. (?) naploensis* n. n. p. 64 pl. iii f. 6-8; *A. hercynicus* n. f. p. 68 pl. iii f. 16; *A. (?) portagensis* n. n. p. 69 pl. iii f. 15; Palaeozoic, TRAUTH Jahrb. preuss. geol. LdAnst. 55 1 1935.

†*Anaspyroceras* gen. n. Spyrocerati-dae type *Orthoceras anellum* (Conrad) Hall [ref. and fig.] Middle Ordovician N. Amer., SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 4.

†*Anetoceras* gen. n. type *Cyrtoceratites arduennense* Steininger 1853 Lower Devonian St. Johann, SCHINDEWOLF Jahrb. preuss. Geol. LdAnst. 55 1 1935 pp. 268, 269.

†*Anglicornus* gen. n. p. 52 [Oncocerati-dae ?] type *A. anneliesae* sp. n. Lewis Run, Upper Devonian Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935 p. 53 pl. 6 f. 14-15.

Anolites arminiae angusta p. 177 [text-fig. 8]; *laczkoi fulcoidea* p. 177 [text-fig. 9a-b] vars. n. Cretaceous Europe, SALOPEK Bull. Int. Acad. Yougoslav 29-30 1936.

†*Anthrdoceras*, BISAT 106.

†*Aptychus laeviradiatus* p. 98 pl. xi (xli) f. 15, 16; *A. gemmellaroi* p. 99 pl. xi (xli) f. 17 spp. n. Domerian Taormina, FUCINI Palaeontogr. ital. Siena 35 1935.

†*Argonauta*, IJIRI 435.

†*Arietoceras compressum* fig., REMAC-CIONI 782.

†*Arietites geyeri* nom. nov. for *Ariet.* sp. ind. Geyer Lias of Hierlatz, SIEMIRADZKI Arch. Tow. nauk. Lwow. (3) 3 3 1923 p. 15 pl. vii f. 9.—†*Arietites bucklandi*, ANON 30.

†*Armenoceras danicum* p. 374 pl. viii f. 1, 2 text-fig. 1; *kiaeri* p. 380 pl. viii

f. 5; pl. ix f. 7, 8 text-fig. 2; spp. n. Pleistocene Denmark, TEICHERT Medd. dansk. Geol. Foren. 8 4 1934.—*A. clermontense* p. 249 pl. xxxii f. 1; *iowense* p. 249 pl. xxxiv f. 4, 5 spp. n. Maquoketa Shale Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935.—*A. wellsae* p. 73 pl. xviii f. 1a-b; *gasconense* p. 74 pl. xxii f. 2a-b spp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.—*A. wukutsuense* nom. nov. = *Yabeites orientale* Endo, SHIMIZU & OBATA, J. Shanghai Sci. Inst. (2) 2 3 1936 p. 32 f. 4.—*A. pseudo-imbricatum* fig., TEICHERT 968.

†*Arnioceras semicostatum*, ANON 30.—*A. hartmanni* fig., GILLET & SCHNEEGANS 337.

†*Artinskia whortani* sp. n. Lower Permian Kansas, A. K. MILLER J. Paleont. Menasha Wis. 10 6 1936 pp. 492, 493 pl. lxxiii.

†*Aspidites* (?) *menorcinus* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 124 f. 149 pl. v f. 40.

†*Aturia alabamensis* Morton (Eocene) fig., ALDRICH 12.

†*Aulacobelus subfusiformis, pistilli-formis*, BREISTROFFER 140.

"*Baculites vagina*" (?) specimens from Kalaw identified thus, now recognised as of inorganic origin; SAHNI 834.—*B. vagina* Forbes, SCHNEIDER 873.

†*Baltoceras*, KOBAYASHI 490.

†*Bassleroceras* gen. n. genotype *Orthoceras perseus* Billings; Philipsburg Quebec, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 263.

†*Beekmanoceras* gen. n. genotype *Cyrtendoceras* (?) *priscum* Ruedemann, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 264.

†*Behemoth groenlandicus* sp. n. Port-landian Upper Jurassic C. Leslie Milne Land, SPATH Medd. Groenland 99 3 1936 p. 66 pl. xxiii f. 1; pl. xxiv f. 1.

†*Belemnites acutus*, ANON., 30.—*B. siculus* Gemm. in sch. Domerian Taormina, FUCINI Palaeontogr. ital. Siena 35 1935 p. 97 pl. xi (xli) f. 13, 14.

†*Belemnosepia sagittata* (Münster) fig., DREUFUSS 253.

†*Beloitoceras* (?) *discrepans* sp. n. Maquoketa Shale, Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 253 pl. xxxvii f. 8.

†*Besselsoceras* gen. n. Armenoceratidae type *B. besselsense* nom. nov. = *Armenoceras* efr. *rotulatum* Foerste (non Billings) [ref. to fig.] Gotlandian Greenland, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 7.

†*Besselsoceratinae* subfam. n. Armenoceratidae, "between Armenoceratidae and Huroniidae," SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 7.

†*Bickmorites barbensis* sp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 69 pl. xxvi f. 1; pl. xiv f. 1, 2; pl. xv f. 1A, B.

†*Biconulites hardmani* figs., SPATH 932.

†*Binatisphinctes welschi* p. 61 pl. xi f. 2, 2a, 3, 3a; *B. robausei* p. 61 pl. xiv f. 2, 2a, 3; *B. giganteus* p. 62 pl. xiii f. 1, 1a: spp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936.

†*Bitauinioceras* gen. nov. Permian Timor [? Cycloceridae] type *Orthoceras bitauiniense* Haniel [Palaeont. v. Timor III 1915 p. 141 pl. lvi f. 5], SHIMIZU & OBATA J. Geol. Soc. Japan 43 508 1936 p. 18.

†*Blastoceras* gen. nov. p. 50 [Oncoceratidae?] type *B. cylindrostomum* p. 50 [cylindrostomum p. 51] sp. n. p. 51 pl. vi f. 10-13, Lewis Run: Upper Devonian Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935.

†*Bonarellia pas-de-Jeu* eniss p. 27 pl. i f. 2, 2a, b text-fig. 3; *B. peneau* p. 28 pl. iv f. 2, 2a, b, 4; spp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936.

†*Bradfordoceras* gen. nov. p. 32 (Pseudorthoceratidae) type *B. transversum* sp. n. p. 34 pl. iii f. 1-5; pl. iv f. 1; pl. v f. 1; pl. vi f. 3; pl. viii f. 3-4 Lewis Run, Upper Devonian Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935.—*Bradfordoceras multicameratum* p. 38 pl. vii f. 6; Warren: *B. ignotum* p. 41 pl. iv f. 4;

Lewis Run: *B. gomphoides* p. 42 pl. iv f. 2-3; Lewis Run: *B. sinuosum* p. 42 pl. v f. 1-4; pl. vii f. 5; pl. viii f. 5: Lewis Run spp. n. *B. hector* variants *alpha* p. 45 pl. vi f. 4; *beta* p. 46 pl. vi f. 5, 6, 8; *gamma* p. 47 pl. iv f. 5; *delta* p. 47 pl. viii f. 6-8, *zeta* p. 48 pl. vi f. 2; *eta* p. 49 pl. vi f. 1; variants nov., FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935.

†*Cadomites linguiferum, rectilobatum* figs., PASSENDORFER 706.

†*Campbelloceras* gen. n. genotype *Eurystomites virginiana* Hyatt, Cotter formation, Virginia, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 265.

†*Carantia* err. pro *Garantia* explic. pls. TZANKOV & BOUCEV Ann. Univ. Sofia 30 3 1934 (op. p. 248); BOGDANOV 124.

†*Carlloceras* gen. n. pp. 13, 24 Koninkioceratidae, type *C. garlandensis* sp. n. Upper Devonian Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935 p. 25 pl. ii f. 12-14.

†*Cassinoceras* gen. n. genotype *Piloceras explanator* Whitfield Vermont, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 266.

†*Casteroceras* gen. n. (Rhyticeratidae) type *Cyrtoceras alternatum* Hall, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 46 pl. iv f. 5; pl. v f. 2-5.

†*Catoraphiceras* gen. n. genotype *C. lobatum* sp. n. Upper Powell or Smithville formation, Upper Canadian Stewart Co. Tennessee, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 266 pl. xxxviii f. 14.

†*Cawtoniceras prionodes* sp. n. Jurassic Wyoming, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 47 4 1936 p. 559 pl. i f. 3; pl. ii f. 13; pl. iii f. 3.

†*Cedarvilleoceras* gen. n. Spyroceratidae type *Dawsonoceras nodosocostatum* (McChesney) Foerste [ref. to figs.] Gotlandian N. Amer., SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 5.

†*Centrotarphyceras* gen. n. genotype, *Lituites seelyi* Whitfield Ft. Cassin formation Upper Canadian Vermont, ULRICH & FOERSTE 30 5-6 1935 p. 267.

†*Ceratites fritschii* sp. n. Trias Germany, SCHMIDT Jahrb. preuss. geol. Ld. Anst. 55 1 1935 p. 206.—*C. antecedens*, SCHMIDT 865.—*C. Triassic Bulgaria*, STEFANOFF 941.

†*Chanasia trinodosa* sp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 45 pl. x f. 2, 2a, b text-fig. 13.

†*Changkiuoceras* "gen. n." Hemipiloceratidae type *C. shantungense* sp. n. [non descr.], genus includes ? *Suecoceras yehliense* Grab. *S. attenuatum* Grab. and *Cameroeras trifurcatum* Yü Middle Ordovician China, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 3 [refers to figs.].

†*Charactoceras laddi* sp. n. Maquoketa Shale, Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 254 pl. xxxi f. 1; pl. xxx f. 1-3.

†*Cheiloceras discoidale, acutum, depressum, verneuili* figs., NALIVKINA 658.—*Cheiloceras Devonian S. Ural*, NALIVKINA 660.

†*Chitinodeuthis* gen. n. type *decidua* p. 200 pl. xi f. 1-5; *C. crassicristata* p. 203 pl. xiii f. 1a-c; spp. n. Lias, Reutlingen Germany, MÜLLER-STOLL Nova Acta Leop. Carol. Halle N.F. 4 20 1936.

†*Chonetes* sp. fig., DAS-GUPTA 230.

†*Choristoceras (Peripleurites) rotundatus* sp. n. Dachsteinkalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1040 pl. xiii f. 34-35.

†*Clarkoceras*, KOBAYASHI 490.

†*Clitendoceras* gen. n. genotype *C. saylesi* sp. n. Ft. Cassin formation Upper Canadian New York, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 268 pl. xxxviii f. 1.

†*Coeloceras mastodon* p. 90 pl. x (xi) f. 3, 4; *pusillum* p. 91 pl. viii (xxxviii) f. 9, 10; *Domerian Taormina*, FUCINI Palaeontogr. ital. Siena 35 1935.

†*Coloceras milleri* sp. n. Mid-Pennsylvanian Kansas, NEWELL J. Paleont. Menasha Wis. 10 6 1936 p. 481 pl. lxviii f. 1a-4; pl. lxix f. 1, 2; pl. lxx f. 1.

†*Coreanoceras* benthonic adaptation, KOBAYASHI 487.—*Coreanoceras*, KOBAYASHI 490.

†*Cornaptychus lythensis sigmopleura* p. 40 pl. v f. 8; *l. divergens* vars. n. p. 40 pl. v f. 9; *l. undulicosta* p. 41 pl. v f. 10; *l. accurvata* p. 42 pl. v f. 11; *l. accurvata-granulata* p. 42; *l. levisoni* p. 43 pl. v f. 12; *l. concordans* p. 45 pl. vi f. 1 vars. n. Lias Europe, TRAUTH Jh. Ver. vaterl. Naturk. Württemb. 91 1935.—*C. elasma* (Mey.) *signopleura* p. 52; *latefrons* p. 54; *concordans* p. 54 vars. n. Lias Europe TRAUTH Jh. Ver. vaterl. Naturk. Württemb. 91 1935.—*C. latolythensis* p. 32 pl. v f. 1; *transiens* p. 33 pl. v f. 2 bis 4; spp. n. Lias Europe, TRAUTH Jh. Ver. vaterl. Naturk. Württemb. 91 1935.

†*Conocerina* gen. n. genotype *C. brevis* sp. n. Upper Ozarkian Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 268, 269 pl. xxxviii f. 5.

†*Coroniceras parthenope* pls. i, ii, ROQUEFORT 818.

†*Cotteroceras* gen. n. genotype *C. compressum* sp. n. Cotter formation, Upper Canadian, Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 269, 270 pl. xxxviii f. 10.

†*Craspedites leptus* p. 88 pl. xxxvii f. 5a, b; *ferrugineus* p. 86 pl. xxii f. 3a, b; spp. n. Portlandian C. Leslie Milne Land. [The author now adds *Paracraspedites* Swinnerton to genera included in *Craspeditidae* established by him Pal. Indica N.S. ix 1 1934 p. 17.] SPATH Medd. Grønland 99 3 1936.

†*Cravenoceras vetum* p. 11 pl. i f. 1-3, ? 4; *C. (?) Sudeticeras bobrovnikense* p. 12 pl. i f. 5 spp. n. Carboniferous Hultschin Germany, PATTEISKY N. Jahrb. Min. Geol. Paläont. Stuttgart 76 1 1936.

†*Crendonites pregorei* sp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 30 pl. xxii f. 2.—*Crendonites elegans* p. 35 pl. viii f. 6 *pregorei* p. 30 pl. xxii f. 2; *subgorei* p. 62 pl. ix f. 5; *transitorius* p. 64 pl. xxviii f. 4 spp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936.—*C. lesliei* p. 62 pl. xiii f. 1; pl. xix f. 1; pl. xxii f. 5; *eugluptus* p. 63 pl. ix f. 1; pl. xiii f. 3a-b; *subregularis* p. 64 pl. xiii f. 4, 5; pl. xviii f. 5; pl. xx f. 3; *anguinus* p.

65 pl. xxi f. 2a-c **spp. n.** Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936.

†*Cyclendoceras clermontense* p. 235 pl. xxxiv f. 3, 2; *thomasi* p. 236 pl. xxxiii f. 1; *aikinsonense* p. 237 pl. xxxiii f. 2; pl. xxvii f. 1 **spp. n.** Maquoketa Shale, Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935.

†*Cyclendoceratidae* fam. n. for *Cyclendoceras* Grab. & Shim.; *Protocycloceras* Hyatt, and *Subvaginoceras* gen. n. [q. v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 12.

†*Cycloceras* (?) *gaspense* sp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 45 pl. x f. 1.

†*Cyptendoceras* gen. n. genotype *C. ruedemanni* sp. n. H. Cassin formation Upper Canadian Vermont., ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 270 pl. xxxviii f. 15.

†*Cyrtoceras* ? *ericense* sp. n. Lias Mt. S. Giuliano, Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 15 pl. i f. 1-2.

†*Cyrtocycloceras* gen. n. p. 59 type *Cyrtoceras cognatum* Barrande; *C. bouleauxense* p. 59 pl. xviii f. 3; sp. n. Silurian Gaspé Peninsula E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Cyrtoclymenia involuta arctica* var. n. Upper Devonian Novaya Zemlya, NALIVKINA Trans. arctic Inst. Lenin-grad 58 1936 p. 91 f. 1.

†*Cyrtorizoceras schucherti* p. 51 pl. xi f. 1a-b; *diagnale* p. 52 pl. xxv f. 5, 6; *barbense* p. 54 pl. x f. 4; *gasconsense* p. 55 pl. xxiv f. 6; **spp. n.** Silurian, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Dactylioceras mirabile* p. 85 pl. viii (xxxviii) f. 1-4; *tauromenense* p. 86 pl. viii (xxxviii) f. 5, 6; *pseudo-commune* p. 86 pl. ix (xxxix) f. 1-3; *simplex* p. 86 pl. ix (xxxix) f. 4, 5; *pseudo-crassulosum* p. 87 pl. ix (xxxix) f. 6-8; *polymorphum* p. 88 pl. ix (xxxix) f. 9-12, 13 ?; *peloritatum* p. 88 pl. ix (xxxix) f. 14, 15; *subholandrei* p. 89 pl. ix (xxxix) f. 17; *inaequicostatum* p. 89 pl. ix (xxxix) f. 16; *percostatum* p. 89 pl. x (xl) f. 6, 7; *perplicatum* p. 89 pl. x (xl) f. 8, 9, FUCINI Palaeontogr. ital. Sierra 35 1935.

†*Daraelites praecursor* Fromaget *pyrenaicus* var. n. Dinantian [Carboniferous] France, DELÉPINE Bull. Soc. géol. Fr. 5 v 1-3 1935 p. 174 pl. vii f. 3-4 text-figs. 1-3.

†*Deckeroceras clermontense* sp. n. Maquoketa Shale Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 256 pl. xxxv f. 2, 3, 1.

†*Deirotoceras shideleri* sp. n. Maquoketa Shale Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 248 pl. xxxvii f. 5.

†*Diagoceras* gen. n. (Orthoceratidae) type *Orthoceras aptum* Hall, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 23 pl. i f. 5-8; pl. ii f. 1.

†*Diestoceras gaspense* pp. 374, 381 pl. liv f. 1, 2; *D. cooperi* pp. 376, 382 pl. lv f. 3, 4; *D. brevidomum* pp. 374, 383 pl. liv f. 3-5; *D. subglobosum* pp. 374, 383 pl. liv f. 6; pl. lv f. 2: **spp. n.** Upper Ordovician Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936.

†*Dimeroceras* Devonian S. Ural, NALIVKINA 660.

†*Dimorphoceras kathleenii* sp. n. Bowland Shales = *Dimorphoceras species A* (Geol. Mag. April 1930 vol. lxvii p. 166) p. 190 fig. 3 No. 7; *D. ribblense* p. 190 fig. 3 No. 5; Dinckley, MOORE J. Manchester Geol. Assoc. 1 3 1936.—*Dimorphoceras*, BISAT 106.

†*Discoceras antiquissima* (Eichw.) fig., THORSLUND 978.

†*Donacoceras* gen. n. type *D. arundineum* Foerste, in Hume, FOERSTE J. Paleont. Menasha Wis. 10 5 1936 p. 375.—*Donacoceras percense* sp. n. Upper Ordovician Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936 p. 376 pl. iv f. 9.

†*Dorsetensia romani* figs., WETZEL 1051.

†*Dorsoplanites antiquus* p. 68 pl. xxiv f. 4a, b; pl. xxvii f. 6a, b, 7a, b; pl. xxix f. 1a, b; pl. xxxi f. 2a, b, 4a-c; pl. xxxii f. 4a, b; pl. xxxiii f. 7a, b, 8a, b; pl. xxxiv f. 3a, b; pl. xxxvi f. 8a, b; *transitorius* p. 69 pl. xiv f. 4a, b; pl. xxxiii f. 9a, b; *altingeri* p. 70 pl. vi f. 1a, b pl. xxxiv f. 2a, b-z *maximus* p. 71 pl. xxvi f. 1; pl. xxviii f. 1; pl. xxxii f. 3; pl. xxxvi f. 6a, b; *gracilis*

p. 72 pl. xxvii f. 1a, b; pl. xxviii f. 3a, b; pl. xxix f. 2a, b; pl. xxx f. 2a, b; pl. xxxii f. 2a, b, 5a, b; pl. xxxiii f. 3-6; pl. xxxv f. 3: *crassus* p. 74 pl. xxix f. 5a, b; pl. xxxi f. 3: *flavus* p. 75 pl. xxxiv f. 1a-c: *subpanderi* p. 76 pl. xxvii f. 5a, b; pl. xxxi f. 1a, b: *dorsoplanoides* p. 77 pl. xxvi f. 2; pl. xxvii f. 2; pl. xxxix f. 7: *jamesoni* p. 78 pl. xxix f. 3; pl. xxx f. 1: *triplex* p. 79 pl. xxv f. 4; pl. xxxii f. 1; pl. xxxv f. 1, 2 spp. n. Upper Jurassic C. Leslie Milne Land; †*Dorsoplanites antiquus robusta* p. 68 pl. xxix f. 1; pl. xxxiii f. 7, 8: *gracilis tenuicostata* p. 2 pl. xxvii f. 1: *g. evoluta* p. 72 pl. xxx: *g. flexuosa* p. 73 pl. xxxv f. 3: *triplex mutabilis* p. 80 pl. xxxv f. 1; pl. xxxii f. 1 vars. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936.

†*Durania persica* sp. n. Cretaceous Khamir, S. Persia, L. R. Cox Palaeont. Ind. Calcutta 22 2 1936 p. 26 pl. ii f. 1-3, pl. iii f. 6.

†*Dwightoceras* gen. n. genotype *Cytroceras* (?) *dactyloides* Dwight. Rochdale formations, Middle Canadian, New York, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 272.

†*Dyscritoceras* gen. n. genotype *Cytroceras metellus* Billings Canadian Point Lewis, nr. Quebec, Canada, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5, 6 1935 p. 272.

†*Ectenolites* gen. n. genotype *E. subgracile* sp. n. Gasconade formation, Upper Ozarkian Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 272, 273 pl. xxxviii f. 8, 9.

†*Ectocycloceras* gen. n. genotype *Orthoceras cataline* Billings St. Armands formation, Philipsburg, Canada, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 275.

†*Ectonoceras* gen. n. genotype *E. ruedemanni* Kobayashi 1933 Wanwan-kou formation, Upper Ozarkian S. Manchuria, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 274.

†*Endoceras kayi* sp. n. Maquoketa Shale Iowa, FOERSTE J. sci. Labs.

Denison Univ. 30 5-6 1935 p. 234 pl. xxviii f. 1.—*E. coxi* sp. n. Red River formation Akpatok Island, Foerste in, FOERSTE & Cox Geol. Mag. London 73 865 July 1936 p. 292 figs. 3, 4.—*E. akpatokense* sp. n. Red River formation Akpatok Island, Foerste in, FOERSTE & Cox Geol. Mag. London 73 865 July 1936 p. 294 pl. iv f. 1 and text-figs. 1, 2.

†*Eobeloceras* type *Ammonites multi-septatus* v. Buch., SCHINDEWOLF Z. deuts. Geol. Ges. Berlin 88 10 1936 p. 690.

†*Eosactoceras* gen. n. Sactoceratidae type *E. minimum* nom. n. = *Armenoceras nanum* Endo. non Grabau [ref. to fig.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 9.

†*Eospyroceras* gen. n. Spyroceratidae, type *Orthoceras arcuoliratum* Hall [ref. to figs.] Middle Ordovician, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 4.

†*Ephippiorthoceras laddi* p. 241 pl. xxxvi f. 1; *tenuistriatum* p. 241 pl. xxxvi f. 10 spp. n. Maquoketa Shale Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935.

†*Epipallasiceras* subgen. n. of *Pavlovina* [non desc.] Perisphinctidae *pseudoperta* sp. n. q.v. subgenotype, SPATH Medd. Grønland 99 3 1936 p. 56.

†Eskimoceratidae fam. n. for *Eskimoceras* Troedsson, *Pseudoeskimoceras* and *Kogenoceras* genn. n. [q.v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 22.

†*Euspidoceras evolutum* sp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 69 pl. xviii f. 1, 1a text-fig. 18.

†*Euhuronia* gen. n. Sactoceratidae, type *Stereoplasmoceras yabei* Kobayashi, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 23.

†*Eurasiaticoceras* gen. n. Trocholitiidae type *Discoceras eurasiaticum* Frech [ref. to figs.] Middle Ordovician China, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 5.

†*Eushantungoceras* gen. n. Wutino-ceratidae [q.v.] type *Orthoceras pseudo-imbricatum* Barrande (= *O. imbricatum* Bar. "wrongly referred by Teichert to *Armenoceras*" Gotlandien Bohemia, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 8.—*Eushantungoceras* [gen.] "nov." [non descr.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 p. 28.

†*Eutraphoceras haltomi* sp. n. Eocene Alabama, ALDRICH Mus. Pap. Alabama Mus. Nat. Hist. 12 1931 p. 6 pls. i-iii.

†*Foersteoceras* gen. n. Cycloceratidae type *Cycloceras selkirkense* (Whiteaves), SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 21.

†*Foersteoceras* Shimizu & Obata genotype *Cycloceras selkirkense* (Whiteaves) p. 18, SHIMIZU & OBATA 897.

†*Garantiana primitiva* sp. n. Bajocian [Jurassic] Europe, WETZEL N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 p. 540 pl. xxi f. 6-7 text-figs. 9a, b.

†*Gasconsoceras* gen. n. type *G. pulchellum* sp. n. p. 61 pl. xiii f. 2; *planiventrum* p. 62 pl. xxv f. 3; pl. xiii f. 1A, B; *obesum* p. 63 pl. xii f. 1A, B; pl. xv f. 2; pl. xxv f. 4; *cascapediense* p. 66 pl. xii f. 2 spp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Lab. Denison Univ. 31 1-2 1936.

†*Gaspocyrtoceras* gen. n. type *G. cooperi* sp. n. Foerste Silurian Gaspe Peninsula E. Canada, FOERSTE J. Sci. Labs. Denison Univ. 31 1-2 1936 p. 56 pl. xxiv f. 10, and pl. xxv f. 1, 2.—*Gaspocyrtoceras telleri* sp. n. p. 57 pl. xxiv f. 7-9; Silurian Gaspe. Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Gastrioceras normalis* sp. n. Lower Coal Measure, Lancashire, CHALMERS J. Manchester Geol. Assoc. 1 3 1936 p. 160 pl. ii f. 6-8, pl. iii f. 7-11.—*G. retrorsum* sp. n. Lower Coal Measures Lancashire, CHALMERS J. Manchester Geol. Assoc. 1 3 1936 p. 156 pl. ii f. 3-5; pl. iii f. 1-6.—*G. kneichowense* p. 17 pl. i f. 6, 7 text-fig. 4; *orientale* p. 19 pl. ii f. 1, 2, pl. iv f. 10, text-fig. 5; *suborientale* p. 21 pl. ii f. 3, 7 text-fig. 6; *perornatum* p. 25 pl. iv f. 3, 6 text-fig. 8; *reticulatum* p. 26 pl. iii f. 1, 2 text-fig. 9; *Yohi* p. 28 pl. iv f. 1, 2, 7-9 Upper Palaeozoic China, YU Palaeont. sinica B XI 4 1935.

* †*Gastroceras hirsutum* sp. n. Permian, Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 14 pl. ii f. 6, 7.

†*Geisonoceras* (?) *clermontense* sp. n. Maquoketa Shale, Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5, 6 1935 p. 240 pl. xxix f. 1.—*Geisonoceras expansum* sp. n. Upper Ordovician, Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936 p. 375 pl. iv f. 1.

†*Geisonocerina* ? *danielensis* p. 32 pl. v f. 1; *barbensis* p. 32 pl. iv f. 1, 2; pl. v f. 3 : spp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Glyphioceras bisinum* sp. n. Dinantian [Carboniferous] France, DELÉPINE Bull. Soc. géol. Fr. 5 v 1-3 1935 p. 178 pl. vii f. 5-9.—*G. pauperum* sp. n. Permian Sicily, GREGORIO Ann. Géol. Paléont. Palermo 52 1930 p. 14 pl. ii f. 5.

†*Grabauoceras* gen. n. Hemipiloceratidae type *Piloceras platyventrum* Grabau, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 1936 p. 18.

†*Grammoceras penenudum* fig., GILLET & SCHNEEGANS 337.

†*Greenlandoceras* gen. n. Greenlandoceratidae [q.v.] type *Sactoceras* ? *lineatum* Troedsson [ref. to figs.] Ordovician Greenland, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 7.

Greenlandoceratidae fam. n. for *Greenlandoceras* gen. n. [q.v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 6.

†*Grossouvreia frickensis*, BLONDET 116.

†*Goniatis* *tonksi* sp. n. Bowland Shales, Dinckley, MOORE J. Manchester Geol. Assoc. 1 3 1936 p. 185 pl. ii f. 5 text-fig. 3 No. 2.—*G. bisati* sp. n. Bowland Shales, Cold Coats, Lancashire (Pendleton & Whalley), MOORE J. Manchester Geol. Assoc. 1 3 1936 p. 182 pl. iii f. 8, 13, 14 text-fig. 3 No. 6.—*Goniatis* of the Carboniferous of Western Europe, BISAT 106.

†*Gorbyoceras* gen. n. type *Spyroceras gorbyi* (Miller) Foerste [ref. to fig.] Upper Ordovician N. Amer., SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 4.

†*Gymnites bosnensis nodosa* var. n. Cretaceous Europe, SALOPEK Bull. Int. Acad. Yougoslav. 29-30 1936 p. 180 [text-fig. 11 original paper, q.v.].

†*Hammelloceras* gen. n. Hammelloceratidae (q.v.) type *Spyroceras hammelli* Foerste [ref. to figs.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 6.

†Hammelloceratidae fam. n. for *Hammelloceras* and *Porteroceras* gen. n. [q.v.] = *Spyroceras* Hyatt [pars], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 pp. 3, 5.

†*Harpoceras levigocarinarum* sp. n. Lias Mt. Giuliano, Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 14 pl. i f. 17.—*H. difalensis* p. 10 pl. iv f. 1; *bellicus* p. 10 pl. iv f. 4 spp. n. Dogger M. Erice S. Giuliano, GREGORIO Ann. Géol. Paléont. Palermo 56 1930.

Hecticoceras, BLONDET 113.

†*Hedenstroemia hyatti* Smith pl. ii f. 3-6 text-figs., PETHOVIC & MIHALOVIC 722.

†*Hemipiloceras* gen. n. p. 16 Hemipiloceratidae type *H. ellipticum* sp. n. p. 17 f. 3, 4 Ordovician, Manchuria, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936.

†Hemipiloceratidae fam. n. for *Hemipiloceras*, *Grabauoceras*, and *Liaotungoceras* gen. n. [q.v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 16.

†*Hexameroceras erectum* p. 86 pl. xxiv f. 1, 2; *schucherti* p. 87 pl. xix f. 1A, B; (?) *occlusum* p. 88 pl. xx f. 2A, B; spp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Holcodiscus* (*Spitidiscus*) *oosteri nodosa* mut. n. p. 72 (p. ? résumé) pl. ii f. 6; *H. irregularis* sp. n. p. 74 (p. 92, résumé) p. iii f. 3-5; *H. hugiformis* sp. n. p. 73 (p. 91, résumé) pl. ii f. 7-9; *H. mediocostatus* sp. n. p. 74 (p. 91, résumé) pl. iii f. 1-2; *H. perezianus toulai* mut. n. p. 78 (p. 93, résumé) pl. v f. 3-7; *H. geronimaeformis* sp. n. f. 2; *H. p. rasgradi* mut. n. p. 78 (p. 94, résumé) pl. v p. 79 (p. 94, résumé) pl. v f. 8-10, pl. vi f. 1, 2A-C; *H. angulatus* sp. n. p. 89 (p. 95, résumé) pl. vi f. 3-4; Cretaceous Bulgaria, TZANKOV Ann. Univ. Sofia 31 3 1935.—*Holcodiscus rasgradi*, *H. (Spitidiscus) intermedius*, *H. (S.) incertus*, *H. (S.) subquadratus*, *H. (S.)*

fallacior, *H. (S.) van-den-hecke*, *H. (S.) oosteri*, TZANKOV 1002.

†*Holcostephanus frischlini* fig., BLONDET 116.

†*Horioceras costulatum* sp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2 3 1936 p. 33 pl. v f. 3 text-fig. 8.

†*Huronica gaspensis* sp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 76 pl. ix f. 2.

†*Huronella cochleata* fig., TEICHERT 938.

†*Hypospyroceras* gen. n. *Spyroceratidae* type *Orthoceras tretiforme* Hall [ref. to fig.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 4.

†*Imitoceras* Devonian S. Ural, NALIVKINA 660.

Kellnerites samoborensis sp. n. Cretaceous Europe, SALOPEK Bull. Int. Acad. Yougoslav 29-30 1936 p. 176 [pl. i f. 1a, b of original paper q.v.].—*K. samoborensis* sp. n. Europe, SALOPEK Prirod. Istraž. Kral. Jugoslav 20 1936 p. 212 pl. i f. 1a, b.

Kerberites subswindonensis p. xx f. 4; *K. trikraniiformis* pl. xxi f. 4; *K. virguloides* pl. xxvii f. 4 spp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Gronland 99 3 1936 "p. 34."

†*Kinkelimiceras thiebauti* sp. n. Lower Oxford France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 54 pl. v f. 1.

†*Kionoceras barbense* p. 35 pl. xxiv f. 11; *bouleauxense* p. 35 pl. vii f. 4, 5 spp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.—*K. omasi* p. 242 v. xxix f. 4; *postvillense* p. 243 pl. xxviii f. 2, 3; pl. xxix f. 5; *tenuitectum* p. 244 pl. xxix f. 2 spp. n. Maquoketa Shale Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935.—*K. postvillense* pl. xxviii f. 2, 3; *tenuitectum* pl. xxix f. 2; *thomasi* pl. xxix f. 4; *postvillense* pl. xxix f. 5 are magnified three times diameter of original specimens, J. sci. Labs. Denison Univ. 30 FOERSTE p. 92 285.

†*Kirkoceras* gen. n. genotype *K. arcuatum* sp. n. Manitou formation, Upper Ozarkian Colorado, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 277 pl. xxxviii f. 4.

†*Kochina* gen. n. (Perisphinctidae) p. 81 type *K. groenlandica* sp. n. p. 82 pl. xxxvi f. 1a, b; pl. xxxviii f. 1a-c Upper Jurassic (Portlandian) C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936.

†*Kogenoceras* gen. n. Eskimoceratidae type *Tofangoceras huroniforme* Kobayashi, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 22.

†*Koninckioceras jewetti* p. 485 pl. lxxii f. 1a, b; *K. eliasi* p. 486 pl. lxxii f. 2 text-figs. 1a, b; *K. wyandottense* p. 488 pl. lxxi f. 1a-c spp. n. Carboniferous U.S.A., NEWELL J. Paleont. Menasha Wis. 10 6 1936.

†*Laevilamellaptychus hennigi* nom. nov. *Aptychus* sp. Hennig Zeitsch. Deutsch geol. Ges. A 65 1913 p. 157 pars. pl. ii f. 3 non pl. ii f. 4 = *A. f. ind.*, TRAUTH Ann. naturh. Mus. Wien 47 1936 p. 135 pl. iii f. 7.

†*Lamellaptychus angulocostatus* (Pet.) *longa* var. n. (= *Aptychus pimientensis* O'Conn. partim.) Cretaceous Cuba, TRAUTH Proc. K. Akad. Wet. Amsterdam 39 1 1936 p. 67, 71.—*L. angulocostatus* (Pet.) var. *atlantica* (Henn.), v. *cristobalensis* O'Conn. figs., TRAUTH 996.

†*Laugeites* nom. nov. for *Kochina* Spath non Resser 1935, genotype *L. groenlandica* Spath, SPATH Geol. Mag. London 73 865 July 1936 p. 334.

†*Leioceratinae* subfam. nov., SPATH Palaeont. Ind. Calcutta 22 3 1936 p. 7.

†*[Leopoldia]* (?) *muretensis* sp. n. Hunterian Lower Cretaceous Néron Chartreuse, BREISTROFFER Bull. Soc. sci. Dauphiné 55 1935 p. 541 = *Hoplites* sp. Douvillé Esq. geol. Préalp p. 208 pl. xiii f. 4 = holotype.—*Leopoldia varappensis*, BREISTROFFER 140.

†*Liaotungoceras* gen. n. Hemipiloceratidae type *Piloceras manchuriense* Endo, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 19.

†*Lissoceras psilodiscum*, *voultense* figs., PASSENDORFER 706.

†*Lobotornoceras* gen. n. type *Goniatites ausavensis* Steininger, SCHINDEWOLF Z. deuts. Geol. Ges. Berlin 88 10 1936 p. 689.

†*Lytoceras audaux lentulum* var. n. Lias Central Appenines, RAMACCIONI Bol. Soc. geol. ital. 1 1936 p. 173 pl.

vii f. 5.—*L. zejszneri* sp. n. Lias Poland, SIEMIRADZKI Arch. Tow. nauk. Lwow. (3) 3 3 1923 p. 35 pl. v f. 9.—*L. adeloides* fig., PASSENDORFER 706.—*Lytoceras* Suess 1865 status of, SPATH 936.

†*Manchuroceras wolungense* figs., KOBAYASHI 487.

†*Mandaloceras erectum* sp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 83 pl. xx f. 1a, b.

†*Marathonites juresanensis* sp. n. Middle Urals, MAXIMOWA Bull. Soc. Nat. Moscow. Sect. Géol. 43 2 1935 p. 283 f. 13, and f. 9-11 of Plate.—*M. krasnopolskyi* Karp. figs., MAXIMOWA 608.

†*Mcqueenoceras* gen. n. genotype *M. jeffersonense* sp. n. Upper Canadian Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 279 pl. xxxviii f. 2.

†*Medlicottia canavarii* sp. n. Permian Italy, GRECO Palaeontogr. ital. Siena 35 1935 p. 175 pl. xv (iv) f. 2, 3.—*M. illius* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 14 pl. ii f. 3, 4.

†*Meekoceras gracilitatis* White pl. ii f. 1, 2; text-figs. *M. (Koninckites) vetustus* Waagen pl. i f. 1-5 text-figs., PETKOVIĆ & MIHAILOVIĆ 722.

†*Megaphyllites noricus* sp. n. Dachsteinkalk, Trias Hungary, KUTASSY Math. term. Ért. Budapest 54 3 1936 p. 1040 pl. xiii f. 32, 33.

†*Metacoceras knighti* p. 728 pl. xevii f. 2, 3; *sulciferum* p. 729 pl. xcvi f. 4, 5 spp. n. Carboniferous Wyoming, MILLER & THOMAS J. Paleont. Menasha Wis. 10 8 1936.

†*Metalegoceras clarkei* sp. n. Kimberley Div., W. Australia, A. K. MILLER J. Paleont. Menasha Wis. 10 8 1936 p. 687 pl. xcii f. 1-7.

†*Metaspyroceras kindlei* p. 376 pl. lvi f. 3-5; *M. gaspense* p. 377 pl. lvi f. 6; pl. lvii f. 4 spp. n. Upper Ordovician Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936.—*M.* (as "gen. n." p. 1 as of Foerste p. 3), SHIMIZU & OBATA 898.

†*Microbiplices* gen. n. type *A. microbiplex* Quenstedt, ARKELL Annu. English Corallian Beds Mon. Pal. Soc. Nov. 1936 II p. xli pl. c f. 6.

†*Mooreoceras condrai* sp. n. Carboniferous U.S.A., NEWELL J. Paleont. Menasha Wis. 10 6 1936 p. 483 pl. lxix f. 3a-e.

†*Mortonoceras texanum internodosum* var. n. Upper Cretaceous Jimenez Mexico, RENZ Abh. Schweiz. paläont. Ges. 57 1936 p. 10 pl. iii f. 2, 2a, b.—*M. densinodosum* sp. n. Upper Cretaceous Rio Grand, nr. Jimenez, Mexico, RENZ Abh. Schweiz. paläont. Ges. 57 1936 No. 1 p. 8 pl. ii f. 1, 1a.

†*Mysticoceras* gen. n. genotype *M. vincinum* sp. n. "Canadian" Missisquoi Co., Quebec, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 280, 281 pl. xxxviii f. 7.

†*Nannites mambrini* p. 126 f. 150 pl. v f. 50-55; *capucinus* p. 128 f. 151 pl. v f. 49-52; *pinguis* p. 129 pl. v f. 46-48: spp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss 22 1936.

†*Nautilus desertorum*, DESIO 245.

†*Nautilus*, KRUGLOV 502.

†*Neocyloceras* gen. n. (Orthoceratidae?) p. 14 type *N. olivum* sp. n. p. 16 pl. i f. 1-10; pl. ii f. 1 Red Lewis Run sandstone Venango stage Upper Devonian, Lewis Run, Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935.—*Neocyloceras obliquum geronticum* var. n. p. 18 pl. ii f. 2; Lewis Run; *N. harrisi* sp. n. p. 19 pl. ii f. 4, 5, 7-9; Tidionte Bridge, Warren Co.; *N. lilianae* sp. n. p. 21 pl. ii f. 6, 10 Tidionte Bridge; *N. cadwaladeri* sp. n. p. 22 pl. ii f. 3, Warren; Upper Devonian Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935.

†*Neomanticoceras* gen. n. type *Manticoceras paradoxum* Matern, SCHNEDWOLF Z. deuts. Geol. Ges. Berlin 88 10 1936 p. 690.

†*Neorthoceras* gen. nov. Permian Timor [? Cycloeridae] type *Orthoceras verbeeki* Haniel [Palaeont. v. Timor III 1915 p. 140 pl. lvii f. 6], SHIMIZU & OBATA J. Geol. Soc. Japan 43 508 1936 p. 18.

†*Neowutinoceras* gen. n. Wutinoceratidae [q.v.] type *Armenoceras kleri* Teichert [ref. to fig.] "Collected from Pleistocene Norway but considered by Teichert a Gotlandian sp.," SHIMIZU & OBATA J. Shanghai Sci.

Inst. (2) 2 1 1935 p. 8.—*Neowutinoceras* [gen.] nov. [non descr.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 1936 p. 28.

†*Neumatoceras latilineatum* pp. 378, 380 pl. lvi f. 13; *N. striatum* pp. 378, 380 pl. lvi f. 11, 12; *N. percense* pp. 378, 380 pl. lvi f. 14: spp. n. Upper Ordovician Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936.

†Nybyoceratinae subfam. n. Armenoceratidae for *Nybyoceras* and *Orthonybyoceras* genn. n. [q.v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 7.

†*Ohioceras* gen. n. Ohioceratidae, type *Kionoceras myrice* (Hall & Whitfield) Foerste [ref. to figs.] Gotlandian N. Amer., SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 6.

†Ohioceratidae fam. n. for *Striato-ceras* and *Ohioceras* genn. n. [q.v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 6.

†*Onychoceras* gen. n. genotype *Cyrtoceras confertissimum* Whitfield, Upper Canadian, Vermont, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 283.—*Onychoceras costulatum* p. 293 pl. xxxviii f. 1-5 text-fig. 1; *costulatum* p. 295 pl. xxxviii f. 6-9 text-fig. 2 spp. n. [Lias] Germany, FENTZER Z. deuts. geol. Ges. Berlin 88 4 1936.

†*Oppelia alternata* sp. n. Lias Mt. S. Giuliano, Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 15 pl. i f. 12, 13.—*O. conjugens* fig., PASSENDORFER 706.

†*Orbignyiceras* gen. n. of sub-fam. Hectioceratinae, type *Hectioceras pseudopunctatum* Lahusen, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paleont. Mém. 29 13 2-3 1936 p. 34 text-fig. 9.—*Orbignyiceras trezeense* sp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 36 pl. xvi f. 2, 2a text-fig. 10.

†*Orionoides monestieri* p. 58 pl. vii f. 1, 1a; *O. termieri* p. 58 pl. viii f. 1, 1a; *O. cayeuxi* p. 59 pl. ix f. 1, 1a; *O. lanquinei* p. 59 pl. x f. 1, 1a; *O. piveleaui* p. 60 pl. xi f. 1, 1a; *O. raguini* p. 60 pl. xii f. 1, 1a; spp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Paléont. Mém. 29 13 2-3 1936.

†*Orthonybyoseras* gen. n. Nybyoceratinae Arnenoceratidae, type *Ormoceras*? *convingtonense* Foerste. & Teichert [ref. to figs.] Upper Ordovician N. Amer., SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 7.

†*Orthoceras* [vide etiam *Hippurites*].

†*Orthocera* Modeer genotype probably a foraminifer, TEICHERT & MILLER 970.

†*Orthoceras* (?) *attawapiskatense* sp. n. Silurian, Attawapiskat limestone Ekwan R., Hudson Bay, FOERSTE Ohio J. Sci. 36 5 1936 p. 262 pl. i f. 7 text-fig. 3.—*Orthoceras clemvillense* p. 29 pl. xvii f. 1A, B, 2; *chaleurense* p. 31 pl. v f. 2; spp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.—*O. gaspense* p. 374 pl. lv f. 10, 11; *percense* p. 375 pl. lv f. 12, 13; *kindlei* p. 375 pl. lv f. 14; spp. n. Upper Ordovician, Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936.—*O. ungavaense* sp. n. Richmond formation Akpatok Island, Foerste in FOERSTE & Cox Geol. Mag. London 73 865 July 1936 p. 298 text-fig. 13.—*O. dominans* sp. n. Permian Sicily, GREGORIO Ann. Geol. Paléont. Palermo 52 1930 p. 15 pl. ii f. 17.—*O. giulianense* p. 14 pl. i f. 3; *perrarum* p. 14 pl. i f. 10, 11, spp. n. Lias Mt. S. Giuliano, Palermo, GREGORIO Ann. Geol. Paléont. Palermo 53 1930.—*O.* Brünnick genotype *Orthoceratites regularis* Schlottheim "which has been regarded as the genotype of *Orthoceras*," TEICHERT & MILLER 970.—*Orthoceras wongi*, *chinense*, KOBAYASHI 490.—*Orthoceras* cf. *planiseptatum* Sandb., *regulare* Scklot. figs., PÉNEAU 718.

†*Orthoceratites* Gmelin genotype a Devonian cephalopod, TEICHERT & MILLER 970.

†*Orygoceras fuchsi*, *filocinctum*, *cultratum*, *fistula*, *scolecostomum*, VITALIS 1019.

†*Osbornoceras* (?) *savagei* sp. n. Silurian Port Nelson Limestone, 4 miles above Lower Rapids, Nelson River, Hudson Bay, FOERSTE Ohio J. Sci. 36 1936 p. 266 pl. ii f. 1.

†*Ovoceras* gen. n. type *Gomphoceras oviforma* Hall, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 64 pl. viii f. 1, 2.

†*Oxygonioceras* (?) *wabashense* sp. n. (O. cf. *cuneatum* Foerste J. Sc. Lab. Den. 21 p. 63) Silurian Hudson Bay, FOERSTE Ohio J. Sci. 36 1936 p. 268.

†*Oxynoticeras buckmani* fig., BLONDET 116.

†*Pachendoceras* gen. n. genotype *Cameroceas huzzahense* Ulrich & Foerste Upper Ozarkian Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 283.

†*Palaeocycloceras* gen. n. Cycloceratidae type *P. hupehense* nom. nov. = *Protocycloceras deprati* Yü non Reed, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 20.

†*Palmeroceras* gen. n. Sub-order Cyrtocochanites type *Orthoceras fustis* Hall, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 58 pl. ii f. 4; pl. iv f. 1-2; pl. vii f. 3.

†*Paraendoceras* "Ulrich & Foerste" [err. pro *Parendoceras*] nom. nov. for *Saffordoceras* Ulrich & Foerste 30 (1935) p. 285 (non Foerste & Teichert 1930 Denison Univ. Bull. 25. 1930 p. 264), FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 92.

†*Paralcidia couffoni* p. 24 pl. viii f. 2, 2a, b; *P. preauberti* p. 25 pl. vi f. 4; *P. pattei* p. 26 pl. vi f. 5: spp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936.

†*Paralegoceras*? *milleri* sp. n. Devonian Yellow Springs, Ohio, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935 p. 56 pl. viii f. 1-2.

†*Parapachydiscus egertoni* Forbes, *P. e-neubergicus* figs. Cretaceous of Japan, MATUMOTO 605.

†*Paraphyllites filifer* sp. n. Agoniatitidae Devonian Rhine province, SPRIESTERBACH Jahrb. preuss. geol. LdAnst. 55 1 1935 p. 521 pl. i f. 2, 3.

†*Pararmenoceras* gen. n. Wutinoceratidae, type *Armenoceras penksiense* Endo [ref. to fig.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 1936 p. 30 f. 3.

†*Parendoceras* nom. nov. for *Saffordoceras* Ulrich & Foerste genotype *S. jeffersonense* U. & F. (non *Saffordoceras* Foerste & Teichert genotype *S. nelsoni* F. & T.), ULRICH & FOERSTE J. Paleont. Menasha Wis. 10 5 1936 p. 417.

†*Parormoceras* gen. n. Sactoceratidae type *Actinoceras nanum* (Grabau) Kobayashi [ref. to fig.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 8.

†*Pavlovia* (*Lydistratites* ?) *worthensis* sp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 30 pl. xviii f. 6.—*Pavlovia* (*Lydistratites*) *iris* p. 27 pl. xxii f. 4; *nobilis* p. 27 pl. v f. 6; *triplicata* p. 27 pl. ix f. 6; *vulgaris* p. 31 pl. xvii f. 5 spp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936.

P. allovirgatoides p. 37 pl. vii f. 4a, b pl. xiv f. 3a-c; *jubilans* p. 39 pl. xxxv f. 4a, b; pl. xxxix f. 1a, b Upper Kimmeridgian C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 37.—*Pavlovia* (*Pallasiceras*) *communis* p. 41 pl. iv f. 1a, b, 3, 6a, b; pl. v f. 4a, b, 7a, b: *regularis* p. 42 pl. iii f. 3a, b; pl. iv f. 2a-c: *perinflata* p. 44 pl. v f. 2a, b, 3a, b; pl. xi f. 3a, b: *subaperta* p. 45 pl. iii f. 2a-c; pl. vi f. 2a, b; pl. viii f. 7; pl. xi f. 4b; pl. xxvi f. 4a, b: *variabilis* p. 48 pl. x f. 1a, b; pl. xxi f. 1a, b: *inflata* p. 49 pl. xiv f. 1a-c: *kochi* p. 50 pl. xv f. 1a, b: *alterneplicata* p. 51 pl. xif. 1; pl. xii f. 3; pl. xvii f. 2: *rugosa* p. 52 pl. xi f. 2; pl. xii f. 1a, b; pl. xvii f. 3a, b: *similis* p. 54 pl. xii f. 4a, b: *rotundiformis* p. 55 pl. xix f. 3a, b: *P. (Epi-pallasiceras) pseudaperta* p. 56 pl. viii f. 1, pl. ix f. 3, 4; pl. xif. 5; pl. xvi f. 1, 4; pl. xx f. 1; pl. xxxix f. 2: *P. (E.) costata* p. 58 pl. vii f. 1; pl. x f. 7; pl. xviii f. 1a, b, 3: *P. (E.) tumida* p. 59 pl. xvii f. 1a, b: *P. (E.) praecox* p. 60 pl. xxv f. 1a, b spp. n. *P. (E.) pseudaperta superba* var. n. p. 57 pl. xxxix f. 2a, b.

†*Pectinatites* (*Keratinites* ?) *groenlandicus* sp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 9 3 1936 p. 25 pl. vi f. 1; pl. vii f. 5; pl. viii f. 4.

†*Peltoceras reversum* fig., BLONDET 116.

†*Peltoceratoides regularis* p. 64 pl. xiv f. 1, 1a text-fig. 15; *P. retrospinatum* p. 66 pl. xviii f. 2, 2a; pl. xix f. 1 text-figs. 16, 17 spp. n. Lower Oxford France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936.

†*Pericyclus niger* sp. n. Dinantian Hérault, DELÉPINE Bull. Soc. géol. Fr. 5 v 1-3 p. 69 pl. i f. 3a, b:

†*Perioidanoceras* (?) *chaleurense* sp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936 p. 77 pl. xi f. 3.

†*Perisphinctes* (*Dichotomosphinctes* ?) *ormingtonensis* sp. n. p. 31 pl. ix f. 1-4 text-figs. 10, 11; Brit. Mus. No. C.36499, 46454 Blake & Damon Colltuss; *P. (Discosphinctes) cantisruffae* sp. n. p. 35 pl. x f. 1a-c, 2a, b text-figs. 13, 14 Corallian Dorset, ARKELL Amm. English Corallian Beds pt. II Mon. Pal. Soc. Nov. 1936.—*P. ("Incertae sedis") dubius* p. 41 pl. viii f. 3a, b; *P. branensis* p. 42 pl. xi spp. n. Corallian Beds, Dorset, ARKELL Amm. of English Corallian Beds Mon. Pal. Soc. Nov. 1936.—*P. spongiphilus* fig., BLANDET 116.

†*Peroniceras* and Lower Cretaceous from N. Zululand, RENNIE 795.

†*Phragmoceras altum* p. 89 pl. xx f. 3; *northropi* p. 90 pl. xxi f. 2 spp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Phylloceras posalpinum* sp. n. Lias S. Giuliano Palermo, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 15 pl. i f. 16.—*P. penninicum* sp. n. Lias Poland, SIEMIRADZKI Arch. Tow. nauk. Lwow (3) 3 3 1923 p. 31 pl. vi f. 7, 8.—*P. (Phyllopachyceras) rouyanum*, BREISTROFFER 40.—*P. kudernatschi*, kunthi, zignoi, flabellatum, disputabile, figs., PASSENDORFER 706.—*P. geyeri*, frondosum, subfrondosum figs., RAMACIONI 782.

†“*Polygrammoceras*” *endoceroideis*, KOBAYASHI 490.

†*Polyptychites*, LUPPOV 575.

†*Popanoceras tschernowi* sp. n. Middle Urals, MAXIMOWA Bull. Soc. Nat. Moscow Sect. Geol. 43 2 1935 p. 284 f. 14 and 12-17 of plate.

†*Porteroceras* gen. n. Hammeloceratidae type *Spyroceras porteri* (Schuchert) Foerste [ref. to figs.] Upper Ordovician ? Canada, SHIMIZU & OBATA J. Shanghai Sci. Inst. (?) 2 1 1935 p. 6.

†*Praebigotites* gen. n. type *P. west-falicus* Bajocian [Jurassic] Europe, WETZEL N. Jahrb. Min. Geol. Paläont. Stuttgart 75 3 1936 p. 533 pl. xxi f. 1-5 text-figs. 5-8.

†*Praeglyphioceras uralicum* sp. n. Devonian Ay River, S. Ural, NALWIKINA Trans. Cents. Geol. Prosp. Inst. U.S.S.R. 79 1936 p. 16 pl. ii f. 6a-f text-fig. 18.

†*Praehaploceras zwieseli* fig., BLONDET 116.

†*Prodictylioceras dorsetense* sp. n. Lias Green Ammonite Beds, Charmouth, Dorset, SPATH Quar. J. Geol. Soc. London 92 4 1936 p. 452 pl. xxxiii f. 1a, b.

†*Progalbanites* gen. n. [nom. nov. for *Lydistratites* pars] type *P. albani* Arkell (1935 pl. xxvi f. 2), SPATH Medd. Grønland 99 3 1936 pp. 27, 30, 37.

†*Prolecanites involutus* sp. n. Lower Namurian [Carboniferous] France, DELÉPINE Bull. Soc. géol. Fr. 5 v 1-3 1935 p. 185 pl. viii f. 3.—*P. quinquelobus* Kittl pl. vii f. 2, 10, DELÉPINE 241.

†*Pronorites uralensis shuichengensis* var. n. Uralian Kueichow, China, YIN Palaeont. sinica B. XI 4 1935 p. 14 pl. i f. 1, 3 pl. ii f. 8, 9 text-fig. 2.

†*Propinacoceras ajense* sp. n. Middle Urals, MAXIMOWA Bull. Soc. Nat. Moscow Sec. Géol. 43 2 1935 p. 276 text-fig. 1-5 and f. 1-5 of plate.

†*Protocanites lyoni* figs., MILLER 617.

†*Protocycloceras* cfr. *cyclophorum*, SHIMIZU & OBATA 897.

†*Protokionoceras perstrigatum* p. 37 pl. xxiii f. 1; *imperator* p. 38 pl. viii f. 1, 2; pl. ix f. 1; *microlineatum* p. 39 pl. vii f. 1-3; spp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Protrachyceras vouki* sp. n. Cretaceous Europe, SALOPEK Bull. Int. Acad. Yougoslav 29-30 1936 p. 177 [pl. ii f. 1a-d original papers q. v.].—*P. vouki* sp. n. S. Europe, SALOPEK Prirod. Istraž. Kral. jugoslav. 20 1936 p. 217 pl. ii f. 1a-d.—*P. hermiti* sp. n. Trias Spain, SCHMIDT Abh. heidelberg Akad. Wiss. 22 1936 p. 118 f. 145 pl. vi f. 20-25.

†*Pseudeskimoceras* gen. n. Eskimoceratidae type *Cycloceras? manchuriense* Endo, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 22.

†*Pseudolissoceras monsalvensis* n. n. for *Haploceras Lissoceras elimatum* [Opp.], TRAUTH Ann. naturh. Mus. Wien 47 1936 footnote p. 129.

†*Pseudorthoceras palmerae* sp. n. Upper Devonian Reynolds Duaruy Erie Co., Pennsylvania, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 22 75 1935 p. 31 pl. vii f. 1-3.—*T. knoxense* fig., MILLER & THOMAS 624.

†*Pseudorthoceratidae* fam. nov. including *Pseudorthoceras* Girty, *Mooreoceras* M. D. & C., *Dolorthoceras* M. D. & C., *Bradfordoceras* Flower & Caster, FLOWER & CASTER Bull. Amer. Paleont. Ithaca 1935 22 75 p. 29.

†*Pseudosageceras multilobatum* text-fig., PETKOVIC & MIHAILOVIC 722.

Psiloceras planorbis, ANON 30.

†*Psilophyllites langei* sp. n. Lias Europe, KUHN Jh. Ver. vaterl. Naturk. Württemb. 91 1935 p. 13 pl. i f. 1a, b and text-fig.

†*Ptychites* Triassic Bulgaria figs., STEFANOFF 941.

†*Pultaliceras* for *Putealiceras* p. 40, GÉRARD & CONTAUT 328.

†*Puzosia mayoriana* Orb., MURGEANU, 656.

†*Quenstedticeras fouenieri* sp. n. Lower Oxford France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 47 pl. xii f. 2, 2a.

†*Reineckeites falloti* p. 50 pl. i f. 1, 1a; *R. brasili* p. 51 pl. ii f. 1, 1a spp. n. Lower Oxford France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 20.

†*Rizoceras* (?) *dartae* p. 47 pl. x f. 3; (?) *atlanticum* p. 48 pl. x f. 6; (?) *pocilliforme* p. 48 pl. xxiii f. 4; (?) *infundibuliforme* p. 49 pl. xxiii f. 3 spp. n. Silurian Gaspé Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.

†*Rossienceras* gen. n. of sub-Fam. Hecticoceratinae, type *Hecticoceras rossiense* Teisseyre, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Mém. 29 13 2-3 1936 p. 38 text-fig. 11.

†*Sactoceras maquoketense* sp. n. Maquoketa Shales Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 248 pl. xxxvi f. 4, 5; pl. xxxvii f. 4.

†*Saffordoceras* gen. n. genotype *S. jeffersonense* sp. n. Middle Canadian Tennessee, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 285, 286 pl. xxxviii f. 16.—*Saffordoceras* (type *S. jeffersonense* U. & F.) is renamed *Parendoceras* [q.v.], ULRICH & FOERSTE 1007.

†*Salterella*, SPATH 932.

†*Schlönbachia bertrandi mexicana* var. n. Upper Cretaceous Rio Grand nr. Jimenez Mexico, RENZ Abh. schweiz. paläont. Ges. 57 1936 No. 1 p. 6 pl. i f. 2, 2a; pl. iii f. 1, 1a.

†*Schlothemia angulata*, ANON. 30.

†*Seelyoceras* gen. n. genotype *Cyrtoceras raei* Whitfield, Beekmantown formation, Canadian, New York, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5, 6 1935 p. 286.

†*Shantungoceras* gen. n. Wutino-ceratidae, type *Armenoceras tateiwai* Kobayashi [ref. to figs.] Korea, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 1936 p. 31.

†*Shelbyoceras robustum* sp. n. Lower Ozarkian Shannon Co. Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 287 pl. xxxviii f. 13.

†*Shuichengoceras* subgen. nov. of *Gonioloboceras* type *S. yohi* sp. n. Lower Permian Kneichow China, YIN Palaeont. Sinica B XI 4 1935 p. 31 pl. v f. 1, 2 text-figs. 10.

†*Shumardoceras* gen. n. genotype *Lituites complanata* Shumard Upper Canadian Missouri, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 288.

†*Sinoceratidae* fam. n. Middle Ordovician *Sinoceras* S. & O. type *Orthoceras chinense* Foord in Yü [figs. referred to], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 3.

†*Sonninia subspinoso* fig., BLONDET 116.

†*Sphenodiscus stauri* sp. n. Upper Cretaceous Rancho Ramirez, Rio Grande, Mexico, RENZ Abh. schweiz. paläont. Ges. 57 1936 p. 14 pl. i f. 4; pl. ii f. 2, 2a-b, 3.

†*Spyrocera* *percense* p. 377 pl. lvi f. 1; pl. lvii f. 5: *S. liratum* p. 378 pl. lvi f. 2; pl. lvii f. 6; *S.?* sub-

glabrum pp. 378, 379 pl. lvi f. 7; spp. n. Upper Ordovician Percé, Quebec, FOERSTE J. Paleont. Menasha Wis. 10 5 1936.—*S. calvini* p. 245 pl. xxxii f. 2, *clermontense* p. 246 pl. xxvii f. 3, 2 spp. n. Maquoketa Shale, Iowa, FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935.—*S. chaleureuse* p. 42 pl. vi f. 5A, B; *danielense* p. 43 pl. xix f. 2A, B; *orientale* p. 43 pl. vi f. 2; pl. xiii f. 3; *northropi* p. 43 pl. vi f. 1; spp. n. Silurian Gaspe Peninsula, E. Canada, FOERSTE J. sci. Labs. Denison Univ. 31 1-2 1936.—*Spyrocera* (?) *savagei* sp. n. Silurian Brassfield Limestone, Osborn Hudson Bay, FOERSTE Ohio J. Sci. 36 1936 p. 263 pl. i f. 3, 4 text-fig. 2.—*S. wordiei* sp. n. Ordovician Akpatok Island 650 ft. Foerste in FOERSTE & Cox Geol. Mag. London 73 p. 301 pl. iv f. 3.—*S. clermontense* on pl. 27 f. 2, 3 is magnified three diameters, FOERSTE p. 92 285.

†*Spyroceratidae* fam. n. for *Spyrocera* Hyatt [pars] also for *Subspyrocera*, *Anaspyrocera*, *Gorbyocera* genn. n. [q.v.] and *Metaspyrocera* Foerste, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 3.

†*Stacheoceras sostiense* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 14 pl. ii f. 1, 2.—*S. globulinum* sp. n. Permian Sicily, GREGORIO Ann. géol. Paléont. Palermo 52 1930 p. 14 pl. ii f. 11-14.

†*Stemtonoceras* gen. n. genotype *S. elongatum* sp. n. Upper Ozarkian, Pennsylvania, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 pp. 288, 289 pl. xxxviii f. 3.

†*Stenopoceras abundum* sp. n. Carboniferous Wyoming, MILLER & THOMAS J. Paleont. Menasha Wis. 10 8 1936 p. 734 pl. xcviii f. 7-10; pl. xcix f. 1, 2.

†*Stereoplasmodoceras* Grabau, genotype *S. pseudoseptum* Grabau (pl. vi f. 5-6 non f. 7 pl. ix f. 11) Grabau's pl. ix f. 11 transferred to *Ormoceras*—*S. p.* pl. xxiv f. 1, 2, KOBAYASHI 488.—*S. schindewolfi* p. 238; *leicherti* p. 239 pl. xxvi f. 3-4; *cylindricum* p. 239 pl. xxvi f. 5; spp. n. Ordovician North Chosen, KOBAYASHI Japan J. Geol. Geogr. 13 3-4 1936.

Stereoplasmodoceratidae Kobayashi for *Stereoplasmodocera* and *Tofangoceras*, KOBAYASHI 488.

†*Stereoplasmodocera* gen. n. Stereoplasmodoceridae type *Stereoplasmodocera tofangoense* Kobayashi p. x f. 6, KOBAYASHI Japan. J. Geol. Geogr. 13 3-4 1936 p. 241 pl. xxi f. 6.

†*Stokesoceras balticum* sp. n. Pleistocene Denmark, TEICHERT Med. dansk. geol. Foren 8 4 1934 p. 387 pl. viii f. 3.

†*Striacoceras* gen. n. (Orthoceratidae) type *Orthoceras typum* Saemann p. 28 pl. ii f. 2, 3, 6, 7, 9; pl. iii f. 1-7; pl. iv f. 3-4, 7-9; pl. v f. 1, 6; pl. vi f. 7; pl. vii f. 2; pl. viii f. 7; pl. ix f. 3, 4, 11, 12, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936.—*Striacoceras typum alpha* p. 35 pl. iii f. 2; pl. iv f. 8; pl. vi f. 7; *beta* p. 37 pl. iii f. 3-5, 7; pl. iv f. 7; *gamma* p. 38 pl. iii f. 1; pl. iv f. 9; *delta* p. 39 pl. iii f. 6; *epsilon* p. 39 pl. v f. 6; pl. ix f. 3, 11: variants nov. *S. kionoceroide* sp. n. p. 40 pl. ii f. 5; pl. ix f. 5, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936.

†*Striatoceras* gen. n. Ohioceratidae type *Sactoceras striatum* Troedsson [ref. to figs.] Upper Ordovician Greenland, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 6.

†*Subbonarellia meroniensis* p. 29 pl. ix f. 2, 2a, b text-fig. 5; *S. andegavensis* p. 30 pl. vi f. 2, 2a text-fig. 6; *S. intermedia* p. 31 pl. vi f. 3 text-fig. 7; spp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936.

†*Subcraspedites claxbiensis* p. 85 pl. xxxvi f. 6; *groenlandicus* p. 84 pl. xxxvi f. 3; spp. n. *lamplughii* nom. nov. for *Craspedites subditus* Pavlow non Trautschold sp. p. 81 Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936..

†*Subgrossouvria crassa* sp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 56 pl. vi f. 1, 1a.

†*Sublunuloceras virguloides* sp. n. Lower Oxford, France, GÉRARD & CONTAUT Mém. Soc. géol. Fr. Paléont. Mém. 29 13 2-3 1936 p. 44 pl. vii f. 2, 3, 3a.

†*Subpenhsioceras* gen. n. p. 14 Suecoceratidae, type *S. spindiforma* p. 15 sp. n. Ordovician Manchuria, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 pp. 14, 15 f. 1, 2.

†*Subplanites pseudoscruposus* sp. n. Upper Jurassic C. Leslie Milne Land, SPATH Medd. Grønland 99 3 1936 p. 173 text-fig. 2.

†*Subsphyroceras* gen. n. Sphyroceratidae type *Sphyroceras middlevillense* Foerste [ref. to fig.] Middle Ordovician N. Amer., SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 4.

†*Subvaginoceras* gen. n. Cyclendoceratidae, type *Kotoceras typicum* Kobayashi, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 13.

†*Sudetoceras* (?) *parvalingue* sp. n. Carboniferous Haultschin Germany, PATTEISKY N. Jahrb. Min. Geol. Paläont. Stuttgart 76 1 1936 p. 9 pl. i f. 17-20 text-fig. 1.

†Suecoceratidae fam. n. for *Subpenhsioceras* Endo. *Penhsioceras* Endo, *Suecoceras* Holm, *Nanno Clarke*, *Proterocameroceras* Ruedemann, *Camero-ceras* Conrad, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 2 1936 p. 14.

†*Tainoceras wyomingense* sp. n. Carboniferous Wyoming, MILLER & THOMAS J. Paleont. Menasha Wis. 10 8 1936 p. 732 pl. xevi f. 13; pl. xevii f. 6; pl. xeviii f. 3, 4.

†*Tetranodoceras* gen. n. (Rhyticeratidae) type *Cyrtoceras transversum* Hall, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 41 pl. ii f. 8; pl. vi f. 1-5; pl. vii f. 1.

†*Thalassoceras wadei* Permian W. Australia, A. K. MILLER J. Paleont. Menasha Wis. 10 8 1936 685 pl. xcii f. 8-12.

†*Timanites occidentalis* sp. n. Upper Devonian, Alberta, MILLER & WARREN J. Paleont. Menasha Wis. 10 7 1936 pp. 632, 634 f. 4-6.—*Timanites keyserlingi*, MILLER & WARREN 625.

†*Tofangoceras endoi* sp. n. Ordovician S. Manchuria, KOBAYASHI Japan. J. Geol. Geogr. 13 3-4 1936 p. 241.

†*Tofangocerina* gen. n. Stereoplasmodoceridae type *Orthoceras toyamai* Endo U.S. Nat. Mus. Bul. 164 p. 67 (pl. xiii, f. 13 only), KOBAYASHI Japan. J. Geol. Geogr. 13 3-4 1936 p. 241.

†*Tornoceras* Devonian, S. Ural, NALWIKINA 660.

†*Toxoceras baculatus* fig., TZANKOV & BONČEV 1003.

†*Trinoceras*, KRUGLOV 502.

†*Verticoceras* gen. n. type *V. erectum* sp. n. = *Gomphoceras conradi* Hall pars, FLOWER Bull. Amer. Paleont. Ithaca 22 76 1936 p. 72 pl. ix f. 6, 7.

†*Volborthella*, FOERSTE 287.

†*Waagenoceras adrianense* p. 13 pl. ii f. 15-16, *W. minutum* p. 14 pl. ii f. 8-10 spp. n. Permian Sicily, GREGORIO Ann. Géol. Paléont. Palermo 52 1930.

†*Walcottoceras* gen. n. genotype *Endoceras? monensis* Walcott Upper Ozarkian Alberta, ULRICH & FOERSTE J. sci. Labs. Denison Univ. 30 5-6 1935 p. 289.

†*Woehrmannia decorata* sp. n. Dachsteinkalk Trias, Hungary, KUTASSY Math. term. Ért Budapest 54 3 1936 p. 1020 pl. xii f. 5-8.

†*Wutinoceras* gen. n. Wutinoceratidae type *Nybyoceras foerstei* Endo [ref. to fig.] Ordovician Manchuria, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 1936 p. 28 f. 2.

†Wutinoceratidae fam. n. for *Wutinoceras* Shimizu & Obata; *Pararmenoceras* Shimizu & Obata; *Shantungoceras* Shimizu & Obata, *Neowutinoceras*

and *Eushantungoceras* gen. n. [q.v.], and *Cyrtonybyoceras* Troedsson, SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 1 1935 p. 8.—Wutinoceratidae fam. n. (near Nybyoceratidae) for *Wutinoceras*, *Pararmenoceras* and *Shantungoceras* gen. n. [q.v.], SHIMIZU & OBATA J. Shanghai Sci. Inst. (2) 2 3 1936 p. 27.

INCERTAE SEDIS.

Ammonoidea "a group incertae sedis in the Phylum Mollusca," FOSSAMANCINI 293.—"*Arca* "clarki" Dickerson "not an arcid" fam. undetermined, REINHART 793.

"*Gymnosolen* "ramsayi" [Problematical] figs., YANK 1069.

†*Rimpia testa* sp. n. Trias Cave of Billiemi Palermo, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 13 pl. 9 f. 6.

†*Sphenotus tropicus* "nom. nov." Devonian Altai, HALFEEN Rec. Geol. West Siberian Region 20 1935 p. 1 pl. vi f. 9.

†*Tentaculites straeleni* Maillieux pl. ii f. 12, MAILLIEUX 590.

IX. CRUSTACEA

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS

| | PAGE |
|------------------------------|------|
| I. TITLES | 1 |
| II. SUBJECT INDEX | 26 |
| Distribution | 29 |
| III. SYSTEMATIC INDEX | 31 |

I.—TITLES.

1.—Abeloos, M. Doigts mobiles supplémentaires dans la pince d'un Tourteau (*Cancer pagurus* L.). Bull. Soc. sci. Bretagne **13** 1936 pp. 20-23 1 pl.

2.—Abramowitz, A. A. The action of intermedin on Crustacean melanophores and of the Crustacean hormone on Elasmobranch melanophores. Proc. Nat. Acad. Sci. Washington **22** 1936 pp. 521-523.

3.—Abramowitz, A. A. Action of Crustacean eyestalk extract on melanophores of hypophysectomized Fishes, etc. Proc. Soc. exp. Biol. **34** 1936 pp. 714-716.

Aiyar, R. G. *vide* Subramaniam.

4.—Alderman, A. L. Some new and little known Amphipods of California. Univ. Calif. Pub. Zool. **41** 1936 pp. 53-74 51 figs.

5.—Alexander, C. I. Ostracoda of the genera *Eucythere*, *Cytherura*, *Eucytherura*, and *Loxoconcha* from the Cretaceous of Texas. J. Paleont. Menasha **10** 1936 pp. 689-694 1 pl.

6.—Allan, R. S. The fauna of the Reefton Beds, (Devonian) New Zealand. Palaeont. Bull. N.Z. **14** 1935 pp. 1-72 5 pls. [Crust. p. 30.]

7.—Anderson, R. S. Studies on bioluminescence. II. The partial purification of *Cypridina* luciferin. J. gen. Physiol. Baltimore **19** 1935 pp. 301-305.

8.—André, M. Sur le *Cancer personatus* Linné. Bull. Mus. Hist. nat. Paris **8** 1936 pp. 92-93.

9.—Angelini, G. Osservazioni sulla struttura del mesointestino di *Armadillidium*. Mem. Soc. tosc. Sci. nat. **45** 1935 pp. 128-140 1 pl.

10.—Arcangeli, A. Un genere e due specie nuovi di Isopodi terrestri del Brasile. Arch. zool. Torino **23** 1936 pp. 201-208 1 pl.

11.—Arcangeli, A. Gli Isopodi terrestri del Portogallo. Boll. Lab. Zool. Portici **29** 1936 pp. 1-39 24 figs.

12.—Arcangeli, A. Specie nuove di Isopodi terrestri della Spagna raccolte dal Prof. F. Silvestri. Boll. Lab. Zool. Portici **29** 1936 pp. 40-46 11 figs.

13.—Arcangeli, A. *Asellus* delle caverne del Belgio. Bull. Mus. Hist. nat. Belg. **11** no. 37 1935 pp. 1-8 2 pls.

14.—Arcangeli, A. *Porcellio flavocinctus* B. L. e *Porcellio pelseneeri* n. sp. (Crostacei Isopodi Terrestri). Mem. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 185-196 16 figs.

15.—Arvanitaki, A. Données sur les caractéristiques de la réponse répétitive a la stimulation galvanique du nerf isolé de Crabbe. C.R. Soc. Biol. Paris 123 1936 pp. 755-758 also 758-759 2 figs.

16.—Arvanitaki, A. [and others]. Existence de longues durées d'utilisation dans le déclenchement galvanique des pulsations nerveuses chez les Crustacés. C.R. Soc. Biol. Paris 121 1936 pp. 638-640 3 figs.

17.—Auger, D. et Fessard, A. Action de la température et de certaines substances sur le potentiel de repos des nerfs de Crustacés. Interprétation des résultats. C.R. Soc. Biol. Paris 122 1936 pp. 189-190.

18.—Baldi, E. Ricerche sulla fisiologia del sistema nervoso negli artropodi. I. La meccanica deambulatoria normale del gambero. Arch. zool. Torino 23 1936 pp. 47-80 22 figs.

19.—Baldi, E. Sul problema delle forme locali di *Eudiaptomus vulgaris* Schm. nel lago di Garda e in altri laghi italiani. Mem. Mus. Stor. nat. Venez. trident. 3 1936 pp. 247-285 10 figs.

20.—Balss, H. Decapoda (Nachträge und Berichtigungen) in: Grimpe & Wagner Tierwelt Nord-u. Ostsee Leipzig 10 N3 1936 pp. 1-4.

21.—Balss, H. Brachyura of the Hamburg Museum expedition to south-western Australia, 1905. J. Roy. Soc. W. Aust. 21 1935 pp. 113-151 1 pl. 3 text-figs.

22.—Balss, H. The fishery grounds near Alexandria. VII. Decapoda. With an appendix: Schizopoda by C. Zimmer. Notes Mem. Fisheries Res. Cairo 15 1936 pp. 1-67 40 maps.

23.—Balss, H. Beiträge zur Kenntnis der Portamonidae (Süßwasserkrabben) des Kongogebiets. Rev. Zool. Bot. afr. Tervueren 28 1936 pp. 165-204 29 figs. and maps.

24.—Balss, H. Ueber *Sesarma* (*Chiromantes*) *kamermanni* de Man (Crustacea Dekapoda). Bull. Mus. Hist. nat. Belg. 12 No. 30 1936 pp. 1-3 2 figs.

25.—Banks, E. *Palaeogyge buiten-djiki*, a parasitic Isopod from the coast of Borneo. Sarawak Mus. J. 4 1935 pp. 357-358.

26.—Barigozzi, C. I caratteri fenotipici del biotipo tetraploide partenogenetico di *Artemia salina* in relazione agli altri biotipi partenogenetici. Arch. zool. Torino 22 1936 pp. 1-16 13 figs.

27.—Barigozzi, C. Il legame genetico fra i biotipi partenogenetici di *Artemia salina*. Arch. zool. Torino 22 1936 pp. 33-77 2 pls. 1 text-fig.

28.—Barnard, K. H. Terrestrial Isopods and Amphipods from Mauritius. Ann. Natal Mus. P'mburg 8 1936 pp. 1-17 7 figs.

29.—Barnard, K. H. Isopods collected by the R.I.M.S. "Investigator." Rec. Ind. Mus. Calcutta 38 1936 pp. 147-191 19 figs.

30.—Barnes, H. M. *Cubaris spenceri* a new terrestrial Isopod, from the Northern Territory of Australia. J. Roy. Soc. W. Austr. 20 1934 pp. 63-70 1 pl. 2 text-figs.

31.—Barnes, T. C. Experiments on *Ligia* in Bermuda. IV. Effects of heavy water and temperature. Biol. Bull. Woods Hole 70 1936 pp. 109-117 2 figs.

32.—Bassindale, R. The developmental stages of three English Barnacles *Balanus balanoides* (Linn.), *Chthamalus stellatus* (Poli) and *Verruca stroemia* (O. F. Müller). Proc. zool. Soc. London 1936 pp. 57-74 9 fig.

33.—Bazikalova, A. J. A new form of Amphipoda from Lake Baikal. C.R. Acad. Sci. Moscou 1936 vol. 4 pp. 35-38 10 figs.

34.—Becker, F. D. Some observations on respiration in the terrestrial Isopod, *Porcellio scaber* Latreille. Trans. Amer. Mic. Soc. Menasha 55 1936 pp. 442-445 2 figs.

35.—Behney, W. H. Amphipod responses to environmental stimuli. Proc. Penn. Acad. Sci. 6 1932 pp. 22-25.

36.—Behning, A. L. Kaspische Perekariden in Manytsch-Bassin. C.R. Acad. Sci. Moscow 1936 vol. 4 pp. 85-87 2 figs. [In German.]

37.—Behning, A. *Nitocra divariceta* Chappuis im Kaspisee. Int. Rev. Hydrobiol. Leipzig 33 1936 pp. 247-249 1 fig.

38.—Bere, R. Parasitic Copepods from Gulf of Mexico Fish. Amer. Midl. Nat. Notre Dame **17** 1936 pp. 577–625 319 figs.

39.—Bere, R. Further notes on the occurrence of parasitic Copepods on Fish of the Trout Lake region with a description of the male of *Argulus birmosus*. Trans. Wisc. Acad. Sci. Arts Lett. **29** 1935 pp. 83–88 1 pl.

40.—Berg, K. Reproduction and depression in the Cladocera illustrated by the weight of the animals. Arch. Hydrobiol. Stuttgart **30** 1936 pp. 438–462 1 pl.

41.—Birstein, J. A. Materialien zur geographische Verbreitung der Wassertieren der UdSSR. 4. Zur Frage über die Herkunft der Marinen Crustaceen in den Flüssen des Ponto-Kaspischen Bassins. Zool. J. Moscow **14** 1935 pp. 749–761 map. [Russian, with German rés.]

Bloch, F. *vide* Gallien.

42.—Bogne, J. Y. and Rosenberg, H. Excitability of sensory fibres in *Maia* nerve, pp. 67–72 2 figs. Electrical responses of *Maia* nerve to single and repeated stimuli pp. 158–180 2 pls. J. Physiol. Cambridge **87** 1936.

43.—Bonde, C. von. The reproduction, embryology and metamorphosis of the Cape Crawfish (*Jasus lalandii* (Milne Edwards) Ortmann). Invest. Rept. Fish. Survey S. Africa no. **6** 1936 pp. 1–25 12 pls.

44.—Borg, F. On a remarkable Cladoceran. Ann. Mag. N.H. (10) **17** pp. 290–303 1 pl. 2 text-figs.

45.—Borg, F. Zur Kenntnis der Cladoceren-Gattung *Anchistropus*. Zool. Bidr. Uppsala **15** 1936 pp. 289–330 2 pls. 13 text-figs.

46.—Boschma, H. Notes on some Rhizocephala of the genus *Loxothylacus*. Festschrift E. Strand Riga **1** 1936 pp. 370–391 16 figs.

47.—Boschma, H. The specific characters of *Sacculina rotundata* Miers and *Sacculina yatsui* nov. spec. Zool. Meded. Leiden **19** 1936 pp. 1–22 14 figs.

48.—Bouček, B. Die Planktonfauna der böhmischen Graptolithenschiefer. Cbl. Min. Geol. Paläont. Stuttgart **1936B** pp. 291–296 2 figs. [Crust. pp. 294–295.]

49.—Bouček, B. Die Ostracoden des böhmischen Ludlows. (Stufe e β). N. Jahrb. Min. Geol. Paläont. Stuttgart **76** 1 1936 pp. 31–98 5 pls. 8 text-figs.

50.—Bouvier, L. Observations relatives à l'Ecrevisse sur la constitution des flancs chez les Crustacés. C.R. Acad. Sci. Paris **203** 1936 pp. 222–225.

51.—Bouvier, L. Observations complémentaires sur les pattes des Crustacés décapodes appartenant à la section des Astacomorphes. C.R. Acad. Sci. Paris **203** 1936 pp. 1301–1305.

52.—Bowley, E. A. A survey of the Oniscoid genus *Phallonicus* Budde-lund with a description of new species. J. Roy. Soc. W. Austr. **21** 1935 pp. 45–73 4 pls.

53.—Brand, E. Rogen mit Ostrakoden-Schachtelungen im Miozän von Frankfurt a.M. Senckenbergiana Frankfurt **18** 1936 pp. 113–121.

54.—Branson, C. C. New name for a Morrison Ostracode genus. [*Theriosynocium*]. J. Paleont. Menasha **10** 1936 p. 323.

55.—Brattstrom, H. *Ulophysema öresundense* n. gen et sp., eine neue Art der Ordnung Cirripedia Ascothoracica. Ark. Zool. Stockholm **28A** no. 23 1936 pp. 1–10 4 figs.

56.—Brehm, V. Ostrakoden aus Mandschuko. Annot. zool. jap. **15** 1936 pp. 374–377 6 figs.

57.—Brehm, V. Crustacea. 1. Cladocera und Euphyllipoda in: Mission Scientifique de l'Omo Paris **2** 1935 pp. 141–166 21 figs.

58.—Brehm, V. Nachträge zur Fauna der Hochgebirgsseen der Hohen Tauern. Int. Rev. Hydrobiol. Leipzig **33** 1936 pp. 276–279 fig.

59.—Brehm, V. Report on Cladocera [Yale N. India Exped.]. Mem. Conn. Acad. Arts Sci. **10** 1936 pp. 283–297 5 figs.

60.—Brehm, V. Mitteilungen von den Forschungsreisen Prof. Rahms. Mitt. V. Zur Variabilität der *Pseudo-boeckella gibbosa* Brehm.—Zur Thermal-fauna der Anden pp. 107–108 4 figs. Mitt. VI. Ueber die Cladocerenfauna des Titicaca und über einige neue Fundstellen bereits bekannter Cope-poden pp. 157–159. Zool. Anz. Leipzig **114** 1936.

- 61.—Brehm, V. Mitt. VII. Schlussmitteilung über Cladoceren und Copepoden.—Ueber den Formenkreis der *Delachauxiella trigonura* (Ekman). *Macrothrix atahualpa* nov. spec. und *Godetella*. Zool. Anz. Leipzig 115 1936 pp. 317–325 8 figs.
- 62.—Brehm, V. und Thomsen, R. Brasilianische Phyllopoden und Arguliden gesammelt von Herrn. Dr. O. Schubart. Zool. Anz. Leipzig 116 1936 pp. 211–218 9 figs.
- 63.—Brian, A. Descrizione di una nuova specie di *Buddelundiella* proveniente dalla caverna delle Arce Canide. Boll. Soc. ent. ital. Genova 68 1936 pp. 22–27 24 figs.
- 64.—Brinkmann, A. Die nordischen *Munnida* arten und ihre Rhizocephalen. Bergens Mus. Skr. no. 18 1936 pp. 1–111 5 pls. 25 text-figs. etc.
- 65.—Broch, H. Crustacea in: Die Bodenfauna der Garnelen-Felder. Avh. Norske Vid. Akad. Oslo 1935 no. 5 1936 pp. 14–16.
- 66.—Broekhuysen, G. J. On development, growth and distribution of *Carcinoides maenas* (L.). Arch. neerl. Zool. 2 1936 pp. 257–399 map 4 pls. diagram charts etc.
- Brown, F. A. *vide* Wheeler.
- 67.—Brzęk, G. Die Cladoceren des Kiekrz-Sees. Prace Kom. mat.-przyr. poznań. Tow. Przyj. Nauk. (B) 7 no. 4 1935 pp. 1–107 8 figs. [Polish, with German rés.]
- 68.—Bulycheva, A. New species of Amphipoda from the Japan Sea. Ann. Mag. Nat. Hist. (10) 18 1936 pp. 242–256 35 figs.
- 69.—Burkenroad, M. D. The Aristaeinae, Soleroцерinae and pelagic Penaeinae of the Bingham Oceanographic collection. Materials for a revision of oceanic Penaeidae. Bull. Bingham Oceanogr. Coll. New Haven 5 no. 2 1936 pp. 1–151 71 figs.
- 70.—Calman, W. T. and Crawford, G. I. Marine boring animals injurious to submerged structures. 2nd ed. pp. 1–38 21 figs. London (British Museum Nat. Hist. Econ. Ser. no. 10) 1936 8vo.
- 71.—Chace, F. A. Revision of the bathypelagic Prawns of the family Acanthephyridae, with notes on a new family Gomphonotidae. J. Wash. Acad. Sci. 26 1936 pp. 24–31.
- Chambers, J. *vide* Howe.
- 72.—Chapman, F. and Parr, W. J. Foraminifera and Ostracoda from soundings made by the Trawler "Bonthorpe" in the Great Australian Bight. J. Roy. Soc. W. Aust. 21 1935 pp. 1–6.
- 73.—Chappuis, P. A. Copepoda: Harpacticoida in: Mission scientifique de l'Omo 3 fasc. 29 1936 pp. 245–292 137 figs.
- 74.—Chappuis, P. A. Ueber Höhlencopepoden. Bul. Soc. Şti. Cluj 8 1936 pp. 321–334 34 figs.
- 75.—Chappuis, P. A. Zur Systematik der Copepoda Harpacticoida. Bul. Soc. Şti. Cluj 8 1936 pp. 348–353.
- 76.—Chappuis, P. A. Subterrane Harpacticiden aus Jugoslavien. Bul. Soc. Şti. Cluj 8 1936 pp. 386–398 25 figs.
- 77.—Chappuis, P. A. Harpacticiden der Expedition Handel-Mazetti nach Süd-China (1914–1918). Bul. Soc. Şti. Cluj 8 1936 pp. 405–408 5 figs.
- 78.—Chappuis, P. A. Brasilianische Ruderfusskrebse (Crustacea Copepoda) gesammelt von Herrn Dr. Otto Schubart. IV. Mitt. Bul. Soc. Şti. Cluj 8 1936 pp. 450–461 19 figs.
- 79.—Chauchard, P. La chonaxie des divers systèmes neuromusculaires chez les Crustacés, et ses variations due à la subordination. C.R. Soc. Biol. Paris 121 1936 pp. 1600–1602. See also L. Lapique 122 1936 pp. 172–176.
- 80.—Chevey, P. et Lemasson, J. Sur une Lernée parasite des carpes et carassins au Tonkin. Bull. Soc. zool. Fr. 61 1936 pp. 4–9 3 figs.
- 81.—Chopra, B. The Cape Crawfish industry of South Africa with some observations on the Prawn and Crab industries in India. Curr. Sci. Bangalore 4 1936 pp. 529–533.
- Clark, A. R. *vide* Sexton.
- 82.—Clark, E. The Freshwater and Land Crayfishes of Australia. Mem. nat. Mus. Melbourne no. 10 1936 pp. 1–58 11 pls. 2 text-figs.
- 83.—Clark, E. Notes on the habits of Land Crayfishes. Vict. Nat. Melbourne 53 4 1936 pp. 65–68 5 figs.

84.—Clark, L. B. The visual acuity of the Fiddler-Crab, *Uca pugnax*. J. gen. Physiol. Baltimore 19 1935 pp. 311-319.

Clarke, G. L. *vide* Fuller.

85.—Coifmann, I. Alcuni Misidacei nuovi raccolti dal Prof. L. Sanzo nella crociera della R. N. Ammiraglio Magnaghi al Mar Rosso (1923-24). Boll. Zool. Torino 7 1936 pp. 83-88 5 figs.

86.—Cornwall, I. E. On the nervous system of four Canadian Barnacles (one new species). J. biol. Board Canada 1 1936 pp. 469-475 5 figs.

87.—Coryell, H. N. and Malkin, D. S. Some Hamilton Ostracods from Arkona, Ontario. Amer. Mus. Nov. 891 1936 pp. 1-20 38 figs.

88.—Coryell, H. N. and Williamson, M. A study of the Ostracoda fauna of the Waldron Shale, Flat Rock Creek, St. Paul, Indiana. Amer. Mus. Nov. 870 1936 pp. 1-7 15 figs.

89.—Crawford, G. I. Additions to the Plymouth marine fauna (1931) in the Crustacean Orders Tanaidacea, Isopoda, and Amphipoda. J. mar. biol. Ass. Plymouth 21 1936 pp. 95-106 1 fig.

Crawford, G. I. *vide* Calman.

90.—Creaser, E. P. Crustaceans from Yucatan. Pub. Carnegie Instn. Washington 457 1936 pp. 117-132 43 figs.

91.—Crichton, M. I. and Young, M. R. Crustacea in: The natural history of Barra, Outer Hebrides. Proc. phys. Soc. Edinb. 22 1936 pp. 269-271.

92.—Dannevig, A. Hummer og Hummerkultur. Fiskerid. Skrift. ser. Havunders Bergen 4 no. 12 1936 pp. 1-59 16 figs.

93.—Darby, H. H. Intersexuality in the Crustacea pp. 145-149 1 pl. The mechanism of chela differentiation in the Crustacea, pp. 151-170. Pap. Tortugas Lab. Carnegie Instn. 29 1935.

94.—David, R. Recherches sur la biologie et l'intersexualité de *Talitrus saltator* Mont. Bull. biol. France-Belg. 70 1936 pp. 332-357 18 figs.

David, R. *vide* Gallien.

95.—Davis, A. G. The London Clay of Sheppey and the location of its fossils.

Proc. Geol. Ass. London 47 1936 pp. 328-345. [Crust. p. 339.]

96.—Day, J. H. Heterogonic growth in the abdomen of *Carcinus maenas*. Rep. Dove Mar. Lab. Cullercoats (3) no. 3 1935 pp. 49-59 3 figs.

97.—Decksbach, N. K. Chironomiden- und Daphnia-Gewinnung in der Umgebung einer Grossstadt. Arch. Hydrobiol. Stuttgart 30 1936 pp. 582-588.

98.—Delépine, G. Contribution à l'étude de la faune du Dinantien des Pyrénées. Bull. Soc. géol. Fr. (5) 5 1935 pp. 65-95 1 pl.

99.—Delépine, G. Crustacés en: Recherches paléontologiques sur quelques gisements carbonifères de la Sarthe. Bull. Soc. géol. Fr. (5) 5 1935 pp. 81-82.

100.—Demianowicz, A. Die Landisopoden (Isopoda terrestria) Bessarabiens. II Teil. Mem. Acad. Polon. Cracovie 6 1934 pp. 67-93 26 figs.

101.—Dons, C. Ein gefleckter Hummer. K. norske vidensk. Selsk. Trondheim Forh. 8 1936 pp. 21-24 2 figs.

102.—Dons, C. Isopoden aus der Möre-Küste und Nord-Norwegen. K. norske vidensk. Selsk. Trondheim Forh. 8 1936 pp. 41-43 2 figs.

103.—Dornesco, G. T. Recherches sur les constituants cytoplasmiques des cellules nerveuses de *Potamobius astacus*. Bull. Histol. appliq. 11 1934 pp. 190-211 2 pls.

104.—Dornesco, M. et G. T. Structure cytologique de la vessie de la glande verte de l'écrevisse. Arch. Zool. exp. gén. Paris 78 1936 Notes et Revue pp. 37-43 9 figs.

105.—Dorogostaiskii, —. Gammariden der Barguisiner Bucht. [Lake Baikal.] Bull. Inst. sci. Biol. Géogr. Irkutsk 7 1936 pp. 42-51 1 pl. [Russian, with German rés.]

106.—Doubovsky, N. To the question of the comparative variability of rudimentary and function organs. Proc. Zool. Biol. Inst. Sci. Res. Charkov 1 1936 pp. 169-171. [Russian, with English rés.]

107.—Doubovsky, N. V. Contribution à l'étude de la faune des Ostracodes d'eau douce de l'Ukraine. Trav. Soc. Nat. Charkow 50 2 1927 pp. 107-120. [Russian only.]

108.—Doubowsky, N. W. Contribution à l'étude de la faune et de la biologie des Ostracodes du bassin du Donetz septentrional. Trav. Soc. Nat. Kharkov 52 1929 pp. 101-162 3 pls. [Russian only.]

109.—Drach, P. L'eau absorbée au cours de l'exuviation, donnée fondamentale pour l'étude physiologique de la mue. Définitions et déterminations quantitatives. C.R. Acad. Sci. Paris 202 1936 pp. 1817-1819.

110.—Drach, P. Le cycle parcouru entre deux mues et ses principales étapes chez *Cancer pagurus*. C.R. Acad. Sci. Paris 202 1936 pp. 2103-2105.

111.—Drach, P. Croissance allométrique et dimorphisme sexuel chez les Brachyours. C.R. Acad. Sci. Paris 203 1936 pp. 820-823 1 fig.

112.—Drilhon, A. Quelques constantes chimiques et physico-chimiques du milieu intérieur de crabe sacculiné (*Carcinus moenas*). C.R. Acad. Sci. Paris 202 1936 pp. 981-982.

113.—Drilhon, A. et Pora, E. A. Ionisation et tampons du milieu intérieur du crabe parasité (*Carcinus moenas* sacculiné). C.R. Acad. Sci. Paris 202 1936 pp. 1309-1311.

114.—Duffield, J. E. Fluctuations in numbers of Crayfish. J. Anim. Ecol. London 5 1936 p. 396.

115.—Edmondson, C. H. Effect of X-rays on regeneration of chelipeds of *Atya bisulcata*. Occ. Pap. Bishop Mus. Honolulu 11 no. 16 1936 pp. 3-15 1 pl. 1 text-fig.

116.—Elster, H. J. Einige biologische Beobachtungen an *Heterocope borealis* Fischer (= *H. weismanni* Imhof). Int. Rev. Hydrobiol. Leipzig 33 1936 pp. 357-433 8 figs.

117.—Emmart, E. W. Studies on the effect of temperature on the embryo of *Carinogammarus mucronatus* Say. J. exp. Zool. Philadelphia 74 1936 pp. 353-379 1 pl. 6 text-figs.

118.—Eriksson, S. Studien über die Fangapparate der Branchiopoden nebst einigen phylogenetischen Bemerkungen. Zool. Bidr. Uppsala 15 1936 pp. 23-287 1 pl. 46 text-figs.

119.—Erlanson, E. W. A preliminary survey of marine boring organisms in Cochin harbour. Curr. Sci. Bangalore 4 1936 pp. 726-732, also p. 877.

120.—Ewers, L. A. Propagation and rate of reproduction of some freshwater Copepoda. Trans. Amer. micr. Soc. Menasha 55 1936 pp. 230-238.

121.—Fage, L. et Monod, T. La faune marine de Jameo de Agua Lac souterrain de l'île de Lanzarote (Canaries). Arch. Zool. exp. gén. Paris 78 1936 pp. 97-113 9 figs.

122.—Farran, G. P. Copepoda in: Sci. Reps. Gr. Barrier Reef Exped. 1928-29 London 5 no. 3 1936 pp. 73-142 30 figs.

123.—Farran, G. P. *Bradyetes brevis*, a new species of Copepod from East Greenland. Ann. Mag. Nat. Hist. (10) 18 1936 pp. 238-241 8 figs.

124.—Farran, G. P. Report on the Copepoda in: The Arctic plankton collected by the Nautilus expedition 1931. L. Linn. Soc. London 39 1936 pp. 404-412 1 fig.

125.—Fenizia, G. I Paguridi del golfo di Napoli 2^e contr. Annu. Mus. zool. Univ. Napoli 7 no. 2 1936 pp. 1-40 27 figs.

Fessard, A. *vide* Auger.

126.—Filhol, J. Nouvelles observations sur le développement et la biologie du *Lamproglana pulchella* Nordmann. Ann. Parasitol. Paris 14 1936 pp. 246-255 7 figs.

127.—Fish, C. J. The biology of *Calanus finmarchicus* in the Gulf of Maine and Bay of Fundy. Biol. Bull. Woods Hole 70 1936 pp. 118-141 11 figs.; also pp. 193-216 9 figs.

128.—Fish, C. J. The biology of *Oithona similis* in the Gulf of Maine and Bay of Fundy. Biol. Bull. Woods Hole 71 1936 pp. 168-187 9 figs.

129.—Flecker, H. & P. O. The haunt of the North Queensland Spiny Crayfish. [*Astacopsis fleckeri*.] North Queensl. Nat. Cairns 4 no. 41 1936 pp. 18-20 1 pl.

130.—Foxon, G. E. H. Notes on the natural history of certain sand-dwelling Cumacea. Ann. Mag. N.H. (10) 17 1936 pp. 377-393 7 figs.

131.—Foxon, G. E. H. Note on recapitulation in the larvae of the Decapod Crustacea. Ann. Mag. N.H. (10) 18 1936 pp. 117-123 4 figs.

132.—Foxon, G. E. H. Some functional considerations in the origin and evolution of the Arthropoda. Biol. generalis Wien 11 1935 pp. 107–121.

133.—Foxon, G. E. H. Orientation of *Chirocephalus* and *Daphnia*. Nature London 137 1936 pp. 948–949.

134.—Fraser, F. C. On the development and distribution of the young stages of Krill (*Euphausia superba*). "Discovery Reports" Cambridge 14 1936 pp. 1–192 76 maps and text-figs.

135.—Fraser, J. H. The distribution of rock pool Copepoda according to tidal level. J. Animal Ecol. 5 1936 pp. 23–28 1 pl.

136.—Fraser, J. H. The occurrence, ecology and life history of *Tigriopus fulvus* (Fischer). J. Mar. biol. Ass. Plymouth 20 1936 pp. 523–536 5 figs.

137.—Frost, N. Amphipoda from Newfoundland waters with description of a new species. Decapod larvae from Newfoundland waters. Rep. Fishery Res. Newfoundland no. 1 1936 pp. 1–24 9 figs.

138.—Fuller, J. L. and Clarke, G. L. Further experiments on the feeding of *Calanus finmarchicus*. Biol. Bull. Woods Hole 70 1936 pp. 308–320 2 figs.

139.—Furtos, N. C. Freshwater Ostracoda from Florida and North Carolina. Amer. Midl. Nat. Notre Dame 17 1936 pp. 491–522 15 figs.

140.—Furtos, N. C. On the Ostracoda from the cenotes of Yucatan and vicinity. Pub. Carnegie Instn. Washington no. 457 1936 pp. 89–115 88 figs.

141.—Gajl, K. *Brachinecta paludosa* aus der Tatra als eine neue Art betrachtet; ihre Morphologie, Ökologie und geographische Verbreitung. Mem. Acad. Polon. Cracovie 6 1934 pp. 237–277 2 pls. 4 photos.

142.—Gallien, L. *Pseudanthessius nemertophilus* nov. sp., Copépode commensal de *Lineus longissimus* Sowerby. Bull. Soc. zool. Fr. 60 1936 pp. 451–459 3 figs.

143.—Gallien, L. Apparition de *Eriocheir sinensis* H. M. Edw., sur les côtes françaises du Boulonnais. Bull. Soc. zool. Fr. 61 1936 pp. 204–206 1 fig.

144.—Gallien, L. et Bloch, F. Recherches sur *Lecithomyzon moenadis* Bloch et Gallien. Copépode parasite de

la ponte de *Carcinus moenas* Pennant. Bull. biol. France-Belg. 70 1936 pp. 36–53 2 pls. 2 text-figs.

145.—Gallien, L. et David, R. Anomalies, régression et perte de l'oeil chez *Talitrus saltator* Montagu. Bull. biol. France-Belg. 70 1936 pp. 184–196 15 figs.

Garrett, J. B. vide Howe.

146.—Gauthier, H. *Eriopisa seurati*, nouvel Amphipode du Sud-tunisien. Bull. Soc. Hist. nat. Alger 27 1936 pp. 133–143 3 figs.

147.—Gauthier, H. Entomostraces de Madagascar (5^e note). Description d'un nouveau *Lynceus* (Conchostraces). Bull. Soc. zool. Fr. 61 1936 pp. 105–116 5 figs.

148.—Gibbons, S. G. Early development stages of Copepoda. I. *Rhincalanus nasutus* and *Eucalanus elongatus*. Ann. Mag. Nat. Hist. (10) 18 1936 pp. 384–392 2 figs.

149.—Gibbons, S. G. *Calanus finmarchicus* and other Copepods in Scottish Waters in 1933. Sci. Invest. Fish. Scotl. 1936 No. 2 pp. 1–37 6 charts 3 text-figs.

150.—Gicklhorn, J. Eine bemerkenswerte Membranfärbung an *Cyclops strenuus* Fischer. Zool. Anz. Leipzig 114 1936 pp. 306–312 1 fig.

151.—Gillespie, A. S. Some notes on *Astacilla longicornis* (Sow.) obtained on the North Wales coast. North Western Nat. Arbnoath 11 1936 pp. 29–33 5 figs.

152.—Glassell, S. A. New Porcellanids and Pinnotherids from tropical North American waters. Trans. San Diego Soc. Nat. Hist. 8 1936 pp. 277–304 1 pl.

153.—Glassell, S. A. The Templeton Crocker Expedition. I. Six new Brachyuran Crabs from the Gulf of California. Zoologica New York 21 1936 pp. 213–218.

154.—Glebovskaya, E. M. Silurian Ostracodes from the north western shores of Novaya Zemlya. Trans. arctic Inst. Leningrad 58 1936 pp. 33–43 1 pl. [Russian, with English rés.]

155.—Gonzaga do Nascimento, L. Subsídio para o estudo da fauna carcinológica de Portugal. Brotéria Lisboa 32 1936 pp. 1–16, 83–90, 179–191.

156.—Gordon, I. On a few Indo-Pacific species of *Pinnotheres* with special reference to asymmetry of the walking legs. J. Linn. Soc. London 40 1936 pp. 163–180 7 figs.

157.—Gordon, I. On Hippolytid prawns of the genus *Ligur* Sarato. Proc. Linn. Soc. London 1935–36 1936 pp. 102–108 2 figs.

158.—Gordon, I. On the Macruran genus *Rhynchocinetes* with the description of a new species. Proc. zool. Soc. London 1936 pp. 75–88 7 figs.

159.—Gravier, C. Sur un Crustacé (Stomatopode) rare de l'Île de Pâques. Bull. Mus. Hist. nat. Paris 8 1936 pp. 254–256 1 fig.

160.—Greco, B. Crustacea in: La fauna permiana del Sosio. Palaeontogr. ital. Siena 35 1935 pp. 148–154 2 pls.

161.—Gregorio, March. A. de. Artropoda in: Sul Permiano di Sicilia. Ann. Géol. Paléont. Palermo 52 1930 pp. 10–11 figs.

162.—Gregorio, March. A. de. Crustacei in: Monographia dei fossili liassici di Monte San Giuliano. Ann. Géol. Paléont. Palermo 53 1930 p. 13 fig.

163.—Gregorio, March. A. de. Fossili triassici delle Cave di Billiemi presso Palermo. Ann. Géol. Paléont. Palermo 54 1930 p. 11 fig.

164.—Gross, F. Cleavage of blastomeres in the absence of nuclei. Quart. J. micr. Sci. London 79 1936 pp. 57–72 1 pl. 8 text-figs.

165.—Gruvel, A. Crustacés en: Contr. à l'étude . . . du Canal de Suez. Mem. Inst. Egypt 29 1936 pp. 176–183 6 figs.

166.—Guiart, J. Les Crustacés parasites de *Mola mola*. Bouvier Livre Jubilaire pp. 49–52 Paris 1936.

167.—Guibé, J. Deux Copépodes parasites de l'Esturgeon. Bull. Soc. linn. Caen (8) 8 1936 pp. 4–6.

168.—Guibé, J. Remarques sur *Caligus rapax* Milne Edwards, Copépode parasite de poissons, recueilli sur *Cyclopterus lumpus* L. Bull. Soc. linn. Caen (8) 8 1936 pp. 20–22.

169.—Gurjanova, E. F. Crustacées. Isopodes des Mers orientales in: Faune de l'U.R.S.S. 7 no. 3 pp. xii +

279 150 figs. Moscou-Leningrad (Acad. Sci.) 1936. [Russian, with German rés.]

170.—Gurjanova, E. Contribution to the zoogeography of far eastern seas. Bull. Acad. sci. Moscou 1935 pp. 1229–1235. [Russian, with English rés.]

171.—Gurjanova, E. The zoogeography of Kara Sea. (Contribution to the fauna of Amphipoda and Isopoda of the northern part of the Kara Sea.) Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 565–598 6 maps. [Russian, with English rés.]

172.—Gurjanova, E. Contribution to the fauna of Crustacea-Malacostraca of the Arctic Region. Trans. arctic Inst. Leningrad 33 1936 pp. 31–44 4 figs. [Russian, with English rés.]

173.—Gurjanova, E. Neue Beiträge zur Fauna der Crustacea-Malacostraca des arktischen Gebietes. Zool. Anz. Leipzig 113 1936 pp. 245–255 5 figs.

174.—Gurjanova, E. Beiträge zur Kenntnis der Isopodenfauna des Pazifischen Ozeans. IV. Neue Isopodenarten aus dem Japanischen und Bering-Meer. Zool. Anz. Leipzig 114 1936 pp. 250–265 5 figs.

175.—Gurjanova, E. Beiträge zur Amphipodenfauna des Karischen Meeres. Zool. Anz. Leipzig 116 1936 pp. 145–152 3 figs.

176.—Gurney, R. Larvae of Decapod Crustacea. Stenopidea, Amphionidae, Phyllosoma. "Discovery" Rep. Cambridge 12 1936 pp. 377–440 41 text-figs.

177.—Gurney, R. Notes on some Decapod Crustacea of Bermuda.—I. The larvae of *Leptochela* and *Latreutes*. Proc. zool. Soc. London for 1935 1936 pp. 785–793 6 pls.

178.—Gurney, R. Notes on some Decapod Crustacea of Bermuda. II. The species of *Hippolyte* and their larvae. Proc. zool. Soc. London 1936 pp. 25–32 5 pls.

179.—Gurney, R. Notes on some Decapod Crustacea of Bermuda.—III–V. Proc. zool. Soc. London 1936 pp. 619–630 7 pls.

180.—Gustaffson, G. On the Thalassinidea of the Swedish west coast. Ark. Zool. Stockholm 28A no. 1 1935 pp. 1–19 4 figs.

181.—Guthörl, P. *Arthropleura britannica* Andrée aus der Tiefbohrung Detingen V. (Lothringen). Jahrb. preuss. geol. LdAnst. 55 1935 pp. 338–340 1 fig.

182.—Hale, H. M. Three new Cumacea from South Australia. Cumacea from a South Australian reef. Rec. S. Austr. Mus. 5 1936 pp. 395–438 23 figs.

183.—Hanström, B. Die Sinusdrüse und der hormonal bedingte Farbwechsel der Crustaceen. K. svenska Vetens. Akad. Handl. (3) 16 no. 3 pp. 1–99 44 figs.

184.—Hanström, B. Neue Untersuchungen über Sinnesorgane und Nervensystem der Crustaceen V. K. fysioogr. Sällsk. Lund Förh. 5 1936 pp. 156–169 11 figs.

185.—Harada, I. Kristische Studien über die Gattung *Ichthyoxenus*. Zool. Mag. Tokyo 48 1936 pp. 723–729 4 figs. [Japanese, with German rés.]

186.—Hardy, A. C. The continuous plankton recorder: a new method of survey. Rapp. Cons. Explor. Mer Copenh. 95 1936 pp. 35–47 11 figs.

187.—Harrevel, A. van and Wiersma, C. A. G. The double motor innervation of the adductor muscle in the claw of the Crayfish. J. Physiol. Cambridge 88 1936 pp. 78–99 11 figs.

188.—Harrevel, A. van and Wiersma, C. A. G. The triple innervation of the Crayfish muscle. Proc. Nat. Acad. Sci. Washington 22 1936 p. 667.

189.—Harris, R. W. and Worrell, F. A fossiliferous horizon from the Lower Permian of Caddo County, Oklahoma. J. Paleont. Menasha 10 1936 pp. 518–519 7 figs.

Hatai, K. vide Nomura.

190.—Heberdey, R. F. Der Farbensinn helladaptierter Daphnien. Biol. Zbl. Leipzig 56 1936 pp. 207–216 1 fig.

191.—Heberdey, R. F. Neue Untersuchungen über den Farbensinn niederer Krebse. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 118–125.

192.—Hertzog, L. Crustacés de biotopes hypogées de la vallée du Rhin d'Alsace. Bull. Soc. zool. Fr. 61 1936 pp. 356–372 4 figs.

193.—Hertzog, L. Crustaceen aus unterirdischen Biotopen des Rheintales bei Strassburg. I. Mitt. Zool. Anz. Leipzig 114 1936 pp. 271–279 3 figs.

194.—Hesse, E. Ueber Vorkommen und Verbreitung der Phyllopoden *Cheirocephalus grubii* Dyb., *Triops cancriformis* (Bose) und *Lepidurus apus* (L.) in der näheren und weiteren Umgebung von Berlin. Märk. Tierw. Berlin 1 1936 pp. 208–214.

195.—Hiraiwa, Y. K. Studies on a Bopyrid, *Epipenaeon japonica* Thielemann. III. Development and life-cycle, with special reference to the sex differentiation in the Bopyrid. J. Sci. Hiroshima Univ. Zool. 4 1936 pp. 101–141 7 pls. 8 text-figs.

196.—Hiro, F. Occurrence of the Cirriped *Stomatolepas elegans* on a Loggerhead Turtle found at Seto. Annot. zool. jap. 15 1936 pp. 312–320 5 figs.

197.—Hiro, F. The fauna of Akkeshi Bay. II. Cirripedia. J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 pp. 213–229 1 pl. 5 text-figs. [In English.]

198.—Hiro, F. Report on the Cirripedia collected in Malayan waters by the Ship "Zuihō-maru." Japan J. Zool. 6 1936 pp. 621–636 9 text-figs.

199.—Horasawa, Y. On the relative activities of *Diaptomus chaffanjonii* and *Cyclops strenuus* at different temperatures. Proc. Imp. Acad. Tokyo 11 1935 pp. 447–449.

200.—Horasawa, Y. The ecological significance of the temperature coefficients in relative activities of *Diaptomus chaffanjonii* and *Cyclops strenuus*. Zool. Mag. Tokyo 48 1936 pp. 97–102 2 figs. [Japanese, with English rés.]

201.—Howe, H. V. Ostracoda of the genus *Encythere* from the Tertiary of Mississippi. J. Paleont. Menasha 10 1936 pp. 143–145 6 figs.

202.—Howe, H. V. and Garrett, J. B. Louisiana Sabine Eocene Ostracoda. Geol. Bull. Louisiana Dep. Conser. no. 4 1934 pp. 1–71 4 pls.

203.—Howe, H. V. and Chambers, J. Louisiana Jackson Eocene Ostracoda. Geol. Bull. Louisiana Dep. Conserv. no. 5 1935 pp. viii + 65 6 pls.

204.—Howe, H. V. and Law, J. Louisiana Vicksburg Oligocene Ostracoda. Geol. Bull. Louisiana Dep. Conserv. no. 7 1936 pp. vii + 96 6 pls.

205.—Hsü, F. Étude sur les poils sensoriels de Crustacés inférieurs (*Chirocephalus*). Ann. Soc. sci. Bruxelles 56B 1936 pp. 87-91 4 figs.

206.—Hsü, F. Les organes frontaux de *Chirocephalus nankinensis* (Anostracé Crustacé). Ann. Soc. sci. Bruxelles 56B 1936 pp. 303-306 6 figs.

207.—Huertz, F. Les Gammares. Bull. Soc. Nat. Luxembourg 29 1935 pp. 186-188.

208.—Hult, J. On some species and genera of Parasellidae: i. 29A no. 6 pp. 1-14 22 figs.; ii. 29B no. 5 pp. 1-6 1 fig. Ark. Zool. Stockholm 1936.

209.—Huzinaga, M. Studies in the development of *Penaeus japonicus* Bate [in Japanese]. Rep. Hayatomo Fish. Inst. 1 1935 pp. 1-51 16 pls. [Abstract in Japan J. Zool. 6 1936 p. (80).]

210.—Ii, N. Studies in Japanese Mysidacea. I. Descriptions of new and some already known species belonging to the genera *Neomysis*, *Acanthomysis* and *Proneomysis*, pp. 577-619 116 figs. II. Description of three new species belonging to new genera *Parastilomysis* and *Paracanthomysis*, pp. 1-15 41 figs. Japan J. Zool. 6 1936 and 7 1936.

211.—Ischreyt, G. Ueber die Variabilität von *Bythotrephes*. Arch. Hydrobiol. Stuttgart 30 1936 pp. 359-370.

212.—Ischreyt, G. Zur Rassenforschung in der Limnologie. Mikrokosmos Stuttgart 29 1936 pp. 197-200.

213.—Israel, H. B. A contribution towards the life histories of two California Shrimps, *Crango franciscorum* (Stimpson) and *Crango nigricauda* (Stimpson). Fish Bull. Sacramento no. 46 1936 pp. 1-28 9 figs.

214.—Israelsky, M. C. Upper Cretaceous Ostracoda of Arkansas in: Stratigraphy and structure of the Gulf coastal plain of Arkansas by W. C. Spooner and others. Bull. 2 Arkansas Geol. Survey Little Rock 1929 pp. 1-20 4 pls. [Only rec. 1936.]

215.—Jackson, H. G. Terrestrial Isopods from Malaysia. Bull. Raffles Mus. Singapore 12 1936 pp. 78-87 4 figs.

216.—Jägersten, G. Ueber die Geschlechtsverhältnisse und das Wachstum bei *Pandalus*. Ark. zool. Stockholm 28A no. 20 1936 pp. 1-26 1 pl. 15 text-figs.

217.—Jakubisiak, S. Matériaux à la faune des Harpacticoides de Roscoff (côtes bretonnes, France). Fragmenta faun. Mus. zool. Polon. 2 1936 pp. 315-321. [In French.]

218.—Järnefelt, H. und Rylov, W. Ueber das Vorkommen von *Acanthodiaptomus tibetanus* (Daday) in Nordfinnland nebst einer komplettierenden Beschreibung dieser Art. Ann. Zool. Soc. zool.-bot. fenn. Vanamo Helsinki 2 No. 2 1935 pp. 3-9 2 figs.

219.—Jasper, H. H. Recherches sur l'excitabilité et les caractères de la réponse dans le système neuromusculaire de Crustacés. Influence des centres ganglionnaires. Arch. intern. Physiol. Liège 41 1935 pp. 281-321.

220.—Jennings, P. H. A microfauna from the Monmouth and Basal Rancocas groups of New Jersey. [U. Cretaceous and Eocene.] Bull. Amer. Paleont. Ithaca 23 no. 78 1936 pp. 40-64 2 pls.

221.—Jensen, A. S. Den Kinesiske Uldhaandskrabbe (*Eriocheir sinensis* M.-Edw.) in Danmark. Biol. Meddel. Kjøbenhavn 13 no. 3 1936 pp. 1-24 2 pls. map. [Danish, with German res.]

222.—John, D. D. The southern species of the genus *Euphausia*. Discovery Reports Cambridge 14 1936 pp. 193-324 40 figs.

223.—Johnson, M. L. The control of respiratory movements in Crustacea by oxygen and carbon dioxide. II. J. exp. Biol. London 13 1936 pp. 467-475 1 fig.

224.—Johnson, R. A. [and others]. Destruction of timber by marine organisms in the Port of Sydney. Suppl. Rept. i pp. 1-99 illustr. Sydney 1936 8vo.

225.—Johnson, W. R. The Ostracoda of the Missouri Series in Nebraska [Carboniferous]. Pap. Nebraska Geol. Surv. no. 11 1936 pp. 1-52 5 pls.

226.—Kalmus, H. und Waldes, V. Ist die durch Adrenalin bewirkte Glykolyse beim Flusskrebse spezifisch. Z. vergl. Physiol. 23 1936 pp. 713–714.

227.—Kamita, T. *Eriocheir leptognathus* found in Corea. Zool. Mag. Tokyo 48 1936 pp. 15–16 1 fig. [Japanese only.]

228.—Karaman, S. Die Fauna der Unterirdischen Gewässer Jugoslawiens. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 46–73 3 figs.

229.—Karlovac, O. *Parapenaeus longirostris* (H. Lucas) an der Ostküste der Adria. Zool. Anz. Leipzig 115 1936 pp. 60–62 1 fig.

230.—Kato, K. Secondary sexual character in some legs of the male *Ligia exotica*. Zool. Mag. Tokyo 48 1936 pp. 333–334 3 figs. [In English.]

231-2.—Katz, B. Neuro-muscular transmission in Crabs. J. Physiol. Cambridge 87 1936 pp. 199–221 2 pls. 7 text-figs.

233.—Kedrowski, B. Sur la réalité des structures fibrillaires dans la cellule nerveuse vivante. Arch. Anat. micr. Paris 31 1935 pp. 451–458 2 pls.

234.—Kedrowski, B. Ueber die Anwesenheit der neurofibrillen in lebende Nervenzellen. J. Biol. Moscou 4 1935 pp. 825–832 10 figs. [Russian, with German rés.]

235.—Kellelt, B. Carboniferous Ostracodes. J. Paleont. Menasha Wis. 10 1936 pp. 769–784.

Kersten, H. vide Snider.

236.—Kesselyák, A. Die Isopodenfauna der Halbinsel von Tihany. Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 82–88. [Magyar, with German rés.]

237.—Kiefer, F. Freilebende Süss- und Salzwassercopepoden von der Insel Haiti. Mit einer Revision der Gattung *Halicyclops* Norman. Arch. Hydrobiol. Stuttgart 30 1936 pp. 263–317 map 126 text-figs.

238.—Kiefer, F. Ueber die Krebstiere, insbesondere die Ruderfusskrebse des Eichener Sees. Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i. B. 1 1936 pp. 157–162 1 pl.

239.—Kiefer, F. Ueber das Vorkommen von Blattfusskrebsen (Euphyll-

poda) in Baden. Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i. B. 1 1936 pp. 255–262 1 pl.

240.—Kiefer, F. Ueber einige Ruderfusskrebse (Crustacea, Copepoda) aus dem Grundwasser Belgiens. Bull. Mus. Hist. nat. Belg. 12 no. 3 1936 pp. 1–13 7 figs.

241.—Kiefer, F. Weitere neue Ruderfusskrebse (Crustacea, Copepoda) aus Indien. Zool. Anz. Leipzig 113 1936 pp. 1–6 11 figs.

242.—Kiefer, F. Indische Ruderfusskrebse (Crustacea, Copepoda). i. pp. 136–142 11 figs. ii. pp. 226–233 12 figs. iii. pp. 331–333 10 figs. Zool. Anz. Leipzig 113 1936.

243.—Kiefer, F. Indische Ruderfusskrebse (Crustacea, Copepoda). Zool. Anz. Leipzig 114 1936 pp. 77–82 14 figs.

244.—Kiefer, F. Ein neuer Cyclopide (Crustacea, Copepoda) aus dem Grundwasser der Oberrheinischen Tiefebene. Zool. Anz. Leipzig 113 1936 pp. 84–87 8 figs.

245.—Kiefer, F. Brasilianische Ruderfusskrebse (Crustacea Copepoda) gesammelt von Herrn Dr. Otto Schubart. ii. Mitteilung pp. 129–133 8 figs. iii. Mitteilung pp. 320–322 5 figs. Zool. Anz. Leipzig 114 1936.

246.—Kiefer, F. Ein weiterer neuer Cyclopide (Crustacea Copepoda) aus dem Grundwasser der Oberrheinischen Tiefebene. Zool. Anz. Leipzig 115 1936 pp. 168–170 5 figs.

247.—Kiefer, F. Mitteilungen von den Forschungsreisen Prof. Rahms. Mitt. VIII. Cyclopiden. Zool. Anz. Leipzig 115 1936 pp. 244–249 14 figs.

248.—Kiefer, F. Brasilianische Ruderfusskrebse (Crustacea Copepoda) gesammelt von Herrn Dr. Otto Schubart. v. Mitt. Zool. Anz. Leipzig 116 1936 pp. 31–35 14 figs.

249.—Kiefer, F. *Parastenocaris germanica* n. sp. ein neuer harpacticoider Ruderfusskrebs aus dem Grundwasser der Oberrheinischen Tiefebene. Zool. Anz. Leipzig 116 1936 pp. 98–101 9 figs.

250.—Kiefer, F. Eine neue *Parastenocaris*-Art (Crustacea Copepoda) aus Brasilien. Zool. Anz. Leipzig 116 1936 pp. 142–144 9 figs.

251.—Kiefer, F. Ueber die Systematik der süd-amerikanischen Diaptomiden (Crustacea Copepoda). Zool. Anz. Leipzig **116** 1936 pp. 194–200 7 figs.

252.—Kikuchi, K. A new species of *Diaptomus* from Formosa. Proc. Imp. Acad. Tokyo **12** 1936 pp. 198–200 6 figs.

253.—Kleinholz, L. H. Crustacean eye-stalk hormone and retinal pigment migration. Biol. Bull. Woods Hole **70** 1936 pp. 159–184 2 pls. 4 text-figs.

254.—Klie, W. Ueber die zeitweilige Besiedlung einer Baumhöhle durch *Heterocypris incongruens* Ramdohr (Ostr.). Arch. Hydrobiol. Stuttgart **30** 1936 pp. 673–675.

255.—Klie, W. Entomostraken aus der bulgarischen Höhle "Lakatnik." Bull. Inst. Roy. Hist. nat. Sophia **9** 1936 p. 108.

256.—Klie, W. Neue Candoninae (Ostr.) aus dem Grundwasser von Belgien. Bull. Mus. Hist. nat. Belg. **12** no. 13 1936 pp. 1–13 20 figs.

257.—Klie, W. Ostracoden aus Kamerun. Rev. Zool. Bot. afr. Tervueren **28** 1936 pp. 287–309 19 figs.

258.—Klie, W. Ergänzungen zur Beschreibung der Ostracoden-Art *Candona crispata* mihi. Zool. Anz. Leipzig **113** 1936 pp. 269–271 1 fig.

259.—Klie, W. Zwei neue Süßwasser-Ostracoden der Unterfamilie Candocyprinae von der Insel Korfu. Zool. Anz. Leipzig **113** 1936 pp. 325–331 20 figs.

260.—Klie, W. Zur Kenntnis der Ostracodenfamilie Polycopidae. Zool. Jahrb. Jena (Syst.) **68** 1936 pp. 517–532 27 figs.

261.—Koba, K. Some observations on *Geotelphusa dehaani* (White) in Japan. Botany & Zool. Tokyo **4** 1936 pp. 529–536 6 figs. [Japanese only.]

262.—Koba, K. Occurrence of the Land-Crab, *Cardisoma hirtipes* Dana in the Ryūkyū (Loo Choo) Islands, Japan. Bull. biogeogr. Soc. Japan **6** 1936 pp. 159–164 1 fig. 1 map.

263.—Koba, K. Preliminary notes on the development of *Geotelphusa dehaani* (White). Proc. Imp. Acad. Tokyo **12** 1936 pp. 105–107.

264.—Koba, K. Revision of the specific name of a Crab as a second intermediate host of *Paragonimus westermanni* in Formosa. Sci. Rep. Tokyo Bun. Daig. (B.) **2** 1936 pp. 201–207 1 fig.

265.—Koba, K. Studies on the Japanese Potamonidae (1): notes on *Potamon rathbuni* de Man as a second intermediate host of *Paragonimus westermanni*. Trans. nat. Hist. Soc. Formosa **26** 1936 pp. 164–174 1 pl. [Japanese only.]

266.—Kobjakova, Z. I. Zoogeographical review of the Decapoda fauna from Okhotsk and Japanese Seas. Trav. Soc. Nat. (Sect. Zool.) Leningrad **65** 1936 pp. 185–228 4 pls. [Russian, with English rés.]

267.—Kobjakova, Z. Uebersicht der Dekapoden-Gattung *Pandalopsis* Bate. Zool. Anz. Leipzig **116** 1936 pp. 185–194 4 figs.

268.—Kosswig, C. und L. Ueber Augenrück und Missbildung bei *Asellus aquaticus cavernicolus*. Verh. Deutsch. zool. Ges. Leipzig **38** 1936 pp. 274–281 6 figs.

269.—Koźmiński, Z. Morphometrische und ökologische Untersuchungen an Cyclopiden der *strenuus*-Gruppe. Int. Rev. Hydrobiol. Leipzig **33** 1936 pp. 161–240 7 figs.

270.—Koźmiński, Z. Ueber die morphologische Gruppierung der Arten des Subgenus *Cyclops*. Mem. Acad. Polon. Cracovie **6** 1934 pp. 105–121 1 pl. 1 text-fig.

271.—Kubo, I. On a Japanese Shrimp of genus *Rhynchocinetes*, *R. regulosus* Stimpson (New Japanese name Saraso-ebi). Botany & Zool. Tokyo **4** 1936 pp. 1887–1892 2 figs. [Japanese only.]

272.—Kubo, I. A new Decapod Crustacean from Japan, *Paramaja kominatoensis* gen. et sp. nov. Bull. Japan Soc. sci. Fish. **4** 1936 pp. 361–364 2 figs.

273.—Kubo, I. A description of a new Alpheoid Shrimp from Japan, pp. 43–46 1 pl. Two new littoral Macrurous Crustaceans from Japan, pp. 47–54 2 pls. On Japanese Penaeid Crustaceans belonging to the genus *Parapenaeopsis*, with a description of

one new species pp. 55-61. A new Homolid Crab from Japan pp. 63-68 1 pl. J. imp. Fish. Inst. Tokyo 31 1936.

274.—Kuhn, O. Neue Decapoden aus dem fränkischen Jura. Cbl. Min. Geol. Paläont. Stuttgart 1936B pp. 120-128 10 figs.

275.—Kuhn, O. Die Fauna der Amaltheentons (Lias 8) in Franken. N. Jahrb. Min. Geo. Paläont. Stuttgart 75 1934 pp. 231-311 6 pls. [Crust., pp. 302-303.]

276.—Lang, K. Copepoda in: Further Zoological Results. Swedish Antarctic Exped. 1901-03 3 no. 3 1936 pp. 1-68 92 figs.

277.—Lang, K. Studien in der Gattung *Epactophanes* (Copepoda Harpacticoida). Ark. Zool. Stockholm 28A no. 11 1935 pp. 1-27 47 figs.

278.—Lang, K. Ueber einige Fälle von Gynandromorphismus und Missbildungen bei *Eudiaptomus gracilis* (G. O. Sars). K. fysiogr. Sällsk. Lund Förh. 5 1936 pp. 78-81 6 figs.

279.—Lang, K. Harpacticiden aus dem Mittelmeer. K. fysiogr. Sällsk. Lund Förh. 5 1936 pp. 87-98 30 figs.

280.—Lang, K. Ueber Umfang und systematische Stellung einiger Harpacticidengenera. K. fysiogr. Sällsk. Lund Förh. 5 1936 pp. 209-216 5 figs.

281.—Lang, K. Die während der Schwedischen Expedition nach Spitzbergen 1898 und nach Grönland 1899 eingesammelten Harpacticiden. K. Svenska Vetensk. Akad. Handl. (3) 15 no. 4 1936 pp. 1-55 117 figs.

282.—Lang, K. Beiträge zur Kenntnis der Harpacticiden. 3. Die Gattung *Pseudomesochra* T. Scott nebst Beschreibung einer neuer Art dieser Gattung. Zool. Anz. Leipzig 113 1936 pp. 174-177 8 figs.

283.—Lang, K. Beiträge zur Kenntnis der Harpacticiden. 4. Ueber die Gattungen *Psamethe* Philippi, 1840, und *Machairopus* Brady 1883 nebst Beschreibung des Mannchens von *Machairopus hippolytes* (Kröyer). 1936 pp. 33-40 2 figs. 5. Bemerkungen über die Sektion *Agnatha* Monad, nebst Aufstellung der neuen Familie. D'Arcy thompsomidae. Zool. Anz. Leipzig 114 1936 pp. 65-68 7 figs.

284.—Lang, K. Beiträge zur Kenntnis der Harpacticiden. 6. Bemerkungen über die Familie der Ameiridae Monard. Zool. Anz. Leipzig 114 1936 pp. 133-136.

285.—Lang, K. Beiträge zur Kenntnis der Harpacticiden. 7. Die Familie Anchorabolidae Sars, nebst Beschreibung einer neuen *Laophantodes*-Art. Zool. Anz. Leipzig 115 1936 pp. 152-159 5 figs.

286.—Lang, K. Die Familie der Cletodidae Sars, 1909. Zool. Jahrb. Jena (Syst.) 68 1936 pp. 445-480 4 figs.

Lapicque, L. *vide* Chauchard.

287.—Lapicque, L. et M. Sur la curarisation chez les Crustacés. C.R. Soc. Biol. Paris 123 1936 pp. 388-391.

288.—Laszt, L. und Süllmann, H. Einfluss der Narkose auf die Permeabilität der Kiemensäckchen von *Daphnia magna* für Säuren. Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 341-344. [German, with Magyar rés.]

289.—Latham, M. H. Carboniferous Ostracoda from Inchkeith in: L. M. Davies, Geol. of Inchkeith. Trans. roy. Soc. Edinb. 58 1936 pp. 783-785.

Law, J. *vide* Howe.

290.—Lebour, M. V. Notes on the Plymouth species of *Spirontocaris* (Crustacea). Proc. zool. Soc. London 1936 pp. 89-104 7 pls.

291.—Lebour, M. V. Notes on the Plymouth *Processa* (Crustacea). Proc. zool. Soc. London 1936 pp. 609-617 6 pls.

292.—Leene, J. E. Note on *Charybdis erythrodactyla* (Lam.), *Charybdis acutifrons* (de Man) and *Charybdis obtusifrons* nov. spec. Zool. Meded. Leiden 19 1936 pp. 117-127 12 figs.

293.—Legendre, R. Les stades larvaires et post-larvaires de *Palinurus vulgaris* et de *Scyllarus arctus* au large du Golfe de Gascogne. Bouvier Livre Jubilaire pp. 53-58 Paris 1936.

294.—Leigh-Sharpe, W. H. New parasitic Copepoda from Naples. Parasitology Cambridge 28 1936 pp. 63-71 9 figs.

295.—Leigh-Sharpe, W. H. Some rare and new parasitic Copepoda, etc., from Brighton and elsewhere. Parasitology Cambridge 28 1936 pp. 410-413 2 figs.

296.—Leiper, R. T. Remarks on a specimen of *Eriocheir sinensis* taken in the Thames. Proc. zool. Soc. for 1935 1936 p. 948.

297.—Leloup, E. Les transformations des gonades et des caractères sexuels externes chez *Pandalus montagui* Leach (Décapode). Bull. Mus. Hist. nat. Belg. 12 No. 19 1936 pp. 1-27 16 figs.

Lemasson, J. *vide* Chevey.

298.—Lindberg, K. Note sur des Cyclopides (Crustacés Copépodes) de l'Iran. Bull. Mus. Hist. nat. Belg. 12 no. 17 1936 pp. 1-26 33 figs. map.

299.—Lindberg, K. Un nouveau Cyclopide d'eau douce de l'Iran, *Mesocyclops iranicus* n. sp. hôte intermédiaire probable du Ver de Médine à Lar. Bull. Soc. zool. Fr. 61 1936 pp. 253-259 4 figs.

300.—Lindberg, K. Notes sur des Cyclopides d'eau douce de l'Inde, avec descriptions d'une espèce nouvelle et de deux variétés nouvelles. Rec. Ind. Mus. Calcutta 37 1935 pp. 405-420 1 pl.

301.—Lochhead, J. H. On the feeding mechanism of the nauplius of *Balanus perforatus* Bruguière. J. Linn. Soc. London 39 1936 pp. 429-442 6 figs.

302.—Lochhead, J. H. Body orientation in the lower Crustacea (Branchiopoda). Nature London 138 1936 pp. 232-233.

303.—Lochhead, J. H. On the feeding mechanism of a Ctenopod Cladoceran, *Penilia avirostris* Dana. Proc. zool. Soc. 1936 pp. 335-355 11 figs.

304.—Lowe, E. On the anatomy of a marine Copepod, *Calanus finmarchicus* (Gunnerus). Trans. roy. Soc. Edinb. 58 1936 pp. 561-603 12 figs.

305.—Lowndes, A. G. Scientific results of the Cambridge Expedition to the East African lakes, 1930. No. 16. The smaller Crustacea. J. Linn. Soc. London 40 1936 pp. 1-31 5 figs.

306.—Luisier, A. Isópodos terrestres de Portugal. Brotéria Lisboa 32 1936 pp. 33-35.

307.—Luyten, M. Over de oecologie der Cladocera van België. Biol. Jaarb. Gent 1 1934 pp. 19, 29-179 12 pls. 98 text-figs. map.

308.—Maccagno, T. Crostacei di Assab. Decapodi, Stomatopodi, Anfipodi. Spedizione del Barone Raimondo Franchetti a Dancalia (1928-29). Ann. Mus. Stor. nat. Genova 59 1936 pp. 171-186.

309.—Machado, A. A existência em Portugal do lagostim de água doce (*Astacus fluviatilis* Rond.). An. Fac. Scienc. Porto 16 1931 pp. 187-190 photo map.

Mackay, D. C. G. *vide* Weymouth.

310.—Mackin, J. G. Studies on the Crustacea of Oklahoma: Notes on the Cladoceran fauna. Proc. Okla. Acad. Sci. 1 1931 pp. 22-28 8 figs.

311.—Mackin, J. G. Studies on the Crustacea of Oklahoma. III. The subterranean Amphipods of the genera *Niphargus* and *Boruta*. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 41-51 2 pls.

312.—Mailieux, E. Ostracoda in: La faune des Schistes de Matagne (Fransien supérieur). Mém. Mus. Hist. nat. Belg. no. 77 1936 pp. 64-69.

Malkin, D. S. *vide* Coryell.

313.—Maloeuf, N. S. R. Quantitative studies on the respiration of aquatic Arthropods and on the permeability of their outer integument to gases. J. exp. Zool. Philadelphia 74 1936 pp. 323-351 6 figs.

314.—Markewitsch, A. P. *Lamproglænae* der Sowjetunion und ihre geographische Verbreitung. Ann. Mus. zool. polon 11 1936 pp. 387-401 4 pls. [German, with Polish rés.]

315.—Martynov, A. V. Amphipoda from the Lake Issyk-Kul. Results Lake Issyk-Kul Exped. 1 1930 pp. 51-70 17 figs. [Russian, with English rés.]

316.—Mathias, P. L'accouplement chez *Chirocephalus diaphanus* Crustacé phyllopoë. Bouvier Livre Jubilaire pp. 59-61 Paris 1936.

317.—Mattox, N. T. A new Fairy Shrimp belonging to the genus *Pristicephalus*. Amer. Midl. Nat. Notre Dame 17 1936 pp. 950-953 1 pl.

318.—Meehan, O. L. An apparent cross between *Streptocephalus texanus* (Packard) and *Streptocephalus sealii* (Ryder). Trans. Amer. micr. Soc. Menasha 54 1935 pp. 336-337.

319.—Meehan, O. L. Notes on the fresh-water Shrimp *Palaemonetes paludosa* (Gibbes). Trans. Amer. micr. Soc. Menasha 55 1936 pp. 433-441 1 pl. 7 text-figs.

320.—Méhes, G. Die eozänen Ostracoden der Umgebung von Budapest. Geol. Hung. Ser. Pal. 12 1936 pp. 1-64 4 pls. many text-figs. [Magyar, with German rés.]

321.—Meinertz, T. Storkrebs. iii. Ringkrebse 2. Baenkebidere (Land-og Ferskvands-Isopoder) in: Danmarks Fauna no. 42 Pp. 1-92 46 figs. Kobenhavn (Gads) 1936 8vo.

322.—Menner, E. Ueber die Wollhandkrabbe. Z. naturw. Halle 89 1931 pp. 85-93 3 figs.

323.—Michajłow, W. et Wierzbicka, M. Sur quelques Copépodes constituant les premiers hôtes intermédiaires de *Diphyllobothrium latum* (L.). Arch. Hydrobiol. Ichthyol. Suwalki 9 1935 pp. 93-98. [French.]

324.—Miloslawskaja, N. M. Zur Amphipoden-Fauna des Schwarzen Meeres. Trav. Stat. Biol. Karadagh 3 1930 pp. 41-49 17 figs. [Russian, with German rés.]

325.—Miyake, S. On three Crabs from off Turi-Shima Danjo-Group, Japan. Annot. zool. jap. 15 1936 pp. 416-421 1 pl. 2 text-figs.

326.—Miyake, S. Reports on the Brachyura of the Riukiu Islands collected by the Yaeyama expeditions during the years 1932-1934. I. Note on a new and some rare Crabs from Iriomotesima, pp. 494-505 2 pls. 2 text-figs. ii. A list of the known species of the Brachyura from Ishigakishima, pp. 506-513. Annot. zool. jap. 15 1936.

327.—Moers-Messmer, W. v. Das Marsupium der Amphipoden und Tanaidaceen. Inaug.-Diss. Pp. 1-37 40 figs. Würzburg (Triltsch) 1936 8vo.

Monod, T. vide Fage, Z.

328.—Monti, R. L'azione dei raggi gamma sulla riproduzione dei Cladoceri: raggi diretti e raggi filtrati attraverso piombo. Festschrift E. Strand Riga 1 1936 pp. 146-184.

329.—Moore, H. B. The biology of *Balanus balanoides*. V. Distribution

in the Plymouth area. J. Mar. biol. Ass. Plymouth 20 1936 pp. 701-716 map 5 figs.

330.—Moorthy, V. N. The influence of fresh bile on Guinea-Worm larvae encysted in *Cyclops*. Ind. med. Gaz. 70 1935 pp. 21-23 2 figs.; also 71 1936 pp. 568-570.

331.—Morey, P. S. Ostracoda from the Chouteau Formation of Missouri. J. Paleont. Menasha 10 1936 pp. 114-122 1 pl.

332.—Mortimer, C. H. Experimentelle und cytologische Untersuchungen über den Generationswechsel der Cladoceren. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 323-388 40 figs.; also Naturwissensch. Berlin 23 1935 pp. 476-480 3 figs.

333.—Mueller, J. F. Notes on some Parasitic Copepods and a Mite chiefly from Florida Freshwater Fishes. Amer. Midl. Nat. Notre Dame 17 1936 pp. 807-815 27 figs.

334.—Nagano, T. Studies on the Crustacean chromatophore. Botany & Zool. Tokyo 4 1936 pp. 1087-1094 [Japanese only.]

334A.—Nascimento, L. G. do. Subsidio para o estudo da fauna carcinológica de Portugal. Brotéria Lisboa 32 1936 pp. 179-191.

335.—Newmarch, E. R. Some notes concerning Salmon Sea Lice (especially *Caligus rapax*). Watson's Micr. Rec. London no. 38 1936 pp. 10-11 2 figs.

336.—Nicholson, K. W. The moulting of *Chirocephalus diaphanus*. Proc. Bristol Nat. Soc. (4) 8 1936 pp. 114-116.

337.—Nierstrasz, H. F. L'évolution entre-croisée chez les Crustacés. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 667-677.

338.—Nigrelli, R. F. *Naobranchia wilsoni*, a parasitic Copepod from the gills of the Porcupine Fish, *Diodon hystrix* Linn. Trans. Amer. micr. Soc. Menasha 54 1935 pp. 52-56 1 pl.

339.—Niijana, H. The chromosomes of a Japanese Spiny Lobster, *Panulirus japonicus* (v. Siebold). J. Fac. Sci. Hokkaido Univ. Zool. 5 1936 pp. 21-28 12 figs.

340.—Nobre, A. Crustaceos decapodes de Portugal. An. Fac. Scienc. Porto 16 1931 pp. 86-122, 224-251, 17 1932 pp. 14-42 100 figs.

341.—Nomura, S. and Hatai, K. On the occurrence of peculiar shaped [fossil] concretions probably due to certain Decapod Crustaceans. Jap. J. Geol. Geogr. 13 1936 pp. 57-61 1 pl.

342.—Nordenstam, Å. The Isopoda collected during the Norwegian Expeditions to East Greenland 1929, 1930, 1931 and 1932. Skr. Svalbard og Ishavet Oslo no. 66 1935 pp. 1-8 map.

343.—Nouvel, L. Sur un mode de régénération des appendices locomoteurs, particulier aux *Crangon*. C.R. Acad. Sci. Paris 202 1936 pp. 584-586.

344.—Nutting, C. C. Some notes on the Crustacea of Barbados. J. Barbados Mus. & Hist. Soc. 3 1936 pp. 81-86.

345.—Ocioszyńska-Wolska, J. Ueber den Bau der Mandibeln bei einigen Arten der Phyllopoda-Conchostraca. Ann. Mus. zool. polon. 11 1936 pp. 379-385 4 pls. [German, with Polish rés.]

346.—Oldham, C. Note on the Fairy Shrimp (*Chirocephalus diaphanus*). Trans. Herts nat. Hist. Soc. 20 pt. 2 1936 p. 24.

347.—Olthof, H. J. Ueber die Luftatmung von *Eriocheir sinensis* H. Milne-Edwards. Z. vergl. Physiol. 23 1936 pp. 293-300 2 figs.

348.—Ommanney, F. D. *Rhincalanus gigas* (Brady). A Copepod of the southern macroplankton. Discovery Reports. Cambridge 13 1936 pp. 277-383 29 figs.

349.—Oorde-de-Lint, G. M. van and Stekhoven, J. H. S. Copepoda parasitica in: Grimpe & Wagler. Tierwelt Nord- u. Ostsee, Leipzig Lief. 31 10c 1936 pp. 73-198 192 figs.

350.—Öpik, A. Ostracoda from the Old Red Sandstone of Tartu, Estonia, pp. 20-27 2 pls. 6 text-figs. Ostracoda from the lower Ordovician *Megalaspis* limestone of Estonia and Russia pp. 28-38 2 pls. 4 text-figs. Ann. Soc. Rebus Nat. Tartu 42 1935. [In English.]

351.—Orton, J. H. On the rate of growth of *Sacculina carcini* Thompson

in *Carcinus maenas* (Pennant). Ann. Mag. Nat. Hist. (10) 17 1936 pp. 617-626.

352.—Orton, J. H. Experiments in the sea on rate of growth of some Crustacea Decapoda. J. Mar. biol. Ass. Plymouth 20 1936 pp. 673-689 2 figs.

353.—Ottestad, P. On Antarctic Copepods from the Norvegia Expedition 1930-1931 in: Sci. Res. Norwegian Antaret. Exped. of Consul Lars Christensen no. 15 1936 pp. 1-44 11 figs.

354.—Pacaud, A. Nouvelles observations sur la répartition de *Chirocephalus stagnalis* Shaw. Bull. biol. France-Belg. 70 1936 pp. 233-239.

355.—Pacaud, A. Nouvelles observations sur la biologie de *Daphnia pulex* de Geer. Bull. Soc. zool. Fr. 61 1936 pp. 117-125.

356.—Pacaud, A. Composition chimique du milieu et remarques sur certains types de stations à Cladocères. C.R. Soc. Biogéographie Paris 13 no. 108 1938 pp. 26-29.

357.—Pacaud, A. Recherches sur le comportement d'un Crustacé phyllopode dans des milieux de composition définie. C.R. Soc. Biol. Paris 121 1936 pp. 218-219.

358.—Panning, A. Wandern die Larven der Wollhand-Krabbe? Zool. Anz. Leipzig 115 1936 pp. 175-177.

359.—Pantin, C. F. A. On the excitation of Crustacean muscle. ii. Neuromuscular facilitation, pp. 111-130 7 figs. iii. Quick and slow responses, pp. 148-158 4 figs. iv. Inhibition, pp. 159-169 5 figs. J. exp. Biol. Cambridge 13 1936.

360.—Paréjas, E. L'organisme B. de E. Joukowski et J. Favre. Arch. Sci. phys. nat. Genève (5) 17 1935 pp. 221-224 6 figs.

361.—Parker, G. H. An inquiline Gammarid on the Sea-Urchin *Lytechinus*. Ecology Brooklyn 17 1 1936 pp. 185-186.

Parr, W. J. vide Chapman.

362.—Passowicz, K. Studien über das Verhalten des Wasserflohes *Daphnia pulex* de Geer in Zuchtlösungen von verschiedenen Wasserstoffionenkonzentrationen. Bull. int. Acad. Cracovie B II 1935 pp. 59-86.

363.—Patanè, L. Ricerche sul sistema tegumentale degli Isopodi. Arch. zool. Torino **23** 1936 pp. 209-240 1 pl. 3 text-figs.

364.—Patanè, L. Prime ricerche sulla struttura degli oostegiti di *Porcellio laevis* (Latreille). Boll. Zool. Torino **7** 1936 pp. 161-165 3 figs.

365.—Patwardhan, S. S. On the structure and mechanism of the gastric mill in Decapoda. VI. The structure of the gastric mill in Natantous Macrura-Penaeidea and Stenopidea; Conclusion. Proc. Indian Acad. Sci. **2** 1935 pp. 155-174 10 figs.

366.—Paulian, R. L'existence d'un stade critique dans la croissance relative de l'*Eupagurus prideauxi* (Crustacé Anomoure). C.R. Soc. Biol. Paris **121** 1936 pp. 435-437.

367.—Pearse, A. S. Crustacea in: Parasites from Yucatan. Pub. Carnegie Instn. Washington no. **457** 1936 pp. 50-51 1 fig.

368.—Péneau, J. Contribution à la faune du Dévonien inférieur du Massif Armoricain. Bull. Soc. géol. Fr. (5) **4** 1935 pp. 545-561 1 pl. [Crust. p. 549.]

369.—Péneau, J. Presence du genre *Leaia* in Ardenay en: Étude du Carbonifère inférieur entre Rochefort et Chalonnes (Maine-et-Loire). Bull. Soc. géol. Fr. (5) **5** 1936 p. 495.

370.—Pereira, C. e Travassos, L. O emprego de Tatuzinhos Oniscidae (Crustacea Isopoda) na preparação de crânios de Vertebrados. Rev. Biol. Hyg. S. Paulo **5** 1934 pp. 67-68.

371.—Pérez, C. Bourgeon de régénération des appendices thoraciques chez les *Æglea*. Bouvier Livre Jubilaire pp. 63-66 2 figs. Paris 1936.

372.—Pérez, C. Triplication du doigt mobile de la pince chez un Crabbe Tourteau. Bull. Soc. zool. Fr. **61** 1936 pp. 372-375 1 fig.

373.—Pérez, C. Procédés pour extraire les Pagures de leur coquille. Bull. Soc. zool. Fr. **61** 1936 pp. 457-459.

374.—Pesson, P. Notes de faunistique armoricaine. Bull. Soc. sci. Bretagne **11** 1934 pp. 52-59 1 fig.

375.—Pesta, O. Entomostraken von der Insel Korfu (Griechenland). Zool. Anz. Leipzig **114** 1936 pp. 241-250 21 figs.

376.—Peters, N. [and others]. Die chinesische Wollhandkrabbe in Europa. Der Fischmarkt Cuxhaven **1936** pp. 1-19 9 figs. [sep. pag. ?].

377.—Picchio, T. S. La *Leptodora* del Lago di Varese. Atti Soc. ital. Milano **75** 1936 pp. 44-63 9 figs.

378.—Picken, L. E. R. The mechanism of urine formation in Invertebrates. I. The excretion mechanism in certain Arthropods. J. Exp. Biol. Cambridge **13** 1936 pp. 309-328 5 figs.

379.—Piesh, S. Ueber die Beziehungen zwischen Atmung, Osmoregulation und Hydratation der Gewebe bei euryhalinen Meeresevertebraten. Zool. Jahrb. Jena (Allg. Zool.) **56** 1936 pp. 129-160.

380.—Pirlot, J. M. Amphipodes de l'expédition du Siboga. 2^{me} part. Les Amphipodes Gammarides. Siboga Exped. Leiden Monogr. **33e** 1936 (Livr. 127) pp. vii + 237-328 46 figs.

381.—Pirlot, J. M. *Urothoe* Dana and Phoxocephalidae Sars. Smithsonian. misc. Coll. **73** no. 8 1936 pp. 41-44.

382.—Pora, E. A. Sur les différences chimiques et physico-chimiques du sang des deux sexes de quelques invertébrés marins [*Maia*]. Bull. Inst. océanogr. Monaco **689** 1936 pp. 1-4.

Pora, E. A. vide Drilhon.

383.—Precht, H. Epizoen der Kieler Bucht. Nova Acta Leop. Carol. Halle **3** 1935 pp. 405-474 44 figs.

384.—Prosser, C. L. Action potentials in the nervous system of the Crayfish. V. Temporal relations in presynaptic and postsynaptic responses. J. cell. comp. Physiol. **7** 1935 pp. 95-111 7 figs.

385.—Prosser, C. L. Action potentials in the nervous system of the Crayfish. III. Central responses to proprioceptive and tactile stimulation. J. comp. Neurol. **62** 1937 pp. 495-505 2 figs.

386.—Pyatakov, M. L. *Leander rectirostris* Czern. als neuer Gast im Kaspi-See. Zool. Anz. Leipzig **113** 1936 p. 47.

387.—Pyefinch, K. A. The internal anatomy of *Baccalaureus* with the description of a new species. Quart. J. micr. Sci. London **78** 1936 pp. 653-686 6 pls. 9 text-figs.

388.—Quidor, A. Sur *Leposphilus labrei* et *Mesoglicola delagei*. Bouvier Livre Jubilaire pp. 67-71 4 figs. Paris 1936.

389.—Rabaud, E. Les Pagures et le sens de l'enroulement des coquilles qu'ils habitent. Bull. Soc. zool. Fr. 61 1936 pp. 277-282.

390.—Rabaud, E. Le stéréotropisme de Pagures. C.R. Acad. Sci. Paris 202 1936 pp. 350-352.

391.—Rammner, W. *Artemia salina* auf Bonaire, Curaçao und St. Martin. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 353-362 5 figs.

392.—Ramult, M. Observations on the embryonic and larval development in *Sacculina* (Rhizocephala) in changed osmotic conditions of medium. Bull. int. Acad. Cracovie B II 1935 pp. 87-109 25 figs.

393.—Rathbun, M. J. Correction of names of fossil Decapod Crustaceans. Proc. biol. Soc. Washington 49 1936 p. 37.

394.—Rathbun,* M. J. The Spider Crabs of America. Bull. U.S. nat. Mus. no. 129 1925 pp. 1-613 283 pls. The Cancroid Crabs of America of the families Euryalidae, Portunidae, Atelecyclidae, Cancridae and Xanthidae. Bull. U.S. nat. Mus. no. 152 1930 pp. 1-609 230 pls.

395.—Rathbun, M. J. Brachyuran Crustacea from Bonaire, Curaçao and Aruba. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 379-388.

396.—Redeke, H. C. Ostracoda in: Flora en Fauna der Zuiderzee. Suppl. 1936 pp. 97-112 9 figs.

397.—Redeke, H. C. La crevette d'eau douce, *Atyaephyra desmaresti* (Mill.) dans les Pays-Bas. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 227-231.

398.—Reiff, E. Isopoden aus dem Lias Delta (Amaltheenschichten) Schwabens. Palaeont. Z. Berlin 18 1936 pp. 49-90 2 pls. 19 text-figs.

399.—Rein, E. F. Paleozoic Ostracodes from the north-eastern shores of Novaya Zemlya. Trans. arctic Inst. Leningrad 58 1936 pp. 45-90 2 pls. 41 text-figs. [Russian, with English rés.]

400.—Remy, P. Un Aselle nouveau de Madère. Brotéria Lisboa 32 1936 pp. 17-32 8 figs.

401.—Retowski, L. Zur Kenntnis der Decapodenfauna der Asiatischen Arktis. Trans. arctic Inst. Leningrad 33 1936 pp. 7-29. [Russian, with German rés.]

Ricardo, C. K. vide Worthington.

Rosenberg, H. vide Bogue.

402.—Roubault, A. Dimorphisme des mâles chez un Tanaidacé. Bull. Soc. zool. Fr. 60 1936 pp. 433-438 3 figs.

403.—Roux, J. Second note upon freshwater Decapod Crustaceans from the Malay Peninsula. Bull. Raffles Mus. Singapore 12 1936 pp. 29-43 2 pls. 14 text-figs.

404.—Russell, F. S. A review of some aspects of zooplankton research. Rapp. Cons. Explor. Mer. Copenh. 95 1936 pp. 3-30 9 figs.

405.—Rustad, D. Der Filtermagen von *Aega stroemi* Lütken (Crustacea Isopoda). Bergens Mus. Aarb. 1936 no. 6 pp. 1-17 8 figs.

406.—Ruud, J. T. Euphausiacea in: Report Danish Oceanogr. Expeds. 1908-10 vol. 2 biology D 6 1936 pp. 1-86 22 figs.

407.—Rylov, W. Zur Limnologie des Kaukasus. III. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 79-88. [Russian only.]

Rylov, W. vide Järnefelt.

408.—Sakai, T. Report on the Brachyura collected by Mr. F. Hiro at Palao [Pelew] Islands. Sci. Rep. Tokyo Bun. Daig. (B) 2 1936 pp. 155-177 3 pls. 7 text-figs.

409.—Sakai, T. Studies on the Crabs of Japan. I. Dromiacea. Sci. Rep. Tokyo Bur. Daig. 3 Suppl. 1 1936 pp. 1-66 9 pls. 13 text-figs.

410.—Schäfer, H. W. Copepoden und Ostracoden aus schlesischen Gewässern. Abh. naturf. Ges. Görlitz 32 Hft. 3, Jubiläumsh. 1936 pp. 65-80.

* Although these two titles were included in the Zoological Record for 1925 and 1930 respectively the new species therein described were accidentally omitted. They will be found in the present volume in the Systematic Part.

411.—Schäfer, H. W. Ueber Hali-cyclopiden (Crustacea Copepoda) aus dem Brackwasser der Insel Hiddensee. Zool. Anz. Leipzig **113** 1936 pp. 167-174 18 figs.

412.—Schäfer, H. W. Cyclopiniden (Crustacea Copepoda) aus der deutschen Nordsee. Zool. Anz. Leipzig **114** 1936 pp. 225-235 20 figs.

413.—Schäfer, H. W. Harpacticoiden aus dem Brackwasser der Insel Hiddensee. Zool. Jahrb. Jena (Syst.) **68** 1936 pp. 545-588 3 pls.

414.—Schellenberg, A. Die Amphipoden der norwegischen Expeditionen nach Ost-Grönland in den Jahren 1929, 1930, 1931 und 1932. Skr. Svalbard og Ishavet Oslo no. **66** 1935 pp. 9-39 3 figs.

415.—Schellenberg, A. Subterrane Amphipoden Badens, nebst einem neuen *Niphargus* aus Polen. Zool. Anz. Leipzig **113** 1936 pp. 67-73 3 figs.

416.—Schellenberg, A. Zwei neue Amphipoden des Stillen Ozeans und zwei Berichtigungen. Zool. Anz. Leipzig **116** 1936 pp. 153-156 1 fig.

417.—Schmitt, W. L. Macruran and Anomuran Crustacea from Bonaire, Curaçao and Aruba. Zool. Jahrb. Jena (Syst.) **67** 1936 pp. 363-378 3 pls.

Schmitt, W. L. *vide* Van Winkle.

418.—Schneider, W. Die Wollhandkrabbe am Niederrhein. Nat. am Niederrhein Krefeld **12** 1936 pp. 10-17 7 photos.

419.—Schubert, K. *Pilumnopus tridentatus* Maitland, eine neue Rundkrabbe in Deutschland. Zool. Anz. Leipzig **116** 1936 pp. 320-323 2 figs.

420.—Schuermans-Stekhoven, J. H. Copepoda Parasitica from the Belgian coast ii. (including some habitats in the North Sea). Mém. Mus. Hist. nat. Belg. no. **74** 1936 pp. 1-20 5 pls.

421.—Schweng, E. Shrimps [*Artemia salina*]. Aquar. Berlin **10** 1936 pp. 201-203 2 photos.

422.—Searle, J. *Bosmina maritima*: first record for Australia. Vict. Nat. Melbourne **52** 1936 pp. 171-172.

423.—Sexton, E. W. and Clark, A. R. Variations in the white pigment of the eye in *Gammarus chevreuxi* Sexton with

a description of a new genetic type, the "clotted eye." J. Mar. Biol. Ass. Plymouth **20** 1936 pp. 691-699 1 fig.

424.—Sexton, E. W. and Clark, A. R. Heterozygotes in a wild population of *Gammarus chevreuxi* Sexton. J. mar. biol. Assoc. Plymouth **21** 1936 pp. 319-356.

425.—Sexton, E. W. and Clark, A. R. A summary of the work on the Amphipod *Gammarus chevreuxi* Sexton, carried out at the Plymouth Laboratory (1912-1936). J. Mar. biol. Assoc. Plymouth **21** 1936 pp. 357-414.

426.—Sgonina, K. Ueber die Infektionsmöglichkeit der Fische durch erwachsene Ergasiliden. Z. Parasitenk. Berlin **8** 1936 pp. 351-355 1 fig.

427.—Shen, C. J. Description of a new tube-dwelling Amphipod collected on the coast of the Shantung Peninsula. Bull. Fan Memorial Inst. Biol. Peiping Zool. **6** 1936 pp. 265-273 5 figs.

428.—Shen, C. J. Notes on the genus *Polyonyx* (Porcellanidae) with description of a new species. Bull. Fan Memorial Inst. Biol. Peiping Zool. **6** 1936 pp. 275-287 2 figs.

429.—Shen, C. J. The freshwater Isopods of Peiping. Bull. Fan Mem. Inst. Biol. Peiping (Zool.) **7** 1936 pp. 1-31 4 pls. 4 text-figs.

430.—Shen, C. J. On a collection of Brachyuran Decapoda from Hainan Island with descriptions of three new species. Chinese J. Zool. **2** 1936 pp. 63-80 4 figs.

431.—Shen, C. J. Additions to the fauna of Brachyuran Crustacea of North China. Contr. Inst. Zool. Peiping **3** 1936 pp. 59-75 4 figs.

432.—Shen, C. J. Notes on the family Halalocarcinidae (Coral-infesting Crabs) with descriptions of two new species. Hong-Kong Nat. Suppl. no. **5** 1936 pp. 21-26 2 pls.

433.—Shiino, S. M. Bopyrids from Tanabe Bay. III. Mem. Coll. Sci. Kyoto (B.) **11** 1936 pp. 157-174 6 figs.

434.—Shiino, M. Bopyrids from Shimoda and other districts. Rec. Oceanogr. Works Japan **8** 1936 pp. 161-176.

435.—Shiino, M. Bopyrids from Misaki. Rec. Oceanogr. Works Japan **8** 1936 pp. 177-190 6 figs.

436.—Shoemaker, C. E. The occurrence of the terrestrial Amphipods, *Talitrus alluaudi* and *Talitrus sylvaticus* in the United States. J. Wash. Acad. Sci. **26** 1936 pp. 60–64 2 figs.

437.—Siewerth, M. V. Revue de la faune des Eucopepoda d'eau douce de l'Ukraine. Trav. Soc. Nat. Charkow **50** 2 1927 pp. 121–140.

438.—Siewerth, M. W. Versuch der Erforschung der Süßwasserfauna Eucopepoda aus dem Donetzbassin. Trav. Soc. Nat. Kharkov **52** 1929 pp. 169–241 map 1 pl. [Russian, with German rés.]

439.—Siewerth, M. W. Weitere Angaben über Eucopepodafauna im Donetzbecken. Trav. Soc. Nat. Kharkov **55** no. 2 1930 pp. 9–19 4 figs. [Russian, with German rés.]

440.—Sivertsen, E. Crustacea Decapoda, Euphausiacea and Mysidacea of the Norwegian Expeditions to East Greenland (1929, 1930, 1931, 1932). Skr. Svalbard og Ishavet. Oslo no. **66** 1935 pp. 41–54.

441.—Smirnov, S. S. Zur Morphologie der rudimentären Füße bei Copepoden. C.R. Acad. Sci. Moscou **1935** 4 1935 pp. 109–112 1 fig. [In German.]

442.—Smirnov, S. S. Eine neue Cyclopiniden-Gattung (Copepoda) aus der Awatscha-Bucht. C.R. Acad. Sci. Moscou **1935** vol. 4 1935 pp. 161–163 3 figs.

443.—Smirnov, S. S. Phyllopoda der Arctis. Trans. Arctic Inst. Leningrad **51** 193 (pp. 1–100 24 figs. [Russian, with German rés.]

444.—Smirnov, S. Ueber *Epischura baikalensis* G. O. Sars (Crustacea Copepoda) von Kamtschatka. Trav. Inst. zool. Acad. Sci. U.R.S.S. **3** 1936 pp. 59–65 1 fig. [Russian, with German rés.]

445.—Smirnov, S. Zweiter Beitrag zur Phyllopodenfauna Transkaukasiens. Zool. Anz. Leipzig **113** 1936 pp. 311–320 9 figs.

446.—Smirnov, S. Beschreibung einer neuen *Acartia*. Art aus dem Japanischen Meer nebst einigen Bemerkungen über die Untergattung *Euacartia* Steuer. Zool. Anz. Leipzig **114** 1936 pp. 87–92 3 figs.

447.—Snider, G. and Kersten, H. Susceptibility to soft X-rays of *Daphnia magna* during its development from egg to young in the brood pouch. J. exp. Zool. Philadelphia **74** 1936 pp. 1–6 3 figs.

448.—Solle, G. Die devonischen Ostracoden Spitzbergens. I. Leperditidae. Skr. Svalband og Ishavets Oslo **64** 1935 pp. 1–61 4 pls. 4 text-figs.

449.—Sømme, S. Some small collections of Amphipoda and *Mysis relicta* from Norwegian lakes. Avh. Norske Vid. Akad. Oslo for 1935 no. 9 1936 pp. 1–11.

450.—Spett, G. Formation of the systematic characters in the ontogenesis of Baikal Gammarids. Zool. J. Moscow **14** 1935 pp. 701–711. [Russian, with English rés.]

451.—Speyer, E. R. Woodlice in: Animal pests of interest in glasshouses. Ann. Appl. Biol. Cambridge **23** 1936 pp. 178–179.

452.—Stammer, H. J. Untersuchungen über die Tierwelt der Karsthöhlengewässer. Verh. int. Vereinig. Limnol. Beograd **7** 1935 pp. 92–99 (see p. 93).

453.—Stammer, H. J. Eine neue Höhlenwasserassel aus Spanien *Stenassellus buchneri* und die Verbreitung der Gattung *Stenassellus*. Zool. Anz. Leipzig **114** 1936 pp. 137–141 5 figs. map.

454.—Stammer, H. J. Ein neuer Höhlenschizopode, *Troglomysis vjetrenicensis* n. g. n. sp. Zugleich eine Uebersicht der bisher aus dem Brack- und Süßwasser bekannten Schizopoden, ihrer geogr. Verbreitung und ihre ökologischen Einteilung, sowie eine Zusammenstellung der blinden Isopoden. Zool. Jahrb. Jena (Syst.) **68** 1936 pp. 53–104 30 figs.

455.—Stekhoven, J. H. S. Beobachtungen zur Morphologie und Physiologie der *Lernaeocera branchialis* L. und der *Lernaeocera luscii* Bassett-Smith (Crustacea Parasitica). Z. Parasitenk. Berlin **8** 1936 pp. 659–696 28 figs.

Stekhoven, J. H. S. vide Oorde-de-Lint.

456.—Stephanides, T. On the presence in Corfu of *Moina salinarum* Gurney and *Moina belli* Gurney. Arch. Hydrobiol. Stuttgart **29** 1936 pp. 691–694 2 figs.

- 457.—Stephensen, K. Two Crustaceans (a Cirriped and a Copepod) endoparasitic in Ophiurids. Danish Ingolf Exped. 3 Pt. 12 pp. 1-18 10 figs. Copenhagen (Hagerup) 1935 4to.
- 458.—Stephensen, K. A Tanaid (*Tanais stanfordi* Richardson) found in freshwater in the Kurile Islands, with taxonomic remarks on the genus *Tanais* sensu lat. (*Tanais* Audouin et Milne-Edwards 1829 and *Anatanaïs* Nordenstam 1930). Annot. zool. jap. 15 1936 pp. 361-373 5 figs.
- 459.—Stephensen, K. Copepoda found on *Limnoria lignorum*. K. norske vidensk. Selskr. Trondheim 1935 pt. II no. 39 1936 pp. 1-10 4 figs.
- 460.—Stephensen, K. Crustacea varia in the Godthaab Expedition 1928. Medd. Grønland 80 no. 2 1936 pp. 1-38 10 maps and figs.
- 461.—Stephensen, K. On *Metopa groenlandica* H. J. Hansen (Crust. Amphip.). Medd. Grønland 118 no. 3 1936 pp. 1-8 3 figs.
- 462.—Stephensen, K. Re-description of *Hyperioipsis vöringi* G. O. Sars (Crust. Amphip.). Tromsø Mus. Aarsheft 53 no. 3 1934 pp. 1-12 4 figs.
- 463.—Stephensen, K. The Amphipoda of N. Norway and Spitsbergen with adjacent waters. Tromsø Mus. Skr. 3 no. 1 1935 pp. 1-140 19 figs. 2 maps.
- 464.—Stephensen, K. and Thorson, G. On the Amphipod, *Metopa groenlandica* H. J. Hansen found in the mantle cavity of the Lamellibranchiate *Pandora glacialis* Leach in east Greenland. Medd. Grønland 118 no. 4 1936 pp. 1-7 3 figs.
- 465.—Stephenson, M. B. Shell structure of the Ostracode genus *Cytheridea*. J. Paleont. Menasha 10 1936 pp. 695-703 1 pl. 2 text-figs.
- 466.—Steuer, A. Postembryonalentwicklung von *Rhincalanus gigas* Brady. Sitz-Ber. Akad. Wiss. Wien (1) 144 1935 pp. 383-390 4 figs.
- 467.—Steuer, A. Die Copepodenfamilie der Macrostellidae. Sitz-Ber. Akad. Wiss. Wien (1) 144 1935 pp. 391-399 1 fig. 2 maps.
- 468.—Stewart, G. A. Ostracodes of the Silica Shale, Middle Devonian of Ohio. J. Paleont. Menasha 10 1936 pp. 739-763 3 pls.
- 469.—[Stiles, C. W.] Notice of possible suspension of rules of nomenclature in certain cases [*Squilla*]. Zool. Anz. Leipzig 115 1936 pp. 110-111.
- 470.—Stoljarov, W. Die parasitäre Fauna der Cyprinidae in der Fischteichwirtschaft zu Ropscha. Trav. Soc. Nat. Leningrad (Sect. Zool.) 63 1934 pp. 343-351. [Russian, with German rés.]
- 471.—Stoljarow, W. P. Zur Kenntnis des Entwicklungszyklus von *Lernaea cyprinacea*. Trav. Soc. Nat. (Sect. Zool.) Leningrad 65 1936 pp. 239-253 5 pls. [Russian, with German rés.]
- 472.—Straelen, V. Van. Sur des Crustacés Décapodes de l'Auvergnien des Alpes de Schwyz. Bull. Mus. Hist. nat. Belg. 12 no. 27 1936 pp. 1-6 2 figs.
- 473.—Straelen, V. Van. Sur les Crustacés Décapodes Triasiques du Nevada. Bull. Mus. Hist. nat. Belg. 12 no. 29 1936 pp. 1-7 2 figs.
- 474.—Straelen, V. Van. Crustacés Décapodes nouveaux ou peu connus de l'époque crétacique. Bull. Mus. Hist. nat. Belg. 12 no. 45 1936 pp. 1-50 4 pls. 2 text-figs.
- 475.—Straelen, V. Van. L'ancienneté et la régression du genre *Homarus* Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 469-479.
- 476.—Strouhal, H. Die Landasseln der Inseln Korfu, Levkas und Kephallonia. Acta Inst. Mus. Zool. Univ. Athen. 1 1936 pp. 53-111 24 figs.
- 477.—Stubbings, H. G. Cirripedia in: Sci. Repts. John Murray Exped. 1933-34 4 no. 1 pp. 1-70 30 figs. London (Trustees Bt. Mus.) 1936 4to.
- 478.—Sturm, F. Zu Fragen der Nierenphysiologie besonders der Cladoceren nach elektiver Vitalfärbung. Z. vergl. Physiol. 23 1936 pp. 420-428 1 fig.
- 479.—Subramaniam, M. K. and Aiyar, R. G. Two methods of formation of dictyosomes from vesicular Golgi bodies. Nature London 137 1936 pp. 830-831 2 figs.
- 480.—Subramaniam, M. K. and Aiyar, R. G. On the possible effect of environment on the cytoplasmic inclusions in the oocytes and oögonia of *Dasychone*

cingulata, *Salmacis bicolor* and *Olibanarius olivaceus*. Proc. Indian Acad. Sci. (B.) 3 1936 pp. 175-194 1 pl. 19 text-figs.

Süllmann, H. *vide* Laszt.

481.—Swartz, F. M. Revision of the Primitiidae and Beyrichiidae with new Ostracoda from the Lower Devonian of Pennsylvania. J. Paleont. Menasha 10 1936 pp. 541-586 12 pls.

482.—Takagi, S. Ueber Sekretbildung in dem Leuchtorgan von *Cypridina hilgendorfi* Müller mit besonderer Berücksichtigung der Mitochondrien. Annot. zool. jap. 15 1936 pp. 344-351 1 pl.

483.—Tamini, E. De l'azione del solfato e tartrato di magnesio sopra alcuni Crostacei d'acque dolci. Atti Soc. ital. Milano 75 1936 pp. 17-22.

484.—Tanaka, O. On some new species of Copepoda from Sagami Bay. Japan. J. Zool. 7 1936 pp. 31-36 5 pls.

485.—Tanaka, O. The Copepods of Sagami Bay. Suisan Gakkwai Hô 6 No. 4 1935 pp. 142-165, 210-227 7 pls. 2 text-figs. [Abstract in Japan J. Zool. 6 1936 p. (80).]

486.—Tarasov, N. On the arctic fauna of Cirripedia thoracica II. Trans. arctic Inst. Leningrad 33 1936 pp. 45-49. [Russian, with English rés.]

487.—Tasnádi-Kubacska, A. *Portunus oligocenicus* Pauca aus Ungarn. Ann. hist.-nat. Mus. Hung. 30 1936 pp. 116-117 [2nd pag.].

488.—Tattersall, W. M. The zooplankton. V. The occurrence and seasonal distribution of the Mysidacea and Euphausiacea. Scient. Rep. Gt. Barrier Reef Exped. London 2 no. 8 1936 pp. 277-289 5 figs.

489.—Tattersall, W. M. Mysidacea and Euphausiacea. Scient. Rep. Gt. Barrier Reef Exped. London 5 1936 pp. 143-176 14 figs.

490.—Tattersall, W. M. Plankton of the Bermuda Oceanographic Expeditions. V. Notes on Schizopoda. Zoologica New York 21 1936 pp. 95-96.

491.—Taylor, E. Report on Oniscoidea (Woodlice) [in the Oxford distr.]. Proc. Ashmol. nat. Hist. Soc. Oxford 1935 1936 pp. 16-17.

492.—Templeman, W. Local differences in the life history of the Lobster (*Homarus americanus*) on the coast of the Maritime Provinces of Canada. J. biol. Board Canada 2 1936 pp. 41-88 12 figs. including maps.

493.—Templeman, W. Further contributions to mating in the American Lobster. J. biol. Board Canada 2 1936 pp. 223-226.

494.—Templeman, W. Fourth stage larvae of *Homarus americanus* intermediate in form between normal third and fourth stages. J. biol. Board Canada 2 1936 pp. 349-354 1 fig.

495.—Templeman, W. The influence of temperature, salinity, light and food conditions on the survival growth of the larvae of the Lobster. J. biol. Board Canada 2 1936 pp. 485-497 1 fig.

496.—Thirring, J. T. Paläontologische Neuigkeiten aus dem Bakony-Gebirge. Földt. Közlöny Budapest 66 1936 pp. 51-68 2 pls. 15 text-figs. [In German only.]

497.—Thomasset, J. J. Contribution à l'étude de la faune Carbonifère du Bassin de Blanzay. Bull. Soc. Hist. nat. Creusot 2 1934 pp. 25-28.

Thomsen, R. *vide* Brehm.

498.—Thorson, G. The larval development, growth and metabolism of arctic marine bottom invertebrates compared with those of other seas. Medd. Grønland 100 no. 6 1936 pp. 1-155 32 figs.

Thorson, G. *vide* Stephensen.

499.—Tokioka, T. Preliminary report on Argulidae found in Japan. Annot. zool. jap. 15 1936 pp. 334-343 1 pl.

500.—Tokioka, T. Larval development and metamorphosis of *Argulus japonicus*. Mem. Coll. Sci. Kyoto 12 B 1936 pp. 93-114 24 figs.

501.—Tonner, F. Das Hautnervensystem der Arthropoden. Zool. Anz. Leipzig 113 1936 pp. 125-136 5 figs.

502.—Torelli, B. Distribuzione in profondità degli Euphausiacea del golfo di Napoli. Boll. Zool. Torino 7 1936 pp. 9-11.

Travassos L. *vide* Pereira.

503.—Tweedie, M. W. F. On the Crabs of the family Grapsidae in the collection of the Raffles Museum. Bull. Raffles Mus. Singapore 12 1936 pp. 44-70 2 pls.

504.—Tweedie, M. W. F. Note on *Paratelphusa* (*Liotelphusa*) *kadamaiana*. Bull. Raffles Mus. Singapore 12 1936 pp. 70-72 2 figs.

505.—Uéno, M. Cladocera of Lake Ngardok in Babelthaop of the Palau [Pelew] Islands. Annot. zool. jap. 15 1936 pp. 514-519 2 figs.

506.—Uéno, M. On the red coloration of freshwater Diaptomids. Botany & Zool. Tokyo 4 1936 pp. 1181-1192. [Japanese only.]

507.—Uéno, M. Cladocera of Mauna Kea, Hawaii. Occ. Pap. Bishop Mus. Honolulu 12 no. 11 pp. 1-9 3 figs.

508.—Uéno, M. Zooplankton of Lake Taraike and its neighbouring waters, southern Sakhalin. Trans. Sapporo nat. Hist. Soc. 14 1936 pp. 173-178 1 pl.

509.—Urita, T. Dimensional morphological and zoogeographical study of Japanese Crabs of the genus *Telmessus*. Sci. Rep. Tôhoku Univ. (4) 11 no. 1 1936 pp. 69-89 7 figs.

510.—Valkanov, A. Notizen über die Brackwässer Bulgariens. Annu. Univ. Sofia 31 no. 3 1935 pp. 249-303 figs. A-Z + 27. [Bulgarian, with German rés.]

511.—Valkanov, A. Ueber einige Mysiden aus Bulgarien. Zool. Anz. Leipzig 115 1936 pp. 25-27 10 figs.

512.—Vandel, A. La mode de répartition des sexes chez *Trichoniscus* (*Spiloniscus*) *provisiorius* II. Femelles deutérogènes et femelles monogènes. C.R. Acad. Sci. Paris 203 1936 pp. 825-827, also pp. 1188-1190.

513.—Vandel, A. Apparition de mutations albinos chez *Trichoniscus* (*Spiloniscus*) *elizabethae* Herold, et leur comportement héréditaire. C.R. Acad. Sci. Paris 203 1936 pp. 889-891.

514.—Van Harreveld, A. A physiological solution for freshwater Crustaceans. Proc. Soc. exp. Biol. 34 1936 pp. 428-432.

Van Harreveld, A. vide Harreveld A. van, also Wiersma.

515.—Van Name, W. G. The American Land and Fresh-water Isopod Crustacea. Bull. Amer. Mus. nat. Hist. 71 1936 pp. 1-535 323 figs.

516.—Van Winkel, M. E. and Schmitt, W. L. Notes on the Crustacea, chiefly Natantia, collected by Captain Robert A. Bartlett in Arctic seas. J. Wash. Acad. Sci. 26 1936 pp. 324-331.

517-519.—Veen, J. E. van. Die Cytheridae der Maastrichter Tuffkreide und des Kunrader Korallenkalkes von Süd-Limburg. Natuurh. Maandbl. Maastricht 25 1936 pp. 21-24, 32-36, 42-45, 61-64, 69-71, 82-86, 98-101, 108-113, 131-188 10 pls.

520.—Vecchi, A. I carotinoidi dei crostacei per la colorazione dei tuorli d'uova di gallina. Nuov. Ann. Agr. Roma 15 1935 pp. 473-502 1 pl.

521.—Verhoeff, K. Ueber Isopoden der Balkanhalbinsel, gesammelt von Herrn. Dr. I. Buresch. III. Teil. Bull. Inst. Roy. Hist. nat. Sophia 9 1936 pp. 1-32 4 figs.

522.—Verhoeff, K. W. Ueber einige Myriapoden und einen Isopoden aus mediterranen Höhlen. Mitt. Höhlen.-u. Karstf. Berlin 1936 pp. 155-162 1 pl.

523.—Verhoeff, K. W. Studien über Isopoda-terrestria. Mitt. zool. Mus. Berlin 21 1935 pp. 80-164 70 figs.

524.—Verhoeff, K. W. Ueber einige Isopoda aus Süd-Indien. Rec. Ind. Mus. Calcutta 33 1936 pp. 97-102 1 pl.

525.—Verhoeff, K. W. Ueber einen Land-Isopoden aus Ladak. Mem. Conn. Acad. Arts Sci. 10 1936 pp. 187-190 7 figs.

526.—Verhoeff, K. W. Ueber die ersten durch Domestikation erzielten Isopoden-Rassen. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 673-681 7 figs.

527.—Volterra-D'Ancona, L. Notizie preliminari sulle Dafnie Nemorensi durante e dopo l'albasamento del livello del lago (1930-1935). Bull. Zool. Torino 7 1936 pp. 47-55.

528.—Wagler, E. Crustacea (Krebstiere) in: Die Tierwelt Mitteleuropas. 2 Lief 2a pp. 1-224, 624 figs. Leipzig (Quelle & Meyer) [1937] 8vo.

529.—Wagler, E. Die Systematik und geographische Verbreitung des Genus *Daphnia* O. F. Müller mit besonderer Berücksichtigung der südafrikanischen Arten. Arch. Hydrobiol. Stuttgart 30 1936 pp. 505–556 30 figs.

530.—Wailles, G. H. Food of *Clupea pallasii* in southern British Columbian waters. J. Biol. Bd. Canada 1 (6) 1936 pp. 477–486 1 fig.

Waldes, V. vide Kalmus.

531.—Walker, R. The central nervous system of *Oniscus* (Isopoda). J. comp. Neurol. 62 1935 pp. 197–238 7 figs.

532.—Ward, M. Crustacea Brachyura from the coasts of Queensland. Mem. Qd. Mus. Brisbane 11 1936 pp. 1–13 3 pls.

533.—Watari, S. On the life history of a fresh water Gammarus, *Echinogammarus annandalei* found at Niguti. Suisan Gakkwai Hô 6 No. 4 1935 pp. 181–209. [Abstract in Japan J. Zool. 6 1936 p. (80).] [Japanese.]

534.—Watson, K. *Astacopsis fleckeri* [addt. note]. Mem. Qd. Mus. Brisbane 11 1936 p. 52.

535.—Weber, H. Ostracoden aus dem Hauterive von Wenden am Mittellandkanal. I. Teil. Beitrag zur Kenntnis der Mikrofauna der norddeutschen Erdölfelder. Jber. niedersächs. geol. Ver. Hannover 26 1935 pp. 139–149 2 pls.

536.—Welsh, J. H. Diurnal movements of the eye pigments of *Anchistioides*. Biol. Bull. Woods Hole 70 1936 pp. 217–227 1 pl. 2 text-figs.

537.—Westergård, A. H. *Paradoxides oelandicus* beds of Öland. Sverig. geol. Undersökn. Årsb. C 30 no. 1 1936 pp. 1–66 12 pls. [Crust. p. 6.]

538.—Weymouth, F. W. and Mackay, D. C. G. Analysis of the relative growth of the Pacific Edible Crab, *Cancer magister*. Proc. zool. Soc. London 1936 pp. 257–280 10 text-figs.

539.—Wheeler, J. F. G. and Brown, F. A. The periodic swarming of *Anchistioides antiquensis* (Schmitt) (Crustacea Decapoda) at Bermuda. J. Linn. Soc. London 39 1936 pp. 413–428 2 figs.

Wiersma, C. A. G. vide Van Harrevald.

540.—Wierzbicka, M. Les résultats du croisement de certaines formes du groupe de *Cyclops strenuus* (sensu lato). Mem. Acad. Polon. Cracovie 6 1934 pp. 189–206 2 pls.

Wierzbicka, M. vide Michajlow.

541.—Wiersma, C. A. G. and Van Harrevald, A. The double motor innervation of a Crayfish muscle. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 190–191.

Williamson, M. vide Coryell.

542.—Wilson, C. B. *Argulus canadensis* from Cape Breton Island. J. biol. Board Canada 2 1936 pp. 355–358 9 figs.

543.—Wilson, C. B. Copepods from the far north collected by Capt. R. A. Bartlett. J. Wash. Acad. Sci. 26 1936 pp. 365–376.

544.—Wilson, C. B. Note on a Copepod from Cuba. Mem. Soc. cubana Hist. nat. 10 1936 p. 32.

545.—Wilson, C. B. Two new parasitic Copepods from Cuban Fish. Mem. Soc. cubana Hist. nat. 10 1936 pp. 107–112 15 figs.

546.—Wilson, C. B. Parasitic Copepods from the Dry Tortugas. Pap. Tortugas Lab. Carn. Instn. 29 1935 pp. 327–347 6 pls.

547.—Wilson, C. B. Copepodes from the cenotes and caves of the Yucatan Peninsula, with notes on Cladocerans. Pub. Carnegie Instn. Washington no. 457 1936 pp. 77–88 12 figs.

548.—Wilson, C. B. Plankton of the Bermuda Oceanographic Expeditions. IV. Notes on Copepoda. Zoologica New York 21 1936 pp. 89–96.

549.—Withers, T. H. A new Cirripede from the Claiborne Eocene of U.S.A. Ann. Mag. nat. Hist. (10) 18 1936 pp. 587–588 1 fig.

550.—Withers, T. H. Miocene Cirripedes (*Scalpellum* and *Tessarasma* gen. n.) from India. Ann. Mag. nat. Hist. (10) 18 1936 pp. 589–593 1 pl. 10 text-figs.

551.—Wolff, R. [and others]. Sur les relations existant entre le magnésium du muscle et la chronaxie. C.R. Acad. Sci. Paris 203 1936 pp. 414–454.

- 552.—Wolsky, A. Ueberzusammenhänge zwischen Entwicklungsphysiologie und Genetik in der experimentellen Morphologie (Erörtert am Problem des Crustaceenauges). Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 186–193. [German, with Magyar rés.]
- 553.—Wolsky, A. Ueber einen blinden Höhlengammaride, *Niphargus aggtelekiensis* Dudich, mit Bemerkungen über die Rückbildung des Gammaridenauges. Verh. mit. Vereinig. Limnol. Beograd 7 1935 pp. 449–463 6 figs.
- 554.—Wolter, H. Beiträge zum Lichtsinn von *Carcinus maenas*. Zool. Jahrb. Jena (Allg. Zool.), 56 1936 pp. 581–612 16 figs.
- Worrell, F. *vide* Harris.
- 555.—Worthington, E. B. and Ricardo, C. K. Scientific results of the Cambridge expedition to the East African lakes, 1930–1. No. 17. The vertical distribution and movements of the plankton in Lakes Rudolf, Naivasha, Edward and Bunyoni. J. Linn. Soc. London 40 1936 pp. 33–69 13 figs.
- 556.—Wright, S. A revision of the South American species of *Pseudodiaptomus*. Ann. Acad. Bras. Sci. Rio 8 1936 pp. 1–24 3 pls. [In English.]
- 557.—Wright, S. Preliminary report on six new species of *Diaptomus* from Brazil. Ann. Acad. Bras. Sci. Rio 8 1936 pp. 79–85 2 pls.
- 558.—Wu, H. W. On a new river Crab, *Parathelphusa (Parathelphusa) chongi* sp. n. Chinese J. Zool. 1 1935 pp. 69–73 1 fig.
- 559.—Yamaguti, S. Parasitic copepods from Fishes of Japan. Part 1. Cyclopoidea i pp. 1–8 5 pls. Part 2. Caligoidea i pp. 1–22 12 pls. Part 3. Caligoidea ii pp. 1–21 9 pls. [? sep. publ.] 1936.
- 560.—Yamaguti, S. Parasitic Copepods from Mollusks of Japan, I. Japan. J. Zool. 7 1936 pp. 113–117 7 pls.
- 561.—Yokoya, Y. Some rare and new species of Decapod Crustaceans found in the vicinity of the Misaki Marine Biological Station. Japan. J. Zool. 7 1936 pp. 129–146 10 figs.
- 562.—Yokoya, Y. On the immature forms of Crustacean Decapods found in the vicinity of Misaki Marine Biological Station in the winter season [in Japanese]. Suisan Gakkwai Hô 6 No. 4 1935 pp. 228–239 1 pl. [Abstract in Japan. J. Zool. 6 1936 p. (80).]
- 563.—Yonge, C. M. On the nature and permeability of chitin. II. The permeability of the uncalcified chitin lining of the foregut of *Homarus*. Proc. roy. Soc. London 120B 1936 pp. 15–41 7 figs.
- 564.—Young, J. Z. The structure of nerve fibres in Cephalopods and Crustacea. Proc. roy. Soc. London 121B 1936 pp. 319–337 2 pls. 4 text-figs.
- Young, M. R. *vide* Crichton.
- 565.—Yü, S. C. A new *Lophomastix* from Chefoo, p. 51. On the Chinese Copepods of the family Argulidae with descriptions of new species, pp. 51–52, Notes on a Bopyrid Isopod parasitic on *Crango crango cassiope* de Man, pp. 52–53. Notes on two new *Ichthyoxenus*, p. 53. [Abstr. Paps. Sci. Conf. Nanning, Kwagsi 1935.]
- 566.—Yü, S. C. Studies of the parasitic Copepods of China belonging to the family Chondracanthidae. Bull. Fan Memorial Inst. Biol. Peiping 6 1935 pp. 1–16 4 pls.
- 567.—Yü, S. C. Notes on the Chinese *Ichthyoxenus* (Parasitic Isopoda) with a description of a new species. Bull. Fan Memorial Inst. Biol. Peiping 6 1936 pp. 71–79 5 figs.
- 568.—Yü, S. C. On the Chinese Penaeidea. Bull. Fan Memorial Inst. Biol. Peiping 6 1935 pp. 161–171.
- 569.—Yü, S. C. Notes on new freshwater Prawns of the genus *Palaemon* from Yunnan. Bull. Fan Memorial Inst. Biol. Peiping Zool. 6 1936 pp. 305–314 4 figs.
- 570.—Yü, S. C. Report on the Macrourous Crustacea collected during the Hainan biological expedition in 1934. Chinese J. Zool. 2 1936 pp. 85–100 7 figs.
- 571.—Yü, S. C. Contribution à l'étude anatomique et histologique d'une Crevette chinoise (*Palaemon asperulus* Mart.). Chinese J. Zool. 2 1936 pp. 101–132 3 pls.
- 572.—Záczwilichowski, J. Ueber die Innervation der Haftapparate der Karpfenlaus *Argulus foliaceus* L. (Branchiura). Bull. int. Acad. Cracovie B II 1935 pp. 145–162 1 pl. 1 text-fig.

573.—Zapke, H. Spuren bohrender Cirripedier in Gastropoden-Gehäusen des Miozäns. *Senckenbergiana Frankfurt* 18 1936 pp. 130–134 4 figs.

574.—Zariquiey y Cenarro, R. Adiciones al "Ensayo de un Catálogo de los Crustáceos Decapodas Marinos de España y Marruecos Español de D. Alvaro de Miranda y Rivera," publicado en 20 de Septiembre 1933. *Butl. Inst. Catal. d'Hist. Nat.* 35 1935 pp. 1–7 [sep. pag.].

575.—Zenkewitch, L. A. On growth rate in different seasons of the year. *Wiss. Ber. Moskauer Staats. Univ.* 4 1935 pp. 135–138 1 fig. [Russian, with English rés.]

576.—Zilch, A. Zur Frage des Flimmerepithels bei Arthropoden. *Z. wiss. Zool. Leipzig* 148 1936 pp. 89–132 11 figs.

577.—Zimmer, C. California Crustacea of the Order Cumacea. *Proc. U.S. Nat. Mus.* 83 1936 pp. 423–439 6 figs.

Zimmer, C. *vide* Balss.

fishes of Australia, CLARK, 83; Shrimp industry in California, ISRAEL, 213; Injurious marine borers, CALMAN & CRAWFORD, 70; ERLANSON, 119; Marine borers of Sydney Harbour, JOHNSON & OTHERS, 224; The Armadillidium pest in Glasshouses, SPEYER 451.

Naturalization.—*Eriocheir* in European waters, GALLIEN, 143; JENSEN, 221; LIEPER, 296; PETERS, 376; SCHNEIDER, 418.

STRUCTURE.

General.—Orientation in Phyllopods, FOXON, 133; Biomechanics and orientation in Branchiopods, LOCHHEAD, 302.

Anatomy of Special Forms.—Oceanic Penaeids, BURKENROAD, 69; *Palaemon*, YU, 571; *Processa*, LEBOUR, 291; *Calanus*, LOWE, 204; *Lecithomyzon*, GALLIEN & BLOCH, 144; *Lernaecera*, STEKHOFEN, 455; *Candona*, KLIE, 258; *Baccalaureus*, PYEFINCH, 387.

External Anatomy.—Limbs of Astacidae, BOUVIER, 50, 51; Asymmetry in Pinnotherid legs, GORDON, 156; The eye-stalk and its glands in Decapods, HANSTRÖM, 183; Exoskeleton of Isopods, PATANÉ, 363; Mouth-parts of Branchiopods, ERIKSSON, 118; Mandibles of Phyllopods, OCIOŚZYŃSKA-WOLSKA, 345; Feeding mechanism of *Penilia*, LOCHHEAD, 303.

Nervous System and Sense Organs.—Dermal nerve supply, TONNER, 501; Nervous system in *Oniscus*, WALKER, 531; Of *Paranaspides*, HANSTRÖM, 184; Of Cirripeds, CORNWALL, 86; Triple innervation of Decapod muscles, HARREVELD & WIERSMA 187, 188; Histology of nerve fibres, *Maja*, YOUNG, 564; Cytology of live nerve cells and fibres, KEDROWSKI, 233, 234; Innervation, attachment organ of *Argulus*, ZACWILICHOWSKI, 572; Nerve-cells, *Potamobius*, DORNESCO, 103; Eye of *Gammarus*, SEXTON & CLARK, 423; Degenerating eye in *Niphargus*, WOLSKY 553; Sensory hairs *Chirocephalus*, HSÜ, 205.

Respiratory Organs.—In *Porcellio*, BECKER, 34.

II.—SUBJECT INDEX.

GENERAL.

General Works.—Crustacea of C. Europe, WAGLER, 528; Methods of plankton research, HARDY, 186.

Phylogeny.—Arthropods in general, FOXON, 132; NIERSTRASZ, 337; *Homarus*, v. STRAELEN, 475; Decapod larva and recapitulation, FOXON, 131; Mouth-parts, Branchiopoda, ERIKSSON, 118.

Taxonomy and Classification.—*Dorippe*, ANDRÉ, 8; Oceanic Penaeidea, BURKENROAD, 69; Gammarids of Lake Baikal, SPETT, 450; *Cyclops*, KÓZMINSKI, 270.

Nomenclature.—Validity of *Urothoe* Dana, PIRLOT, 381.

Economics.—Lobster culture, DANNEVIG, 92; Indian Crab and Prawn industries, CHOPRA, 81; Land Cray-

Alimentary Canal.—Gastric mill in *Macrura*, PATWARDHAN, 365; Stomach of *Aega*, RUSTAD, 405; Intestine of *Armadillium*, ANGELINI, 9.

Gonads.—In *Pandalus*, JAGERSTEN, 216; Alternation of generations in Cladocera, MORTIMER, 332; Marsupium in Amphipods, MOERS-MESSNER, 327; Oostegites in *Porcellio*, PATANÈ, 364.

Cytology.—Existence of cilia in Crustacea, ZILCH, 576; Light-organ of *Cypridina*, TAKAGI, 482; Frontal organ in *Chirocephalus*, HSÜ, 206; Chromatophores, NAGANO, 334; Golgi bodies, SUBRAMANIAM & AIYAR, 479; Cytoplasmic inclusions in oocytes, SUBRAMANIAM & AIYAR, 480; Green gland and its duct, *Astacus*, DORNESCO, 104; Chromosomes of *Panulirus*, NIYANA, 339; Egg cleavage without nuclei in *Artemia*, GROSS, 164.

PHYSIOLOGY.

Nervous System and Sense Organs.—Response to electric stimulation, ARVANITAKI, 15, 16; Effect of temperature on the potential of nerve currents, AUGER & FESSARD, 17; Nerve physiology methods, VAN HARREVELD, 514; Nerve responses to stimuli in Crayfishes, PROSSER, 384, 385; In Amphipods, BEHNEY, 35; Sensory nerves in *Maja*, BOGNE & ROSENBERG, 42; Neuromuscular physiology, CHAUCHARD, 79; Neuromuscular response, PANTIN, 359; JASPER, 219; KATZ, 231; WIERSMA & VAN HARREVELD, 541; Double motor innervation of claw in Cray-fish, HARREVELD & WIERSMA, 187; Vision in *Uca*, L. B. CLARK, 84; Colour-vision *Carcinus*, WOLTER, 554; Colour vision, HEBERDEY, 190, 191; Eye-pigments, *Anchistioides*, WELSH, 536.

Locomotion.—In *Potamobius*, BALDI, 18; Muscular action, PANTIN, 359.

Nutrition.—Feeding mechanism in Cladocera and *Balanus nauplius*, LOCHHEAD, 303, 301; Gastric mill of Decapods, PATWARDHAN, 365.

Respiration and Circulation.—Control of movements, JOHNSON, 223; respiration and osmosis regulation, PIEH, 379; Respiration in *Eriochel*, OLTHOF, 347; In *Cambarus*, MALOEUF, 313; In *Porcellio*, BECKER, 34.

Excretion.—General, PICKEN, 378 In Cladocera, STURM, 478.

Moult.—DRACH, 109, 110.

Miscellaneous.—Hormones activating chromatophores, HANSTRÖM, 183; Eye-stalk hormones and retinal pigment, KLEINHOLZ, 253.

Biochemistry.—Blood of *Maja*, PORA, 382; The bloodfluids of sacculinized Crabs, DRILHON & PORA, 113; Haemolymph, *Carcinus*, DRILHON, 112; Caratinoids of fowl formed by feeding with Crustacea, VECCHI, 520; Magnesium in muscle and chronaxy, WOLFF, 551; *Cypridina* luciferin, ANDERSON, 7; Permeability of chitin, YONGE, 563.

Experimental Physiology.—Effect of different solutions on Phyllopods, PACAUD, 357; On the breeding of *Daphnia*, PASSOWITZ, 362; Effects of gamma rays, MONTI, 328; X-rays and limb regeneration, EDMONDSON, 115; Action of curare, LAPICQUE, 287; Action of adrenalin on *Potamobius*, KALMUS & WALDES, 226; Action of Mg. tartrate and sulphate, TAMINI, 483; Action of intermedin on melanophores, ABRAMOWITZ, 3; Eyestalk extracts on Fish melanophores, ABRAMOWITZ, 2; Effects of temperature on Copepods, HORASAWA, 199, 200; Experiments with retinal pigment of *Gammarus*, SEXTON & CLARK, 424, 425; On the permeability of the gill sac in *Daphnia*, LASZT & STILLMANN, 288; Mechanism of chela differentiation, CRANGON, DARBY, 93.

Age and Growth Experiments.—In Decapoda, ORTON, 352; Differential and other growth problems in Crabs, DRACH, 111; WEYMOUTH & MACKAY, 538; Heterogonic growth of abdomen in *Carcinus*, DAY, 96; Problems in *Eupagurus*, PAULIAN, 366; Seasonal growth-rates in *Balanus*, ZENKEWITCH, 575; In *Succulina*, ORTON, 351.

DEVELOPMENT.

Early stages.—Egg-cleavage *Artemia*, GROSS, 164; Early stages in Copepods, GIBBONS, 148.

Larval Stages; General.—Recapitulation in the Decapod larvae, FOXON, 131; Effects of arctic conditions on the larvae of benthic forms, THORSEN, 498;

Japanese larval Decapods, YOKOYA, 562; Larvae of S. Atlantic Decapods, GURNEY, 176; Decapod larvae of Bermuda seas, GURNEY, 177, 178, 179; Of Newfoundland waters, FROST, 137.

Larval Stages of Special Forms.—*Carcinides*, BROEKHUYSEN, 66; *Crango*, ISRAEL, 213; *Geotelphusa*, KOKA, 263; *Homarus*, TEMPLEMAN, 494; *Jasus*, v. BONDE, 43; *Scyllarus*, LEGENDRE, 293; *Hippolyte*, GURNEY, 178; *Palaeomonetes*, MEEHEAN, 319; *Spirontocaris* and *Processa*, LEBOUR, 290, 291; *Pandalus*, LELOUP, 297; *Epipenaeon*, HIRAIWA, 195; *Penaeus*, HUZINAGA, 209; *Euphausia*, FRASER, 134; JOHN, 222; *Rhinocalanus*, STEUER, 466; *Lernaea*, STOLIAROW, 471; *Leposiphilus*, *Mesoglycola*, QUIDOR, 388; *Lamproglens*, FILHOL, 126; *Tigriopus*, FRASER, 136; *Argulus*, TOKIOKA, 500; *Anchistropus*, BORG, 44, 45; *Balanus*, BASSINDALE, 32; *Bacallureus*, PYE-FINCH, 387.

Oogenesis.—SUBRAMANIAM & AIYAR, 479.

Experimental Embryology.—Effects of X-rays, *Daphnia*, SNIDER & KERSTEN, 447; Osmotic changes and *Sacculina*, RAMULT, 392; Temperature effects, *Carcinogammarus*, EMMART, 117; Egg-cell cleavage without nucleus, GROSS, 164; Degeneration of eye, WOLSKY, 552.

ETHOLOGY.

General Habits of Special Forms.—Sand-dwelling Cumacea, FOXON 130; *Talitrus*, DAVID, 94; *Heteroskope*, ELSTER, 116; *Calanus*, FISH, 127; *Oithona*, FISH, 128; *Tigriopus*, FRASER, 136; *Lernaeocera*, STEKHOVEN, 455.

Special Habits.—Mating, *Homarus*, TEMPLEMAN, 493; Breeding, *Jasus*, v. BONDE, 43; Breeding, freshwater Copepods, EWERS, 120; *Epactophanes*, LANG, 277; Feeding, *Calanus*, FULLER & CLARKE, 138; *Penilia*, LOCHHEAD, 303; Nauplius of *Balanus*, LOCHHEAD, 301; Periodic swarming habits, *Anchistrioides*, WHEELER & BROWN, 539.

Psychology.—Colour-sense, HEBERDEY, 190, 191; Pagurid adaptation of Gastropod shells, RABAUD, 389, 390;

Moult.—DRACH, 109, 110; In *Chirocephalus*, NICHOLSON, 336.

Effects of External Conditions.—Locality and temperature on growth of *Homarus*, TEMPLEMAN, 492, 495; Action of heavy water and temperature on *Ligia*, BARNES, 31; Chemical composition of water, effects on Cladocera, PACAUD, 354, 356; PASSOWICZ, 362; Effects of change of water level in Lake Nemi, VOLTERRA-D'ANCONA, 527; Salinity effects on *Carcinides*, BROEKHUYSEN, 66; Effects of arctic climate on the marine bottom fauna, THORSON, 498; Environmental effects on cytoplasmic inclusions, SUBRAMANIAM & AIYAR, 480; Reproduction affected by weight, BERG, 40; Effects of domestication on Isopods, VERHOEFF, 526.

Ecology.—Arctic marine benthos, THORSON, 498; Rock-pool Copepods and the influence of tidal levels, FRASER, 135; Population fluctuations in Oxfordshire Crayfishes, DUFFIELD, 114.

Marine Hydrography.—General problems, zooplankton research, RUSSELL, 404; New methods for plankton study, HARDY, 186.

Limnology.—Italy, BALDI, 19; PICCHIO, 377; Poland, BRZEK, 67; Caucasus, RYLOV, 407; East African Lakes, WORTHINGTON & RICARDO, 555; Japan, UENO, 508.

Cavernicolous Habitat.—Mysids, STAMMER, 454; Amphipods, ARANGEL, 13; Copepods, CHAPPUIS, 74, 76; Belgian Ostracods, KLE, 256; Rhine valley subterranean life, HERTZOG, 193; Baden, KIEFER, 249; SCHELLENBERG, 415; Yugoslavia, KARAMAN, 228; Bulgaria, KLE, 255; Spain, STAMMER, 453; Cenotes of Yucatan, WILSON, 547; FURTOS, 140; CREASER, 90; Waters of limestone (Kast) caves, STAMMER, 452; Lake in sea-shore cave in Canary Is., FAGE & MONOD, 121.

Other Habitats.—Tree trunk dwelling Ostracods, KLE, 254; Sand-dwelling Cumacea, FOXON, 130; Copepods of Chilean hot-springs, BREHM, 60.

Regeneration.—Effect of X-rays, EDMONDSON, 115; Limbs of *Crangon*, NOUVEL, 343; Thoracic appendages of *Aeglea*, PÉREZ, 371.

Mimicry.—*Hippolyte* and Sargasso weed, GURNEY, 178.

Parasitism.—Crustacea parasitic on Russian Carps (Cyprinidae), STOLJAROV, 470; Effect of *Rhizocephala* infection on *Munida*, BRINKMANN, 64; Infection of Fishes by young Ergasilids, SGONINA, 426.

Commensalism.—Crustacea and Protozoa in Kiel Harbour, PRECHT, 383; *Amphilocus* and a Sea-Urchin, PARKER, 361; Copepods and *Limnoria*, STEPHENSEN, 459; *Metopa* in the mantle cavity of a Lamellibranch, STEPHENSEN & THORSON, 464.

Evolution and Variation.—*Eudiaptomus* in Italian lakes, BALDI, 19; Variation and growth, *Balanus*, MOORE, 329; Eye degeneration in cavernicolous *Asellus*, KOSWIG, 238; In *Niphargus*, WOLSKY, 553; In *Talitrus*, GALLIEN & DAVID, 145.

Sex Problems.—In *Trichoniscus*, VANDEL, 512; Secondary sex characters in *Pandalus*, LELOUP, 297; Gynandromorphism in *Eudiaptomus*, LANG, 278.

Parthenogenesis.—In *Artemia* BARGOZZI, 26, 27.

Hybrids.—In *Streptocephalus*, MEEHEAN, 318.

Intersex.—In *Pandalus*, JÄGERSTEN, 216; *Uca*, DARBY, 93; *Talitrus*, DAVID, 94.

Alternation of Generations.—Cladocera, MORTIMER, 332.

Genetics.—Crustacean eye, WOLSKY, 552; Albinism in *Trichoniscus*, VANDEL, 513; *Gammarus* studies, SEXTON & CLARK, 423, 424, 425; *Cyclops*, WIERZBICKA, 540.

Teratology.—Abnormal chelae in Crabs, ABELOOS, 1; PEREZ, 372; Abnormal appendages, Copepods, SMIRNOV, 441.

DISTRIBUTION AND FAUNAS.

Zoogeographical Problems.—Marine Malacostraca of the Black and Caspian Seas, BIRSTEIN, 41; Zoogeographical relations of Kara Sea, GURJANOVA, 171; Of the Okhotsk and N. Japanese seas, KOBJAKOVA, 266.

Land and Freshwater (including Salt Lakes).

British Islands.—Oxfordshire, E. TAYLOR, 491; Barra I., Hebrides, CRICHTON & YOUNG, 91.

France.—HERTZOG, 193; PESSON, 374.

Belgium.—ARCHANGELI, 13; KIEFER, 240; KLIE, 256; LUYTEN, 307; Luxembourg, HUERTZ, 207.

Holland.—REDEKE, 397.

Scandinavia.—Norway, SØMME, 449; Denmark, JENSEN, 221; MEINERTZ, 321.

Central Europe.—WAGLER, 528; Brandenburg, HESSE, 194; Hiddensee I., Baltic, SCHÄFER, 413; Silesia, SCHÄFER, 410; Baden, KIEFER, 238, 244, 246, 249; SCHELLENBERG, 415; Tirol, BREHM, 58; Hungary, KESSELYÁK, 236.

Poland.—BRZEK, 67; GAJL, 141; SCHELLENBERG, 415.

Finland.—JÄRNEFELT & RYLOV, 218.

Russia.—DECKSBACH, 97; MARKEWITSCH, 314; STOLJAROV, 470; Ukraine, DOUBOVSKY, 107, 108; SIEMERTH, 437, 438, 439; Don basin, BEHNING, 36; Caucasus, RYLOV, 407; Caspian Sea, BEHNING, 37; PYATAKOV, 386.

Portugal and Spain.—ARCHANGELI, 11, 12; LUISIER, 306; MACHADO, 309; STAMMER, 453.

Italy.—BALDI, 19; BRIAN, 83; VERHOEFF, 523.

Balkans.—Yugoslavia, CHAPPUIS, 74, 76; KARAMAN, 228; STAMMER, 454; Roumania, DEMIANOWICZ, 100; Bulgaria, KLIE, 255; VALKANOV, 510; VERHOEFF, 521; Thrace, VERHOEFF, 522.

Mediterranean Islands.—Corfu, KLIE, 259; PESTA, 375; STEPHANOIDES, 456; Ionian Is., STROUHAL, 476.

Atlantic Islands.—Madeira, REMY, 400; Canaries, FAGE & MONOD, 121.

North Africa.—Morocco, ARCHANGELI, 14; Tunisia, GAUTHIER, 146.

Western Asia.—Persia, LINDBERG, 298, 299.

Russian Asia.—Turkestan, MARTYNOV, 315; Transcaucasia, SMIRNOV, 445; Lake Baikal, BAZIKALOVA, 33; DOROGOSTAIKII, 105.

Eastern Asia.—Manchuria, BREHM, 56; N. China, SHEN, 429.

Japan.—UÉNO, 508.

Ethiopian Region.

General.—WAGLER, 529.

West Africa.—Cameroon, KLIE, 257; Belgian Congo, BALSS, 23, 24.

Central and East Africa.—Kenya and Uganda, BREHM, 57; CHAPPUIS, 73; LOWNDES, 305; WORTHINGTON & RICARDO, 555.

Madagascar.—GAUTHIER, 147; Mauritius, BARNARD, 28.

Indian Region.

India.—BREHM, 59; KIEFER, 241, 242, 243; LINDBERG, 300; VERHOEFF, 524, 525.

China.—CHAPPUIS, 77; Yunnan WU, 558; YÜ, 567, 569; Formosa KIKUCHI, 252; Loo Choo Is., KOBAYASHI, 262.

Malaysia.—Malay Peninsula, ROUX, 403; Malay P. and Borneo, JACKSON, 215.

Australian Region.

Australia.—CLARK, 82; Northern Territory, BARNES, 30; Western Australia, BOWLEY, 52.

New Zealand.—BOWLEY, 52.

Pacific Islands.—Pelew, UÉNO, 505; Hawaiian, UÉNO, 507.

Neotropical Region.

General.—VAN NAME, 515.

South America.—Brazil, ARCANGELI, 10; BREHM & THOMSEN, 62; CHAPPUIS, 78; KIEFER, 245, 248, 250, 251; WRIGHT, 556, 557; Chile, KIEFER, 247; Chile and Peru, BREHM, 60.

West Indies.—Curaçoa and Bonaire, etc., RAMMER, 391; Cuba, WILSON, 544.

Central America.—Yucatan, WILSON, 547; FURTOS, 140; CREASER, 90.

Nearctic Region.

General.—SHOEMAKER, 436; VAN NAME, 515.

United States.—Oklahoma, MACKIN, 310, 311; Wisconsin, BERA, 39; Tennessee, MATTOX, 317; Florida, FURTOS, 139.

Marine.

North Atlantic.—STEPHENSEN, 457, 463; RUUD, 403; Spanish coasts, ZARIQUIEY-Y-CENARRO, 574; Portugal coasts, GONZAGA, 155; NASCIMENTO, 334A; NOBRE, 340; Newfoundland waters, FROST, 137; Cape Breton I., WILSON, 542; Gulf of Maine, FISH, 128.

North Sea, Baltic and British Coasts.—Scottish waters, GIBBONS, 149; CRICHTON & YOUNG, 91; Irish sea, GILLESPIE, 151; English Channel, CRAWFORD, 89; GALLIEN, 142; JAKUBISIAK, 217; LEBOUR, 290; LEIGH-SHARPE, 295; MOORE, 329; North Sea, BALSS, 20; BROCH, 65; BROCKHUYSEN, 66; DONS, 102; GUSTAFSON, 180; KLIE, 260; LANG, 285; OORDE-DE-LINT & STEKHOFEN, 349; REDEKE, 398; SCHÄFER, 412; SCHUUR-STEKHOVEN, 420; STEPHENSEN, 459, 463; Swedish waters and Baltic, BRATHSTROM, 55; HULT, 208; OORDE-DE-LINT & STEKHOFEN, 349; PRECHT, 383; SCHÄFER, 411; SCHUBERT, 419.

Mediterranean.—BALSS, 22; FENIZIA, 125; LANG, 279; LEIGH-SHARPE, 294; RUUD, 406; Adriatic, KARLOVAC, 229; Suez Canal, GRUVEL, 165; Black Sea, MILOLAWSKAJA, 324; VALKANOV, 511.

Tropical Atlantic.—Madeira seas, GORDON, 158; Caribbean and G. of Mexico, BURKENROAD, 69; BERE, 38; NUTTING, 344; RATHBUN, 395; SCHMITT, 417; WILSON, 545, 546; Bermuda seas, GURNEY, 177, 178, 179; TATTERSALL, 490; WILSON, 548.

Indo-Pacific.—Red Sea, COIFMANN, 85; LEENE, 292; MACCAGNO, 308; Persian Gulf, GORDON, 156; Indian Ocean, BARNARD, 29; STUBBINGS, 477;

Austro-Malayan Seas, BANKS, 25; GORDON, 156; HIRO, 198; PILOT, 380; TWEEDIE, 503; West Australian coasts, BALSS, 21; SEARLE, 422; South Australian seas, CHAPMAN & PARR, 72; HALE, 182; Gt. Barrier Reef, Queensland, FARRAN, 122; TATTERSALL, 488, 489; WARD, 532; China seas, BOSCHMA, 46; SHEN, 427, 428, 430, 431, 432; YÜ, 565, 566, 568, 570; Japanese seas, BOSCHMA, 47; BULYCHEVA, 68; HIRO, 197; II, 210; KUBO, 272, 273; MIYAKE, 325, 326; SAKAI, 409; SHIHO, 433, 434; SMIROV, 446; TANAKA, 484, 485; Urita, 509; YAMAGUTI, 559, 560; YOHIOYA, 561; North Pacific, GURJANOVA, 169, 170, 174; KOBIAKOVA, 266, 267; SMIRNOV, 442, 444; STEPHENSEN, 458; Pelew Is. seas, SAKAI, 408; Easter I. seas, GRAVIER, 159; Pacific coast of N. America, ALDERMAN, 4; CORNWALL, 86; GLASSSELL, 152, 153; SCHELLENBERG, 416; ZIMMER, 577; Galapagos Is. seas, SCHELLENBERG, 416.

Arctic Seas.—Russian waters, GURJANOVA, 171, 172, 173, 175; RETOWSKI, 401; SMIROV, 443; TARASOV, 486; Greenland and Spitsbergen seas, FARRAN, 123, 124; LANG, 281; NORDENSTAM, 342; SCHELLENBERG, 414; SIVERTSEN, 440; STEPHENSEN, 460, 461, 463; STEPHENSEN & THORSON, 464; THORSON, 498; American Arctic, VAN WINKLE & SCHMITT, 516; C. B. WILSON, 543.

Antarctic and Southern Seas. — FRASER, 134; GURNEY, 176; JOHN, 222; LANG, 276; OTTESTAD, 353.

Geological.

Cambrian.—Sweden, WESTERGÅRD, 537.

Ordovician.—Estonia, ÕPIK, 350.

Silurian.—Novaya Zemlya, GLEBOVSKAYA, 154; REIN, 399; Czechoslovakia, BOUČEK, 48, 49; Indiana, CORYELL & WILLIAMSON, 88.

Devonian.—France, PÉNEAU, 368; Belgian, MAILLIEUX, 312; Estonia, ÕPIK, 350; Spitsbergen, SOLLE, 448; New Zealand, ALLAN, 6; Ohio, STEWART, 468; Pennsylvania, SWARTZ, 481; Ontario, CORYELL & MALKIN, 87.

Carboniferous.—Scotland, LATHAM, 289; France, DELÉPINE, 98, 99; GUTHÖRL, 181; PÉNEAU, 369; THOMASSET, 497; United States, KELLETT, 235; Missouri, MOREY, 331; Nebraska, W. R. JOHNSON, 225.

Permian.—Italy, GRECO, 160; Sicily, GREGORIO, 161; Oklahoma, HARRIS & WORRELL, 189.

Trias. — Sicily, GREGORIO, 162 Nevada, v. STRAELEN, 473.

Lias.—Germany, KUHN, 275; REIFF, 398; Sicily, GREGORIO, 162.

Jurassic. — Switzerland, PARÉJAS, 360; Bavaria, KUHN, 274.

Cretaceous.—W. Europe, v. STRAELEN, 474; Holland, v. VEEN, 517-519; Germany, WEBER, 535; Texas, ALEXANDER, 5; Arkansas, ISRAELSKY, 214; N. Jersey, JENNINGS, 220.

Eocene.—Kent, DAVIS, 95; Switzerland, v. STRAELEN, 472; Hungary, MEHES, 320; Hungary, THIRRING, 496; Louisiana and Texas, HOWE & GARRETT, 202; Howe & CHAMBERS, 203; Mississippi, HOWE, 201; ALABAMA, 549; N. Jersey, JENNINGS, 220.

Oligocene.—Hungary, TASÁDI-KUBACSKA, 487; Mississippi, HOWE, 201; Louisiana, HOWE & LAW, 204; STEPHENSON, 465.

Miocene.—Germany, BRAND, 53; Hungary, ZAPKE, 573; India, WITHERS, 550; Mississippi, HOWE, 201.

Other Geological Publications.—v. STRAELEN, 475; NOMURA & HATAI, 341.

III.—SYSTEMATIC INDEX.

DECAPODA.

[Including general papers on Malacostraca.]

A discussion of the morphology of the Decapod walking legs, BOUVIER, 51.

Epidermal and dermal nerve supply of Crustacea, TONNER 501.

On the activating substance (hormone) controlling the pigments of the chromatophores generally present in the eye-stalks in Decapods, HANSTRÖM 183.

Recapitulation in Decapod larvae, FOXON 131.

Growth rates of Decapods in the sea, ORTON 352.

Fossil concretions in Japan Tertiary beds possibly due to Decapod Crustacea, NOMURA & HATAI 341.

Coprolites of fossil Decapods (*Upogebia*?) from the Purbeck beds of Switzerland, PARÉJAS 360.

Supplement to Decapods of Baltic and North Sea, BALSS 20.

Zoogeographical relations of the Decapod fauna of the Okhotsk and Japanese seas, KOBJAKOVA 266.

The problem of the occurrence of marine Malacostraca in the Black and Caspian seas, BIRSTEIN 41.

Faunal Papers.—Portuguese coasts, NOBRE 340; E. Mediterranean, BALSS 22; Red Sea, MACCAGNO 308; Russian Arctic, GURJANOVA 173; Asiatic Arctic coasts, RETOWSKI 401; Yucatan cenotes, CREASER 90; East Greenland seas, SVERTSEN 440; American Arctic, VAN WINKLE & SCHMITT 516; Cretaceous Decapods of W. Europe, v. STRAELÉN 474.

Brachyura.

Crabs of N. China coasts supplementary information, SHEN 431.

Faunal Lists.—Portuguese seas, NASCIMENTO 334A; Hainan waters, SHEN 430; Riukiu Is., MIYAKE 326; Pelew I., SAKAI 408; Queensland coast, WARD 532; W. Australian coast, BALSS 21.

INCERTAE SEDIS.

†*Onocarcinus insignis* note fig. p. 148, GRECO 160.

OXYRHYNCHA.

(Fams. Maiidae, Parthenopidae, Hymenosomatidae.)

Chlorinoides aculeatus remarks p. 126, BALSS 21.

Cryptopodia hassleri sp. n. L. California coast, RATHBUN Bull. U.S. nat. Mus. 129 1925 p. 554.

Harrovia plana sp. n. Queensl. coast, WARD Mem. Qd. Mus. 11 p. 10 figs.—*H. elegans* descr. figs. p. 142, YOKOYA 561.

Hyas larvae descr. figs. p. 22, FROST 137.

Hyastenus sp. descr. figs. Pelew Is. p. 158, SAKAI 408.

Labrus massena in Red Sea p. 174, MACCAGNO 308.

Leptomithrax cf. *spinulosus* note p. 125, BALSS 21.

Maia squinado physiology of moult, DRACH 110; Chemical differences in the bloods of the sexes, PORA 382.—*M. kominatoensis* descr. figs. p. 418, MIYAKE 325.

Menaethiops contiguiornis descr. p. 173, MACCAGNO 308.

Mithrax (*Mithrax*) *orcutti* sp. n. Oaxaca Mexico coast, RATHBUN Bull. U.S. nat. Mus. 129 1925 p. 397 figs.—*M. (M.) mexicanus* sp. n. Gulf of California, GLASSELL Zoologica 21 p. 213.

Paramaja gen. n. (nr. *Maja*) for genotype *P. komintoensis* sp. n. Japanese seas, KUBO Bull. Jap. Soc. sci. Fish. 4 p. 361 figs.

Pitho dispar sp. n. Porto Rico seas, RATHBUN Bull. U.S. nat. Mus. 129 1925 p. 374 figs.

Platymaia wyville-thomsoni in Japanese seas descr. figs. p. 417, MIYAKE 325.

Sargassocarcinus gen. n. (Acanthonychinae) p. 8 for type *S. foliatus* sp. n. p. 9 Queensl. coast, WARD Mem. Qd. Mus. 11 figs.

Stenocionops beebei sp. n. G. of California, GLASSELL Zoologica 21 p. 214.

Thyrolambrus rathbunae nom. n. pro *T. erosus* Rathb. nec Miers, BALSS J. Roy. Soc. W. Austr. 21 p. 128.

Tiarinia angusta note fig. p. 160, SAKAI 408.

Tutankhamen gen. n. (Pathenopidae) for *Mesorhoa cristatipes* A. M.-Edw., RATHBUN Bull. U.S. nat. Mus. 129 1925 p. 530.

Zalasius australis descr. distr. p. 129, BALSS 21.

CYCLOMETOPA.

(Fams. Corystidae, Gatonidae, Atelecyclidae, Canceridae, Portunidae, Trichiidae, Xanthidae, Potamonidae.)

The relationships and classification of the Xanthidae p. 132, BALSS 21.

Review of the Freshwater Crabs of the Belgian Congo, BALSS 23.

Actaea crockeri sp. n. G. of California, GLASSELL Zoologica 21 p. 215.

Atergatopsis globosa sp. n. coast W. Austr., BALSS J. Roy. Soc. W. Austr. 21 p. 137 figs.

Banarelopsis gen. n. (Xanthidae) for type *B. australis* sp. n. Queensl. coast, WARD Mem. Qd. Mus. 11 p. 7 figs.

Baptozius vinosus off Riukiu Is. descr. figs. p. 497, MIYAKE 326.

Cancer pagurus moult cycle, DRACH 109; Individual with double chelae, ABELOOS 1.—*C. magister* relative growth studies, WEYMOUTH & MACKAY 538.—*C. porteri* nom. n. pro *C. longipes* Bell nec Linn. p. 199, *C. luederwaldtii* S. Brazil coast p. 200 figs., RATHBUN Bull. U.S. nat. Mus. 152 1930.

Carcinides moenas development, growth, moult, sex ratio and distribution in Dutch waters, BROEKHUYSEN 66.

Carcinus moenas colour vision, WOLTER 554; Heterogonic growth of abdomen, DAY 96; Biochemistry of haemolymph, DRILHON 112.

Charybdis obtusifrons sp. n. Jiddah Red Sea and notes descr. figs. allied spp., LEENE Zool. Meded. 19 p. 124.

Chlorodopsis miersi nom. n. pro *C. granulatus* Miers nec Stimpson Queensl. coast, WARD Mem. Qd. Mus. 11 p. 4 figs.—*C. (Cyclodius) palaoensis* sp. n. Pelew Is., SAKAI Sci. Rep. Tokyo Bun. Daig. 2 p. 167 figs.

Clistoceloma merguiense notes figs. p. 68, TWEEDIE 503.

Eriphia laevimana note fig. p. 169, SAKAI 408.

Etisodes australis sp. n. Queensl. coast, WARD Mem. Queensl. Mus. 11 p. 5 figs.

Etisus deflexus, *E. utilis* diagn. figs. p. 164, SAKAI 408.

Eurypanopeus abbreviatus ater subsp. n. Vera Cruz coast Mexico, RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 407 fig.

Gaudichaudia gen. n. for *Xantho gaudichaudii* M.-Edw., RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 278.

Geotelphusa dehaani observation in Japan waters, KOBA 261; Breeding habits and development, KOBA 263.

†*Harpactocarcinus telegdirothi* sp. n. p. 61, *H. t. baconica* var. n. p. 63, *H. punctulatus dudarensis* var. n. p. 64, *H. hungaricus* sp. n. p. 65 all figs. Eocene? Hungary, THIRRING Földt. Közlöny 66.

Heterataea ceratopus the first zoea figs., GURNEY 179.

Heteropanope convexa sp. n. Red Sea, MACCAGNO Ann. Mus. Genova 59 p. 176.

Hexapanopeus schmitti Rio Brazil coast p. 393, *H. paulensis* S. Paulo Brazil p. 395, *H. orcutti* Sinaloa coast, Mexico p. 397, *H. sinaloensis* also Sinaloa coast, Mexico p. 398 all spp. n. figs., RATHBUN Bull. U.S. nat. Mus. 152 1930.

Heteropilumnus cristadentatus sp. n. Off Tsingtao, China, SHEEN Contr. Inst. Zool. Peiping 3 p. 65 figs.

Kraussia quadriceps sp. n. Japanese seas, YOKOYA Japan. J. Zool. 7 p. 143 figs.

Leptodius australis sp. n. Queensl. coast, WARD Mem. Qd. Mus. 11 p. 6 figs.

†*Lithophylacidae* fam. n. pro *Lithophylax trigeri* descr. figs. p. 43, v. STRAELEN 474.

Lobopilumnus agassizii trinidadensis form. n. Trinidad waters, RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 526 figs.

Lophopanopeus somaterianus sp. n. Bering Sea, RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 332 figs.

†*Necronectes vaughani* = *N. vicksburgensis* (Stenzel), RATHBUN 393.

Ozius guttatus diagn. figs. p. 168, SAKAI 408.

Panopeus herbstii simpsoni form. n. Florida coast p. 337 figs., *P. turgidus* sp. n. Louisiana coast p. 364 figs., RATHBUN Bull. U.S. nat. Mus. 152 1930.

Paraliomera gen. n. for type *Liomera longimana* M.-Edw., RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 243.

Parathelphusa (P.) *chongi* sp. n. Yunnan, WU Chinese J. Zool. 1 p. 68 figs.—*P. (Liotelphusa) kadamaiana* addt. descr. figs., TWEEDIE 504.—*P. (Peritelphusa) pilosimana* sp. n. Malay Pen., ROUX Bull. Raffles Mus. 12 p. 41 figs.

Paraxanthias ponapensis descr. and ext. of range p. 135, BALSS 21.

Pilumnopus tridentatus recorded in the Kiel Canal, SCHUBERT 419.

Pilumnus longleyi sp. n. Florida coast, RATHBUN Bull. U.S. nat. Mus., 152 1930 p. 502 figs.—*P. pelagius* sp. n. G. of California, GLASSELL Zoologica 21 p. 215.

Platycarcinus pagurus abnormal chelae fig., PEREZ 372.

Platypodia granulosa note fig. p. 163, SAKAI 408.

Platyxanthus cokeri sp. n. Peru coast, RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 282 figs.

Potamon (Potamiscus) cognatum p. 31, *P. (P.) rafflesi* p. 33, *P. (P.) pahangense* p. 35 spp. n. Malay Peninsula all figs., ROUX Bull. Raffles Mus. 12.

Portunus (Achelous) pichilinquel L. California coast p. 78, *P. (A.) floridanus* Florida coast p. 82, *P. (A.) bahamensis* Bahama seas p. 90 spp. n. all figs., RATHBUN Bull. U.S. nat. Mus. 152 1930.

†*Portunus oligocenicus* in the L. Oligocene beds of Hungary, TASNÁDI-KUBACSKA 487.

Potamon rathbuni not *P. obtusipes*, etc. is host of cercariae of *Paragonimus* in Formosa desc. figs. etc., Koba 264, 265.

Potamonautes review of the Congolese spp. and subsp. p. 166, *P. johnstoni etappersi* subsp. n. Lake Tanganyika p. 182, *P. vandenbrandeni* sp. n. Leopoldville p. 190 maps and figs., BALSS Rev. Zool. Bot. afr. 28.

Pseudocryptocoeloma gen. n. (Xanthidae) for type *P. parvus* sp. n. Queensl. coast, WARD Mem. Qd. Mus. 11 p. 3 figs.

Telmessus taxonomy, measurements, structure, distr. and discussion of two species, URETA 509.

Tetrazanthus rugosus sp. n. Florida coast, RATHBUN Bull. U.S. nat. Mus. 152 1930 p. 459 figs.

Thalamita crenata, *T. spinimana* descr. figs. p. 161, SAKAI 408.

Xanthias granosus in E. Mediterranean p. 38, BALSS 22.

CATOMETOPA.

(Fams. Gonoplacidae, Pinnotheridae, Cymopolidae, Retroplumidae, Ocypodidae, Mycteridae, Grapsidae, Geocarcinidae, Hapalocarcinidae.)

Malayan Grapsids in the Raffles Museum at Singapore, TWEEDIE 503.

Cardisoma hirtipes in Loo Choo Is. notes, distr., Koba 262.

Chasmocarcinus ferrugineus sp. n. G. of California, GLASSELL Zoologica 21 p. 216.

Cryptochirus hongkongensis off Hong Kong, *C. granulatus* Christmas I., Indian Ocean spp. n. figs. and note on other spp. of the family, SHEN Hong Kong Nat. Suppl. no. 5 p. 23.

Cryptolutea gen. n. (Gonoplacidae) for type *C. lindemanensis* sp. n. Queensl. coast, WARD Mem. Qd. Mus. 11 p. 1 figs.

Cymopolia zacae sp. n. G. of California, GLASSELL Zoologica 21 p. 217.—*C. longimana* sp. n. off Riukiu Is., MIYAKE Annot. Zool. jap. 15 p. 495 figs.

Dissodactylus xantusi sp. n. Gulf of California, GLASSELL Trans. S. Diego Soc. 8 p. 299 fig.

Eriocheir sinensis general habits, MENNER, 322; Present status in Europe, habits and economics, PETERS, 376; Taken in the Thames at Battersea, LEIPER 296; Off Boulogne, extension of range, GALLIEN 143; Present status in Danish waters, JENSEN 221; On the Lower Rhine photos, SCHNEIDER 418; Wanderings of the larval stages, PAN-NING 358; Respiration physiology, OLTHOF 347.—*E. leptognathus* in Corea fig., KAMITA 227.

Fabia unguifalcula sp. n. Pacific coast Mexico, GLASSELL Trans. S. Diego Soc. 8 p. 298 fig.

Macrophthalmus franchetti sp. n. Red Sea, MACCAGNO Ann. Mus. Genova 59 p. 177.—*M. simdentatus* sp. n. Hainan waters, SHEN Chinese J. Zool. 2 p. 70 figs.

Mertonia lanka descr. figs. p. 144, YOKOYA 561.

Metaplex sheni note fig. p. 69, TWEEDIE 503.

Metograpsus oceanicus diagn. fig. p. 173, SAKAI 408.

Metopograpsus latifrons note fig. p. 48, TWEEDIE 503.

Pachygrapsus quadratus sp. n. nr. Singapore, TWEEDIE Bull. Raffles Mus. 12 p. 46 figs.

Pinnixa richardsoni sp. n. Canal Zone, Panama, GLASSELL Trans. S. Diego Soc. 8 p. 301 figs.

Pinnotheres asymmetry in the walking legs, *P. spinidactylus* in *Modiolus* nr. Singapore p. 169, *P. tivelae* on *Tivela* Muscat p. 174, *P. winckworthi* on *Paphia* Penang p. 177 all spp. n. figs. and notes and figs of other species, GORDON J. Linn. Soc. Lond. 40.

Prontonyx nom. n. for *Ceratoplax laevis* Miers, WARD Mem. Qd. Mus. 11 p. 2 figs.

Sarmatium sp. desc. fig. p. 173, SAKAI 408.

Scopimera curtelsona sp. n. Hainan waters, SHEN Chinese J. Zool. 2 p. 73 figs.

Sesarma descr. and notes Malayan spp. p. 50 *S. (S.) singaporensis* p. 53, *S. (S.) gemmifera* p. 58 spp. n., *S. (Parasesarma) calypso lanchesteri* subsp. n. p. 62, *S. (P.) rutilimana* sp. n. p. 63 all in Malay Pen. waters, TWEEDIE Bull. Raffles Mus. 12 all figs.—*S. (Chiro-mantes) kammermani* in Belgian Congo, addt. descr. figs., BALSS 24.—*S. quadrata* new to Chinese seas p. 68, SHEN 430.—*S. (Sesarma) smithi* off Riukiu Is. note figs. p. 497, MIYAKE 326.

Uca pugnax visual acuity, L. B. CLARK 84.—*U. pugilator* intersexuality and the size of the chelae, DARBY 93.—*U. novaeguineae* Pelew Is. note figs. p. 171, SAKAI 408.

OXYSTOMATA.

(Fams. Dorippidae, Calappidae, Leucosiidae, Raninidae.)

Calappa terrae-reginae sp. n. Queensl. coast, WARD Mem. Qd. Mus. 11 p. 11 figs.

†*Cenomanocarcinus* gen. n. (Calappidae) for *C. inflatus*, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 37 figs.

Dorippe personatus (Linn.) and other spp. confused with it, taxonomy and nomenclature, ANDRÉ 8.

Ebalia (Phlyxia) quadrata note fig. p. 117, BALSS 21.

Leucosia perlata note figs. p. 157, SAKAI 408.

Matuta flagra sp. n. Hainan I., SHEN Chinese J. Zool. 2 p. 64 figs.

†*Paranecrocarcinus* gen. n. (Calappidae) for *P. hexagonalis* sp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 37 figs.

Philyra nipponensis sp. n. Japanese Seas, YOKOYA Japan. J. Zool. 7 p. 140 figs.

DROMIACEA.

(Fams. Prosopeidae, Homalodromiidae Dromiidae, Dynomenidae, Homolidae.)

The Dromiacea of Japanese seas with keys descr. and figs, SAKI 409.

Cryptodromia tumida trispinosa p. 21, *C. t. bispinosa* p. 22 subspp. n. Japan seas, SAKAI Sci. Rep. Tokyo Bun. Daig. 3 suppl. i figs.

†*Cyclothyreus autissiodorensis* sp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 29 figs.

Dromidiopsis michaelsoni sp. n. off W. Australia, BALSS J. Roy. Soc. W. Austr. 21 p. 113 figs.

Dynomene spinosa addt. desc. p. 115, BALSS 21.

†*Homolopsis tuberculata* p. 31, *H. spinosa* p. 33 spp. n. figs. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45.

Latreillopsis major sp. n. Japanese seas, KUBO J. imp. Fish. Inst. 31 p. 63 figs.—*L. laciniata* sp. n. Japanese seas, SAKAI Sci. Rep. Tokyo Bun. Daig. 3 suppl. 1 p. 54 figs.

†*Nodoprosopeon beurleni* sp. n. Jurassic Bavaria, KUHN Cbl. Min. Geol. 1936B p. 120 fig.

Petalomera angulata p. 29, *P. fukuii* p. 31, *P. atypica* p. 33, *P. nodosa* p. 39 all figs. spp. n. Japanese seas and descr. figs. of other spp., SAKAI Sci. Rep. Tokyo Bun. Daig. 3 suppl. 1.

†*Pithonoton planum* sp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 27 figs.

†*Prosopeon icaunensis* sp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 25 figs.

Anomura.

GALATHEIDEA.

(Fams. Aegleidae, Chirostylidae, Galatheidae, Porcellanidae.)

Aeglea laevis regeneration of appendages, PÉREZ 371.

Galathea longirostris sp. n. Japanese seas, YOKOYA Japan J. Zool. 7 p. 138 figs.

†*Galatheitis neocomiensis* sp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 24 figs.

Munida sarsi nom. n. for *M. rugosa* Sars nec Fabr. p. 13, BRINKMANN 64.

Munidopsis polymorpha general note p. 102, FAGE & MONOD 121.

Orthochela gen. n. (Porcellanidae) for *O. pumila* sp. n. L. California, GLASSELL Trans. S. Diego Soc. 8 p. 296 figs.

Pachycheles narcortezensis p. 290, *P. sonorensis* p. 291 spp. n. Pacific coast, Mexico, GLASSELL Trans. S. Diego Soc. 8.

Petrolisthes schmitti p. 280, *P. sanfelipennis* p. 281, *P. nigrunguiculatus* p. 282, *P. tiburonensis* p. 284 spp. n. Gulf of California, GLASSELL Trans. S. Diego Soc. 8.

Pisosoma smithi p. 286, *P. lewisi* p. 287, *P. erosa* p. 289 spp. n. Pacific coast of Mexico, GLASSELL Trans. S. Diego Soc. 8.

Polyonyx asiaticus sp. n. off Shantung N. China with list of other spp., SHEN Bull. Fan Mem. Inst. 6 p. 279 figs.

Porcellana magdalensis sp. n. Gulf of California, GLASSELL Trans. S. Diego Soc. 8 p. 295.

HIPPIDEA.

Lophomastix tchangii sp. n. Chinese waters, YÜ Abstr. Pap. Sci. Conf. Nanning 1935 p. 51.

PAGURIDEA.

(Fams. Potamochelidae, Paguridae, Coenobitidae, Lomosidae, Lithodidae.)

The adaptation of the Hermit-Crabs to the shape of the gasteropod shells they inhabit, RABAUD 389.

Stereotropism in Pagurids, cause of their adoption of shells as retreats, RABAUD 390.

Hermit-Crabs of the Gulf of Naples, FENIZIA 125.

Anapagurus breviaculeatus sp. n. p. 25 figs., *A. chiroacanthus gracilis* p. 31, *A. c. cristatus* p. 32 figs. varr. n. all Gulf of Naples, FENIZIA Annu. Mus. zool. Napoli 7 no. 2.

Catapagurides macrochirus sp. n. p. 3 figs., *C. m. platichelus* var. n. p. 10 figs., *C. crassipes tuberculatus* var. n. ? p. 12 figs., *C. timidus neapolitanus* var. n. ? p. 14 figs. all Gulf of Naples, FENIZIA Annu. Mus. zool. Napoli 7 no. 2.

Eupagurus bernhardus method of extracting from its molluscan shell, PÉREZ 373.—*E. prideauxi* relative growth studies, PAULIAN 366.

Pagurus bonairensis sp. n. Bonaire W.I. coast, SCHMITT Zool. Jahrb. (Syst.) 67 p. 376 figs.

†*Palaeopagurus würganensis*, *P. schneidi* spp. n. Jurassic Bavaria, KUHN Cbl. Min. Geol. 1936B p. 123 figs.

Macrura.

Macrura of Hainan seas, YÜ 570.

NEPHROPSIDEA.

(Fams. Erymidae, Nephropsidae, Potomobiidae, Parastacidae.)

Land and freshwater Crayfishes of Australia, with descriptions keys and taxonomy, CLARK 82.

Astacopsis fleckeri addt. note, WATSON 534; Distr. status, habits, fig., FLECKER 129.—*A. gouldi* p. 35, *A. tricornis* p. 36 both figs. spp. n. Tasmania, CLARK Mem. nat. Mus. Melbourne no. 10.

Astacus fluviatilis morphology and homologies of the thoracic appendages, BOUVIER 50; Structure of the duct of the green gland, DORNESCO 104; Status and distr. in Portugal, MACHADO 309.

Austroastacidae fam. n. for *Austroastacus* gen. n. for genotype *Engaeus hemicirratulus* Smith & Schuster p. 51, also *A. cymus* sp. n. p. 53 Victoria, CLARK Mem. nat. Mus. Melbourne no. 10.

Cambarus physiology of respiration, MALOEUF 313.—*C. clarkii* muscle-nerve physiology, WIERSMA & VAN HARREVELD 541.

Cherax destructor p. 26 Victoria, *C. albidus* p. 28 Victoria, *C. punctatus* p. 29 Queensland spp. n. all figs., CLARK Mem. nat. Mus. Melbourne no. 10.

†*Clytia amalthea* in Lias of Bavaria note fig. p. 302, KUHN 275.

Engaeus sericatus p. 40, *E. quadrimanus* p. 41, *E. tuberculatus* p. 43, *E. villosus* p. 44 spp. n. all figs. Victoria, CLARK Mem. nat. Mus. Melbourne no. 10.—*E. victoriensis*, *E. fossor* habits and economic status in Victoria, CLARK 83.

†*Enoploclytia glaessneri* sp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 10.

†*Eryma* sp. in Lias, Bavaria note fig. p. 303, KUHN 275.—*E. falsani* note fig. p. 13, GREGORIO 162.—*E. tithonia* p. 8, *E. tuberculata* p. 9 spp. n. Cretaceous France, v. STRAELEN Bull. Mus. Belg. 12 no. 45 figs.

Eustacus gen. n. for *Astacopsis serratus* (Shaw) and other spp., CLARK Mem. nat. Mus. Melbourne no. 10 p. 10.

Geocharax gen. n. for genotype *G. gracilis* sp. n. p. 31, also *G. lyelli* sp. n. both figs. both Victoria, CLARK Mem. nat. Mus. Melbourne no. 10.

Homarus vulgaris habits and economic cultivation, DANNEVIG 92; Habits, status, economics in Portuguese waters p. 83, GONZAGA D. N. 155; A spotted individual descr. fig., DONS 101.—*H. americanus* effects of temperature and locality on size and growth in E. Canada, TEMPLEMAN 492; mating habits, TEMPLEMAN 493; Larval stages, TEMPLEMAN 494.

†*Homarus* geological history and retrograde evolution and phylogeny, v. STRAELEN 475; Review of Cretaceous spp. p. 14, *H. pelseneeri* sp. n. Cretaceous France p. 18 figs., v. STRAELEN Bull. Mus. Belg. 12 no. 45.—*H. alpinus* sp. n. Auversian (Eocene) of Switzerland, v. STRAELEN Bull. Mus. Hist. nat. Belg. 12 no. 27 p. 1 figs.

Parastacoides gen. n. (Parastacidae) for genotype *Astacus tasmanicus* Erichson descr. figs., CLARK Mem. nat. Mus. Melbourne no. 10 p. 48.

Potamobius pallipes mechanics of locomotion, BALDI 13; Population fluctuations in Oxfordshire, DUFFIELD 114.

Pseudengaeus gen. n. (Parastacidae) for genotype *P. strictifrons* sp. n. p. 47 also *P. sternalis* sp. n. p. 48 both figs. Victoria, CLARK Mem. nat. Mus. Melbourne no. 10.

†*Stenochirus ericensis* sp. dub. Lias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 53 1930 p. 13 figs.

SCYLLARIDEA (LORICATA).

(Fams. Palinuridae, Scyllaridae.)

Phyllosoma larvae of *Palinurus*, *Scyllarus* and allied forms in S. Atlantic descr. figs. p. 400, GURNEY 176.

†*Eryon* sp. Cretaceous Switzerland desc. fig. p. 1, v. STRAELEN 475.

Jasus lalandii breeding habits and development early and larval stages, v. BONDE 43.

†*Limparus dentatus* descr. figs. p. 2, v. STRAELEN 475.

Palinurus vulgaris habits, status, economics off Portugal p. 1, GONZAGA D. N. 155; Larval stages, LEGENDRE 293.

Scyllarus arctus larval stages, LEGENDRE 293.

INCERT. SED. NR. PALINURIDAE.

†*Platyleon nevadensis* gen. et sp. n. Trias Nevada, v. STRAELEN Bull. Mus. Hist. nat. Belg. 12 no. 29 p. 1 figs.

GLYPHAEIDEA.

†*Glyphea ützingensis* p. 125, *G. broilii* p. 126 spp. n. Jurassic Bavaria, KUHN Cbl. Min. Geol. 1936B.

†*Mecochirus houdardi* sp. n. Cretaceous Switzerland, v. STRAELEN Bull. Mus. Belg. 12 no. 45 p. 5 figs

†*Meyeria ornata* and other spp. descr. fig. p. 6, v. STRAELEN 475.

†*Triasiglyphea mulleri* gen. et sp. n. (Glypheidae) Trias Nevada, v. STRAELEN Bull. Mus. Hist. nat. Belg. 12 no. 29 p. 3 figs.

THALASSINIDEA.

(Fams. Axiidae, Laomedidae, Thalassinidae, Axianassidae, Callianassidae.)

†*Callianassa alpha* Rathbun = *C. zeta* nom. n., *C. beta* = *C. eta* nom. n.,

C. gamma = *C. theta* **nom. n.**, RATHBUN 393.

Upogebia and *Callianassa* on west coast Sweden range, status habits, GUSTAFSON 180.

CARIDEA.

(Fams. Pasiphaeidae, Atyidae, Hoplophoridae, Pandalidae, Alpheidae, Hippolytidae, Palaemonidae, Crangonidae, etc.)

The larvae of Bermudan Palaemonidae p. 619 figs., GURNEY 179.

Key of the genera and spp. of Acanthephyridae, CHACE 71.

Alpheopsis hummelincki sp. n. Dutch West Indies, SCHMITT Zool. Jahrb. (Syst.) 67 p. 364 figs.

Alpheus ventrosus in Hainan waters p. 91, YU 570.

Amphion larvae discussion of affinities descr. figs. p. 392, GURNEY 176.

Anchistioides diurnal movements of eye pigment, WELSH 536.—*A. antiquensis* periodic swarming habits in Bermuda waters, WHEELER & BROWN 539.

Anchistus misakiensis sp. n. Japanese Seas, YOKOYA Japan. J. Zool. 7 p. 136 figs.

Athanas japonicus sp. n. Japanese seas, KUBO J. Imp. Fish. Inst. Tokyo 31 p. 43 figs.—*A. ohsimai* sp. n. Japanese seas, YOKOYA Japan. J. Zool. 7 1936 pp. 129–131 figs.

Atya bisulcata effect of X-rays on limb regeneration, EDMONDSON 115.

Atyaephyra (*Caradina*) *desmaresti* range in Holland and Belgium and note on habits, REDEKE 397.

Balssia gastii on Spanish coasts p. 6, ZARIQUIEY Y CENARRO 574.

Bentheocaris stylorostratis Bate should be referred to *Acanthephyra* p. 30, CHACE 71.

Betaeus murayamai sp. n. Japanese seas, YOKOYA Japan. J. Zool. 7 p. 132 fig.—*B. yokoyai* sp. n. Japanese seas, KUBO J. imp. Fish. Inst. 31 p. 50 figs.

Bythocaris payeri taxonomic note p. 14, SIVERTSEN 440.

Caridina nilotica gracilipes in salt water off Hainan p. 88, *C. lanceifrons* sp. n. Hainan waters p. 89 figs., YU Chinese J. Zool. 2,

Crago franciscorum, *C. nigricauda* life history and economics on California coasts, ISRAEL 213.

Crangon, regeneration of locomotor appendages, NOUVEL 343.—*C. armilatus* problems and mechanism of chela differentiation, DARBY 93.—*C. malleator* taxonomic note p. 367, SCHMITT 417.

Gomphonotidae **fam. n.** for *Gomphonotus* **nom. n.** pro *Gonatonotus* Milne-Edw. 1881 preocc., CHACE J. Wash. Acad. Sci. 26 p. 25.

Hippolyte pleuracantha bermudensis subsp. n. Bermuda p. 27 and notes on other Bermuda spp. and their larval stages and mimicry in *H. acuminata* to the vesicles of *Sargassum*, GURNEY P.Z.S. 1936 p. 25 5 pls.—*H. curacaoensis* addt. descr. p. 370, SCHMITT 417.

Jousseamea arubae sp. n. Aruba coast, SCHMITT Zool. Jahrb. (Syst.) 67 p. 366 figs.

Latreutes larvae from Newfoundland waters descr. figs., p. 18, FROST 137.—*L. fucorum* larval stages, GURNEY 177.

Leander rectirostris recorded from Caspian Sea, PYATAKOV 386.

Leptochela gracilis in Hainan waters fig. p. 86, YU 570.—*L. hainanensis* sp. n. Hainan waters, YU Chinese J. Zool. 2 p. 87 fig.—*L. carinata*, *L. pugnax* larval development, GURNEY 177.

Ligur uveae from Fiji descr. figs. field obs. and note on *L. edwardsii*, GORDON 157.

Macrobrachium olfersii variation and coloration p. 372, SCHMITT 417.

Palaemon asperulus general anatomy and histology, YU 571.—*P. (Parap.) trompi armatus* subsp. n. Malay Pen., ROUX Bull. Raffles Mus. 12 p. 30.—*P. brevicarpus heterochirus* var. n. p. 305, *P. yunnanensis* sp. n. p. 308 figs., Yunnan, YU Bull. Fan. Mem. Inst. 6.—*P. morleyi* sp. n. Cave in Yucatan, CREASER Pub. Carnegie Instn. no. 457 p. 126 figs.

Palaemonella spinulata sp. n. Japanese seas, YOKOYA Japan. J. Zool. 7 p. 135 figs.

Palaemonetes sinensis in salt water off Hainan p. 92 and notes on other spp., YU 570.—*P. paludosa* in Louisiana descr. habits life hist. figs., MEEHEAN 319,

Pandalopsis revision with key p. 185, *P. multidentatus* p. 188, *P. ochotensis* p. 190, *P. punctatus* p. 191 all spp. n. figs., *P. aleutica glabra* subsp. n. p. 192 figs. all N. Pacific, KOBJAKOVA Zool. Anz. 116.

Pandatus larvae off Newfoundland descr. figs. p. 14, FROST 137; Development of gonads and hermaphroditism, JÄGERSTEN 216.—*P. montagui* development of gonads and 2nd sex characters, LÉLOUP 297.

Perichlimes maxilludides sp. n. off Bonaire W.I., SCHMITT Zool. Jahrb. (Syst.) 67 p. 371 figs.—*P. (Ancylcaris) akiensis* sp. n. Japanese seas, KUBO J. Imp. Fish. Inst. Tokyo 31 p. 47 figs.

Processa edulis, *P. caniculata* characters of adults and larval development, LÉBOUR 291.—*P. bermudensis* descr. of adult and larval development p. 624 figs., GURNEY 179.

Rhynchocinetes rigens sp. n. Madeira coast p. 76 figs., *R. balssi* nom. n. for *R. typus* Balss 1922 nec Borradaile 1916 p. 85 and key to all the spp., GORDON P.Z.S. 1936.—*R. regulosus* in Japanese seas descr. fig., KUBO 271.

Spirontocaris larvae from Newfoundland waters descr. figs. p. 15, FROST 137.—*S. cranchii* descr. figs., *S. occulta* sp. n. Plymouth waters p. 96 figs. with notes on larval stages habits and history, LÉBOUR P.Z.S. 1936 p. 89.

Synalpheus japonicus sp. n. Japanese seas, YOKOYA Japan J. Zool. 7 p. 133 figs.

Typhlatya pearsei sp. n. cave in Yucatan, CREASER Pub. Carnegie Instn. no. 457 p. 128 figs.

STENOPODEA.

Structure of the gastric mill in Penaeids and Stenopids, PATWARDHAN 365.

Stenopus hispidus and other spp. larvae descr. figs. p. 380, GURNEY 176.

PENAEIDEA.

(Fams. Penaeidae, Sergestidae.)

Revision of the oceanic Penaeidae, BURKENROAD 69.

Review of the Chinese Penaeidea with descr. and keys, YÜ 568.

Gastric mill of Penaeids, PATWARDHAN 365.

Bentheogennema gen. n. for genotype *Gennadus intermedius* Bate, BURKENROAD Bull. Bingham oceanogr. Coll. 5 no. 2 p. 56.

Benthesicymus cereus p. 30, *B. urinator* p. 45, *B. strabus* p. 46 spp. n. Caribbean Sea, BURKENROAD Bull. Bingham oceanogr. Coll. 5 no. 2 figs.

Hymenopenaeus aphoticus sp. n. Caribbean, BURKENROAD Bull. Bingham oceanogr. Coll. 5 no. 2 p. 112 figs.

Penaeus japonicus embryonic and larval development, HUZINAGA 209.

Parapenaeopsis brevirostris sp. n. Japanese seas, KUBO J. imp. Fish. Inst. 31 p. 55 figs.

Parapenaeus longirostris in the Adriatic fig., KARLOVAC 229.

EUPHAUSIACEA.

Review of the Euphausids of the Atlantic and Mediterranean, distribution, biology and ecology, RUUD 406.

Vertical distr. of Euphausids in Gulf of Naples, TORELLI 502.

The Euphausiid fauna of the Gt. Barrier Reef and its seasonal distribution and habits, TATTERSALL 488, 489.

Euphausids as food of the Pacific Herring, WAILES 530.

Faunal List.—Bermuda seas, TATTERSALL 490; East Greenland seas, SIVERTSEN 440.

Euphausia a review with descr. and figs. of the ten species in southern waters with the later larval development of five of them, JOHN 222.—*E. superba* larval development and distr. of eggs and larvae in Antarctic waters, FRASER 134.

Meganyctiphanes note on the species and their distinctions p. 7, RUUD 406.

Pseudeuphausia latifrons life-history and larvae figs. p. 168, TATTERSALL 489.

Thysanopoda tricuspidata remarks p. 165, TATTERSALL 489.

MYSIDACEA.

A list of brackish- and fresh-water Schizopods taxonomy distr. ecology and eye-degeneration p. 62, STAMMER 454.

The vertical seasonal and diurnal distribution of the Mysids on the Gt. Barrier Reef off Queensland, TATTERSALL 488, 489.

Faunal Lists.—Bermuda area, TATTERSALL 490; East Greenland seas, SIVERTSEN 440.

Acanthomysis longirostris p. 590, *A. dimorpha* p. 593 spp. n. Corea waters figs. notes figs other spp.; Ii Japan J. Zool. 6.—*A. incisa* sp. n. Gt. Barrier Reef, TATTERSALL Sci. Rep. Gt. Barrier Reef Exped. 5 p. 161 figs.

Antromysis gen. n. (Mysinae) for *A. cenotensis* sp. n. figs. cave in Yucatan, CREASER Pub. Carnegie Instn. 457 p. 121 figs.

Doxomysis littoralis recorded for Gt. Barrier Reef p. 154, TATTERSALL 489.

Echinomysis distinguenda sp. n. Red Sea, COIFMANN Bull. Zool. Torino 7 p. 87 fig.

Erythrops yongei Queensl. Barrier Reef, TATTERSALL Sci. Rept. Gt. Barrier Reef Exp. 5 p. 149 fig.

Gymnerythrope microps sp. n. Red Sea, COIFMANN Bull. Zool. Torino 7 p. 85 figs.

Heteromysis cotti in Canaries notes figs. p. 109, FAGE & MONOD 121.

Limnomysis benedeni in the Don basin note p. 86, BEHNING 36.

Metamblyops stephensoni sp. n. Gt. Barrier Reef, TATTERSALL Sci. Rep. Gt. Barrier Reef Exp. 5 p. 152 figs.

Meterythrope affinis sp. n. Red Sea, COIFMANN Bull. Zool. Torino 7 p. 84 fig.

Mysidella bulgarica sp. n. brackish lakes, Bulgaria, ILLIG in VALKANOV Annu. Univ. Sofia 3 p. 282 fig., also Zool. Anz. 115 p. 26 figs.

Mysis relicta in Norwegian lakes, SOMME 449.

Neomysis general taxonomy p. 577, *N. nakazawai* sp. n. off Sakhalin p. 581 figs., *N. czerniawskii* descr. figs. p. 585, Ii Japan J. Zool. 6.

Paracanthomysis gen. n. for genotype *P. hispida* sp. n. p. 7 figs. Japanese seas, also *P. kurilensis* sp. n. p. 11 figs. Kurile Is. seas, Ii Japan J. Zool. 7.

Parastilomysis gen. n. p. 1 for genotype *P. paradoxa* sp. n. p. 3 figs. Japanese seas, Ii Japan J. Zool. 7 1936.

Promysis orientalis notes figs. p. 154, TATTERSALL 489.

Proneomysis diagn. and key p. 604, *P. fusca* p. 605, *P. eriopedes* p. 609, *P. misakiensis* p. 612, *P. perminuta* p. 616 all spp. n. all figs. Japanese waters, Ii Japan. J. Zool. 6.

Pseuderythrope gracilis gen. n. (nr. *Metamblyops*) et sp. n. Red Sea, COIFMANN Bull. Zool. Torino 7 p. 83 figs.

Pseudomysidetes gen. n. p. 156 for *P. russelli* sp. n. p. 157 Gt. Barrier Reef, TATTERSALL Sci. Rep. Gt. Barrier Reef Exp. 5 figs.

Siriella dubia notes figs. p. 146, TATTERSALL 489.

Synerythrope intermedia note fig. p. 150, TATTERSALL 489.

Troglomysis vjetrenicensis gen. et sp. n. cavernicolous in Jugoslavia, STAMMER Zool. Jahrb. (Syst.) 68 p. 54 figs.

SYNCARIDA.

(= Anaspidacea.)

Bathynella natans note p. 278, HERTZOG 193.

†*Palaeocaris* first European example in Carboniferous of Blanzky basin, France, THOMASSET 497.

Paranaspidetes, *Micraspidetes* structure of nerve system and sense organs, HANSTRÖM 184.

STOMATOPODA.

Gonodactylus demani note desc. p. 179, MACCAGNO 308.

Pseudosquilla oxyrhyncha off Easter Isle, Pacific descr. note fig., GRAVIER 159.

Squilla name to be made fixed, STILES 469.

CUMACEA.

Swimming, feeding, swarming, breeding and moulting habits of sand-dwelling Cumacea, FOXON 130.

Cumacea of S. Australian coasts, HALE 182.

Allodiastylus gen. n. (Diastylidae) for genotype *A. cretatus* sp. n. S. Australian coasts, HALE Rec. S. Austr. Mus. 5 p. 426 figs.

Campylaspis canaliculata sp. n. California coast, ZIMMER Proc. U.S. Nat. Mus. 83 p. 427 figs.

Cumella laevis descr. figs. p. 432, *C. lima* sp. n. p. 435 figs. S. Australian coasts, HALE Rec. S. Austr. Mus. 5.

Cyclaspis caprella sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 395 figs.—*C. pura* sp. n. S. Australian coasts, HALE Rec. S. Austr. Mus. 5 p. 405 figs.—*C. nubila* sp. n. California coast, ZIMMER Proc. U.S. Nat. Mus. 83 p. 424 figs.

Diastylis goodsiri distr. in the Arctic map p. 5, STEPHENSEN 460.—*D. californica* sp. n. California coast, ZIMMER Proc. U.S. Nat. Mus. 83 p. 431 figs.

Diastylopsis tenuis sp. n. California coast, ZIMMER Proc. U.S. Nat. Mus. 83 p. 436 figs.

Dic lasiodactylum descr. figs. p. 422, HALE 182.

Dimorphostylis cottoni sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 400 figs.

Gephyrocuma gen. n. (Bodotriidae) for genotype *G. pala* sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 412 figs.

Gynodiastylis similis, *G. turgidus* descr. figs. p. 418, HALE 182.

Hemilamprops (?) *californica* sp. n. California coast, ZIMMER Proc. U.S. Nat. Mus. 83 p. 429 figs.

Iphinoë trispinosa various habits, FOXON 130.

Lamprops fasciata swimming and other habits, FOXON 130.

Leptocuma sheardi sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 409 figs.

Oxyurostylis pacifica sp. n. California coast, ZIMMER Proc. U.S. Nat. Mus. 83 p. 437 figs.

Pachystylis vietus sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 424 figs.

Picrocuma gen. n. (Bodotriidae) for genotype *P. poecilota* sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 415 figs.

Pseudocuma longicorne swimming and other habits, FOXON 130.

Schizotrema bifrons aculeata var. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 430 fig.

Symphodomma bakeri sp. n. S. Australian coast, HALE Rec. S. Austr. Mus. 5 p. 397 figs.

TANAIDACEA.

On the structure of the marsupium in the Tanaids, MOERS-MESSMER 327.

Leptochelia sex dimorphism and growth, ROUBAULT 402.

Leptognathia gracilioides in Plymouth waters note fig. p. 96, CRAWFORD 89.

†*Palaeotanais quenstedti* gen. et sp. n. (? Apseudidae) Lias Germany, REIFF Palaeont. Z. 18 p. 86 figs.

Tanais chevreuxi recorded in Plymouth waters p. 96, CRAWFORD 89.—*T. stanfordi* in freshwater in Kurile Is. descr. figs. and note on the generic taxonomy, STEPHENSEN 458.

ISOPODA.

The exoskeleton and its glands in Isopods, PATANÉ 363.

Isopods new to Plymouth waters p. 97, CRAWFORD 89.

Isopods of N. Norway coast, DONS 102.

The Isopods of the Kara Sea and their zoogeographical significance, GURJANOVA 171, 172.

Review of the Isopods of the N. Pacific-Bering, Ochotsk and Japan seas, GURJANOVA 169, 170, 174.

Fresh-water Isopods of N. China, SHEN 429; Of the Cenotes of Yucatan, CREASER 90.

Marine Isopods of Indian Seas, BARNARD 29; Of East Greenland seas, NORDENSTAM 342.

GNATHIDEA.

Gnathia (*Elaphognathia*) *monodi* sp. n. Japanese seas, GURJANOVA Zool. Anz. 114 p. 256 figs.

ANTHURIDEA.

(Vacant.)

ASELLOTA.

Asellus aquaticus cavernicolous eye degeneration, KOSHWIG 268; In China descr. figs. p. 21, SHEN 429.—*A.*

(*Proasellus*) *cavaticus leruthi* p. 2, *A.* (*P.*) *meridianus belgicus* p. 3 subspp. n. Belgian caves, ARCANGELI Bull. Mus. Hist. nat. Belg. 11 no 37 figs.—*A.* (*P.*) *italicus perarmatus* subsp. n. Madeira, REMY Broteria 32 p. 20 figs.—*A. incisus* sp. n. freshwater Missouri, VAN NAME Bull. Amer. Mus. 71 p. 464 figs.

Desmosoma intermedium sp. n. p. 2 figs. Skagerrak, *D. fitipes* nom. n. pro *D. tenuimanum* key of all spp., HULT Ark. Zool. 29A.

Ilyarachna bergendali i p. 11, *I. longicornis* ii p. 1 descr. notes figs., HULT 208.

Janira spinosissima sp. n. W. Greenland waters, STEPHENSEN Medd. Grønland 80 no. 2 p. 7 figs.

Janiropsis serricaudis sp. n. Japanese seas, GURJANOVA Zool. Anz. 114 p. 251 fig.

Mancasellus herricki nom. n. for *M.* sp. Herrick 1887 Alabama, VAN NAME Bull. Amer. Mus. 71 p. 483 figs.

Munna avatshensis Bering sea p. 253, *M. subneglecta* Japanese seas p. 254 spp. n. figs., GURJANOVA Zool. Anz. 114.

Munida review of spp. distr. life history and account of their infesting Rhizocephaline parasites and their mutual relations, BRINKMANN 64.

Munnopsurus (*Eurycope*) *giganteus* in Baffin sound map p. 11, STEPHENSEN 460.

Stenasellus range of the genus, *S. buchneri* sp. n. cave in Spain p. 137 figs., *S. brevili* note p. 139, STAMMER Zool. Anz. 114.

FLABELLIFERA.

Aega stroemi structure of the "stomach," RUSTAD 405.—*A. ventrosa* in Arabian sea descr. p. 157, *A. ommatophylax* figs. p. 158, BARNARD 29.

Agarna engraulidis sp. n. on *Engraulis*, Orissa coast, BARNARD Rec. Ind. Mus. 38 p. 169 figs.

Argathona normani taxonomic remarks and descr. p. 156, BARNARD 29.

Cerceis bicarinata sp. n. Bay of Bengal, BARNARD Rec. Ind. Mus. 38 p. 183 figs.

Cilicæa caniculata descr. figs. p. 181, BARNARD 29.

Cirolana procellana Mergui p. 149, *C. perlata* L. Burma p. 153 spp. n. with

notes and figs. of other Indian spp., BARNARD Rec. Ind. Mus. 38.—*C. anops* sp. n. in cave in Yucatan, CREASER Pub. Carnegie Instn. 457 1936 p. 118 figs.—*C. browni* freshwater Cuba, VAN NAME Bull. Amer. Mus. 71 p. 423 figs.

Cymodoce longistylis off Nicobars remarks p. 179, BARNARD 29.

Ichthyoxenus review of spp. with anatomical and taxonomic notes, HARADA 185.—*I. yunnanensis*, *I. hsiakowensis* spp. n. Yunnan and Hankow, China, YÜ Abstr. Paps. Sci. Conf. Nanning 1935 p. 53.—*I. tchangi* sp. n. on *Barbus* in Yunnan, YÜ Bull. Fan Mem. Inst. Biol. 6 p. 72 figs.—*I. sinensis* sp. n. on *Carassius* Peiping China p. 7 figs., *I. geei* descr. figs. p. 11, SHEN Bull. Fan Mem. Inst. 7.

Limnoria lignorum general account of this and other injurious borers, CALMAN & CRAWFORD 70.—*L. septima* sp. n. off Andamans, BARNARD Rec. Ind. Mus. 38 p. 175 figs.

Livoneca parasilura sp. n. Hopei, China on *Parasilurus*, SHEN Bull. Fan. Mem. Inst. 7 p. 4 figs.

Lobothorax laevis remarks figs. p. 168, BARNARD 29.

Nerocila phaeopleura notes figs. p. 166, BARNARD 29.

†*Palaega kessleri* p. 51, *P. suevica* p. 67 spp. n. figs., *P. kunthi* addt. descr. p. 80 Lias Swabia Germany, REIFF PALAEONT Z. 18.

Pleopodius elongatus status of genus and other remarks p. 165, BARNARD 29.

Renocila ovata descr. figs. p. 161, BARNARD 29.

Sphaeroma terebrans boring activity in Cochin harbour, India, ERLAUSON 119.—*S. triste* off Nicobars remarks figs. p. 177, BARNARD 29.

Tachaea chinensis descr. figs. p. 18, SHEN 429.

VALVIFERA.

Arcturus baffini distr. in northern and Greenland waters map p. 14, STEPHENSEN 460.

Astacilla longicornis descr. and field obs. Irish sea, GILLESPIE 151.—*A. polita* sp. n. Japanese seas, GURJANOVA Zool. Anz. 114 p. 255 figs.

Cleantis natalensis remarks figs. p. 186, BARNARD 29.

EPICARIDEA.

Japanese Bopyrids, SHIINO 433, 434, 435.

Argeia pingi sp. n. on *Crago* Hopei coast, China, Yü Abstr. Paps. Sci. Conf. Nanning 1935 p. 52.

Athelges takanoshimensis tenuibranchatus var. n. on *Eupagurus* in Japan seas, SHIINO Rec. Oceanogr. Works Japan 8 p. 187 figs.

Bopyrid indet. descr. fig. p. 173, SHIINO 434.

Bopyrella angusta sp. n. Japan seas, SHIINO Mem. Coll. Sci. Kyoto 11 p. 157 figs.

Bopyrinella antilensis nipponica var. n. Tanaba Bay Japan, SHIINO Mem. Coll. Sci. Kyoto 11 p. 159 figs.

Cataphryxus gen. n. for *Epiphryxus* Shiino 1934 nec NIERSTRASZ & BRENDER A B. 1932 type, *E. primus* Shiino, SHIINO Mem. Coll. Sci. Kyoto 11 p. 172.

Epicepon japonicum descr. figs. p. 168, SHIINO 434.

Epipenaeon japonica development, life-cycle and sex differentiation, HIRAIWA 195.

Grapsicepon magnum p. 167, *G. rotundum* p. 169 spp. n. Tanaba Bay Japan, SHIINO Mem. Coll. Sci. Kyoto 11 figs.

Heterocephon gen. n. (Bopyridae) for *H. marginatum* sp. n. on *Pinnotheres* Japan seas, SHIINO Rec. Oceanogr. Works Japan 8 p. 165 5 figs., also note figs. p. 185, SHIINO 435.

Lobocephon diagn. and taxonomic discussion pl. 161, *L. grapsi* descr. figs. p. 163, SHIINO 434.

Merocephon xanthi descr. occurrence in Japanese seas p. 166, SHIINO 433.

Onychocephon resupinum sp. n. Tanaba Bay, Japan, SHIINO Mem. Coll. Sci. Kyoto 11 p. 163 figs.

Palaeogyge buitendjiki parasitic on *Palaemon* on Sarawak coast descr., BANKS 25.

Phryxus abdominalis distr. in northern waters p. 15 map, STEPHENSEN 460.

Probopyrus creaseri sp. n. on *Palaeomonetes* off Yucatan, PEARSE Pub. Carnegie Instn. no. 457 p. 51 figs.

Pseudione hyndmanni and other spp. descr. figs. p. 177, SHIINO 435.

Scyrrapeon quadrihamatum sp. n. on *Maja* in Japanese seas, SHIINO Rec. Oceanogr. Works Japan 8 p. 171.

ONISCOIDEA.

General account of the Land and Freshwater Isopods of N. and S. America with descriptions and figures, VAN NAME 515.

Male genital organs of Oniscoidea; also Oniscoidea as hosts of the larvae of Muscidae, VERHOEFF 523.

The effects and changes caused by domestication among Land-Isopods, VERHOEFF 526.

Use of Woodlice for cleaning Vertebrate skulls, PEREIRA & TRAVASSOS 370.

Faunal Lists.—Oxfordshire, etc., E. TAYLOR 491; Denmark, MEINERTZ 321; Hungary, KESSELYÁK 236; Portugal and Spain, ARCANGELI 11, 12; LUISIER 306; N. Italy, VERHOEFF, 523; Ionian Is., STROUHAL 476; Bessarabia, Roumania, DEMIANOWICZ 100; Bulgaria, VERHOEFF, 521; Mauritius, BARNARD 28; Perak and Borneo, JACKSON 215; N. and S. America, VAN NAME 515.

Androniscus roseus borgotarensis subsp. n. Italy p. 130 figs., *A. dentiger calvivagus* Verh. = *boldorii* Strouh. p. 131, VERHOEFF Mitt. zool. Mus. Berlin 21.

Armadillidium histology of intestine figs., ANGELINI 9.—*A. speyeri* and other Woodlice as pests in glasshouses, SPEYER 451.—*A. assimile* note fig. p. 7, ARCANGELI 11.—*A. jaqueti* descr. figs. p. 86, DEMIANOWICZ 100.—*A. (A.) rojanum* sp. n. Italian Alps p. 115, A. (A.) *arcangelii scrivani* subsp. n. p. 117, A. (*Pseudosphaerium*) *simoni hontremolense* p. 118, A. (*P.*) *savonense finalense* p. 121, A. s. *ligurinum* p. 121, A. s. *albissolense* p. 122 subsp. n., A. (*P.*) *apenninigenum* p. 122 sp. n. all N. Italy all figs., VERHOEFF Mitt. zool. Mus. Berlin 21.—*A. (A.) albanicum* p. 92 A. (*A.*) *frontemarginatum* p. 93 and other spp. descr. figs., A. (*A.*) *humile* sp. n. Cephalonia p. 103 figs., STROUHAL Acta Inst. Mus. Zool. Univ. Athen. 1.—

A. (A.) rhodopinum p. 2, *A. (A.) elysii* p. 4 spp. n. Bulgaria, VERHOEFF Bull. Inst. R. Hist. nat. Sophia 9 figs.

Buddelundiella caprae sp. n. cave in Liguria Italy, BRIAN Boll. Soc. ent. ital. Genova 68 p. 22 figs.—*B. borgensis* sp. n. N. Italy, VERHOEFF Mitt. zool. Mus. Berlin 21 p. 104 figs.

Camorta gen. n. (Fam. Detonidae olim Scyphacidae) for *C. nicobarica* sp. n. Nicobars, BARNARD Rec. Ind. Mus. 38 1936 p. 190 figs.

Chaetophiloscia elongata in Corfu note fig. p. 74, STROUHAL 476.

Circoniscus hamatus sp. n. Bt. Guiana, VAN NAME Bull. Amer. Mus. 71 p. 309 figs.—*C. pallidus* sp. n. S. Brazil, ARCANGELI Arch. zool. Torino 23 p. 204 figs.

Cubaris spenceri sp. n. Northern Territory, Australia, BARNES J. Roy. Soc. W. Austr. 20 p. 63 figs.—*C. watsoni* p. 331, *C. booneae* p. 336 Jamaica, *C. phyllax* p. 353 S. Domingo, *C. moneaguensis* p. 355 Jamaica, *C. oaxacana* p. 356 Mexico, *C. culebrae* p. 370, *C. wheeleri* p. 380, *Culebra* I. W.I., *C. mineri* p. 383 Bt. Guiana, *C. cinchonae* p. 391 Jamaica all spp. n. all figs., VAN NAME Bull. Amer. Mus. 71.

Cylisticus pontremolensis p. 112, *C. ligurinus* p. 115 spp. n. Italian Alps figs., VERHOEFF Mitt. zool. Mus. Berlin 21.

Cyphotendana gen. n. (Haplothalaminae) p. 95 for *C. dalmazzensis* p. 97 and *C. ligurina* p. 98 spp. n. figs. N. Italy, VERHOEFF Mitt. zool. Mus. Berlin 21.

Dekanoscia gen. n. (Oniscidae) p. 97 for *D. longicornis* sp. n. p. 98, Travancore, India, VERHOEFF Rec. Ind. Mus. 38 figs.

Diploexochus pollex sp. n. Mauritius, BARNARD Ann. Natal Mus. 8 p. 10 figs.

Eluma caelatum descr. range p. 3, ARCANGELI 11.

Exalloniscus coecus in Perak note fig. p. 79, JACKSON 215.

Haplophthalmus and allied genera review p. 90, VERHOEFF 523.—*H. delmontensis* sp. n. p. 132, *H. mengiei cottianus* subsp. n. p. 133 N. Italy, VERHOEFF Mitt. zool. Mus. Berlin 21.—*H. stygirus* sp. n. Thrace, VERHOEFF Mitt. Höhlen- u. Karstf. 1936 p. 159 figs.

Hirtiliglia subg. n. for type *Ligia baudiniana* M.-Edw., VAN NAME Bull. Amer. Mus. 71 p. 57.

Hyloniscus mariae in Bessarabia notes figs. p. 70, DEMIANOWICZ 100.

Katascaphius gen. n. p. 100 (nr. *Titanethes*) for *K. sturanus* sp. n. p. 101 figs. Italian Alps, VERHOEFF Mitt. zool. Mus. Berlin 21.

Lepidoniscus pruinosis biellensis subsp. n. Italy, VERHOEFF Mitt. zool. Mus. Berlin 21 p. 106 figs.

Ligia experiments of effect of temperature, etc., BARNES 31.—*L. exotica* sex characters in legs of male, KATO 230.

Ligidium germanicum notes figs. p. 68, DEMIANOWICZ 100.

Myrmekiocellio gen. n. p. 15 (Porcellionidae) for *M. squamatus* sp. n. p. 6 Bulgaria, VERHOEFF Bull. Inst. R. Hist. nat. Sophia 9 figs.

Nagara (Nagara) travancoria sp. n. Travancore, India, with key of other spp., VERHOEFF Rec. Ind. Mus. 38 p. 100.

Neotroponiscus gen. n. (Porcellionidae) for *N. carolii* sp. n. S. Brazil, ARCANGELI Arch. zool. Torino 23 p. 201 figs.

Nesodillo jonesii sp. n. Travancore India, VERHOEFF Rec. Ind. Mus. 38 p. 101 figs.

Oniscus structure of nervous system, WALKER 531.

Oroniscus (Oroniscus) hessei sp. n. Italian Alps, VERHOEFF Mitt. zool. Mus. Berlin 21 p. 109 figs.

Phalloniscus hist. diagnosis and revision p. 46, *P. chiltoni* Auckland I. p. 51, *P. armatus* S.I. New Zealand p. 56, *P. [Hanoniscus] nicholli* W. Austr. p. 60, *P. [H.] monodi* W. Austr. p. 63 spp. n. all figs., BOWLEY J. Roy. Soc. W. Austr. 21.

Philoscia heroldii sp. n. p. 107, *P. muscorum biellensis* subsp. n. p. 108 N. Italy figs., VERHOEFF Mitt. zool. Mus. Berlin 21.—*P. (Setaphora) rafflesii* sp. n. Perak, JACKSON Bull. Raffles Mus. 12 p. 77 figs.—*P. (Philoscia?) geiseri* Texas p. 117, *P. (Ischioscia) mineri* Dominica W.I. p. 125, *P. paraguayana* Paraguay p. 139, *P. omisa* p. 141, *P. karaboana* p. 143, *P. roraimae* p. 145, *P. inquilina* p. 147 all Bt.

Guiana, *P. moneaguensis* Jamaica p. 152, *P. langi* p. 164, *P. pearsei* p. 166 both Bt. Guiana spp. n. all figs., VAN NAME Bull. Amer. Mus. 71.

Platyarthrus atanassovi p. 8, *P. messorum* p. 9 spp. n. Bulgaria, VERHOEFF Bull. Inst. R. Hist. nat. Sophia 9 figs.—*P. squamatus* and other spp. notes figs. p. 73, DEMIANOWICZ 100.

Porcellio laevis structure of oostegite, PATANÉ 364.—*P. scaber* respiratory organs and their working, BECKER 34.—*P. (P.) dispar* and other Portuguese spp. notes figs. p. 10, *P. (Porcellionides) atlanticus* nom. n. pro *P. p. buddelandi* Verh., *P. (P.) jackson* nom. n. for *P. variabilis* JACKSON p. 21, *P. (Porcellionides) lusitanorum* sp. n. Portugal p. 21 figs., ARCANGELI Boll. Lab. Zool. Portici 29.—*P. (P.) novus* p. 40, *P. (Proporcellio) pusillus* p. 42 spp. n. figs. Spain, ARCANGELI Boll. Lab. Zool. Portici 29.—*P. pelseeneeri* sp. n. Morocco and note on *P. flavocinctus* ARCANGELI Mem. Mus. Hist. nat. Belg. (2) 3 1936 p. 185 figs.—*P. (Porcellionides) pruinosis epirotes* p. 81, *P. (Agabiformius) coreyraeus* p. 83 notes figs., STROUHAL 476.

Porcellionides habanensis sp. n. Cuba, VAN NAME Bull. Amer. Mus. 71 p. 244 figs.

Porcellium balkanicum p. 11, *P. witoschicum* p. 13 spp. n. figs. Bulgaria, VERHOEFF Bull. Inst. R. Hist. nat. Sophia 9.—*P. trianguliferum* note fig. p. 78, DEMIANOWICZ 100.

Protracheoniscus saxonius and other spp. notes figs. p. 79, DEMIANOWICZ 100.—*P. (P.) nivalis* sp. n. Ladak, VERHOEFF Mem. Conn. Acad. Arts Sci. 10 p. 188 figs.

Saidjahus altimontis sp. n. Perak, JACKSON Bull. Raffles Mus. 12 p. 83 figs.

Scleropactes tatei sp. n. Ecuador, VAN NAME Bull. Amer. Mus. 71 p. 288 figs.

Sphaeroniscus guianensis p. 297, *S. tukeitanus* p. 300 spp. n. Bt. Guiana, VAN NAME Bull. Amer. Mus. 71.

Spherillo hypotoreus sp. n. Perak, JACKSON Bull. Raffles Mus. 12 p. 84 figs.

Sunniva minor descr. figs. p. 6, *S. mamillata* p. 8, *S. uniformis* p. 9 figs. spp. n. Mauritius, BARNARD Ann. Natal Mus. 8.

Sysenus infelix note fig. p. 42, DONS 102.

Tendosphaera verrucosa male descr. p. 126, *T. biellensis* sp. n. figs. N. Italy p. 125, VERHOEFF Mitt. zool. Mus. Berlin 21.

Tiroloscia squamuligera bargensis subsp. n. Italy, VERHOEFF Mitt. zool. Mus. Berlin 21 p. 106 figs.

Tracheoniscus arcuatus distinctions between the wild and domesticated races p. 675, VERHOEFF 526.—*T. simrothi* p. 127, *T. riparianus* p. 128 spp. n. *T. novicus dronerensis* p. 130 subsp. n. all Italy all figs., VERHOEFF Mitt. zool. Mus. Berlin 21.—*T. myrmicidarum* sp. n. Bulgaria, VERHOEFF Bull. Inst. R. Hist. nat. Sophia 9 p. 10.—*T. elizabethae* albinistic, mutations VANDEL 513.—*T. provisorius* monogenic and deutero-genic females, VANDEL 512.—*T. (Chaliconiscus) cocyreaus* in Corfu descr. fig. p. 68, STROUHAL 476.—*T. mauritiensis* sp. n. Mauritius, BARNARD Ann. Natal Mus. 8 p. 3 figs.

Trichorhina anophthalma sp. n. Portugal, ARCANGELI Boll. Lab. Zool. Portici 29 p. 23 figs.—*T. silvestrii* sp. n. Spain, ARCANGELI Boll. Lab. Zool. Portici 29 p. 44 figs.—*T. bequaerti* sp. n. Cuba, VAN NAME Bull. Amer. Mus. 71 p. 206 figs.

Tricyphoniscus gen. n. p. 18 (Trichoniscidae) for *T. bureschi* sp. n. p. 20 figs. Bulgaria, VERHOEFF Bull. Inst. R. Hist. nat. Sophia 9.

Tylos insularis sp. n. Galapagos Is., VAN NAME Bull. Amer. Mus. 71 p. 412 figs.

AMPHIPODA.

A list of the Amphipods of the N. Norway and Spitsbergen areas of the N. Atlantic with keys descr. distr. and many figures, STEPHENSEN 463.

General conditions and adaptations of the Deep-sea Amphipods pp. 237–252 and descriptive account of the littoral forms obtained by the Siboga-Expedition, PIRLOT 380.

A study of the differentiating specific characters of 5 spp. of Baikal Gammarids, SPETT 450.

On the structure of the Amphipod marsupium, MOERS-MESSMER 327.

Amphipods new to Plymouth waters
p. 98, CRAWFORD 89.

The Amphipods of the Kara Sea and
their zoogeographical significance, GUR-
JANOVA 171, 172.

Faunal Lists. — Norwegian lakes,
Sømme 449; Black Sea, MILOLAWSKAJA
324; Lake Baikal, DOROGOSTAISKII
105; California coast, ALDERMAN 4;
Newfoundland waters, FROST 137;
East Greenland seas, SCHELLENBERG
414.

GAMMARIDEA.

Acidostoma laticorne note new for
Greenland p. 11, SCHELLENBERG 414.

Ambasiella gen. n. (Lysianassidae)
p. 15 for *Ambassia murmanica* v. d.
Brüggen, SCHELLENBERG Skr. Svalb.
no. 66 p. 16 figs.

Ampelisca subbrevicornis sp. n. East
Indian seas, PIRLOT Siboga-Exped. 33e
p. 278 figs. — *A. furcigera* p. 242, *A.*
derjugini p. 244 spp. n. figs. Japan Sea,
BULYCHEVA Ann. Mag. N.H. (10) 18.

Apherusa retovskii sp. n. ? descr. figs.
Siberian arctic, GURJANOVA Trans.
arctic Inst. 33 p. 41.

Amphilocus neapolitanus in associa-
tion with the Sea Urchin, *Lytechinus* in
Bermuda waters, PARKER 361.

Amphithoe valida descr. notes p. 68,
A. similans sp. n. California coast,
ALDERMAN Univ. Cal. Pub. Zool. 41
p. 68 figs.

Amphithoides patrizi sp. n. Assab,
Red Sea, MACCAGNO Ann. Mus. Genova
59 p. 182.

Aorides californica sp. n. Californian
coast, ALDERMAN Univ. Cal. Pub. Zool.
41 p. 63 figs.

Aristias pacificus sp. n. off Vancouver
I., SCHELLENBERG Zool. Anz. 116 p. 153.

Arrhis luthkei sp. n. Tschukotisch Sea,
GURJANOVA Zool. Anz. 113 p. 252 figs.

Aruga generic diagnosis emended p.
263, PIRLOT 380.

Arugella gen. n. (Lysianassidae) p. 259
for *A. heterodonta* sp. n. East Indian
seas p. 260, PIRLOT Siboga-Exped. 33e.

Bogidiella albertimagni (= *Jugo-
crangonyx skopljensis* Karaman) descr.,
biology, affinities in subterranean waters
nr. Strasbourg figs., HERTZOG 192.

Boruta americana sp. n. Oklahoma,
MACKIN Trans. Amer. Micr. Soc. 54
p. 46 figs.

Byblis mucronata p. 286, *B. rhino-
ceros* p. 290 spp. n. figs. East Indian Seas,
PIRLOT Siboga Exped. 33e.

Carinogammarus mucronatus effect of
temperature on the developing embryo,
EMMART 117.

Cerapus longirostris sp. n. off Shan-
tung China, SHEN Bull. Fan Mem. Inst.
6 p. 265 figs.

Crasa bereskini sp. n. Kara Sea,
GURJANOVA Zool. Anz. 116 p. 147 figs.

Echinogammarus annandalei life his-
tory habits and economics, WATABI
533.

Elasmopus caprai sp. n. Assab Red
Sea, MACCAGNO Ann. Mus. Genova 59
p. 184. — *E. odontoplax* sp. n. p. 328 figs.
E. Indian Seas and remarks and figs.
other spp., PIRLOT Siboga-Exped. 33e.
— *E. ecuadorensis* sp. n. off Galapagos
Is., SCHELLENBERG Zool. Anz. 116 p. 153
figs.

Eriopisa seurati sp. n. Tunisia,
GAUTHIER Bull. Soc. Hist. nat. Alger
27 p. 133 figs.

Eusiroides diplonyx descr. figs. p. 302,
PIRLOT 380.

Gammarosphaera gen. n. (Gammari-
dae) for sp. n. *G. insularis* sp. n. Lake
Baikal, BAZIKALOVA C.R. Acad. Sci.
Moscou 1936 p. 36 figs.

Gammarus chevreuxi experimental
work on genetics of eye-colour and
other matters, SEXTON & CLARK 424,
425; White eye pigment and a new
genetical type, "clotted eye," SEXTON
& CLARK 423. — *G. locusta*, *G. pulex* in
Luxembourg notes, HUERTZ 207. — *G.*
ocellatus sp. n. pp. 52, 66, figs., *G. o.*
minor subsp. n. pp. 56, 67, figs., *G.*
bergi sp. n. pp. 59, 68 all Issyk-Kul lake,
Turkestan, MARTYNOV Results Lake
Issyk-Kul Exped. 1 1930.

Glycerina tenuicornis descr. figs. p.
271, PIRLOT 380.

Grandidierella africana sp. n.
Cameroon, SCHELLENBERG Zool. Anz.
116 p. 154.

Harpinia salebrosa sp. n. Tschuko-
tisch Sea, GURJANOVA Zool. Anz. 113
p. 248 figs. — *H. tarasovi* p. 248, *H.*
schurini p. 250, *H. gurjanovae* p. 251,
H. pacifica p. 252, *H. kobjakovae* p. 254,

H. orientalis p. 255 all spp. n. all figs. Japanese Sea, BULYCHEVA Ann. Mag. N.H. (10) 18.

Hippomedon stephensenii sp. n. Newfoundland seas, FROST Rep. Fish. Res. Newfoundland no. 1 p. 7 fig.

Hyperiopsis vøringi a redescription with figures from deep water off Norway, STEPHENSEN 462.

Liljeborgia dubia note figs. p. 300, PIRLOT 380.

Linguimaera gen. n. for *Maera othonides* Walker, PIRLOT Siboga-Exped. 33e p. 309 figs.

Maerella tenuimana note figs. p. 306, PIRLOT 380.

Melita californica sp. n. California coast, ALDERMAN Univ. Cal. Pub. Zool. 41 p. 60 figs.

Melitoides makarovi gen. et sp. n. ? (Gammaridae) descr. figs. Siberian Arctic, GURJANOVA Trans. arctic Inst. 33 p. 38.

Melphidippa macrura in Kara Sea note p. 254, GURJANOVA 173.

Menigrates spinirami sp. n. Kara Sea, Arctic, GURJANOVA Zool. Anz. 113 p. 246 figs.

Metopa groenlandica synonymy, descript. distr. figs., STEPHENSEN 461, commensal (or parasitic) in *Pandora* in Greenland seas figs., STEPHENSEN & THORSON 464.—*M. cariana* new to Greenland note p. 23, SCHELLENBERG 414.

Microropus cristatus sp. n. Lake Baikal, DOROGOSTAIKII Bull. Inst. Sci. Biol. Geogr. Irkutsk 7 pp. 49, 51 figs.

Monoculodes diamesus sp. n. Tschukotisch Sea, GURJANOVA Zool. Anz. 113 p. 251 figs.

Niphargus aggtelekiensis structure and degeneration of the eye, WOLSKY 553.—*N. laisi* sp. n. p. 68, *N. jovanovici kieferi* subsp. n. p. 71 Baden, *N. kochianus polonicus* subsp. n. p. 72 Poland all figs., SCHELLENBERG Zool. Anz. 113.—*N. laisi* further note p. 271, HERTZOG 193.—*N. pellucidus* sp. n. Oklahoma, MACKIN Trans. Amer. Micr. Soc. 54 p. 42 figs.

Nototropis tridens sp. n. California coast, ALDERMAN Univ. Cal. Pub. zool. 41 p. 58 figs.

Ochlesia innocens descr. figs. p. 298, PIRLOT 380.

Onisimus dubius sp. n. E. Greenland seas, SCHELLENBERG Skr. Svalb. no. 66 p. 12 figs.

Orchestia mauritiensis sp. n. Mauritius, BARNARD Ann. Natal Mus. 8 p. 15 figs.—*O. malayensis thienemanni* taxonomic discussion p. 155, SCHELLENBERG 416.

Pardaliscella malygini sp. n. Kara Sea GURJANOVA Zool. Anz. 116 p. 149 figs.—*P. larrovi* sp. n. ? descr. figs. Siberian Arctic, GURJANOVA Trans. arctic Inst. 33 p. 40.

Parhyale fasciger notes figs. p. 105, FAGE & MONOD 121.

Periphlias gen. n. (Philantidae) for *P. carinatus* sp. n. Sulu E. Indian Seas, PIRLOT Siboga-Exped. 33e p. 295 figs.

Photis conchicola sp. n. California coast, ALDERMAN Univ. Cal. Pub. Zool. 41 p. 66 figs.

Pleustes depressus sp. n. California coast, ALDERMAN Univ. Cal. Pub. Zool. 41 p. 56 figs.

Podocerus sponicolus sp. n. domicolous in a sponge California coast, ALDERMAN Univ. Cal. Pub. Zool. 41 p. 70 figs.

Pontarpinia (emend. pro *Pontharpinia*) *nasuta* sp. n. Tschukotisch Sea, GURJANOVA Zool. Anz. 113 p. 249 figs.

Pontharpinia obtusidens sp. n. California coast, ALDERMAN Univ. Cal. Pub. Zool. 41 p. 54 figs.

Pontogammarus aralensis note in the Don basin, BEHNING 36.

Pontoporeia ekmani sp. n. Japan Sea, BULYCHEVA Ann. Mag. N.H. (10) 18 p. 246 figs.

Schisturella pulchra new to Greenland note fig. p. 18, SCHELLENBERG 414.

Shoemakerella gen. n. (Lysianassidae) p. 264 for *Lysianassa nasuta* Dana, PIRLOT Siboga-Exped. 33e.

Stegocephalopsis wagini sp. n. Kara Sea, GURJANOVA Zool. Anz. 116 p. 145 figs.

Talitroides topitotum descr. figs. p. 13, BARNARD 28.

Talitrus saltator degeneration of the eye and other anomalies due to artificial confinement, GALLIEN & DAVID 145; General habits sex dimorphism and intersexuality, DAVID 94.—*T. gulliveri* descr. figs. p. 12, BARNARD 28.—*T. alluaudi*, *T. sylvaticus* occurrence and status in U.S.A. introduced? SHOE-MAKER 436.

Talorchestia franchetti p. 179, *T. affinis* p. 181 spp. n. Assab, Red Sea, MACCAGNO Ann. Mus. Genova 59.

Tmetonyx mucronatus sp. n. E. Indian seas, PIRLOT Siboga-Exped. 33e p. 275 figs.—*T. similis* new to Greenland seas note p. 21, SCHELLENBERG 414.

Tryphosa groenlandica sp. n. E. Greenland seas, SCHELLENBERG Skr. Svalb. 66 p. 20.

Urothoe Dana and the family name, a nomenclatural discussion, PIRLOT 381.

Waldeckia kroyeri crenulata subsp. n. East Indian Seas, PIRLOT Siboga-Exped. 33e p. 268 figs.

INGOLFIELLIIDEA.

[Vacant.]

HYPERIDEA.

[Vacant.]

CAPRELLIDEA.

[Vacant.]

PHYLLOCARIDA.

†*Aristozoe weberi* sp. n. Silurian Novaya Zemlya, REIN Trans. arctic Inst. 58 p. 84 fig.

†*Ceratiocaris rubini* sp. n. Devonian France, PENEAU Bull. Soc. géol. Fr. (5) 4 p. 549 figs.—*Ceratiocaris* sp. descr. fig. Carboniferous Pyrenees, DELÉPINE 98.

†*Dithyrocaris* sp. descr. figs. Carboniferous Pyrenees, DELÉPINE 98.

†*Echinocaris* sp. descr. fig. p. 30, ALLAN 6.

†*Hymenocaris* (?) *oelandica* sp. n. (ex Holm MS.) Cambrian of Oeland, Baltic, WESTERGÅRD Sverig. geol. Unders. Årsb. C 30 no. 1 p. 61 figs.

INCERT. SEDIS.

†*Arthropleura britannica* in Carboniferous Westphalia note fig., GUTHÖRL 181.

†*Carcinellus* gen. n. for *C. triasinus* sp. n. Trias Sicily, GREGORIO Ann. Géol. Paléont. Palermo 54 1930 p. 11.

BRANCHIOPODA.

The mouth parts of the Branchiopoda with notes on phylogeny, ERIKSSON 118.

Orientation in the Branchiopods, LOCHHEAD 302.

Faunal Lists.—Japanese lakes, UENO 508; Kenya Colony, BREHM 57; East African Lakes, LOWNDES 305.

PHYLLOPODA.

Range and status of *Chirocephalus* and other Phyllopods round about Berlin, HESSE 194.

Structure of the mandibles of *Cyzicus*, *Leptestheriella*, *Limnadia* and *Lynceus*, OCTOSZYŃSKA-WOLSKA 345.

Orientation in Phyllopoda, FOXON 133.

Faunal Lists.—Baden, KIEFER 239; Transcaucasia, SMIRNOV 445; Russian Arctic waters, SMIRNOV 443.

Artemia salina in Curaçao and other W.I. islands systematics and dimensions RAMMNER 391; Eggs from California hatched and raised in an aquarium, SCHVENG 421; Tetraploid parthenogenesis and other problems, BARIGOZZI 26, 27.

Branchinecta polonica sp. n. Tatra Mts., Poland with notes on morphology, etc., GAJL Mem. Acad. Polon. Cracovie 6 1934 p. 246 figs.

Branchipodopsis terpogossiani sp. n. Transcaucasia, SMIRNOV Zool. Anz. 113 p. 317 figs.

Caenestheriella ehrenbergi fimbriata var. n. Kenya Colony, BREHM Miss. sci. de l'Omo 2 p. 164 figs.

Chirocephalus structure of sensory hairs, HSÜ 205.—*C. diaphanus* sexual embrace, MATHIAS 316; Field obs. in Bucks and Herts, OLDRAM 346; Observations on moult, NICHOLSON 336.—*C. stagnalis* causes governing its distribution in Pyrenees, PACAUD 354; Effects of various solutions, PACAUD 357.—*C. nankinensis* the frontal sense organ, HSÜ 206.—*C. kerkyrensis* sp. n. Corfu, PESTA Zool. Anz. 114 p. 248 figs.

Eulimnadia azerbaijani sp. n. Transcaucasia, SMIRNOV Zool. Anz. **113** p. 312 figs.

Lynceus decaryi sp. n. Madagascar, GAUTHIER Bull. Soc. zool. Fr. **61** p. 105 figs.

Pristicephalus comptus sp. n. Tennessee, MATTOX Amer. Midl. Nat. **17** p. 950 figs.

Streptocephalus chappuisi sp. n. Kenya Colony, BREHM Miss. sci. de l'Omo **2** p. 162 figs.—*S. texanus* × *S. sealii* a hybrid in Oklahoma, MEEHEAN **318**.

CLADOCERA.

The Cladocera of Belgium, distr. oecology and systematics many illustr., etc., LUYTEN **307**.

Excretion physiology in Cladocera, STURM **478**.

Alternation of generations in Cladocera, sexual and cytological experimental studies, MORTIMER **332**.

Effects of starvation and loss of weight in inducing gamogenesis in Cladocera, BERG **40**.

Effect of chemical constitution of the water on the distr. of Cladocera, PACAUD **356**.

Faunal Lists.—Polish lake, BRZEK **67**; Pelew Is., UENO **505**; Hawaiian Is., UENO **507**; Chile and Peru, BREHM **60**; Brazil, BREHM & THOMSEN **62**; Oklahoma, MACKIN **310**.

Alona ladacensis sp. n. Ladak, BREHM Mem. Conn. Acad. **10** p. 295 figs.—*A. affinis barbata* var. n. Kenya Colony, BREHM Miss. sci. de l'Omo **2** p. 153 figs.—*A. verrucosa* in the Pelew Is. descr. figs. p. 517, UENO **505**.—*A. cambouei* in Hawaii descr. fig. p. 6, UENO **507**.

Anchistropus structure, development, habits, range, BORG **45**.—*A. emarginatus* parasitic relations to *Hydra* life-history and distribution in Sweden and elsewhere, BORG **44**.

Bosmina maritima recorded for West Australian waters, SEARLE **422**.

Bythotrephes variation statistics, ISCHREY **211**; Races, their variations and distribution in European lakes, ISCHREY **212**.

Ceriodaphnia dubia in Hawaii descr. figs. p. 4, UENO **507**.

Chydorus piger, C. cf. *eurynotus* notes figs. p. 155, BREHM **57**.—*Chydorus* sp. descr. fig. Nilgiris India, p. 297, BREHM **59**.

Daphnia review of the genus and key to some of the spp. p. 144, BREHM **57**; A review of the African spp. descr. synonymy range etc., WAGLER **529**; Effects of the lower level of the water of Lake Nemi, Italy, VOLTERRA D'ANCONA **527**; Conditions of existence around Moscow, DECKSBACH **97**; Colour sense, HEBERDEY **190**.—*D. pulex* breeding experiments under differing conditions, PASSOWICZ **362**; Its association with *Chirocephalus*, PACAUD **355**.—*D. magna* effect of X-rays during development, SNIDER & KERSTEN **447**.

Diaphanosoma neotropicum sp. n. Brazil, BREHM & THOMSEN Zool. Anz. **116** p. 213 figs.

Drepanomacrothrix stschelkanowzewi gen. et sp. n. and note on spp. in Ladak, BREHM Mem. Conn. Acad. **10** p. 293 fig.

Dunhevedia crassa interrupta var. n. Kashmir, BREHM Mem. Conn. Acad. **10** p. 290 figs.

Euryalona orientalis at Nairobi note discussion figs. p. 151, BREHM **57**.—*E. brasiliensis* sp. n. Brazil, BREHM & THOMSEN Zool. Anz. **116** p. 215 figs.

Leptodora hyalina in Lago di Varese descr. variation population studies, PICCHIO **377**.

Leydigia schubarti sp. n. Brazil, BREHM & THOMSEN Zool. Anz. **116** p. 216 figs.

Macrothrix chevreuxi in Hawaii descr. fig. p. 5, UENO **507**.—*M. atahualpa* sp. n. Chile, BREHM Zool. Anz. **115** p. 322 figs.

Moina salinarum, *M. belli* descr. habits etc. in Corfu, STEPHANIDES **456**.—*M. tonsurata* sp. n. Kenya Colony, BREHM Miss. sci. de l'Omo **2** p. 148 figs. —*M. esau* sp. n. Nilgiri hills India, BREHM Mem. Conn. Acad. **10** p. 289 figs.

Moinodaphnia macleayi in Pelew Is. descr. fig. UENO **505**.

Penilia avirostris feeding mechanism, LOCHHEAD **303**.

COPEPODA.

Notes on the taxonomy of the genera of Thalestridae with key of genera and spp., figs. p. 13, LANG 276.

Review of the families and genera of Section Agnatha of Harpacticoid Copepods and diagnosis of a new family D'Arcythompsonidae (p. 65), LANG 283.

A review of the genera of the family Ameiridae (Harpacticids), LANG 284.

Review of the genera of the family Anchorabolidae, LANG 285.

A review of the Cletodidae (Harpacticid Copepods) with keys to genera and species, LANG 286.

Critical notes on the systematics of Harpacticoid Copepods, CHAPPUIS 75.

Breeding habits of freshwater Copepods, EWERS 120.

Horizontal and vertical distribution and numerical status of antarctic Copepods, OTTESTAD 353.

Red pigments of Japanese Diaptomids, UENO 506.

Copepods and Euphausiids are the chief food of the Pacific Herring, WAILES 530.

Ergasilids only infect Fishes when in quite young stages, SGONINA 426.

The parasitic Copepods of *Mola mola*, GUIART 166.

Faunal Lists, Freshwater.—Sweden; LANG 282; Belgium, KIEFER 240; Hiddensee I., Baltic, SCHÄFER 413; Silesia, SCHÄFER 410; Baden, KIEFER, 238; Ukraine, S. Russia, SIEWERTH, 437, 438, 439; Persia, LINDBERG, 298; Lake Taraika, Japan, UENO 508; Kenya and other African localities, CHAPPUIS 73; East African Lakes, LOWNDES 305; Brazil CHAPPUIS 78; Haiti, KIEFER 237; Yucatan cenotes, WILSON 547.

Faunal Lists, Marine.—Roscoff and British Channel, JAKUBISIAK, 217; Scottish waters, GIBBONS 149; Spitsbergen seas, FARRAN 124; Mediterranean, LANG 279; Sagami Bay, Japan, TANAKA 484, 485; Great Barrier Reef Queensland, FARRAN 122; Bermuda region, WILSON 548; American Arctic, WILSON, 543; Arctic waters, LANG 281; Antarctic waters, LANG 276.

Faunal Lists, Parasites.—North Sea and Baltic, OORDE-DE-LINT & STEKHOFEN 349; Belgian Coast, SCHUURMANS-STEKHOFEN 420; Japan seas, YAMAGUTI 559, 560; Gulf of Mexico, BERE 38.

Acanthochondria tschangii p. 2, *A. wui* p. 5, *A. shawi* p. 7, *A. brevicorpa* p. 9 all figs. spp. n. gills off Fish off Chefoo, YÜ Bull. Fan Memorial Inst. 6.

Acanthocyclops rhenanus sp. n. springs nr. Freiburg-i-B., KIEFER Zool. Anz. 115 p. 168 figs.—*A. stammeri* cf. *westfalicus* in Belgium descr. figs. p. 4, KIEFER 240.

Acanthodiptomus tibetanus recorded from N. Finland, addt. descr. etc. figs., JÄRNEFELT & RYLOV 218.

Acartia steueri sp. n. Japan seas SMIRNOV Zool. Anz. 114 p. 87 figs.—*A. pietschmanni* p. 119, *A. pacifica* p. 120 notes figs., *A. australis* sp. n. Gt. Barrier Reef p. 120 figs., FARRAN Sci. Rep. Gt. B.R. Exp. 5.

Achtheinus galerhini sp. n. on *Galeorhinus* in Japanese seas, YAMAGUTI Par. Copepods Japan pt. 3 p. 11 figs.

Alella berecynthia sp. n. on *Crenilabrus* G. of Naples, LEIGH-SHARPE Parasitol. 28 p. 65 figs.

Allodiaptomus gen. n. p. 142 for genotype *A. raoi* sp. n. Madras Pres. p. 137, also *A. mirabilipes* sp. n. Mysore p. 139 both figs., KIEFER Zool. Anz. 113.—*A. cinctus* (Gurney), *A. mirabilipes* probably identical addt. descr. figs. p. 323, KIEFER 242.

Altenantha trisetosa sp. n. S. Georgia waters, LANG Fur. Zool. Res. Swed. Ant. Exped. 3 no. 3 p. 10 figs.

Ameira hiddensöensis notes figs. p. 562, SCHÄFER 413.—*A. boeckii* sp. n. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4 p. 32 figs.

Amphiascus nasutus and other spp. notes figs. p. 21, LANG 281.—*A. falklandensis* Falkland I. seas p. 54, *A. gracilis* p. 55, *A. southgeorgiensis* p. 56 S. Georgia seas spp. n. all figs., LANG Fur. Res. Swed. Ant. Exped. 3 no. 3.

Anuretes plectorhynchi sp. n. on *Plectorhynchus* in Japanese seas, YAMAGUTI Par. Copepods of Japan no. 2 p. 15 figs.—*A. parvulus* descr. male figs. p. 321, WILSON 546.

Arctodiaptomus (Stenodiaptomus) altissimus sp. n. Ladak Kashmir, KIEFER Zool. Anz. 113 p. 1 figs.

Argestes tenuis arcticus var. n. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4 p. 37 fig.

Argestigens glacialis sp. n. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4 p. 38 figs.

Argyrodiaptomus note on the genus and its contained spp. p. 195 figs., KIEFER 251.

Attheyella pilosa in Yucatan descr. p. 79, WILSON 547.—*A. (A.) wierzejskii* note figs. p. 393, CHAPPUIS 76.

Bomolochus decapтери sp. n. on *Decapтерus* Japanese seas, YAMAGUTI Par. Copepods of Japan No. 3 p. 5 figs.—*B. scutigerulus* sp. n. on *Pseudopeneus*, Dry Tortugas, WILSON Pap. Tortugas Lab. 29 p. 335 figs.

Brachiella intermedia sp. n. on *Sciaenops* G. of Mexico, BERE Amer. Midl. Nat. 17 p. 613 figs.

Bradya typica note fig. p. 10, *B. confluens* sp. n. Spitsbergen seas p. 12 figs., LANG K. Svenska V. Akad. Handl. (3) 15 no. 4.—*B. proxima* note fig. p. 7, LANG 276.

Bradyetes brevis sp. n. off E. Greenland FARRAN Ann. Mag. N.H. (10) 18 p. 239 figs.

Calanus finmarchicus general anatomy, LOWE 304; In Scottish waters distr. vertical and general and fertilization problems, GIBBONS 149; Distr. status, breeding and other habits in Gulf of Maine, etc., FISH 127; Size variation p. 405, FARRAN 124; Experiments on feeding habits and nutrition, FULLER & CLARKE 133.

Caligus rapax notes figs., NEWMARCH 335; Variation, GUIBÉ 168.—*C. rabidus* sp. n. on *Alopias* off Brighton, LEIGH-SHARPE Parasitol. 28 p. 410 figs.—*C. seriolaе* p. 2, *C. fistulariaе* p. 3, *C. epinephili* p. 4, *C. katuwu* p. 6 all spp. n. all figs. Japanese seas, YAMAGUTI Par. Copepods of Japan 2 1936.—*C. berychis* sp. n. on *Beryx* off Havana, WILSON Mem. Soc. cubana Hist. nat. 10 p. 107 figs.—*C. praealtus* sp. n. on *Reniceps* G. of Mexico, BERE Amer. Midl. Nat. 17 p. 583 figs.—*C. aliuncus* descr. female and habitat p. 330, WILSON 546.

Calocalanus pavoninus sp. n. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. Barrier Reef 5 p. 83 figs.

Calodiaptomus gen. n. for *Diaptomus merillae* Wright 1927, KIEFER Zool. Anz. 116 p. 199.

Canuellopsis gen. n. (Harpacticidae) for *C. typica* sp. n. Spitsbergen sea LANG K. Svenska V. Akad. Handl. (3) 15 No. 4 p. 5 figs.

Ceratochondria gen. n. (Chondracanthidae) for type *Chondracanthus brevicollis* Kroyer, Yü Bull. Fan Memorial Inst. Biol. 6 no. 1 1935 p. 1.

Cerviniopsis intermedia p. 7, *C. stylicaudata* p. 8 spp. n. figs. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4.

Ceuthonectes serbicus, etc. descr. fig. p. 324, CHAPPUIS 74; p. 389, CHAPPUIS 75.

Charopinus quaternius sp. n. on *Peristedion* Dry Tortugas, WILSON Pap. Tortugas Lab. 29 p. 343 figs.

Cholidya taxonomy and affinities, p. 211, LANG 280.

Clausocalanus arcuicornis remark figs. p. 82, FARRAN 122.

Clavellopsis strumosa descr. figs. p. 611, *C. longimana* sp. n. p. 612 figs. on *Mugil* G. of Mexico, BERE Amer. Midl. Nat. 17.

Cletocamptus deitersi and other spp. descr. figs. p. 301, KIEFER 237.

Corissa gen. n. (Cyclopoida) p. 131 for *C. parva* sp. n. p. 132 figs. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. 5.

Corycaeus vitreus, *C. crassiusculus* p. 134, *C. minimus* p. 137 notes figs., FARRAN 122.

Cyclopina latipes p. 225, *C. kieferi* p. 227 spp. n. figs. North Sea notes on other spp. and key to genus p. 233, SCHÄFER Zool. Anz. 114.

Cyclopiniopsis gen. n. (Cyclopinidae) p. 161 for genotype *C. curticauda* sp. n. p. 162 Awatscha bay, Kamtchatka, SMIRNOV C.R. Acad. Moscou 1935 vol. 4 figs.

Cyclops and *Diaptomus* spp. acting as host of *Diphylllobothrium*, MICHAJLOW & WIERZBICKA 323.

Cyclops a morphological classification of the subgenus, KÓZMIŃSKI 270; Infested with guinea-worm embryos, MOORTHY 330.—*C. strenuus* breeding and crossing experiments, WIERZBIŃKA 540; Investigation with selective vital stainings, GICKLHORN 150; *C. strenuus* and allied forms, review, variation, ecology, etc., KÓZMIŃSKI 269.—*C. s. divergens* subsp. n. Persia, LINDBERG Bull. Mus. Hist. nat. Belg. 12 no. 17. p. 3 figs.—*C. dubitabilis* and other spp. descr. figs. p. 294, KIEFER 237.—*C. furcifer* descr. figs., KIEFER 238.—*C. ladakanus* Ladak p. 5, *C. hutchinsoni* Dal Lake Kashmir p. 6 spp. n., KIEFER Zool. Anz. 113.

Dactyloidiaptomus gen. n. for *Diaptomus pearsi* Wright 1927, KIEFER Zool. Anz. 116 p. 198.

Dactylopusia mediterranea sp. n. Mediterranean, LANG K. fysiogr. Sallsk. Lund 5 p. 89 figs.

Delachauxiella inca sp. n. Chile, BREHM Zool. Anz. 115 p. 317.

Diacyclops laisi sp. n. Baden, KIEFER Zool. Anz. 113 p. 85 figs.—*D. laisi*, *D. unisetiger* critical notes p. 272, HERTZOG 193.—*D. languidus belgicus* subsp. n. Belgium, KIEFER Bull. Mus. Hist. nat. Belg. 12 no. 3 p. 8 figs.

Diaptomus (*Diaptomus*) *serbicus* in Corfu notes figs. p. 246, PESTA 375.—*D. worthingtoni* sp. n. Lake George Uganda, LOWNDES J. Linn. Soc. Lond. 40 p. 13 figs.—*D. venoi* sp. n. Formosa, KIKUCHI Proc. Imp. Acad. Tokyo 12 p. 198 figs.—*D. orientalis* Brady its possible identification and status, *Tropidiaptomus australis*, *T. mutatus*, nom. n. *T. informis* sp. n. pp. 81, 82 figs., KIEFER Zool. An. 114.—*D. dahli* Para p. 79, *D. cearensis* Ceará p. 80, *D. isabellae* Pernambuco p. 81, *D. jatobensis* Pernambuco, *D. corderoi* Minas Geraes p. 82, *D. paulistanus* São Paulo p. 83 spp. n. all Brazil all figs., WRIGHT Ann. Acad. Bras. 8 1936.—*D. proximus* sp. n. Haiti, KIEFER Arch. Hydrobiol. 80 p. 268 figs.—*D. novamexicanus* descr. figs. in Yucatan cenotes p. 80, WILSON 547.

Dichelesthium oblongum on Sturgeon descr., GUIBÉ 167.

Dinematura latifolia descr. figs. p. 9 pt. 3, YAMAGUTI 559.

Donsiella limnorinae gen. et sp. n. (? Laophontidae) commensal on *Limnoria* on Norway coast, STEPHENSEN K. norske videnskr. Selskr. Trondheim 1935 pt. ii no. 39 p. 6 figs.

Echetus typicus descr. figs. p. 586, BERE 38.

Echinocamptus (*Limocamptus*) *werestschagini* note figs. and key of the genus p. 406, CHAPPUIS 77.—*E. vulgaris*, *E. jeanneli*, *E. verrucosus* p. 268, *E. monticola* p. 273 spp. n. all figs. Kenya Colony, CHAPPUIS Miss. sci. Omo 3.

Echinocletodes gen. n. (*Cletodidae*) for *Cletodes armata* Scott 1903, LANG Zool. Jahrb. Syst. 68 p. 467.

Echthrogaleus coleoptratus descr. figs. p. 7 pt. 3, YAMAGUTI 559.

Ectinosoma finmarchicum descr. figs. p. 408, FABRAN 124.—*E. vitiosum*, *E. arcticum* descr. figs. p. 551, SCHÄFER 413.

Eirgos gen. n. (*Euryphoridae*) for *E. anurus* sp. n. on *Chaetodipterus*, G. of Mexico, BERE Amer. Midl. Nat. 17 p. 593 figs.

Elaphoidella stammeri p. 328, *E. charon* p. 331 spp. n. Yugoslavia caves, CHAPPUIS Bul. Soc. Ști. Cluj 8 figs.—*E. karamani* sp. n. subterranean Yugoslavia, CHAPPUIS Bul. Soc. Ști. Cluj 8 p. 391 figs.—*E. arambourgi* p. 250, *E. elgonensis* p. 253, *E. kenyensis* p. 256, *E. massai* p. 257, *E. crassicaudis* p. 261, spp. n. figs. Kenya Colony, CHAPPUIS Miss. sci. Omo 3.—*E. schubarti* sp. n. p. 455 figs., *E. pectinata brevifurcata* subsp. n. p. 457 figs. Brazil, CHAPPUIS Bul. Soc. Ști. Cluj 8.

Entepherus gen. n. (*Pandaridae*) p. 595 for *E. laminipes* sp. n. on *Mobula*, G. of Mexico figs. p. 596, BERE Amer. Midl. Nat. 17.

Epactophanes richardi revision of races and other studies, occurrence of heterogony, LANG 277.

Epischura baikalensis in Kamtschatka and key of the genus, SMIRNOV 444.

Ergasilus hypomesi sp. n. Japan seas on *Hypomesus*, YAMAGUTI Par. Copepods of Japan 1 p. 1 figs.—*E. centrarchidarum* and other spp. in freshwater Fishes of Florida notes figs. p. 808, MUELLER 333.

Euacartia discussion and review of the subgenus p. 91, SMIRNOV 446.

Eucalanus elongatus early development figs., GIBBONS 148.

Euchaeta consimilis p. 90, *E. russelli* p. 91 spp. n. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. 5 figs.

Eucyclops bondi descr. figs. p. 291, KIEFER 237.—*E. productus* sp. n. Ladak Kashmir, KIEFER Zool. Anz. 113 p. 4.—*E. multicolor* sp. n. Deccan India, LINDBERG Rec. Ind. Mus. 37 p. 408 figs.—*E. silvestrii*, *E. prionophorus* descr. figs. p. 245, *E. ensifer* sp. n. Chile p. 248 figs., KIEFER Zool. Anz. 115.—*E. neotropicus* sp. n. Brazil, KIEFER Zool. Anz. 114 p. 129 figs.

Eudactylina aspera descr. figs. p. 604, *E. longispina* p. 605, *E. turgipes* p. 606, *E. squamosa* p. 607 spp. n. on fishes, G. of Mexico all figs., BERE Amer. Midl. Nat. 17.

Eudiaptomus gracilis gynandromorphism and other abnormalities, LANG 278.—*E. vulgaris* variation and local races in Lake Garda and other Italian lakes, BALDI 19.

Eurycletodes rectangulatus p. 40, *E. arcticus* p. 41, *E. abyssi* p. 43, *E. echinatus* p. 44 all spp. n. all figs. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4.

Euryphorus coryphaenae descr. fig. p. 1 pt. 3 YAMAGUTI 559.

Eurytemora hirundoides abnormal rudimentary appendages, SMIRNOV 441.

Euterpina acutifrons note figs. p. 459, CHAPPUIS 78.

Gloiopotes sp. descr. figs. p. 4 pt. 3, YAMAGUTI 559.—*G. ornatus* taken on *Tetrapturus* at Havana, WILSON 544. *G. crassus* sp. n. on *Rhombochirus*, G. of Mexico, WILSON & BERE in Bere Amer. Midl. Nat. 17 p. 590 figs.

Godetella kummleri and other spp. descr. range in S. Amer. and S. Africa, p. 319, BREHM 61.

Halicyclops review of the species with descr. key and figs. p. 271, KIEFER 237.—*H. christianeniensis* and other spp. descr. figs. from Hiddensee I., Baltic, SCHÄFER 411.

Harpacticus furcatus sp. n. S. Georgia waters, LANG Fur. Zool. Res. Swed. Ant. Exped. 3 p. 8 figs.

Hatschekia ischnon on *Pagellus*, *H. gerro* on *Labrus* spp. n. G. of Naples, LEIGH-SHARPE Parasitol. 28 p. 63 figs.

Hemicletodes gen. n. (Cletodidae) p. 48 for *H. typicus* sp. n. figs. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4.

Hemidiaptomus gurneyi stephanidesi var. n. Corfu, PESTA Zool. Anz. 114 p. 245 figs.

Heterochondria gen. n. (Chondracanthidae) for type *Chondracanthus longicephala* Yü 1932, Yü Bull. Fan Memorial Inst. Res. 6 no. 1 1935 p. 2.

Hetercope borealis structure habits development on the Bodensee, ELSTER 116.

Heteropsyllus rostratus descr. ♀ figs. p. 50 LANG 281.

Horsiella brevicornis, *H. trisetosa*, etc. descr. figs. p. 576, SCHÄFER 413.

Idyaea furcata descr. fig. p. 16, LANG 281.

Idiodiaptomus gen. n. for *Diaptomus gracilipes* v. Douwe, KIEFER Zool. Anz. 116 p. 199.

Irodes tetraodontis note figs. p. 4, YAMAGUTI 559.

Ismardidae fam. n. nr. Thalestridae for *Ismardis sparticus* gen. et sp. n. in *Patella*, G. of Naples, LEIGH-SHARPE Parsaitol. 28 p. 68 figs.

Labidocera sp. note descr. figs. p. 116, FARRAN 122.—*L. bipinnata* sp. n. Japan seas, TANAKA Japan J. Zool. 7 p. 31 figs.

Lamproglena review with key of spp., *L. orientalis* Chanka lake, E. Siberia on *Erythroculter* p. 291, *L. compacta* Kirghiz country on *Diptychus* p. 293 figs., MARKEWITSCH Ann. Mus. zool. polon. 11.—*L. pulchella* developmental stages, FILHOL 126.

Laophonte cornuta dentioperculata Falkland seas var. n., *L. pauciseta* S. Georgia seas sp. n. both figs., LANG Fur. Res. Swed. Ant. Exped. 3 no. 3.—*L. brevifurca* ? descr. figs. commensal on *Limnoria* p. 4, STEPHENSEN 459.

Laophontodes discussion of genus and key of spp. p. 153, *L. gracilipes* sp. n. Swedish waters, LANG Zool. Anz. 115 p. 155 figs.—*L. armatus* nom. n. for *L. echinatus* Willey nec Brady figs. p. 64, LANG 276.

Lechithomyzon moenadis structure, development, parasitic and other habits, systematic status and affinities, GALLIEN & BLOCH 144.

Lepeophtheirus goniistii p. 10, *L. kareii* p. 12, *L. sekii* p. 14 spp. n. all figs. Japanese seas, YAMAGUTI Par. Copepods of Japan no. 2 1936.—*L. marginatus* p. 587, *L. eurus* p. 589 spp. n. on fishes, G. of Mexico, BERE Amer. Midl. Nat. 17.

Leposiphilus labrei development and affinities figs., QUIDOR 388.

Leptastacus spinicaudatus kliei note figs. p. 572, SCHÄFER 413.

Lernaea cyprinacea parasitic habits and life history, STOLLAROW 471.—*L. carassii* effects on host in Tonkin figs., CHEVEY & LEMASSON 80.

Lernaeocera branchialis and other spp. from Belgian Coast notes and figs. p. 13, SCHUURMANS-STEKHOFEN 420.—*L. branchialis*, *L. lusci* habits nomenclature, structure and distinctions, STEKHOFEN 455.

Lernanthropodes gen. n. (Anthosomidae) for *L. cucullus* sp. n. on *Trachinotus* G. of Mexico, BERE Amer. Midl. Nat. 17 p. 602 figs.

Lernanthropus pupa and other spp. descr. notes figs. p. 599, BERE 38.—*L. mugilis* and other spp. descr. figs. p. 13 pt. 3, YAMAGUTI 559.—*L. manicatus* on *Calanus* p. 338, *L. talipes* on *Kyphosus* p. 339 both figs. spp. n. Dry Tortugas, WILSON Pap. Tortugas Lab. 29.

Lichomolgus spondyli sp. n. in *Spondylus*, Japanese seas, YAMAGUTI Japan J. Zool. 7 p. 124 figs.

Macandrewella asymmetrica p. 104, *M. sewelli* p. 106, *M. mera* p. 107 spp. n. all figs. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. 5.

Machairopus antarcticus sp. n. S. Georgia waters, LANG Fur. Res. Swed. Ant. Exped. 3 No. 3 p. 12 figs.

Macrocylops albidus note fig. p. 2, LINDBERG 298.

Macrosetella and allied genera review range etc., STEUER 467.

Maraenobotius insignipes elgonensis p. 278, *M. brucei africanus* p. 279 subspp. n. figs. Kenya Colony, CHAPPUIS Miss. sci. Omo 3.

Megacyclops viridis deserticola subsp. n. Persia, LINDBERG Bull. Mus. Hist. nat. Belg. 12 no. 17 p. 7 figs.

Megadiaptomus hebes gen. et sp. n. Mysore, India, KIEFER Zool. Anz. 114 p. 77 figs.

Mesochra lilljeborgi and other spp. notes figs. p. 569, SCHÄFER 413.

Mesocletoides brevifurca sp. n. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4 p. 47 figs.

Mesocyclus iranica sp. n. Persia, LINDBERG Bull. Mus. Hist. nat. Belg. 12 no. 17 p. 12 figs.—*M. iranicus* sp. n. Laristan, Iran probable host of *Dracunculus*, LINDBERG Bull. Soc. zool. Fr. 61 p. 253 figs.—*M. leuckarti deccanensis* p. 408, *M. rylovi vermifer* p. 415 subspp. n. figs. Deccan India, LINDBERG Rec. Ind. Mus. 37.—*M. ellipticus* sp. n. Brazil, KIEFER Zool. Anz. 116 p. 34 figs.

Mesoglicola delagei developmental stages and affinities figs., QUIDOR 388.

Metacyclops unacanthus sp. n. Persia, LINDBERG Bull. Mus. Hist. nat. Belg. 12 no. 17 p. 9 figs.

Metadiaptomus aethiopicus descr. Lake Bunyoni Uganda p. 11, LOWNDES 305.

Monocletodes gen. n. (Cletodidae) for *Cletodes varians* Scott 1903, LANG Zool. Jahrb. Syst. 68 p. 467.

Moraria poppei meridionalis critical note p. 323, CHAPPUIS 74.

Nannopus palustris descr. fig. p. 574, SCHÄFER 413.

Naobranchia wilsoni addt. descr. and information figs., NIGRELLI 338.—*N. variabilis* descr. figs. p. 610, BERE 38.

Neutrocyclops gen. n. for *Cryptocyclops brevifurca* Lowndes with addt. descr. of sp. and figs., KIEFER Zool. Anz. 114 p. 130.

Nitocra typica and other spp. notes figs. p. 564, SCHÄFER 413.—*N. divaricata caspica* subsp. n. Caspian, BEHNING Int. Rev. Hydrob. Leipzig 33 p. 248 figs.

Nitocrella omega sp. n. underground waters nr. Strassbourg, HERTZOG Zool. Anz. 114 p. 273 figs.

Notodiaptomus gen. n. for *Diaptomus iheringi*, *D. nordestinus* and other Brazilian spp. no type indicated, KIEFER Zool. Anz. 116 p. 197 figs.

Odontodiptomus gen. n. for *Diaptomus thomsoni* Brehm 1933, KIEFER Zool. Anz. 116 p. 199.

Oithona hebes in Brazil descr. figs. p. 320, KIEFER 245.—*O. similis* in Gulf of Maine status general biology, breeding habits, FISH 128.

Oncaea conifera descr. figs. p. 127, FARRAN 122.

Ophioica (?) *appendiculata* sp. n. in *Ophiomitrella* in Greenland seas, STEPHENSEN Danish Ingolf Exped. iii pt. 12 1935 p. 13 figs.

Panaetis haliotis sp. n. in *Haliotis* Japanese seas, YAMAGUTI Japan J. Zool. 7 p. 115 figs.

Pandarus cranchii descr. larval changes figs. p. 333, WILSON 546.

Paracalanus aculeatus note figs. p. 79, FARRAN 122.

Paradiptomus africanus descr. ♂ ♀ in Crater lake nr. Naivasha p. 6, LOWNDES 305.

Paralebion elongatus descr. figs. p. 331, WILSON 546.

Paramesochra arctica sp. n. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4 p. 33 figs.

Paranannopus gen. n. (Cletodidae) for *Nannopus abyssi* Sars 1920, LANG Zool. Jahrb. Syst. 68 p. 476.—*Paranannopus* note p. 51, *P. sarsi* sp. n. Spitsbergen seas, LANG K. Svenska V. Akad. Handl. (3) 15 no. 4 p. 52 figs.

Paraphiloconcha gen. n. p. 123 (Clausiiidae) for genotype *P. meretricis* sp. n. p. 121 figs. in *Meretrix* Japanese seas, YAMAGUTI Japan J. Zool. 7.

Parastenocaris glareola sp. n. underground waters, nr. Strassbourg, HERTZOG Zool. Anz. 114 p. 275 figs.—*P. germanica* sp. n. subterranean waters, Baden, KIEFER Zool. Anz. 116 p. 99 figs.—*P. phreatica* sp. n. subterranean Yugoslavia, CHAPPUIS Bul. Soc. Sti. Cluj 8 p. 395 figs.—*P. muscicola* p. 283, Kenya, *P. caffer* p. 284 Transvaal? spp. n. figs., CHAPPUIS Miss. sci. Omo 3.—*P. hexacantha* sp. n. Brazil, KIEFER Zool. Anz. 116 p. 142 figs.

Parategastes haphe sp. n. on *Serranus* G. of Naples, LEIGH-SHARPE Parasitol. 28 p. 67 figs.

Parathalestris similis sp. n. Beagle Channel, LANG Fur. Res. Swed. Ant. Exped. 3 no. 3 p. 46 figs.

Paravestwoodia aegidaea note figs. p. 94, LANG 279.

Perissocope revision key, etc. p. 209, LANG 280.

Pharodes gen. n. p. 345 (Chondracanthidae) for *P. tortugensis* sp. n. p. 346 figs. on *Bathygobius* Dry Tortugas, WILSON Pap. Tortugas Lab. 29.

Philoconcha gen. n. p. 120 (Clausiiidae) for genotype *P. amygdalae* sp. n. p. 118 and *P. paphiae* sp. n. p. 119 all figs. Japanese seas, YAMAGUTI Japan J. Zool. 7.

Phyllodiptomus blanci, *P. annae* distinctions and addt. descr. figs. p. 321, KIEFER 242.

Pontella barbata p. 32, *P. forcipata* p. 33, *P. bifurcata* p. 34 spp. n. Japanese seas, TANAKA Japan J. Zool. 7.

Pontoeciella abyssicola notes figs. p. 125, FARRAN 122.

Porcellidium lecanoides note on a paired pair fig. p. 87, LANG 279.

Psamathe and *Machairopus* review of genera and their spp. and descr. of ♂ of *M. hippolytes* figs., LANG 283.

Pseudanthessius nemertophilus sp. n. commensal with *Lineus* English Channel GALLIEN Bull. Soc. zool. Fr. 60 p. 451 figs.

Pseudanuretes gen. n. p. 17 for genotype *P. chaetodontis* on *Chaetodon*, Japanese seas, YAMAGUTI Par. Copepods of Japan no. 2 p. 16 figs.

Pseudergasilus gen. n. p. 3 for genotype, *P. parasiluri* sp. n. on *Parasilurus* p. 2 figs., and also *P. zacconis* sp. n. on *Zacco* p. 3 figs. both Japanese waters, YAMAGUTI Par. Copepods of Japan no. 1.

Pseudoboeckella gibbosa variability in Chile p. 107 figs., BREHM 60.

Pseudocaligus fugu sp. n. on *Spheroides* Japanese seas, YAMAGUTI Par. Copepods of Japan no. 2 p. 9 figs.

Pseudochondracanthus hexaceraus sp. n. on *Spheroides* Dry Tortugas, WILSON Pap. Tortugas Lab. 29 p. 344 figs.

Pseudodiptomus review of S. Amer. spp. p. 3, *P. marshi* sp. n. Recife, Brazil p. 13, WRIGHT Ann. Acad. Bras. Sci. Rio 8.—*P. dubius* sp. n. Madras Pr., KIEFER Zool. Anz. 113 p. 231 figs.

Pseudomesochra diagn. and key to spp., *P. similis* sp. n. Sweden, LANG Zool. Anz. **113** p. 175 figs.

Pseudomyicola gen. n. (Myicolidae) p. 114 for *P. ostreae* sp. n. Japanese seas on *Ostrea* p. 113 figs., YAMAGUTI Japan J. Zool. **7**.

Pseudotharybis zetlandica note figs. p. 88, FARRAN **122**.

Rebelula tripartita sp. n. on *Calanus* Dry Portugas, WILSON Pap. Tortugas Lab. **29** p. 342 figs.

Rhacodiaptomus gen. n. for *Diaptomus amazonicus* Wright, etc., KIEFER Zool. Anz. **116** p. 198.

Rhinediaptomus subg. n. see *Sinodiaptomus*.

Rhincalanus gigas distr. vertical and horizontal, life history in antarctic seas, OMMANNEY **348**; Larval development, STEUER **466**.—*R. nasutus* early development figs., GIBBONS **148**.

Rhizothrix scotti sp. n. Spitsbergen waters, LANG K. Sven. V. Akad. Handl. (3) **15** no. 4 p. 53 figs.

Robertsonia taxonomy and affinities figs. p. 212, LANG **280**.

Saphirella tropica notes figs. p. 129, FARRAN **122**.

Schizopera haitiana and other spp. descr. figs. p. 304, KIEFER **237**.—*S. clandestina* and other spp. notes figs. p. 557, SCHÄFER **413**.

Scolecithricella nicobarica note figs. p. 97, FARRAN **122**.

Scolecithrix ctenopus note figs. p. 95, FARRAN **122**.

Scotocalanus gen. n. (nr. *Scotocalanus*) p. 102 for *S. galeatus* p. 103, and *S. lobatus* p. 104 both figs. spp. n. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. **5**.

Scotocalanus longispinus note figs. p. 98, *S. sedatus* p. 99, *S. australis* p. 101 both figs. spp. n. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. **5**.

Selioides bolbroëi descr. fig. p. 21, STEPHENSEN **460**.

Sigmatidium minor descr. figs. p. 547, SCHÄFER **413**.

Sinodiaptomus (*Rhinediaptomus* subg. n. ?) *indicus* sp. n. Madras, KIEFER Zool. Anz. **113** p. 226 figs.

Stenhelia (*Stenhelia*) *curviseta* sp. n. p. 27, *S. (S.) aemula bifida* var. n. p. 29, *S. (Delavalia) cornuta* sp. n. p. 30, Spitsbergen seas all figs., LANG K. Svenska V. Akad. Handl. (3) **15** no. 4.

Stylicletodes gen. n. (Cletodidae) for *Cletodes leptostylis* Sars 1920, LANG Zool. Jahrb. Syst. **68** p. 467.

Taeniacanthodes gen. n. p. 336 (Cyclopia) for *T. gracilis* sp. n. p. 337 figs. on *Paralichthys* Dry Tortugas, WILSON Pap. Tortugas Lab. **29**.

Tanyrhinus gen. n. (nr. *Calanus*) p. 85 for *T. naso* sp. n. p. 86 Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. **5**.

Temoropia mayumbaensis notes figs. figs. p. 110, FARRAN **122**.

Thermocyclops minutus, *T. tenuis* critical descr. figs. p. 31, KIEFER **248**.—*T. hyalinus persicus* subsp. n. p. 16, *T. tinctus* sp. n. p. 20 both figs. Persia, LINDBERG Bull. Mus. Hist. nat. Belg. **12** no. 17.—*T. analogus* sp. n. Madras Pr., KIEFER Zool. Anz. **113** p. 229 figs.—*T. inversus* sp. n. N.E. Brazil, KIEFER Zool. Anz. **114** p. 132 figs.

Tigriopus fulvus occurrence ecology and life history off Isle of Man, FRASER **136**.—*T. angulatus* ? in Kenya p. 285 fig., CHAPPUIS **73**.

Triphyllacanthus ancoralis sp. n. on *Ogcocephalus* G. of Mexico, BERE Amer. Midl. Nat. **17** p. 608 figs.

Tropodiaptomus euchaetus sp. n. Nilgiris S. India, KIEFER Zool. Anz. **113** p. 3 figs. [See also under *Diaptomus*.]

Xanthocalanus squamatus sp. n. Gt. Barrier Reef, FARRAN Sci. Rep. Gt. B.R. Exp. **5** p. 93 figs.

Zaus abbreviatus note fig. p. 14, LANG **281**.

BRANCHIURA.

Argulus foliaceus innervation of the attachment organs (antennal), ZAĆWILICHOWSKI **572**.—*A. flavescens* descr. note figs. p. 807, MUELLER **333**.—*A. loutinghengi* sp. n. on *Ophiocephalus* in Honan, China, YÜ Abstr. Paps. Sci. Conf. Nanning **1935**.—*A. japonicus* larval development, TOKIOKA **500**.—*A. onodai* sp. n. on *Spheroides* Japanese waters with descr. notes on other Japanese spp., TOKIOKA Annot. zool.

jap. 15 p. 340 figs.—*A. carteri* in Brazil note p. 217, BREHM & THOMSEN 62.—*A. cubensis* sp. n. on *Cichlasoma* Cuba freshwater, WILSON Mem. Soc. cubana Hist. nat. 10 p. 110.—*A. rhamdiae* sp. n. on *Rhamdia* in Yucatan cenote, WILSON Pub. Carnegie Inst. no. 457 p. 78 figs.—*A. fuscus* p. 578, *A. varians* p. 579, *A. bicolor* p. 580 spp. n. figs. on fishes of G. of Mexico, BERE Amer. Midl. Nat. 17.—*A. biramosus* in Wisconsin male descr. figs., BERE 39.—*A. canadensis* addt. descr. male, etc., WILSON 542.

Dolops sinensis sp. n. on *Siniperca* in Hupei, China, YÜ Abstr. Paps. Sci. Conf. Nanning 1935 p. 52.

OSTRACODA.

Variation in the swimming bristles of the second antenna in Cypridae, DOUBOVSKY 106.

Revision of the families Primitiidae and Beyrichiidae with institution of new fams. Hollinidae, Tetradellidae, Drepanellidae, Aechminidae, Acronotellidae, Primitopsidae with complete list of genera including several new ones, SWARTZ 481.

Revision and corrections of taxonomy and synonymy of Carboniferous Ostracods of U.S.A., KELLETT 235.

Faunal Lists, Recent.—Zuiderzee, REDEKE 396; Silesia, SCHÄFER, 410; Ukraine, S. Russia, DOUBOVSKY 107, 108; Cameroon, KLE 257; East Africa Lakes, LOWNDES 305; Great Australian Bight, CHAPMAN & PARR 72; Cenotes of Yucatan, FURTOS 140; Florida, FURTOS 139.

Faunal Lists, Fossil.—Ordovician, ÖPIK 350; Silurian, Czechoslovakia, BOUČEK 49; Novaya Zemlya, GLEBOVSKAYA 154; REIN 399; Indiana, CORYELL & WILLIAMSON 88; Devonian, Belgium, MAILLIEUX 312; Spitsbergen, SOLLE 448; Estonia, ÖPIK 350; Ohio, STEWART 468; Pennsylvania, SWARTZ 481; Ontario, CORYELL & MALKIN 87; Carboniferous Scotland, LATHAM 289; Missouri, MORAY 331; Nebraska, W. R. JOHNSON 225; Cretaceous Holland, v. VEEN 517-519; Germany, WEBER 535; Texas, ALEXANDER 5; Arkansas, ISRAELSKY 214; Cretaceous-Eocene, New Jersey, JENNINGS 220; Eocene, Hungary, MÉHES 320; Louisiana and Texas, HOWE & GARRETT 202; HOWE & CHAMBERS 203; Oligocene Louisiana, HOWE & LAW 204; STEPHENSON 465.

†*Acanthoscapha pentagonalis* sp. n. Devonian Pennsylvania, SWARTZ J. Paleont. 10 p. 579 figs.

†*Acratia similaris* sp. n. Carboniferous, Missouri, MOREY J. Paleont. 10 p. 120 figs.

†Aechmininae subf. n. p. 53, *Aechmina* (?) *striata* sp. n. figs. p. 55 Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Aechmina serrata* sp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 748 figs.—*A. bigeneris*, *A. spinoterminalata* spp. n. Devonian Penn., SWARTZ J. Paleont. 10 p. 564 figs.

†*Aechminaria* gen. n. (Primitiidae) for genotype *Ae. nodosa* sp. n. p. 5 also *Ae. robusta* sp. n. figs. Silurian Indiana CORYELL & WILLIAMSON Amer. Mus. Nov. 870.

†*Alanellidae* fam. n. for *Alanella* gen. n. for *Alanella bohémica* sp. n. p. 71, *A. b. decurtata* mut. n. p. 72 figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Amphissites similaris* sp. n. Carboniferous Missouri, MOREY J. Paleont. 10 p. 115 figs.—*A. conatus* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. no. 891 p. 5 figs.

†*Antibithocypris* gen. n. (Bairdiidae) for genotype *A. gooberi* sp. n. Cret. Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. no. 78 p. 46 figs.

†*Aparchites* (A.) *contrarius*, A. (A.) *asymmetricus* p. 38, A. (*Neoaparchites* subg. n.) *bohemicus* p. 39 spp. n. all figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Archicythereis* Howe gen. n. (Cytheridae) for type *Cythereis yazooensis* Howe & Chambers p. 57, *A. reticulospinosa* p. 59, *A. stephensoni*, *A. sylverinca* p. 60 spp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Argilloecia hiwanneensis* sp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 25 figs.

†*Backocythere wattervalleyensis* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 46 figs.

†*Bairdia planoconvexa* sp. n. Silurian, Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 7 fig.—*B. sinuosa* p. 119, *B. kinderhookensis* p. 120 spp. n. figs. Carboniferous, Missouri,

MOREY J. Paleont. 10.—*B. summacuminata* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 9 figs.—*B. hazzardi* p. 26, *B. hiwanneensis* p. 27, *B. woodwardsensis* p. 28 spp. n. figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Bairdites* gen. n. (Bairdiidae) for genotype *B. deltasulcata* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 9 figs.

†*Bairdoppilata delicatula*, *B. pondera* spp. n. Cret. Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. no. 78 p. 45.—*B. taxodonta* sp. n. Oligocene Louisiana, HOWE & LAW Bull. Geol. Louisiana no. 7 p. 28 figs.

†*Basslerella* gen. n. p. 60 (Entomidae) for genotype, *B. ornatissima* sp. n. p. 61 figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Berounella* gen. n. p. 65 (Beyrichiidae) for genotype *B. rostrata* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 66 figs.

†*Birdsallella devonica* sp. n. Devonian Ont., CORYELL & MALKINS Amer. Mus. Nov. no. 891 p. 17 figs.—*B. tumida* sp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 763 figs.

†*Bollia sagittaformis* p. 574, *B. burgeri* p. 575 spp. n. *B. americana* *zygocornis* var. n. p. 575, *B. cristata* sp. n. p. 576 all figs. Devonian Pennsylvania, SWARTZ J. Paleont. 10.—*B. widderensis* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 2 figs.

†*Brachycythere betzi* p. 47, *B. harlani*, *B. jerseyensis* p. 48, *B. pseudovata* p. 50 spp. n. figs. Cret. Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. no. 78.—*B. jessupensis* p. 47, *B. nanafabiana* p. 48 spp. n. figs. Eocene Louisiana, HOWE & GARRETT Geol. Bull. Louisiana Dep. Conser. no. 4.—*B. russelli* sp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 41 figs.

†*Budnianella* gen. n. (Kirkbyidae) for genotype *B. caroli* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 69 figs.

†*Bufina* gen. n. (Ropolonellidae) for genotype *B. elata* sp. n. p. 8 figs. also *B. elongata* sp. n. p. 9 figs. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891.

†*Buntonia* gen. n. (Cytheridae) p. 22 for genotype *B. shubutuensis* sp. n. p. 23 figs. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5.

†*Burllella sublunata*, *B. brevispinata* p. 759, *B. (?) bisulcata*, *B. rhomboidalis* p. 760 spp. n. all figs. Devonian Ohio, STEWART J. Paleont. 10.

†*Bythocypris minuta* sp. n., *B. grandis ludlowiana* mut. n. p. 77, *B. concinna inflata* var. n. p. 79 figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.—*B. (?) sinuosa* sp. n. Silurian Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 7 fig.—*B. lucasensis*, *B. subquadrata* spp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 755 figs.—*B. erectus* sp. n. Permian Oklahoma, HARRIS & WORRELL J. Paleont. 10 p. 518 figs.—*B. frequens* sp. n. Eocene Hungary, MÉHES Geol. Hung. Pal. 12 p. 14 figs.—*B. ? mcguirti* p. 28, *B. ? mayeri* p. 29 spp. n. figs. Eocene Louisiana, HOWE & GARRETT Geol. Bull. Louisiana Dep. Conser. no. 4 p. 26 figs.—*B. (?) gibsonensis* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 9 figs.

Candona crispata addt. descr. note on copulatory organ fig., KLIE 258.—*C. angulata* notes figs. p. 98, REDEKE 396.—*C. balatonica* p. 518, *C. annae* p. 520 diagn. figs., FURTOS 139.—*C. triquetra* p. 2, *C. leruthi* p. 8 spp. n. Belgian cave-waters, KLIE Bull. Mus. Hist. nat. Belg. 12 no. 13 figs.—*C. kliei* sp. n. Ukraine S. Russia, DOUBOWSKY Trav. Soc. Nat. Kharkov 52 1929 p. 105 figs.

Candonocypris diagn. and key p. 502, *C. pugionis* sp. n. Florida p. 505 figs., FURTOS Amer. Midl. Nat. 17.

Candonopsis solitaria descr. figs. p. 287, KLIE 257.

†*Cavellina paraquesita* sp. n. Devonian Pennsylv., SWARTZ J. Paleont. 10 p. 583 figs.—*C. cuneata*, *C. subplana* spp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 14 figs.

†*Ceratopsis bocki* sp. n. Ordovician Estonia, OPIK Ann. Soc. Rebus Nat. Tartu 42 p. 35 figs.

Chlamydotheca unispinosa, p. 96, *C. texasiensis* p. 99 descr. figs., FURTOS 140.

Clithrocytharidea subg. n. vide *Cytharidea*.

†*Coelonella* gen. n. (Leperditellidae) for genotype *C. scapha* sp. n. p. 742, also *C. plana* sp. n. figs. Devonian Ohio, STEWART J. Paleont. 10.

†*Conchoprimitia* gen. n. (Primitiidae) p. 29 for genotype *C. gammae* sp. n. and *Primitiella glauconitica* Kummerow Ordovician Estonia, ÕPIK Ann. Soc. Rebus Nat. Tartu 42 p. 29 figs.

†*Cornulina* gen. n. (Primitiidae) for *C. bispinosa* sp. n. p. 2, also *C. silurica*, *C. fractomarginata*, *C. sigmoidia* spp. n. p. 3 all figs. Silurian Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870.

†*Cryptocypris* gen. n. (Bairdiidae) for genotype *C. subovatus* sp. n. Silurian, Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 7 figs.

†*Ctenobolbina bohémica* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 64 figs.—*C. trilobata* sp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 749 figs.

Cyclocypris scrobiculata sp. n. Corfu, KLIE Zool. Anz. 113 p. 325 figs.

Cypretta brevisaepta sarta var. n., *C. bilicis* p. 497, *C. nigra* p. 498, *C. intosa* p. 500 spp. n. all Florida, *C. turgida* recorded for U.S.A. p. 501, FURTOS Amer. Midl. Nat. 17 all figs.

Cypria ophthalmica subsalsa var. n. Zuiderzee Holland, REDEKE Flor. Faun. Zuiderz. p. 109 figs.

Cypricercus mollis sp. n. Florida, FURTOS Amer. Midl. Nat. 17 p. 509 figs.

Cyprideis littoralis notes figs. p. 102, REDEKE 396.

Cypridina biochemistry of the luciferin, ANDERSON 7.—*C. hilgendorfi* on the light-giving organ and its cytological structure, TAKAGI 482.

†*Cypridina?* *tuberculata* sp. n. Silurian Novaya Zemlya, REIN Trans. arctic Inst. 53 p. 84 figs.—*C. bohémica* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 84 figs.—*C. limburgensis* sp. n. Cretaceous S. Limburg, v. VEEN Natuurh. Maandbl. 25 p. 170 figs.

†*Cypridinella rostrata* note fig. p. 154, GRECO 160.

Cypridopsella worthingtoni sp. n. Lake Rudolf, LOWNDES J. Linn. Soc. 40 p. 27.

Cypridopsis okeechobei sp. n. Florida, FURTOS Amer. Midl. Nat. 17 p. 492 figs.

C. inaudita, *C. rhomboidea* p. 91, *C. yucatanensis*, *C. niagranensis* p. 94 spp. n. all figs. Yucatan cenotes, FURTOS Pub. Carnegie Instn. no. 457.

Cyprinotus salinus notes figs. p. 101, REDEKE 396.—*C. uenoi* sp. n. Manchuria, BREHM Annot. zool. jap. 15 p. 374 figs.—*C. inconstans*, *C. symmetricus* p. 104, *C. putei* p. 105, *C. unispinifera* p. 106 spp. n. figs. Yucatan cenotes, FURTOS Pub. Carnegie Instn. no. 457.

Cypris (*Cypria*) *pseudocrenulata* p. 511, *C. (Physocypris) gibbera* p. 512, *C. (P.) exquisita* p. 516 spp. n. all figs. Florida, FURTOS Amer. Midl. Nat. 17.

†*Cythere limburgensis*, *C. dolloi*, p. 172, *C. lamarchei*, *C. (?) krausei* p. 173 spp. n. all figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*C. bruceclarki* sp. n. Cretaceous Arkansas, ISRAELSKY U. Cret. Ostr. Arkansas 1929 p. 11 figs.

†*Cythereis ornatissima reticulata* note fig. p. 142, WEBER 535.—*C. binkhorsti*, *C. decocki*, *C. octofera* p. 133, *C. pseudosemicancellata*, *C. bemelensis*, *C. limburgensis* p. 136, *C. euglyphoidea* p. 137, *C. macrophthalmoidea*, *C. pseudomacrophthalmoidea*, *C. pergensis*, *C. interruptoidea* p. 140, *C. orchidella*, *C. anorchidea* p. 144, *C. horridulor* p. 145, *C. foersterianoidea*, *C. bidentifera*, *C. tridentata* p. 149, *C. lepidoides*, *C. corrosa*, *C. planissima*, *C. camperi* p. 152, *C. major*, *C. minor*, *C. regina-astrid*, *C. hoffmani*, *C. faujasi* p. 153, *C. geulemensis* p. 154, *C. eximioidea*, *C. macerrima*, *C. bispinifera* p. 157, *C. minutoidea* p. 158, *C. macerior* p. 159, *C. crassior* p. 160, *C. serratuloides*, *C. miquelli*, *C. kokeni*, *C. fimbriatoides* p. 162, *C. cuvieri*, *C. goldfussi* p. 163 all spp. n. all figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*C. ozanana*, *C. ponderosana* p. 13, *C. tridentata*, *C. communis* p. 14, *C. ivii* p. 15, *C. saratogana*, *C. costatana*, *C. hannai* p. 16, *C. spoori*, *C. bartoni* p. 17, *C. plummeri* p. 18, *C. hazzardi*, *C. bicornis* p. 19 spp. n. figs. Cretaceous Arkansas, ISRAELSKY U. Cret. Ostr. Arkansas 1929.—*C. pulchra* sp. n. Cret.—Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. no. 78 p. 54 figs.—*C. dadayi* sp. n. p. 40, *C. d. similis* var. n. p. 42, *C. mulleri* p. 42, *C. perlucida* p. 43 spp. n. Eocene Hungary, MÉHES Geol. Hung. Pal. 12.—*Cythereis?* *alabamensis* p. 50, *C. harrisi* p. 51, *C.*

hilgardi p. 53, *C. ? russelli* p. 54, *C. sabinensis* p. 55 spp. n. figs. Eocene Louisiana and Texas, HOWE & GARRETT Bull. Geol. Louisiana Dep. Conserv. no. 4.—*C. broussardi* p. 24, *C. (?) catahoula* p. 25 spp. n., *C. c. pyeatti* p. 26 var. n., *C. deussenii* p. 27, *C. florienensis* p. 28, *C. gibsonensis* p. 29, *C. grigsbyi* p. 30, *C. hysonensis* p. 31 spp. n., *C. h. dohmi* p. 32 var. n., *C. (?) israelskyi* sp. n. p. 33, *C. i. morsei* p. 34, *C. i. warneri* p. 35 varr. n. *C. (?) jacksonensis* p. 35, *C. montgomeryensis* p. 37, *C. yazoensis* p. 38 spp. n. all figs. Eocene Louisiana, HOWE & CHAMBERS (and others) Geol. Bull. Louisiana no. 5.—*C. (Pterygocythereis ?) alexanderi* p. 42, *C. blaspiedi* p. 44 spp. n., *C. b. melvinensis* var. n. p. 44, *C. (?) chawneri*, *C. dacyi* p. 45, *C. elongorugata* p. 46, *C. (?) kemp* p. 47, *C. (?) mcguirti* p. 48, *C. quadrataspinata* p. 50, *C. rosefieldensis* p. 51, *C. thomsoni* p. 53, *C. vicksburgensis* p. 54, *C. (?) weaveri* p. 55, *C. woodwardsensis* p. 56 all spp. n. all figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Cytherella kegei* p. 81, *C. (?) karlsteiniana* p. 82, *C. (?) ellipsoides*, *C. (?) circulata* p. 83 spp. n. all figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.—*C. hannai* p. 16, *C. hiwanneensis* p. 17, *C. sylberinica* p. 18 spp. n. figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Cytherelloidea ovata* sp. n. Cretaceous Germany, WEBER Jber. niedersächs. geol. Ver. 26 p. 145 figs.—*C. monmouthensis*, *C. navesinkensis* p. 41, *C. spiralia* p. 42 spp. n. Cret. Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. no. 78 figs.—*C. jessupensis* sp. n. Eocene Louisiana, HOWE & GARRETT Geol. Bull. Louisiana Dep. Conserv. no. 4 p. 26 figs.—*C. byramensis* sp. n. p. 18, *C. b. conecuhensis* var. n. p. 19, *C. castleberryensis*, *C. chawneri* p. 20, *C. murdercreekensis* p. 21, *C. rosefieldensis* p. 22 spp. n. all figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Cytheretta alexanderi* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 45 figs.

Cytheridea elongata descr. figs. p. 103, REDEKE 396.

†*Cytheridea falcoburgensis*, *C. ? bemelensis* p. 173 spp. n. figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl.

25.—*C. saratogana* p. 11, *C. ? hannai* p. 12 spp. n. figs. Cretaceous Arkansas, ISRAELSKY U. Cret. Ostr. Arkansas 1929.—*C. pinochii*, *C. punctilifera* p. 58, *C. sepulchra* p. 59 spp. n. figs. Cret.-Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. no. 78.—*C. pappi* sp. n. Eocene Hungary, MÉHES Geol. Hung. Pal. 12 p. 34 figs.—*C. ? broussardi* p. 30, *C. hopkinsi* p. 31, *C. ? jessupensis* p. 32, *C. leei* p. 33, *C. marthavillensis* p. 34, *C. moodyi* p. 35, *C. pendletonensis* p. 36, *C. ? pyeatti* p. 37, *C. robertsi* p. 39, *C. sabinensis* p. 40, *C. spooneri* p. 42, *C. veatchi* p. 43, *C. wallacei* p. 44 spp. n. all figs. Eocene Louisiana, HOWE & GARRETT Geol. Bull. Louisiana Dep. Conserv. no. 4.—*C. (?) caldwelensis* p. 11, *C. ehlersi* p. 12, *C. (?) garretti* p. 14, *C. grigsbyi* p. 15, *C. kellumi* p. 16, *C. montgomeryensis* p. 17, spp. n. Eocene Louisiana, HOWE & CHAMBERS & OTHERS Geol. Bull. Louisiana no. 5.—*C. blaspiedi* Stephenson MS. p. 31, *C. byramensis* Stephenson p. 32, spp. n. *C. grigsbyi vicksburgensis* var. n. p. 33, *C. mcguirti* sp. n. Stephenson p. 33 all Oligocene Louisiana, HOWE & LAW Bull. Geol. Louisiana no. 7.—*C. structure of shell* figs. p. 695, *C. (Haplocytheridea subg. n.)* for genotype *C. montgomeryensis* Howe & Chambers p. 700 also *C. (H.) blaspiedi* sp. n. Oligocene Louisiana p. 701 figs., *C. (Clithrocytheridea subg. n.)* for genotype *C. garretti* Howe & Chambers p. 702, also *C. (C.) grigsbyi vicksburgensis* var. n. Oligocene Louisiana p. 703 all figs., STEPHENSON J. Palaeont. 10.

†*Cytherideis bosqueti* p. 167, *C. limburgensis* p. 168 spp. n. figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*C. byramensis* p. 67, *C. rosefieldensis* p. 68, *C. vicksburgensis* p. 69 spp. n. figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

Cytheridella monodi sp. n. Cameroon, KLIE Rev. Zool. Bot. afr. 28 p. 301 figs.

†*Cytheridella bosqueti*, *C. darwini*, *C. binkhorsti*, *C. ubaghisi* p. 164, *C. tuberculifera*, *C. lyelli*, *C. lienenklausi* p. 167 spp. n. all figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.

†*Cytheromorpha ouachitaensis* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 44 figs.—*C. rosefieldensis*, *C. vicksburgensis* spp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 77 figs.

†*Cytheropteron limburgense*, *C. V-scriptum* p. 71, *C. staringi* p. 82, **spp. n.** figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*C. ledaforma* p. 8, *C. tokiana*, *C. ponderosana* p. 9, *C. saratogana* p. 10, **spp. n.** figs. Cretaceous Arkansas, ISRAELSKY U. Cret. Ostr. Arkansas 1929.—*C. jonesi* **sp. n.** Eocene Hungary, MÉHES Geol. Hung. Pal. 12 p. 22 figs.—*C. montgomeryensis* p. 19, *C. danvillensis* p. 20 **spp. n.** figs. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5.—*C. galericulum* **sp. n.** Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 38 figs.

Cytherura gibba descr. figs. p. 106, REDEKE 396.

†*Cytherura bisulcata* p. 84, *C. unisulcata*, *C. asulcata*, *C. gracilis* p. 85, *C. sulcifera*, *C. excavata* p. 86, *C. bosqueti* p. 98, *C. ubaghsi*, *C. staringi*, *C. binkhorsti*, *C. (?) bemelensis* p. 99, *C. (?) formosa*, *C. tenuistriata* p. 100, *C. crassistriata* p. 101, *C. astriata*, *C. (?) preciosa* p. 108 all **spp. n.** all figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*C. cretacea*, *C. taylorensis*, *C. texana* **spp. n.** Cretaceous Texas, ALEXANDER J. Paleont. 10 p. 691 figs.—*C. spooneri*, *C. ? dubia* p. 6, *C. ? saratogana* p. 7 **sp. n.** figs. Cretaceous Arkansas, ISRAELSKY U. Cret. Ostr. Arkansas 1929.—*C. maxima* p. 19, *C. nigra* p. 21, *C. pannonica* p. 22 **spp. n.** all figs. Eocene Hungary, MÉHES Geol. Hung. Pal. 12.—*C. byramensis* p. 69, *C. hilgardi*, *C. sylverinica* p. 70, *C. walesi* p. 71 **spp. n.** figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Drepanella orvikui* **sp. n.** Devonian Estonia, ÕPIK Ann. Soc. Rebus Tartu 42 p. 22 figs.

Ectoprimitia subg. **n.** see *Hoploprimitia*.

†*Entomis tschermyschevi*, *E. asincriti* p. 83, *E. mathildae* p. 86 **spp. n.** Silurian Novaya Zemlya, REIN Trans. arctic Inst. 58 all figs.

Eocytheropteron spurgeonae **sp. n.** Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 20 figs.—*E. sabinensis* **sp. n.** Eocene Louisiana HOWE & GARRETT Geol. Bull. Louisiana Dep. Conser. no. 4 p. 45 figs.—*E. fiski* **sp. n.** Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 38 figs.

†*Eridococoncha concentrica* **sp. n.** Silurian Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 6 figs.

†*Erythrocypris rosefieldensis* **sp. n.** Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 24 figs.

Eucypris serratomarginata, *E. cisternina* **spp. n.** Yucatan cenotes, FURTOS Pub. Carnegie Instn. no. 457 p. 107 figs.—*E. arcadiae* **sp. n.** Florida, FURTOS Amer. Midl. Nat. 17 p. 507 figs.

†*Eucythere brownstownensis* **sp. n.** Cretaceous Texas, ALEXANDER J. Paleont. 10 p. 690 figs.—*E. woodwardensis* Oligocene, *E. chickasawhayensis* Miocene p. 143, *E. lowei* Eocene p. 144 all **spp. n.** figs. Mississippi, HOWE J. Paleont. 10.—*E. byramensis* **sp. n.** Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 73 figs.

†*Eucytherura depressa* p. 25, *E. hungarica* p. 26, *E. hantkeni* p. 27 **spp. n.** *E. h. rara* var. **n.** p. 28 all figs. Eocene Hungary, MÉHES Geol. Hung. Pal. 12.—*E. murdercreekensis* **sp. n.** Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 71 figs.—*E. chelodon* descr. figs. p. 692, ALEXANDER 5.

†*Euglyphella projecta*, *E. compressa* p. 7, *E. jenningsi* p. 8 **spp. n.** Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891.

†*Euprimitia elongata* **sp. n.** Silurian, Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 6 fig.

†*Eurychilina estonula* **sp. n.** Ordovician Estonia, ÕPIK Ann. Soc. Rebus Tartu 42 p. 33 figs.

Geisina gen. **n.** (Kloednellidae) for genotype *Beyrichiella gregaria* Ulrich & Bassler, JOHNSON Pap. Nebr. Geol. Surv. 11 p. 21 figs.

Graphiodactylidae fam. **n.** for *Graphiodactylus* Roth 1929, KELLETT J. Paleont. 10 p. 773.

†*Graphiodactylus minutus* **sp. n.** Carboniferous, Missouri, MOREY J. Paleont. 10 p. 116 fig.

†*Halliella truncata* **sp. n.** Silurian Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 6 fig.

†*Hamiltonia* gen. **n.** for genotype *Leperditia punctulifera* Hall p. 756 figs., *H. ohioensis* **sp. n.** p. 757, *H. o. subcompressa* var. **n.** p. 758 all Devonian Ohio, STEWART J. Paleont. 10.

Haplocytheridea subg. n. vide *Cytheridea*.

†*Haploprimitia simplex* sp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 743 figs.

†*Healdia arkonensis* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 14 fig.—*H. decora* sp. n. Carboniferous Missouri, MOREY J. Paleont. 10 p. 121 figs.—*H. coryelli* nom. n. for *H. compressa* Kellett 1935, KELLETT J. Paleont. 10 p. 776.

†*Hemicythere kniffeni* sp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 67 figs.

Herpetocypris meridana sp. n. Yucatan cenote, FURTOS Pub. Carnegie Instn. no. 457 p. 101 figs.

Heterocypris incongruens in a tree trunk in Germany, KLIE 254.—*H. obliquus* sp. n. Lake George Uganda, LOWNDES J. Linn. Soc. Lond. 40 p. 17 figs.—*H.* sp. nov.? from Manchuria descr. figs. p. 376, BREHM 56.

†*Hogmochilina* subg. n. see *Isochilina*.

†*Holtedahlinia* gen. n. (Leperditidae) for genotype, *H. teres* sp. n. Devonian Spitsbergen, SOLLE Skr. Svalb. no. 64 p. 46 figs.

†*Hoploprimitia* (?) *praecursor* sp. n. p. 44, *H. (Ectoprimitia subg. n.) corrugata krausei* var. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 45.

†*Isochilina*? *parvula* sp. n. Silurian Novaya Zemlya, REIN Trans. arctic Inst. 58 p. 86 figs.—*I. (Hogmochilina subg. n.)* for type *I. (H.) elliptica* sp. n. p. 20 figs., *I. (H.) isochilinoides* subsp. n. p. 26, *I. (H.) bisulcata* sp. n. p. 28, *I. (H.) curvata* p. 29, *I. (H.) rotundata* p. 30, *I. (H.) coronata* p. 32, *I. (Isochilina) brevimarginata* p. 33, *I. (I.)* sp. p. 34, *I. (n. subgen.) varians* p. 35 all spp. n. *I. v. recta*, *I. v. inflecta* subspp. n. and other unnamed races all figs. Devonian Spitsbergen, SOLLE Skr. Svalbard 64.

†*Janetina* gen. n. (Quasillitidae) for genotype *J. harrietensis* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 19 figs.

†*Jenningsina* gen. n. (Quasillitidae) for *Graphiodactylus catenulatus* v. Pelt, CORYELL & MALKIN Amer. Mus. Nov. no. 891 p. 19.

†*Karlsteinella* gen. n. (Beyrichiidae) for genotype *K. reticulata* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 67 figs.

Kellettina gen. n. (Kirkbyidae) for genotype *Ulrichia robusta*, Kellett, SWARTZ J. Paleont. 10 p. 585.

†*Kirkbyella unicornis* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. no. 891 p. 5 fig.—*K. ozarkensis*, *K. ? dubia* spp. n. Carboniferous Missouri, MOREY J. Paleont. 10 p. 118 figs.

†*Kirkbyites* gen. n. (Kirkbyidae) p. 35 for genotype *K. upsoni* sp. n. p. 36 Carboniferous Nebraska, JOHNSON Pap. Nebr. Geol. Survey no. 11.

†*Kloedenella rubra*, *K. tähtverensis* p. 23, *K. densigrannulata* p. 24 spp. n. Devonian Estonia, ÕPIK Ann. Soc. Rebus Tartu 42 all figs.

†*Krithe hiwanneensis* p. 72, *K. vicksburgensis* p. 73 spp. n. figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Laccoprimitia subcentralis* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 43 figs.

†*Leaia tricarinata* in Carboniferous of Maine-et-Loire, PENEAU 369.

†*Leguminocythereis* Howe gen. n. (Cytheridae) for *L. scarabaeus* sp. n. pp. 61, 63, also *L. cookei* sp. n. p. 62, *L. verrucosus* p. 65 all Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Leperditia fabago*, *L. karensis*, *L. miloradovitschi*, *L. aldenae* p. 79, *L. insularis*, *L. ventricosa* p. 80, *L. laevigata* p. 81, *L. brevis* p. 82, all spp. n. *L. arctica angulosa*, *L. a. terraenovae* varr. n. p. 81 all figs. Silurian Novaya Zemlya, REIN Trans. arctic Inst. Leningrad 58.—*L. jermoläewi* sp. n. pp. 38, 42; figs., *L. grandis elongata* var. n. pp. 39, 42 figs. Silurian Novaya Zemlya, GLEBOVSKAYA Trans. arctic Inst. 58.—*L. alpherovi*, *L. primaeva*, *L. (?) quadrangulata* spp. n. Silurian Novaya Zemlya, REIN Trans. arctic Inst. 58 p. 85 figs.—*L. tartuensis* sp. n. Devonian Estonia, ÕPIK Ann. Soc. Rebus Tartu 42 p. 21 figs.—*L.* sp. aff. *alta* and others descr. figs. p. 42, SOLLE 448.

Leptocythere castanea descr. figs. p. 105, REDEKE 396.

†*Lindsayella* gen. n. (Primitiidae) p. 1 for genotype *L. rugosa* sp. n. also *L. waldronensis* p. 2 figs. Silurian Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. no. 870.

Loxoconcha emelwardensis sp. n. Zuiderzee, REDEKE Flora u. Fauna Zuiderz. p. 108 figs.

†*Loxoconcha limburgensis*, *L. striatopunctata* p. 22, *L. longa*, *L. simplex*, *L. bolliatiformis* p. 23 all spp. n. all figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*L. cretacea* p. 693, *L. brownstownensis* p. 694 spp. n. figs. Cretaceous, Texas, ALEXANDER J. Paleont. 10.—*L. fletcheri* sp. n. Cretaceous Arkansas, ISRAELSKY U. Cret. Ostr. Arkansas 1929 p. 11 figs.—*L. minuta* sp. n. Cret.-Eocene N. Jersey, JENNINGS Bull. Amer. Paleont. 78 p. 59 figs.—*L. buntoni* p. 39, *L. creolensis* p. 40, *L. jacksonensis* p. 41, *L. mornhinvegi* p. 42, *L. vernonensis* p. 43 spp. n. figs. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5.—*L. woodwardsensis* sp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 76 figs.

†*Lucasella* gen. n. (Bairdiidae) for genotype *L. mundula* sp. n. also *L. spinulifera* sp. n. p. 761 all figs. Devonian Ohio, STEWART J. Paleont. 10.

†*Macrocypris parvula*, *M. barraudei* spp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 80 figs.—*M. acutula* sp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 758 figs.—*M. prima* p. 10, *M. kovácsiensis* p. 11 spp. n. figs. Eocene Hungary, MÉHES Geol. Hung. Pal. 12.

†*Macronotella scrobiculata* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 69 figs.

†*Mauriyella* (?) *tuberculata* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 70 figs.

†*Menoeidina* gen. n. (Cytherellidae) for genotype, *M. subreniformis* sp. n. p. 762, *M. s. elongata* var. n. p. 763 all figs. Devonian Ohio, STEWART J. Paleont. 10.

Metacypris americana sp. n. Yucatan cenotes, FURTOS Pub. Carnegie Instn. no. 457 p. 114 figs.

†*Microchilina* gen. n. (Primitiidae) p. 51 for genotype *M. jarovenski* also

M. acuta spp. n. p. 52 figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Milleratia* gen. n. genotype *Beyrichia cinnamomiensis* Miller, SWARTZ J. Paleont. 10 p. 567 figs.

†*Monoceratina sulcata* p. 32, *M. pseudosulcata*, *M. pulchra*, *M. compressa*, *M. obliquejugosa* p. 33, *M. parva*, *M. slavantensis*, *M. aculeata*, *M. pygmaea* p. 34, *M. hispida* p. 42, *M. pecten*, *M. punctata*, *M. glabra*, *M. pseudoglabra* p. 43, *M. bituberculata*, *M. multituberculata*, *M. gracilis* p. 44, *M. gibberula*, *M. bosqueti* p. 45 all spp. n. all figs. and notes on other spp. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*M. bemelenensis*, *M. erinacea* p. 176 spp. n. figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.—*M. bispinata* sp. n. Cretaceous Germany, WEBER Jber. niedersächs. geol. Ver. 26 p. 143 figs.—*M. alexanderi* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 21 figs.—*M. wallacei* p. 39, *M. youngi* p. 40 spp. n. figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

Neoaparchites subg. n. see *Aparchites*.

†*Nesidea porcellanea* p. 16, *N. adentata*, *N. budakesziensis* p. 17, *N. vetusta* p. 18 spp. n. all figs. Eocene Hungary, MÉHES Geol. Hung. Pal. 12.

†*Novakina applanans* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 56.

Oncocypris worthingtoni sp. n. Lake Rudolf, etc., LOWNDES J. Linn. Soc. Lond. 40 p. 22 figs.

†*Orthonotacythere sabinensis* sp. n. Eocene Louisiana and Texas, HOWE & GARRETT Geol. Bull. Louisiana Dep. Conser. no. 4 p. 49 figs.

†*Paenaequina* gen. n. (Leperditidae) for genotype, *P. pentagonalis* sp. n. Devonian Spitsbergen, SOLLE Skr. Svalb. no. 64 p. 44 figs.

†*Parabolbina* gen. n. (Hollinidae) for genotype *Ctenobolbina granosa* Ulrich, also *P. limbata* p. 571, *P. ventrispinosa* p. 575 spp. n. figs. Devonian Pennsylv., SWARTZ J. Paleont. 20.

†*Paracypris franquesi* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 10 figs.—*P. rosefieldensis* Oligocene Louisiana, HOWE & LAW Bull. Geol. Louisiana no. 7 p. 30.

†*Paracythereis* gen. n. p. 55 (Cytheridae) for genotype, *P. typicalis* sp. n. Cret.-Eocene N. Jersey p. 56 figs., JENNINGS Bull. Amer. Paleont. no. 78.

†*Paracytheridea mülleri* p. 64, *P. sarsi*, *P. bosqueti* p. 69 spp. n. figs. Cretaceous Limburg, v. VEEN Natuurh. Maanbl. 25.—*P. belhavenensis* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 18.—*P. byramensis*, *P. toleri* p. 35, *P. woodwardsensis* p. 36 spp. n. figs. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Paraechmia indianensis* sp. n. Silurian Indiana, CORYELL & WILLIAMSON Amer. Mus. Nov. 870 p. 5 figs.

†*Parahealdia* (?) *centralis* sp. n. Devonian Pennsylvania, SWARTZ J. Paleont. 10 p. 581 figs.

†*Paraparchites punctatus* sp. n. Permian Oklahoma, HARRIS & WORRELL J. Paleont. 10 p. 518 figs.

Parapolycope gen. n. (nr. *Polycope*) p. 530 for genotype *P. germanica* p. 531 sp. n. North Sea, KLE Zool. Jahrb. Syst. 68 figs.

†*Paraschmidtella* gen. n. (Leperditellidae) for genotype *P. dorsopunctata* sp. n. Devonian Penn., SWARTZ J. Paleont. 10 p. 563 figs.

†*Phanassymeria foveata* p. 177, *P. afoveata* p. 178 spp. n. figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25.

Physocypris kerkyrensis sp. n. Corfu, KLE Zool. Anz. 113 p. 328 figs.

Physocypris denticulata descr. figs. p. 112, *P. xanabanica* sp. n. Yucatan cenotes, FURTOS Pub. Carnegie Instn. no. 457.

Polycope difficilis p. 529, *P. helgolandica* p. 530 spp. n. North Sea, KLE Zool. Jahrb. Syst. 68 figs.

†*Ponderodictya* gen. n. (Cytherellidae) p. 15 for genotype *Cytherella bispinulata* Stewart, *P. pentacornis* sp. n. p. 16 figs. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. no. 891.

†*Pontocypris eocenica* sp. n. Eocene Hungary, MÉHES Geol. Hung. Pal. 12 p. 9 figs.

†*Pontocypris* ? *rubescens* sp. n. Old Red Estonia, ÕPIK Ann. Soc. Rebus

Tartu 42 p. 24 figs.—*P. oblongata* sp. n. Eocene Hungary, MÉHES Geol. Hung. Pal. 12 p. 8 figs.—*P. (?) mississippiensis* sp. n. Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7 p. 23 figs.

†*Primitia bonnemai* sp. n. Silurian I. of Gotland, SWARTZ J. Paleont. 10 p. 566 figs.—*P. zonata* sp. n. Ordovician Estonia, ÕPIK Ann. Soc. Rebus Nat. Tartu 42 p. 32 figs.—*P. seriata* sp. n. Devonian Ohio, STEWART J. Paleont. 10 p. 743 figs.

†*Primitiella* (?) *ventricosa* sp. n. Devonian Pennsylvania, SWARTZ J. Paleont. 10 p. 568 figs.

†*Primitiinae* subf. n. p. 41, *Primitiella alata*, *P. (?) kolednikensis* spp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 42 figs.

Pseudocythereis gen. n. p. 56 (Cytheridae) for genotype *P. reticulata* sp. n., p. 57 figs. Cret.-Eocene N. Jersey JENNINGS Bull. Amer. Paleont. no. 78.

†*Pyricythereis* Howe gen. n. (Cytheridae) for genotype *Cythereis isreali*kyi, HOWE & CHAMBERS p. 65 also *P. huneri* sp. n. p. 66 Oligocene Louisiana, HOWE & LAW Geol. Bull. Louisiana no. 7.

†*Pyxiprimitia* gen. n. (Primitiidae) for genotype *P. ventriclefta* sp. n. p. 569, also *P. ventripunctata* sp. n. p. 570 Devonian Pennsylvania, SWARTZ J. Paleont. 10 figs.

†*Quasillitidae* fam. n. p. 17 for *Quasillites* gen. n. for genotype *Q. obliquus* sp. n. also *Q. fordei* sp. n. all figs. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. no. 891.

†*Richina* gen. n. (Primitiidae) for genotype, *R. truncata* sp. n. p. 3 and *R. subcircularis* sp. n. p. 4 figs. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891.

†*Ropolonellidae* fam. n. for *Ropolonellus* v. Pelt p. 6, CORYELL & MALKIN 87.

†*Rudderina* gen. n. (Ropolonellidae) for genotype *R. extensa* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 6 figs.

†*Silenites warei* sp. n. Carboniferous Missouri, MOREY J. Paleont. 10 p. 121 figs.

†*Spinovina* gen. n. (Cytherellidae) for genotype *S. distributa* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 17 figs.

Stenocypris fontinalis, *S. malcolmsoni* descr. figs. p. 100, FURTOS 140.

†*Steusloffia mitis* sp. n. Ordovician Estonia, ÕPIK Ann. Soc. Rebus Nat. Tartu 42 p. 36 figs.

Strandesia minuta sp. n. Cameroon, KLIE Rev. Zool. Bot. afr. 28 p. 291 figs. —*S. bicuspis* p. 110, *S. obtusata* p. 111 descr. figs., *S. intrepida* sp. n. p. 111 figs. Yucatan cenes, FURTOS Pub. Carnegie Instn. no. 457.

†*Streptulites* gen. n. (Thlipsuridae) for genotype *S. mooki* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 5.

†*Tetradella grewingki* descr. figs. p. 34, *T. primaria* sp. n. p. 35 figs. Ordovician Estonia, ÕPIK Ann. Soc. Rebus Nat. Tartu 42.

†*Tetrasacculus* gen. n. (Primitiidae) p. 744 for genotype *T. bilobus* sp. n. also *T. bifidus* sp. n. p. 745 figs. Devonian Ohio, STEWART J. Paleont. 10.

†*Theriosynoeicum* gen. nom. n. for *Morrisonia* Branson 1935 preoc., BRANSON J. Paleont. 10 p. 323.

†*Tricornina* gen. n. (Primitiidae) for *T. navicula* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 50 figs.

†*Tubilibairdia* gen. n. (Bairdiidae) p. 581 for genotype *T. tubilifera* sp. n. Devonian Pennsylvania, SWARTZ J. Paleont. 10 p. 581 figs.

†*Ulrichella* gen. n. p. 73 (Beecherellidae) for genotype *U. remiši* sp. n. p. 74 figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Ulrichia furcata* sp. n. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76 p. 46 figs. —*U. pluripuncta* p. 578, *U. terminata* p. 579 spp. n. figs. Devonian Pennsylv., SWARTZ J. Paleont. 10. —*U. spinifera* sp. n. Devonian Ont., CORYELL & MALKIN Amer. Mus. Nov. 891 p. 1 figs.

†*Vltavina* gen. n. (Primitiidae) p. 47 for genotype *V. bohémica* p. 48 also *V. perneri* p. 49 spp. n. figs. Silurian Bohemia, BOUČEK N. Jahrb. Min. Geol. 76.

†*Xestoleberis pergensis* p. 69, *X. supplantata* p. 70 spp. n. figs. Cretaceous Limburg, v. VEEN Natuurh. Maandbl. 25. —*X. sarsi* sp. n. Eocene Louisiana, HOWE & CHAMBERS Geol. Bull. Louisiana no. 5 p. 48 figs. —*X. vicksburgensis* sp. n. Oligocene Louisiana, HOWE Geol. Bull. Louisiana no. 7 p. 78 figs.

Zonocypris alveolata p. 294, *R. calcarata* p. 296, *Z. inornata* p. 298 spp. n. all figs. Cameroon, KLIE Rev. Zool. Bot. afr. 28. —*Z. cordata* in Lake Naivasha generic characters and history p. 21, LOWNDES 305.

CIRRIPEDIA.

Nervous system of Canadian Cirrepedia, CORNWALL 86.

Faunal Lists. — Siberian Arctic TARASOV 486; Hokkaido, Japan, HIRO 197; Indian Ocean, STUBBINGS 477; Austro-Malayan waters, HIRO, 198.

THORACIA.

Acasta zuiho sp. n. off N.W. Australia, HIRO Japan. J. Zool. 6 p. 632 figs.

Balanus balanoides distr. in Plymouth waters variation and growth, MOORE 329; Breeding season and habits, larval development, BASSINDALE 32. — *B. tintinnabulum* seasonal growth-rates, ZENKEWITCH 575. — *B. perforatus* feeding and other habits of nauplius larva, LOCHHEAD 301. — *B. (Balanus) crenatus* and other Japanese species descr. figs. p. 219, HIRO 197. — *B. (Chirona) albus* nr. Zanzibar notes figs. p. 41, *B. (Solidobalanus) thompsoni* p. 43 G. of Aden, *B. (S.) echinoplacis* p. 45 Zanzibar area figs. STUBBINGS Sci. Rep. John Murray Exped. 4. — *B. (Membranobalanus) cuneiformis* sp. n. off N.W. Australia figs. p. 627 and notes descr. figs. other Malayan forms, HIRO Japan. J. Zool. 6. — *B. (B.) altissimus* sp. n. coast Vancouver I., CORNWALL J. biol. Bd. Canada 1 p. 472 figs.

†*Chitobalanus* gen. n. for *C. minusculus* sp. n. Permian Sicily, GREGORIO Ann. Geol. Paléont. Palermo 52 1930 p. 11 figs.

Chthamalus stellatus larval development, BASSINDALE 32. — *C. dalli* descr. figs. p. 215, HIRO 197.

Conchoderma virgatum note figs. p. 623, HIRO 198; Note p. 4, STUBBINGS 477.

†*Corobalanus* gen. n. for *C. problematicus* sp. n. Permian Sicily, GREGORIO Ann. Geol. Paléont. Palermo 52 1930 p. 10 figs.

Dichelaspis (*D.*) *tridens* notes fig. p. 7, STUBBINGS 477.

Oxyaspis notes on the spp. and their distr. map figs. p. 9, STUBBINGS 477

Poecilasma (*P.*) *kaempferi* note fig. larva p. 5, STUBBINGS 477.

†*Pyrula cornuta* and other boring Cirripeds, traces on Miocene Gastropod shells, ZAPKE 573.

Sculpellum (*Smilium*) *kampeni* p. 16, *S.* (*Eusculpellum*) *bengalense* p. 17, *S.* (*Sculpellum*) *abyssicola* p. 20, *S.* (*S.*) *diota* p. 22 and other spp. notes figs., *S.* (*S.*) *woodmasoni murrayi* var. n. S. Arabian coast p. 31 figs., STUBBINGS Sci. Rep. John Murray Exped. 4.—*S. striolatum* in Kara sea note pp. 46, 49, TARASOV 486; descr. figs. p. 22, STEPHENSEN 460.

†*Sculpellum* (*Arcosculpellum*) *hartleyi* sp. n. Miocene Bengal, WITHERS Ann. Mag. N.H. (10) 18 p. 590 figs.

Stomatolepas elegans on *Caretta* structural and taxonomic notes, HIRO 196.

†*Tessarelasma pilsbryi* gen. et sp. n. (Chthamalidae) Miocene Arakan Bengal, WITHERS Ann. Mag. N.H. (10) 18 p. 591 figs.

Verruca stroemia larval development, BASSINDALE 32.—*V. (Rostratoverruca) murrayi* p. 32, *V. (R.) sewelli* p. 35, *V. (V.) macani* p. 39 spp. n. figs. Zanzibar area, STUBBINGS Sci. Rep. John Murray Exped. 4.

†*Zeugmatolepas americana* sp. n. Eocene Alabama, WITHERS Ann. Mag. N.H. (10) 18 p. 587 figs.

ASCOTHORACIDA.

Ascothorax ophioctenis in *Ophiocten* in N. Atlantic descr. figs., STEPHENSEN 457.

Baccalaureus anatomy, development and systematic status p. 654, *B. hexapus* sp. n. in *Palythoa* on Burmese coast p. 681, PYEFINCH Quart. J. micr. Sci. 78 figs.

Ulophysema gen. n. (Dendrogastridae) for genotype, *U. öresundense* sp. n. in *Echinocardium* in Swedish waters, BRATTSTRÖM Ark. Zool. Stockholm 28A no. 23 p. 1 figs.

RHIZOCEPHALA.

The Rhizocephalid parasites of *Munida*, review of spp. and account of the effects on the hosts' development and life history p. 41, BRINKMANN 64.

Loxothylacus review of E. Indian spp. with descr. p. 370, *L. strandi* sp. n. p. 385 figs. China seas, BOSCHMA Festschr. Strand 1936.

Pellogasterella socialis list of hosts, Japanese waters notes figs. p. 226, HIRO 197.

Sacculina carcini age and growth in Morecambe Bay, Irish Channel, ORTON 351; Experimental breeding under changing osmotic conditions, RAMULT 392.—*S. yatsui* sp. n. on *Pachigrapsus* in Japanese seas p. 1, *S. rotundata* descr. figs. p. 11 both figs., BOSCHMA Zool. Meded. Leiden 1936.

Triangulus boschmai nom. n. for *Lernaeodiscus ingolfi* Boschma p. 52, BRINKMANN 64.

MACHAERIDIA.

[Vacant.]

X. ARACHNIDA

TO WHICH ARE ADDED

ARTHROPOD GROUPS

OTHER THAN

INSECTA AND CRUSTACEA.

[ARTHROCEPHALA, GIGANTOSTRACA (XIPHOSURA, SYNXIPHOSURA, EURYPTERIDA, TRILOBITA), PANTOPODA, TARDIGRADA, PENTASTOMIDA, MYRIOPODA, AND PROTOTRACHEATA.]

ARRANGED BY

R. J. WHITTICK, B.Sc.

CONTENTS.

| | PAGE |
|--|------|
| I. TITLES (All groups) | 2 |
| II. SUBJECT-INDEX :— | |
| Arthrocephala | 25 |
| Gigantostraca | 25 |
| Arachnida (incl. Tardigrada, Pantopoda and Pentastomida) ... | 26 |
| Myriopoda | 32 |
| Prototracheata | 33 |
| III. SYSTEMATIC INDEX :— | |
| Arthrocephala | 33 |
| Gigantostraca | 34 |
| Pantopoda | 42 |
| Arachnida (incl. Tardigrada and Pentastomida) | 43 |
| Myriopoda | 75 |
| Prototracheata | 82 |

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I.—TITLES (All Groups).

1.—Abbott, C. E. On the chemical senses of spiders. Bull. Brooklyn ent. Soc. **31** 1936 pp. 212–214.

2.—Allan, R. S. The Fauna of the Reefton Beds (Devonian) New Zealand. Palaeont. Bull. N.Z. **14** 1935 pp. 1–72 5 pls. [Trilobita p. 27.]

3.—Allard, H. A. The Drumming Spider (*Lycosa gulosa* Walckenaer). Proc. Biol. Soc. Washington **49** 1936 pp. 67–68.

4.—Alexander, J. Early reference to the Black Widow spider. Science New York N.S. **84** No. 2190 1936 pp. 552–553.

5.—André, M. Victor Hugo, Acarologue. Bouvier, Livre Jubilaire, Paris 1936 pp. 75–78.

6.—André, M. Sur le *Pediculoides ventricosus* Newport (Acarien). Bull. Mus. Hist. nat. Paris (2) **8** 1936 No. 3 pp. 240–245 and No. 4 pp. 337–341 5 text-figs.

7.—André, M. Descriptions de plusieurs *Microthrombidium* de l'Afrique Orientale (Mission de l'Omo, 1932–1933). Bull. Mus. Hist. nat. Paris Ser. 2 **8** No. 5 1936 pp. 406–422 8 text-figs.

8.—André, M. Notes sur le genre *Caeculus* Dufour (Acarie) avec descriptions d'espèces nouvelles africaines. Bull. Soc. Hist. nat. Alger. T. **26** bis 1935 pp. 79–127 31 text-figs.

9.—André, M. Une espèce inédite Africaine de *Thrombella* (Acarie). Bull. Soc. zool. Fr. T. **61** No. 1 1936 pp. 9–13 3 text-figs.

10.—André, M. Un nouveau genre Africain de *Thrombididae*. Bull. Soc. zool. Fr. T. **61** No. 5 1936 pp. 323–326 1 text-fig.

11.—André, M. Descriptions de plusieurs espèces d'*Allothrombium* de l'Afrique orientale (Mission de l'Omo, 1932–1933). Bul. Soc. zool. Fr. **61** 1936 pp. 421–433 8 text-figs.

12.—André, M. Die Milben der menschlichen Wohnungen. Mitt. Ges. Varratsschutz. Jahrg. **12** Nr. 2 1936 pp. 13–15; Nr. 4 1936 pp. 42–49.

13.—Anonymous. Typhus-like diseases in South Africa. J. Trop. Med. London Vol. **39** No. 12 1936 pp. 139–140.

14.—Anonymous [M. D.]. The epidemiology of tropical typhus. J. Trop. Med. London Vol. **39** No. 1 1936 pp. 9–11.

15.—Archey, G. Revision of the Chilopoda of New Zealand. Rec. Auckland Inst. and Mus. **2** No. 1 1936 pp. 43–70 5 pls.

16.—Arita, K. Ein überzähliges Bein bei einer Pantopoden-Art (*Nymphonella tapetis* Ohshima). Annot. zool. jap. **15** 1936 pp. 469–479 3 text-figs. and 1 plate.

17.—Askund, B. Zur Kenntnis der jämtländischen Ogygiocarisschieferfauna. Sverig. geol. Undersökn. Arsb. C **30** 2 1936 pp. 1–12 2 pls.

18.—Askund, B. Die Fauna in einem Geschiebe aus der Trinucleusstufe in Jämtland. Sverig. geol. Undersökn. Arsb. C **30** 7 1936 pp. 1–6 2 pls.

19.—Bacelar, A. Aracnidos Portugueses. V. Bull. Soc. portug. Sci. nat. T. **12** No. 7 1935 pp. 33–39.

20.—Balboa, P. F. Una nueva especie de Araña Peluda. Mem. Soc. cubana Hist. nat. Vol. **9** 1936 pp. 259–262 1 pl. 5 text-figs.

21.—Balogh, I. J. Über eine neue gynandromorphe Spinne, *Philaenus chrysops* (Poda). Folia zool. hydrobiol. Riga Vol. **9** No. 1 1936 pp. 67–68 2 text-figs.

22.—Balogh, I. J. Zur mitteleuropäischen Verbreitung und über das Einsammeln der Spinne *Theridiosoma gemmosum* (L. Koch). Folia zool. hydrobiol. Riga Vol. **9** No. 1 1936 pp. 68–72 1 map.

23.—Balogh, I. J. Neue Spinnen aus Neuguinea. Zool. Anz. Leipzig Bd. 113 Heft 9-10 1936 pp. 237-245 6 text-figs.

24.—Barrett, C. Stray Notes on Spiders. Vict. Nat. Melbourne 53 No. 5 1936 pp. 79-80 2 pls.

25.—Bartoš, E. Wasserbewohnende Tardigraden der Hohen Tatra. Zool. Anz. Leipzig Bd. 113 Heft 1-2 1936 pp. 45-47 1 text-fig.

26.—Bartoš, E. Neue Tardigraden-Arten aus dem unterkarpatischen Russland. Zool. Anz. Leipzig Bd. 114 Heft 1-2 1936 pp. 45-48 2 text-figs.

27.—Becker, E. Die Mundwerkzeuge des *Tetranychus telarius* (L.) und deren Funktion in Beziehung zur chemischen Bekämpfung des letzteren. Zool. J. Moscow 14 1935 pp. 637-654 10 text-figs. [Paper in Russian, summary in German p. 654.]

Becker vide D'Amour.

28.—Beier, M. Mission scientifique de l'Omo. Paris T. 2 1935 pp. 117-129 11 text-figs.

29.—Beier, M. Zwei neue Pseudoskorpione aus deutschen Kleinsäuger-Höhlen. Zool. Anz. Leipzig Bd. 114 Heft 3-4 1936 pp. 85-87 2 text-figs.

30.—Beier, M. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao und Aruba im Jahre 1930. No. 21. Einige neue neotropische Pseudoskorpione. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 443-447 4 text-figs.

31.—Besseling, A. J. Nederlandsche Hydrachnidae. Genus *Piona*. Ent. Ber. 's Gravenhage 9 1936 pp. 280-288 2 text-figs.

32.—Bhattacharya, G. C. Observations of some peculiar habits of the spider (*Marpissa melanognathus*). J. Bombay nat. Hist. Soc. 39 No. 1 1936 pp. 142-144 2 pls.

33.—Bhattacharya, G. C. Diving Spiders. Intimate observations on a spider of India which submerges when frightened or in search of food, and preys upon fishes. Nat. Hist. N.Y. Vol. 38 6 1936 pp. 77-81 6 figs.

34.—Binns, J. The Black Widow Spider. Occ. Pap. Cincinn. Soc. nat. Hist. No. 1 [1936] pp. 1-9 1 pl.

35.—Birula, A. Über eine neue *Galeodopsis*-Art (Solifugen) aus Mitelasien. Festschrift f. Embrik Strand Riga 1 1936 pp. 47-50 1 text-fig.

36.—Birula, A. Über eine vermutlich neue *Rhagodes*-Art (Solifugen) aus Kurdistan. Festschrift f. Embrik Strand Riga 1 1936 pp. 50-52.

37.—Bishop, S. C. and Crosby, C. R. Notes on Some Spiders of the Family Pisauridae. Ent. News Philad. 47 1936 pp. 238-244 7 text-figs.

38.—Bishop, S. C. and Crosby, C. R. A new genus of spiders in the Erigoneae. Proc. Biol. Soc. Washington 49 1936 pp. 39-42 1 pl.

Bishop vide Crosby.

39.—Bishopp, F. C. and Hixson, H. Biology and economic importance of the Gulf Coast Tick. J. Econ. Ent. Menasha Wis. 29 1936 pp. 1068-1076 2 text-figs.

40.—Bishopp, F. C. and Smith, C. N. The American Dog Tick or Eastern Rocky Mountain Spotted Fever Tick. J. Parasit. Urbana 22 No. 6 1936 pp. 541-542.

41.—Blauvelt, H. H. The Comparative Morphology of the Secondary Sexual Organs of *Linyphia* and Some Related Genera, including a Revision of the Group. Festschrift f. Embrik Strand Riga 2 1936 pp. 81-170 18 plates.

42.—Bodenheimer, F. S. Animal Life in Palestine. Jerusalem 1935. [Arach. and Myriop. pp. 362-380.]

43.—Bonnet, P. Nouvelles recherches sur les griffes des pattes des Araignées (2^e note). Bull. Soc. Hist. nat. Toulouse T. 67 fasc. 3 1935 pp. 346-352 4 text-figs.

44.—Bonnet, P. *Theridion tepidariorum* C. L. Koch. Araignée cosmopolite. Répartition—cycle vital—moeurs. Bull. Soc. Hist. nat. Toulouse T. 67 fasc. 4 1935 pp. 335-386 1 map 9 text-figs.

45.—Bonnet, P. Araignées males a palpe unique. Bull. Soc. Hist. nat. Toulouse T. 67 fasc. 4 1935 pp. 411-414 1 pl.

46.—Borne, F. P. El único caso conocido de muerte en el hombre por mordedura de *Latrodectus*. Act. Soc. sci. Chili T. 37-42 1935 pp. 94-96.

47.—Borne, F. P. Caso de picadura de Araña Doméstica. Act. Soc. sci. Chile T. 37-42 1935 pp. 97-99.

48.—Bouček, B. On some further new Trilobites from the Gothlandian of Bohemia. Bull. int. Acad. Prague Ann. 35 1934 pp. 200-205 1 pl. Paper in Polish in Rozpr. Česk. Akad. Praha 44 No. 34 1935 pp. 1-8 1 pl.

49.—Boulanova, E. Sur la propagation endozoïque des Tyroglyphes par les souris. Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45 Livr. 4 1936 pp. 294-297. [Paper in Russian, summary in French p. 297.]

50.—Boynton, W. H., Herms, W. B., Howell, D. E. and Woods, G. M. Anaplasmosis transmission by three species of ticks in California. J. Amer. Vet. med. Ass. 88 1936 pp. 500-502.

51.—Bozhko, M. P. Tardigrada of the European parts of the U.S.S.R. Proc. Zool.-Biol. Inst. Scient. Res. Charkov 1 1936 pp. 185-216. [In Russian, with summary in English p. 214.]

52.—Britten, H. and Falconer, W. Arachnida of the Whitby District. Naturalist London 1936 No. 957 pp. 221-227.

53.—Brügger, A. Zur Kenntnis der äusserlichen Acarapis-Milben. Archiv. fur Bienenkunde 17 Heft 4-5 pp. 113-142 5 text-figs.

54.—Brumpt, E. Non transmission de la fièvre récurrente de l'Asie centrale à *Spirochaeta persica* par l'*Ornithodoros canestrinii*. Ann. Parasitol. Paris 14 No. 5 1936 pp. 433-435.

55.—Brumpt, E. Action nulle du froid sur le pouvoir infectieux des Argasins vecteurs de fièvres récurrentes. Ann. Parasitol. Paris 14 No. 5 1936 pp. 436-439.

56.—Brumpt, E. Transmission expérimentale exceptionnelle de la fièvre récurrente du Maroc à *Spirochaeta hispanica* par la tique cosmopolite *Rhipicephalus sanguineus*. Ann. Parasitol. Paris 14 No. 6 1936 pp. 564-570.

57.—Brumpt, E. L'Ixodiné *Rhipicephalus sanguineus* ne transmet pas expérimentalement la fièvre récurrente de l'Asie centrale à *Spirochaeta persica*. Ann. Parasitol. Paris 14 No. 6 1936 pp. 571-573.

58.—Brumpt, E. Le spirochète (*Spirochaeta recurrentis*) de la fièvre récurrente à poux de Chine, n'est pas transmis expérimentalement par la piqûre de l'*Ornithodoros moubata* et ne se conserve pas chez cet acarien. Ann. Parasitol. Paris 14 No. 6 1936 pp. 578-585.

59.—Brumpt, E. Sur l'identification des spirochètes récurrents. Etude d'une souche de *Spirochaeta recurrentis* (?) conservée depuis longtemps sur Souris, dans divers laboratoires d'Allemagne. Ann. Parasitol. Paris 14 No. 6 1936 pp. 586-596.

60.—Brumpt, E. Longue conservation de 28 mois du virus du typhus de São Paulo, chez l'argasiné *Ornithodoros turicata*. Non transmission par la piqûre de cet acarien. Ann. Parasitol. Paris 14 No. 6 1936 pp. 621-628.

61.—Brumpt, E. Le virus de la fièvre pourprée des Montagnes Rocheuses peut se conserver plus de 600 jours, dans le corps de l'*Ornithodoros turicata*, mais n'est pas transmis par la piqûre de cet acarien. Ann. Parasitol. Paris 14 No. 6 1936 pp. 629-631.

62.—Brumpt, E. Evolution expérimentale de l'*Ornithodoros lahorensis*. Similitude biologique des stades post-embryonnaires de cet argasiné et de ceux de l'*O. megnini*. Rôle pathogène éventuel. Ann. Parasitol. Paris 14 No. 6 1936 pp. 632-639.

63.—Brumpt, E. Distribution géographique et rôle en pathologie humaine de l'*Ornithodoros savignyi*. Ann. Parasitol. Paris 14 6 1936 pp. 640-646.

64.—Brumpt, E. Contribution à l'étude de l'évolution des Ornithodores. Biologie et longévité de l'*Ornithodoros megnini*. Ann. Parasitol. Paris 14 6 1936 pp. 647-651.

65.—Brumpt, E. et Caminopetros, J. Non transmission de la fièvre récurrente Grecque à *Spirochaeta hispanica* var. *peloponesica*, par la tique *Rhipicephalus sanguineus*. Ann. Parasitol. Paris 14 No. 6 1936 pp. 574-577.

66.—Bryant, E. B. Descriptions of some new species of Cuban spiders. Mem. Soc. cubana Hist. nat. 10 No. 5 1936 pp. 325-332 1 pl.

- 67.—Bubnoff, S. von. Tabellen zur Einführung in die Palaeontologie der Wirbellosen für Anfänger. Mitt. Geol.-palaeont. Griefswald **10** 1935 pp. 92-94.
- 68.—Büren, G. v. Der Gerzensee. Eine limnologische Studie. Mitt. naturf. Ges. Bern. **1935** 1936 pp. 29-94 2 pls. 3 graphs 3 text-figs. [*Hydrachnida* p. 88.]
- Caminopetros *vide* Brumpt.
- Caminopetros *vide* Senevet.
- 69.—Canals, J. Observaciones biológicas en Arácnidos del Orden Opiliones. Rev. chil. Hist. nat. **40** 1936 pp. 61-63.
- 70.—Caporiacco, L. di. Aracnidi terrestri della Laguna Veneta. Atti Mus. Stor. nat. Trieste Vol. **12** 1934 pp. 107-131.
- 71.—Caporiacco, L. di. Aracnidi Fezzanesi raccolti dal Prof. G. Scortecci nel 1934—XII. (Missione della R. Società Geografica.) Atti Soc. ital. Milano Vol. **75** fasc. 1-2 1936 pp. 67-94 6 text-figs.
- 72.—Caporiacco, L. di. Saggio sulla fauna aracnologica del Casentino, Val d'Arno Superiore e Alta Val Tiberina. Festschrift f. Embrik Strand Riga **1** 1936 pp. 326-369 5 text-figs.
- 73.—Caporiacco, L. di. Aracnidi raccolti durante la primavera 1933 nelle oasi del deserto Libico. Mem. Soc. ent. ital. Genova **15** 1936 pp. 93-122 11 text-figs.
- 74.—Carpano, M. Sur les micro-organismes du type *Rickettsia* observés chez des *Ixodes* en Egypte. Ann. Parasitol. Paris **14** No. 5 1936 pp. 417-422 1 plate.
- 75.—Chamberlin, R. V. Records of North American Gnaphosidae with descriptions of new species. Amer. Mus. Nov. **841** 1936 pp. 1-30 45 text-figs.
- 76.—Chamberlin, R. V. Further records and descriptions of North American Gnaphosidae. Amer. Mus. Nov. **853** 1936 pp. 1-17 47 figs.
- 77.—Chamberlin, R. V. A new burrowing spider of the genus *Lycosa* from the Uintah Mountains, Utah. Proc. Biol. Soc. Washington **49** 1936 pp. 15-16 1 text-fig.
- 78.—Chamberlin, R. V. and Ivie, W. Nearctic Spiders of the genus *Wubana*. Ann. Ent. Soc. Amer. Columbus **29** No. 1 1936 pp. 85-98 5 pls.
- 79.—Charitonov, D. E. *Lepthyphantes valentinae* n. sp. Scient. Mem. Univ. Perm. Vol. **1** No. 1 1935 pp. 75-78. [English summary pp. 78-81.] [This paper was recorded from another journal in Zoo. Rec. 1935.]
- 80.—Charitonov, D. E. Nachtrag zum Katalog der Russischen Spinnen. Scient. Mem. M. Gorki St. Univ. Perm. **2** No. 1 1936 pp. 167-223. [Paper in Russian, German summary p. 223.]
- 81.—Chauchard, P. Une station d'Iules sur le rocher de Bizeux. Bull. Lab. Maritime St. Servan **16** 1936 pp. 28-29.
- 82.—Cheo, M. A preliminary list of the Insects and Arachnids injurious to economic plants in China. Peking Nat. Hist. Bull. Vol. **10** Part 3 1936 pp. 167-182; Part 4 pp. 291-308. [No Arachnids listed in these sections.]
- 83.—Chickering, A. M. Families of the Spiders of Michigan. Pap. Mich. Acad. Sci. **21** 1936 pp. 575-586 2 pls.
- 84.—Chickering, A. M. Additions to the list of known species of Spiders from Barro Colorado Island, Panama. Trans. Amer. micr. Soc. Menasha **55** No. 4 1936 pp. 449-456.
- 85.—Christiansen, M. *Argas reflexus* Latreille (Duemiden) i Danmark. Maanedssk. Dyrk. **46** 1934 pp. 6-15 3 text-figs.
- 86.—Cobbold, E. S. The Conchostraca of the Cambrian area of Comley, Shropshire, with a note on a new variety of *Atops reticulatus* (Walcott). Quart. J. Geol. Soc. London **92** 3 1936 pp. 221-235 2 pls.
- 87.—Cockerell, T. D. A. The Entomology of Prince Albert National Park, Saskatchewan. Canad. Ent. **68** 1936 pp. 85-88.
- Colas-Belcour *vide* Roubaud.
- 88.—Comte, P. Le Dévonien inférieur du Léon (Espagne). C.R. Acad. Sci. Paris T. **202** No. 9 1936 pp. 771-773.

89.—Cooper, G. A. and Kindle, C. H. New Brachiopods and Trilobites from the Upper Ordovician of Percé, Quebec. *J. Paleont. Menasha Wis.* **10** 5 1936 pp. 348-372 1 text-fig. 3 pls.

90.—Crichton, M. I. and Waterston, A. R. *Arachnida* in Forrest, J. E., Waterston, A. R. and Watson, E. V. *The Natural History of Barra, Outer Hebrides.* *Proc. phys. Soc. Edinb.* **22** part 5 1936 pp. 286-289.

91.—Crosby, C. R. and Bishop, S. C. *Studies in American Spiders: Miscellaneous Genera of Erigoneae.* *Festschrift f. Embrik Strand Riga* 1936 **2** pp. 52-64 2 plates.

92.—Crosby, C. R. and Bishop, S. C. *Aeronautic Spiders with a description of a new species.* *J. N.Y. ent. Soc.* **44** 1936 pp. 43-49 1 text-fig.

Crosby, *vide* Bishop.

93.—D'Amour, F. E., Becker, F. E. & Riper, Walker Van. *The Black Widow Spider.* *Quart. Rev. Biol.* *Baltimore.* Vol. **11** No. 2 1936 pp. 123-160 7 figs. 29 tables.

94.—David, Sir T. W. E. & Tillyard, R. J. *Memoir on fossils of the late Pre-Cambrian (newer Proterozoic) from the Adelaide Series, South Australia.* Pp. xi + 122 13 pls. Sydney (Angus & Robertson) 1936.

Davis *vide* Gertsch.

95.—Delo, D. M. *Helioccephalus*, new name for *Malvernina* Delo (not Jacoby). *J. Paleont. Menasha Wis.* **10** 5 1936 p. 417.

96.—Delo, D. M. A revision of the Phacopid Trilobites. *J. Paleont. Sharon Mass.* **9** No. 5 1935 pp. 402-420 45 figs. [See No. 108 *Zoological Record* 1935.]

97.—Delpy, L. *Sur la Tératologie du sous-genre Hyalomma* (Koch 1884). *Ann. Parasitol. Paris T.* **14** No. 1 1936 pp. 48-54 7 text-figs.

98.—Delpy, L. *Notes sur les Ixodidés du genre Hyalomma* (Koch). *Ann. Parasitol. Paris T.* **14** No. 3 1936 pp. 206-245 26 text-figs.

99.—Denis, J. *Liste d'Araignées recueillies dans le département du Var* (3 Note). *Ann. Soc. Hist. nat. Toulon* **20** 1936 pp. 136-138.

100.—Denis, J. *Quelques observations sur la biologie d'Antistea elegans*

(*Aran. Hahniidae*). *Bouvier, Livre Jubilaire, Paris* 1936 pp. 79-81.

101.—Dey, A. C. A case of scorpion bite. *Ind. Med. Gaz.* **71** 1936 pp. 402-403.

102.—Diesel, A. M. *The Control and Eradication of Ticks in South Africa with particular reference to the Province of Natal.* *J. S. Afr. Vet. Med. Ass.* **6** 1935 pp. 263-269.

103.—Dons, C. Om enkelte Pantopoder. *K. norske vidensk. Selsk. Trondheim* **2** No. 7 1929 pp. 24-27 5 text-figs.

104.—Dons, C. Endel pantopoder fra Nord-Norge. *K. norske vidensk. Selsk. Trondheim* **2** No. 46 1930 pp. 163-165 4 text-figs.

105.—Doucette, C. F. Observations on Bulb Scale Mite as a major pest of *Narcissus*. *J. Econ. Ent. Menasha Wis.* **29** 1936 pp. 1103-1105.

106.—Downing, W. The Life-history of *Psoroptes communis* var. *ovis* with particular reference to latent or suppressed Scab. *J. comp. Path.* **49** 1936 pp. 163-180 and 183-209 12 text-figs.

107.—Downing, W. The life-history of Scab Mite in relation to control measures. *Vet. Record London* **48** No. 37 1936 pp. 1065-1067.

D'Silva *vide* Shortt.

108.—Dury, R. Notes on the Black Widow Spider. *Occ. Pap. Cincinnati Soc. nat. Hist.* No. 1 [1936] pp. 10-12.

109.—Dyal, S. Fauna of Lahore. 4. Spiders of Lahore. *Bull. Dep. Zool. Panjab Univ. Lahore* **1** 1935 pp. 119-252 7 pls.

110.—Ehlers, G. M. A new Eurypterid from the Upper Devonian of Pennsylvania. *Contr. Mus. Pal. Univ. Michigan* **4** No. 18 1935 pp. 291-295 1 pl.

111.—Englisch, H. Über die lateralen Darmanhangsdrüsen (Vasa malpighii) und die Wohnpflanzen der Tardigraden. *Zool. Jahrb. Jena (Syst.)* **68** 1936 pp. 325-352 10 text-figs.

112.—Elton, C. & Keay, G. The seasonal Occurrence of Harvest Mites (*Trombicula autumnalis* Shaw) on Voles and Mice near Oxford. *Parasitology Cambridge* **28** 1936 pp. 110-115 1 text-fig.

113.—**Esaki, T.** Das Vorkommen der charontiden Amblypygi auf der Palau-Inseln. *Lansania Tokyo* 8 No. 75 1936 pp. 79–90 1 pl.

114.—**Ewing, H. E.** A short synopsis of the North American species of the mite genus *Dermanyssus*. *Proc. ent. Soc. Washington* 38 No. 3 1936 pp. 47–54 1 text-fig.

115.—**Exline, H.** Nearctic Spiders of the genus *Cicurina* Menge. *Amer. Mus. Nov.* 850 1936 pp. 1–22 24 figs.

116.—**Exline, H. I.** Pycnogonids from Puget Sound. *Proc. U.S. nat. Mus.* 83 No. 2991 1936 pp. 413–422 11 text-figs.

117.—**Exline, H.** New and little-known species of *Tegenaria*. *Psyche* Boston 1936 pp. 21–26 1 pl.

118.—**Fage, L.** Une Araignée termitophile, *Andromma bouvieri*, n. sp. *Bouvier, Livre Jubilaire, Paris, 1936* pp. 83–87 2 text-figs.

119.—**Fage, L.** Nouvelle contribution à l'étude des Scorpions de l'Indochine française. *Bull. Soc. ent. Fr.* 41 1936 pp. 179–181.

120.—**Fage, L. & Simon, E.** Mission scientifique de l'Omo. *Arachnida. III. Pedipalpi, Scorpiones, Solifuga et Araneae (1^{re} partie).* *Mém. Mus. Hist. nat. Paris* 4 1936 pp. 293–340 23 text-figs.

Fage vide Gravier.

121.—**Fahlander, K.** Ein japanischer *Nesogeophilus* nebst Bemerkungen über zwei amerikanische Geophiliden. *Ark. Zool. Stockholm* 28 B 7 1936 pp. 1–4 2 text-figs.

Falconer vide Britten.

122.—**Feruth, R.** Exploration biologiques des Cavernes de la Belgique et du Limbourg Hollandais. *XXI^e. Contribution. Deuxième liste des Grottes visitées.* *Natuurh. Maandbl. Maastricht* 25 No. 8 1936 pp. 95–98.

123.—**Field, H. M.** A new locality for the Black Widow Spider. *Science N.Y. (new series)* Vol. 83 No. 2147 1936 p. 186.

124.—**Filinger, G. A.** The Garden Symphyid *Scutigerella immaculata* Newport. *Bull. Ohio agric. Exp. Sta. No. 486* 1931 pp. 1–33 19 text-figs.

125.—**Folkmanoyá, B.** Über einige von Dr. Jaroslav Storkán in Bulgarien gesammelte Chilopoden. *Bull. Inst. Roy. Hist. nat. Sophia* 9 1936 pp. 93–97 3 text-figs.

126.—**Fonseca, F. da.** Ocorrência de uma nova sub-espécie de *Ixodes ricinus* (L. 1758) no estado de S. Paulo (Acarina, Ixodidae). *Bol. biol. S. Paulo N.S.* 2 No. 2 1934 pp. 31–34 2 text-figs.

127.—**Fonseca, F. da.** Notas de Acareologia. XVIII. Generos e especies de acarianos parasitas de ratos (Acari, Laelaptidae). *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 17–23. [Abstract in English p. 23.]

128.—**Fonseca, F. da.** Notas de Acareologia. XIX. Generos e especies de acarianos parasitas de mamíferos (Acari, Laelaptidae). *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 25–32 6 text-figs. [Abstract in English p. 32.]

129.—**Fonseca, F. da.** Notas de Acareologia. XX. Especies de acarianos do genero *Laelaps*, parasitas de ratos do Brasil (Acari, Laelaptidae). *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 33–37. [Abstract in English p. 37.]

130.—**Fonseca, F. da.** Notas de Acareologia. XXI. Gymnandromorphismo em *Amblyomma cajennense* (Fabr., 1787). *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 39–41 2 text-figs. [Abstract in English p. 41.]

131.—**Fonseca, F. da.** Notas de Acareologia. XXII. *Liponissus haematophagus* sp. n. (Acari, Laelaptidae). *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 43–46 2 text-figs.

132.—**Fonseca, F. da.** Notas de Acareologia. XXIII. Novas especies de Trombiculinae dos generos *Trombicula*, *Hannemania* e *Neoschöngastia*. *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 47–50.

133.—**Fonseca, F. da.** Notas de Acareologia. XXIV. (A) Representante brasileiro do genero *Dermanyssus* Dugès, 1834 (Acari, Dermanissidae). (B) Nota sobre o nome generico *Paraelaps*. *Mem. Inst. Butantan S. Paulo* 10 1935–36 pp. 51–59 8 text-figs. [Abstract in English p. 58.]

134.—Fox, J. Chinese spiders of the families *Agelenidae*, *Pisauridae* and *Sparassidae*. J. Wash. Acad. Sci. Vol. 26 No. 3 1936 pp. 121-128 6 text-figs.

135.—Foxon, G. E. H. Observations on the Locomotion of some Arthropods and Annelids. Ann. Mag. nat. Hist. Ser. 10 18 1936 pp. 403-418 10 text-figs.

136.—Franz, E. Ein Spinnen-Nest im Ginsterbusch. Natur. u. Volk 66 Heft 9 1936 pp. 491-492 2 figs.

137.—Frick, G. Das Zeichnungsmuster der Ixodiden. Versuch der Analyse einer Tierzeichnung. J. Morph. Ökol. Tiere Berlin 31 1936 pp. 411-430 21 text-figs.

138.—Froggatt, W. W. Australian Spiders and their Allies. Sydney 1935 pp. 1-123 50 text-figs.

139.—Gadhoke, G. R. Role of the Golgi apparatus in the formation of the acrosome in the male germ cells of the Lahore centipede *Rhysida longipes*. Proc. Indian. Sci. Congr. Calcutta 22 1935 pp. 325-326.

140.—Gaertner, H. R. von. Ober-silurische Faunen aus den spanischen Pyrenäen. Nachr. Ges. Wiss. Göttingen (4) 1 Nr. 2 1930 pp. 179-188 7 text-figs.

141.—Gause, G. F., Smaragdova, N. P. and Witt, A. A. Further studies of interaction between predators and prey. J. Animal Ecol. 5 1936 pp. 1-18 6 text-figs.

142.—Gertsch, W. J. Further diagnoses of new American Spiders. Amer. Mus. Nov. 852 1936 pp. 1-27 37 text-figs.

143.—Gertsch, W. J. The Nearctic Atypidae. Amer. Mus. Nov. 895 1936 pp. 1-19 29 text-figs.

144.—Gertsch, W. J. & Davis, L. I. New Spiders from Texas. Amer. Mus. Nov. 881 1936 pp. 1-21 35 text-figs.

145.—Gertsch, W. J. & Ivie, W. Descriptions of new American Spiders. Amer. Mus. Nov. 858 1936 pp. 1-25 54 text-figs.

146.—Gertsch, W. J. & Mulaik, S. Diagnoses of new Southern Spiders. Amer. Mus. Nov. 851 1936 pp. 1-21 32 text-figs.

147.—Gertsch, W. J. & Mulaik, S. New Spiders from Texas. Amer. Mus. Nov. 863 1936 pp. 1-22 39 text-figs.

148.—Gertsch, W. J. & Wallace, H. K. Notes on new and rare American Mygalomorph Spiders. Amer. Mus. Nov. 884 1936 pp. 1-25 37 text-figs.

149.—Giltay, L. Note sur quelques Pycnogonides de Villefranche S/Mer (Alpes-Maritimes). Bull. Mus. Hist. nat. Belg. T. 10 No. 35 1934 pp. 1-5 1 text-fig.

150.—Giltay, L. A new Pycnogonid from Bermuda. Bull. Mus. Hist. nat. Belg. T. 10 No. 42 1934 pp. 1-3 5 text-figs.

151.—Giltay, L. Notes arachnologiques africaines. VII. Description d'un Pédipalpe nouveau du Congo belge (*Trithyreus ghesquierei* n. sp.). Bull. Mus. Hist. nat. Belg. 11 No. 32 1935 pp. 1-8 4 text-figs.

152.—Goldring, W. Geology of the Berne quadrangle. Bull. New York St. Mus. Albany No. 303 1935 pp. 1-221 70 figs.

153.—Grandjean, F. Les Oribates de Jean Frédéric Hermann et de son père. Ann. Soc. ent. Fr. 105 1936 pp. 27-110 14 text-figs.

154.—Grandjean, F. Observations sur les Oribates (9^e série). Bull. Mus. Hist. nat. Paris (2) T. 7 No. 5 1935 pp. 280-287 2 text-figs.

155.—Grandjean, F. Observations sur les Acariens. (3^e série). Bull. Mus. Hist. nat. Paris (2) T. 8 No. 1 1936 pp. 84-91.

156.—Grandjean, F. *Microzetes auxiliaris* n. sp. (Oribates). Bull. Mus. Hist. nat. Paris (2) T. 8 No. 2 1936 pp. 138-145 4 text-figs.

157.—Grandjean, F. Observations sur les Oribates (10^e Série). Bull. Mus. Hist. nat. Paris (2) 8 No. 3 1936 pp. 246-253 2 text-figs.

158.—Grandjean, F. Le genre *Pachygnathus* Dugès (*Alycus* Koch) (Acariens). Bull. Mus. Hist. nat. Paris Ser. 2 8 No. 5 1936 pp. 398-405.

159.—Grandjean, F. Les Microzetidae n. fam. (Oribates). Bull. Soc. zool. Fr. 61 1936 pp. 60-93 12 text-figs.

160.—Gravier, Ch. et Fage, L. La collection des Onychophores (Péripates) du Muséum National d'Histoire Naturelle de Paris. Bouvier, Livre Jubilaire, Paris 1936 pp. 39-42.

161.—Greco, B. La fauna permiana del Sosio conservata nei Musei di Pisa, di Firenze e di Padova. Parte prima. Introduzione. Considerazioni geopaleontologiche. Tunicata? Crustacea, Cephalopoda. Palaeontogr. ital Siena Vol. 35 1935 pp. 101-190 4 pls. [Trilobita pp. 149-154 2 pls.]

Green vide Larson.

162.—Gregorio, A. de. Sul Permiano di Sicilia. Ann. Géol. Paléont. Palermo 52 1930 pp. 1-10 21 pls. [Trilobita p. 10.]

163.—Gripenburg-Shee, W. Klutert-höhle, Bismarck- und Rentropshöhle bei Milspe und ihre Tierwelt. Abh. Westfäl. Provinzial-Mus. Munster i W. Jahrg. 6 Heft 5 1935 pp. 1-46. [Arachnida p. 26; pp. 33-35. Myriopoda p. 31; p. 41.]

164.—Guttman, S. A. Effect of ultraviolet radiation on the heart of *Limulus polyphemus*. Biol. Bull. Woods Hole 70 1936 pp. 279-281.

165.—Hadži, J. Die Weberknechte (Opiliones) der Insel Krk. Glasnik hrv. prirodosl. Dr. Zagreb 41-48 1936 pp. 289-322 16 text-figs. [Summary in German pp. 319-322.]

166.—Hafeen, L. L. Materials on stratigraphy of Devonian deposits of Altai. Rec. Geol. West Siberian Region No. 20 1934 pp. 1-39 8 pls. [Paper in Russian, summary in English pp. 34-36.]

167.—Harkema, R. The parasites of some North Carolina Rodents. Ecol. Monogr. Durham N.C. Vol. 6 No. 2 1936 pp. 153-232.

168.—Heatley, N. G. The digestive enzymes of the *Onychophora* (*Peripatopsis* spp.). J. Exp. Biol. Cambridge Vol. 13 No. 3 1936 pp. 329-343.

169.—Helfer, H. Meerspinnen. Der Naturforscher Berlin 12 Heft 7 1935 pp. 231-236 9 text-figs.

170.—Helfer, H. Pantopoda (2^e Nachtrag). Grimpe & Wagler. Tierwelt Nord-u. Ostsee Leipzig 11 a 3 1936 pp. 1-5.

171.—Helfer, H. The Fishery Grounds near Alexandria. VIII. Pantopoda. Notes Mem. Fisheries Res. Cairo 16 1936 pp. 1-6 3 text-figs.

172.—Herms, W. B. & Howell, D. E. The western dog tick, *Dermacentor occidentalis* Neum., a vector of bovine anaplasmosis in California. J. Parasitol. Urbana Vol. 21 No. 6 1935 p. 444.

173.—Herms, W. B. & Howell, D. E. The western dog tick, *Dermacentor occidentalis* Neum., a vector of bovine anaplasmosis in California. J. Parasitol. Urbana Vol. 22 No. 3 1936 pp. 283-288.

174.—Herms, W. B. & Wheeler, C. M. *Ornithodoros hermsi* Wheeler as a vector of relapsing fever in California. J. Parasitol. Urbana Vol. 21 No. 6 1935 p. 440.

175.—Herms, W. B. & Wheeler, C. M. *Ornithodoros hermsi* Wheeler as a vector of relapsing fever in California. J. Parasitol. Urbana Vol. 22 No. 3 1936 pp. 276-282.

Herms vide Boynton.

176.—Herrick, C. A. The Tick *Ornithodoros talaje* in Wisconsin homes. J. Parasitol. Urbana Vol. 21 No. 3 1935 pp. 216-217.

177.—Hesse, E. Beiträge zur Arachnoidenfauna der Mark. Märk. Tierw. Berlin 1 Heft 4 1935 pp. 182-192.

178.—Heymons, R. *Pentastomida*. Bronns Klassen u. Ordnungen des Tierreichs Leipzig. Bd. 5 Abt. 4 Buch 1 Lfg. 2 1935 pp. 161-268 35 text-figs.

179.—Hickman, V. V. A new Mygalomorph Spider belonging to the Genus *Hexathele* Ausserer. Pap. roy. Soc. Tasm. 1935 1936 pp. 131-137 1 text-fig.

180.—Hill, H. R. New host records of the Linguatulid, *Kiricephalus coarctatus* (Diesing) in the United States. Bull. S. Calif. Acad. Sci. Vol. 34 No. 3 pp. 226-227 1 pl.

Hixson vide Bishopp.

181.—Hoffer, A. Un Chilopode cavernicole nouveau de Yougoslavie, *Bothropys magnificus* n. sp. Sbor. Kl. přír. Brně 18 1936 pp. 66-71. [Paper in Slav, résumé in French p. 70.]

182.—Howell, B. F. A new Trilobite from the Lower Cambrian of Alberta. Bull. Wagner Free Inst. Philad. 11 No. 4 1936 pp. 29-30 2 pls.

183.—Howell, B. F. A new Cambrian *Paradoxides* from New Brunswick. *Proc. Geol. Soc. Amer.* 1935 1936 p. 370.

184.—Howell, B. F. New Lower Cambrian Trilobite from Alberta. *Proc. Geol. Soc. Amer.* 1935 1936 p. 373.

185.—Howell, B. F., Shimer, H. W. & Lord, G. S. New Cambrian *Paradoxides* fauna from Eastern Massachusetts. *Proc. Geol. Soc. Amer.* 1935 1936 p. 385.

Howell, D. E. *vide* Boynton.

Howell, D. E. *vide* Herms.

186.—Hundt, R. Eine Monographie der Lebensspuren des Unteren Mitteldevons Thüringens. Summary in: *Geol. Zbl. Leipzig* 8 No. 5 1936 p. 250.

187.—Husiatinski, A. Zur Kenntnis des Männchens von *Piersigia intermedia* Williamson (Hydracar.). *Zool. Anz. Leipzig. Bd.* 113 Heft 11–12 1936 pp. 331–334 5 text-figs.

188.—Husiatinski, A. Eine neue Hydracarinenaart der Gattung *Piersigia* Protz aus der Bukowina (Rumänien). *Zool. Anz. Leipzig Bd.* 115 Heft 7–8 1936 pp. 171–174 7 text-figs.

189.—Iharos, A. Zwei neue Tardigraden-Arten. *Zool. Anz. Leipzig Bd.* 115 Heft 7–8 1936 pp. 218–220 2 text-figs.

Ikeda *vide* Kawamura.

190.—Inai, T. *Humilogriffithides*, a New Ally of *Griffithides*. *Proc. Imp. Acad. Tokyo* 12 No. 9 1936 pp. 299–301 10 figs.

191.—Ionescu, M. A. Contribuțiuni la studiul Pseudoscorpionilor din România. *Bul. Soc. Nat. România București* 8 1936 pp. 1–5.

Ivie *vide* Chamberlin.

Ivie *vide* Gertsch.

192.—Jack, R. W. Ticks infesting domestic animals in Southern Rhodesia. *Rhodesia Agric. J.* 33 1936 pp. 907–929 25 figs.

193.—Jacot, A. P. New Mossmites, chiefly Midwestern. *Amer. Midl. Nat. Notre Dame Vol.* 17 No. 2 1936 pp. 546–553 10 text-figs.

194.—Jacot, A. P. Three possible mite vectors of the Dutch Elm disease. *Ann. Ent. Soc. Amer. Columbus* 29 1936 pp. 627–635 13 text-figs.

195.—Jacot, A. P. Undescribed Mossmites from Mauritius. *Ann. Mag. nat. Hist. Ser.* 10 vol. 17 1936 pp. 393–402 12 text-figs.

196.—Jacot, A. P. Spruce Litter Reduction. *Canad. Ent.* 68 1936 p. 31.

197.—Jacot, A. P. Three undescribed Pediculoid mites from the Southern Appalachians. *Canad. Ent.* 68 1936 pp. 129–133 1 pl.

198.—Jacot, A. P. Two unrecorded species of Scutacaridae from the Southern Appalachians. *Canad. Ent.* 68 1936 pp. 225–229 3 text-figs.

199.—Jacot, A. P. More primitive moss-mites of North Carolina. *J. Elisha Mitchell sci. Soc. Chapel Hill* 52 No. 2 1936 pp. 247–253 1 pl.

200.—Jacot, A. P. On Some Large-Winged Mites of the Southwestern States. *J. Ent. Zool. Claremont, Cal.* 27 No. 4 1935 pp. 61–65 11 text-figs.

201.—Jacot, A. P. Some rake-legged mites of the family Cheyletidae. *J. N.Y. ent. Soc.* 44 1936 pp. 17–31 3 pls.

202.—Jacot, A. P. Les Phthiracaridae de Carl Ludwig Koch. *Rev. suisse Zool. Genève* 43 No. 6 1936 pp. 161–187 33 text-figs.

Jacquier *vide* Parat.

203.—Jary, S. G. Further experiments on the control of the Hop red spider mite, *Tetranychus telarius* L. *Ann. appl. Biol. Cambridge Vol.* 23 No. 3 pp. 606–611.

204.—Jary, S. G. The Hypopial Stage of *Aleurobius farinae* Koch (Tyroglyphidae). *Ann. Mag. nat. Hist. Ser.* 10 17 1936 pp. 546–552.

205.—Jary, S. G. & Stapley, J. H. Investigations on the Insect and Allied pests of cultivated Mushrooms. VI. Observations upon the Tyroglyphid Mite *Histiostoma rostro-serratum*, Megnin. *J. S.E. Agr. Coll. Wye Kent No.* 38 1936 pp. 67–74 4 figs.

206.—Jawlowski, H. Beitrag zur Kenntnis Diplopodenfauna Moldaviens. Fragmenta faun. Mus. zool. Polon. 2 No. 24 1936 pp. 249–252. [Paper in Polish, summary in German p. 252.]

207.—Jawlowski, H. Die Diplopodenfauna Südostpolens. Fragmenta faun. Mus. zool. Polon. 2 No. 25 1936 pp. 253–298 2 pl. [Paper in Polish, summary in German pp. 291–298.]

208.—Jones, S. E. The Araneida of Dallas County: Preliminary note. Field & Lab. Dallas. Vol. 4 No. 2 1936 pp. 68–70.

Jones *vide* Willard.

209.—Karaman, S. Die Fauna der unterirdischen Gewässer Jugoslaviens. Verh. mit. Vereinig. Limnol. Beograd Bd. 7 Teil 1 1935 pp. 46–73. [Tardi-grada p. 52, Acarina p. 64.]

210.—Kaston, B. J. The Senses involved in the Courtship of some Vagabond Spiders. Ent. amer. Brooklyn (N.S.) 16 1936 pp. 97–167 9 pls.

211.—Kaston, B. J. The slit sense organs of Spiders. J. Morph. Philadelphia 58 1935 pp. 189–207 23 text-figs. 1 pl.

212.—Kawamura, R. & Ikeda, K. Ecological Study of the *Tsutsugamushi*, *Trombicula akamushi* (Brumpt). Zool. Mag. Tokyo 48 1936 pp. 553–563 3 figs. [Paper in Japanese, résumé in English p. 553.]

Keay *vide* Elton.

213.—Kirjanova, E. S. Zur Frage über die verticale und horizontale Verteilung der Fauna der Wirbellösen in den Erdschichten der Umgegend von Tashkent. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 309–352 5 text-figs. 1 pl. [Paper in Russian, summary in German.]

214.—Kirschenblatt, J. Beiträge zur paläarktischen Zeckenfauna. Zool. Anz. Leipzig Bd. 114 Heft 3–4 1936 pp. 93–97 5 text-figs.

215.—Klein, H. Z. Contributions to the knowledge of the Red Spiders in Palestine. Bull. agric. Res. Sta. Rehovoth 21 1936 pp. 1–63 18 text-figs. [Reprinted from Hadar 9 1936.]

216.—Kobayashi, T. On the *Parabolinella* Fauna from Province Jujuy, Argentina, with a note on the Olenidae. Jap. J. Geol. Geogr. Vol. 13 Nos. 1–2 1936 pp. 85–102 2 pls.

217.—Kobayashi, T. Three contributions of the Cambro-Ordovician Faunas. I. The *Dikelokephalininae* (nov.) its distribution, migration and evolution. II. Notes on some Ordovician faunas of Tasmania. III. Brief remarks on the Cambro-Ordovician of

Karakorum. Jap. J. Geol. Geogr. Vol. 13 Nos. 1–2 1936 pp. 163–185 2 pls.

218.—Kobayashi, T. The Cambro-Ordovician formations and faunas of South Chosen. Palaeontology, Part III. Cambrian Faunas of South Chosen with a special study on the Cambrian Trilobite Genera and Families. J. Fac. Sci. Univ. Tokyo (Geol.) Vol. 4 Part 2 1935 pp. 49–344 24 pls. 33 text-figs. [Trilobita pp. 76–325 22 pls.] [See No. 234 Zoological Record 1935.]

219.—Kobayashi, T. Cambrian and Lower Ordovician Trilobites from Northwestern Canada. J. Paleont. Menasha Wis. Vol. 10 No. 3 1936 pp. 157–167 1 pl.

220.—Kobayashi, T. Proparian genus of the *Olenidae* and its bearing on the Trilobite classification. Proc. Imp. Acad. Tokyo Vol. 12 No. 6 1936 pp. 176–177 6 text-figs.

221.—Kobayashi, T. A brief summary of the Cambro-Ordovician Shelly Faunas of South America. Proc. Imp. Acad. Tokyo 12 No. 9 1936 pp. 296–298.

222.—Koep, T. Hydracarinen der Eifelmaare und vom Niederrhein. Wiss. Mitt. Ver. Natur. u. Heimatk. Köln a Rh. Jahrg. 1 Heft 1 1930 pp. 23–25.

223.—Kolomietz, J. S. Zur Frage der Verbreitung und Lebensweise der Zecke *Rhipicephalus rossicus* Yak. und Koh.-Yak. in der Ukraine. Z. Parasitenk. Berlin 8 Heft 5 1936 pp. 538–541.

224.—Kolosváry, G. Die tiergeographische Verbreitung von *Xysticus sabulosus* und *Embriki*. Acta Biol. Szeged. 4 No. 1 1936 pp. 46–48 3 text-figs. [Summary in German p. 48.]

225.—Kolosvary, G. v. Ein Versuch zur Einteilung der Karpathischen Länder mit Berücksichtigung der spinnenfaunistischen Angaben und ein Beitrag zum Rassenkreisproblem bei Spinnen. Folia zool. hydrobiol. Riga Vol. 9 No. 1 1936 pp. 92–114 17 text-figs. 4 maps.

226.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. Jena 1936. Bd. I pp. i–xx; 1–536, 560 text-figs. Bd. II pp. 537–1314, 752 text-figs.

227.—Kozoulina, O. Déplacements des différentes espèces de tiques sur les divers substratums. Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45 Livr. 4 1936 pp. 298-306 5 text-figs. [Paper concerns mites and is in Russian, with summary in French pp. 305-306.]

228.—Kratochvil, J. Les Opilions de Tchécoslovaquie. Acta Soc. Sci. nat. Moraviae T. 9 fasc. 5 1934 pp. 1-30 2 pls. [Paper in Czech, French résumé pp. 31-35.]

229.—Kratochvil, J. Liste générale des Araignées cavernicoles en Yougoslavie. Acta. Soc. Sci. nat. Moraviae 9 12 1935 pp. 1-25 2 pls.

230.—Kratochvil, J. Sur quelques Araignées de Slavonie centrale. Bull. Inst. nat. agron. Brünn (C) 23 1932 pp. 1-16. [Paper in Slovak, summary in French pp. 13-16.]

231.—Kratochvil, J. *Ischyropsalis Strandii* nov. sp., un Opilion cavernicole nouveau d'Italie. Festschrift f. Embrik Strand Riga 1 1936 pp. 248-251 2 text-figs.

232.—Lameere, A. Les Myriopodes. Précis de Zoologie 4 pp. 1-56 66 text-figs. Bruxelles 1935.

233.—Larson, C. L., Shillinger, J. E. & Green, R. G. Transmission of Rabbit Papillomatosis by the Rabbit Tick, *Haemaphysalis leporis palustris*. Proc. Soc. exp. Biol. vol. 33 No. 4 1936 pp. 536-538.

234.—Lawrence, R. F. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930. Spiders (*Otenizidae* excepted). Ann. Transv. Mus. Vol. 17 Part 2 1936 pp. 145-158 8 text-figs.

235.—Lawrence, R. F. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930. *Chilopoda*. Ann. Transv. Mus. Vol. 17 Part 2 1936 pp. 159-160.

236.—Lawrence, R. F. The Prostigmatic Mites of South African Lizards. Parasitology Cambridge 28 1936 pp. 1-39 23 text-figs.

237.—Legendre, R. Myriapodes recueillis dans les parages de Concarneau (Finistère). Bull. Soc. Sci. nat. Ouest Nantes (5) 4 1935 pp. 197-198.

238.—Leggs, J. The occurrence of Bovine Babesiosis in Northern Aus.

tralia. Pamph. Council sci. industr. Res. Australia No. 56 1935 pp. 1-48 4 pls.

239.—Leruth, R. Exploration biologique des Cavernes de la Belgique et du Limbourg hollandais XXVII^e Contribution: Arachnida. Bull. Mus. Hist. nat. Belg. 11 No. 39 1935 pp. 1-34.

240.—Leruth, R. Exploration biologique des cavernes de la Belgique et du Limbourg Hollandais. XXI^e Contribution. Natuurh. Maanblad Maastricht Jahrg. 25 No. 6 1936 pp. 52-56 1 text-fig.; pp. 66-68; pp. 80-82.

241.—Lessert, R. de. Araignées de l'Afrique orientale portugaise recueillies par MM. P. Lesne et H.-B. Cott. Rev. suisse Zool. Genève 43 No. 9 1936 pp. 207-306 95 text-figs.

242.—Leverault, P. The segmental conditions in the trunk of Trilobites. Amer. J. Sci. New Haven (5) Vol. 31 No. 185 1936 pp. 386-390 7 text-figs.

243.—Lewthwaite, R. & Savor, S. R. Recent work on the typhus-like fevers of Malaya. Trans. Soc. trop. Med. Hyg. London Vol. 29 No. 6 1936 pp. 561-571.

244.—Lindblom, A. Plommongalkvalstret (*Eriophyes similis* Nal.) och dess Bekämpande. Medd. Statens Västskyddsanstalt Stockholm 6 1934 pp. 1-18 3 text-figs. 1 pl. [Paper in Swedish, summary in German p. 14.]

245.—Locket, G. H. Regeneration in Arachnida. Nature London 138 3499 1936 pp. 885-886.

246.—Locket, G. H. The Mating Habits of Spiders. Trans. Oxf. Univ. Jr. Sci. Cl. Sér. 3 7 1922 pp. 200-204.

247.—Lohmander, H. Über die Diplopoden des Kaukasusgebietes. Göteborgs VetenskSamh. Handl. (B) 5 1 1936 pp. 1-96.

248.—Loomis, H. F. The Millipeds of Hispaniola, with descriptions of a new family, new genera and new species. Bull. Mus. Comp. Zool. Harvard 80 No. 1 1936 pp. 1-191 75 text-figs. 3 pls.

249.—Loomis, H. F. New millipeds of the American family *Striariidae*. J. Wash. Acad. Sc. 26 No. 10 1936 pp. 404-409 1 text-fig.

250.—Loomis, H. F. Three new Millipeds of the order *Colobognatha* from Tennessee, Texas, and Lower California, with records of previously known species. Proc. U.S. Nat. Mus. Vol. 83 No. 2989 1936 pp. 361-368 1 text-fig.

Lord *vide* Howell.

251.—Lou, T. H. Sur deux nouvelles variétés de Pycnogonides recueillies à Tsingtao, dans la Baie de Kiaochow, Chine. Contr. Inst. Zool. Peiping 3 1936 pp. 1-34 9 text-figs. 4 pls.

252.—Loukin, E. I. Au sujet de la collection des hydrocarines de Krendovsky. Trav. Soc. Nat. Charkow 50 Liv. 2 1927 pp. 92-103 2 text-figs. [Paper in Russian.]

253.—Loukin, E. I. Preliminary list of Hydracarina of the Kharkov district. Trav. Soc. Nat. Charkow 50 liv. 2 1927 pp. 104-106. [Paper in Russian.]

254.—Lowrie, D. C. New localities for the Black Widow spider. Science New York N.S. 84 No. 2185 1936 p. 437.

255.—Lundblad, O. Die nord-amerikanischen Arten der Gattung *Hydrachna*. Ark. Zool. Stockholm 28A No. 3 1935 pp. 1-44 22 text-figs. 3 pl.

256.—Lundblad, O. Über einige Hydracarininen aus Java. Ent. Tidskr. Stockholm 57 Heft 2-3 1936 pp. 145-157 7 text-figs. 1 pl.

257.—Lundblad, O. Neue Wassermilben aus Santa Catherina in Südbrasilien. Zool. Anz. Leipzig Bd. 115 Heft 1-2 1936 pp. 29-51.

258.—Lundblad, O. Weitere neue Wassermilben aus Santa Catherina in Südbrasilien. Zool. Anz. Leipzig Bd. 116 Heft 1-2 1936 pp. 14-24.

259.—Lundblad, O. Dritte Mitteilung über Wassermilben aus Santa Catherina in Südbrasilien. Zool. Anz. Leipzig Bd. 116 Heft 7-8 1936 pp. 200-211.

260.—Macleod, J. *Ixodes ricinus* in relation to its physical environment. IV. An analysis of the ecological complexes controlling distribution and activities. Parasitology Cambridge 28 1936 pp. 295-319 5 text-figs.

261.—Macleod, J. Studies in Tick-borne fever of Sheep. II. Experiments on transmission and distribution of the disease. Parasitology Cambridge 28 1936 pp. 320-329.

262.—McCann, C. Does the Giant Wood Spider (*Nepila maculata*) live more than one season? J. Bombay nat. Hist. Soc. 39 No. 1 1936 p. 194.

263.—McCann, C. Parental care and cannibalism in Arachnids. J. Bombay nat. Hist. Soc. 39 No. 1 1936 pp. 194-196.

264.—McGregor, E. A. The Texas Citrus mite, a new species. Proc. Ent. Soc. Washington 37 No. 8 1935 pp. 161-165 8 text-figs.

265.—McKeown, K. C. Spider Wonders of Australia Sydney 1936 pp. 270 17 pls.

266.—Mailieux, E. La Faune et l'Âge des Quartzophyllades Siegeniens de Longlier. Mem. Mus. Hist. nat. Belg. No. 73 1936 pp. 1-141 3 pls.

267.—Mailieux, E. La Faune des Schistes de Matagne. Mem. Mus. Hist. nat. Belg. 77 1936 pp. 1-74 1 plate. [Trilobita p. 64.]

268.—Manfredi, P. Alcuni Chilopodi della Tripolitania. Atti Soc. ital. Milano Vol. 74 fasc. 4 1936 pp. 419-422.

269.—Manfredi, P. I Myriapodi Italiani (11° Contributo) Chilopodi della Romagna e delle Marche. Mem. Soc. ent. ital. Genova 15 1936 pp. 123-128.

270.—Manfredi, P. Miriapodi della Venezia Tridentina. Stud. trentini Trento Ann. 16 Nos. 2-3 1935 pp. 161-170 4 text-figs.

271.—Mani, M. S. Dispersal of gall mites by gall midges. Curr. Sci. Bangalore Vol. 3 1934 p. 208.

272.—Marcus, E. Tardigrada. Das Tierreich, Berlin Lief. 66 1936 pp. i-xvii, 1-340 306 text-figs.

273.—Marcus, E. Arachnida. II. Tardigrada. Mission Scientifique de l'Omo, Paris 2 1935 pp. 249-254 1 text-fig.

274.—Marshall, R. Hydracarina from Yucatan. Publ. Carnegie Instn. Washington 457 (12) 1936 pp. 133-137 17 figs.

275.—Marshall, R. Preliminary list of the *Hydracarina* of Wisconsin. Trans. Wisc. Acad. Sci. Arts Lett. Vol. 29 1935 pp. 273-298 6 pls.

276. — Maschke, K. Die Höhlenfauna des Glatzer Schneeberges. 5. Die Metazoenfauna der Bergwerke bei Mährisch-Alstadt. Pax. Beitr. Biol. Glatzer Schneeberges Heft 2 Breslau 1936 pp. 175–191 1 text-fig.

277. — Matheson, R. Three new species of Ticks, *Ornithodoros* (*Acarina*, *Ixodoidea*). J. Parasit. Urbana Vol. 21 No. 5 1935 pp. 347–353 1 pl. 7 text-figs.

Matschulsky vide Rastegaieff.

278. — Maury, A. A propos de deux Myriapodes. Bull. Soc. géol. Normandie 38 (1935) 1936 pp. 82–83.

279. — Megaw, J. Typhus fevers in the tropics. Trans. Soc. trop. Med. Hyg. London Vol. 29 No. 21 1936 pp. 105–110.

280. — Mello-Leitão, C. de. Duas novas aranhas do Nordeste. Ann. Acad. Bras. Sci. Rio 8 No. 2 1936 pp. 133–135 1 fig. 1 pl.

281. — Mello-Leitão, C. de. Essai monographique de la famille Acanthoctenidae. Ann. Acad. Bras. Sci. Rio 8 No. 3 1936 pp. 179–203 3 pls.

282. — Mello-Leitão, C. de. Algumas notas sobre os Laniatores. Arch. Mus. nac. Rio de J. 36 1935 pp. 87–116.

283. — Mello-Leitão, C. de. Contribution à l'étude des Cténides du Brésil. Festschrift f. Embrik Strand Riga 1 1936 pp. 1–31 4 plates. [Addenda pp. 598–601.]

284. — Mello-Leitão, C. de. On two Brazilian Scorpions. Rev. chil. Hist. nat. 39 1935 pp. 90–93 1 text-fig.

285. — Mello-Leitão, C. de. Three interesting new Brazilian Spiders. Rev. chil. Hist. nat. 39 1935 pp. 94–98 8 text-figs.

286. — Mello-Leitão, C. de. Étude sur les Arachnides de Papudo et Constitución (Chili), recueillis par le Prof. Dr. Carlos E. Porter. Rev. chil. Hist. nat. 40 1936 pp. 112–129 13 text-figs.

287. — Mello-Leitão, C. de. Les Opilions de Catalogne. Treb. Mus. Cien. nat. Barcelona Vol. 11 No. 9 1936 pp. 3–18 4 pls.

288. — Meuche, A. Zum Teleiophan-stadium der Wassermilbe *Limnesia maculata* (O. F. Müll.). Zool. Anz. Leipzig Bd. 116 Heft 9–10 1936 pp. 264–267 6 text-figs.

289. — Miedzinski, K. Przyczynek do Fauny Pajakow okolicy Krótoszyna w Poznanskim. Prace Kom. mat-przyr. poznan. Tow. Przyj. Nauk. (B) T. 7 2 1934 pp. 19–24. [German summary p. 24.]

290. — Miller, B. M. Cambrian Trilobites from Northwestern Wyoming. J. Paleont. Menasha Wis. Vol. 10 No. 1 1936 pp. 23–34 1 pl.

291. — Miller, B. M. *Brachyaspidium*, new name for *Brachyaspidis* Miller (not Salter). J. Paleont. Menasha Wis. 10 5 1936 p. 417.

292. — Miller, N. Experimental Studies on *Latrodectus mactans* (The Black Widow). J. Ent. Zool. Claremont Cal. 27 1935 pp. 66–90 4 text-figs.

293. — Millot, J. La glande venimeuse de *Plectreurys tristis* E. Sim. (Aranéides). Bull. Soc. zool. Fr. T. 60 No. 5 1936 pp. 460–462 1 text-fig.

294. — Millot, J. Les glandes sericigènes des Salticides. Bull. Soc. zool. Fr. T. 60 No. 6 1936 pp. 502–510 6 text-figs.

295. — Millot, J. Le sens du goût chez les Araignées. Bull. Soc. zool. Fr. T. 61 No. 1 1936 pp. 27–38 8 text-figs.

296. — Millot, J. Métamérisation et musculature abdominale chez les Araneomorphes. Bull. Soc. zool. Fr. T. 61 No. 3 1936 pp. 181–204 14 text-figs.

297. — Minning, W. Zur Kenntnis des Genus *Boophilus* Curtice II. Z. Parasitenk. Berlin Bd. 8 Heft 3 1936 pp. 365–370 5 text-figs.

298. — Miyazaki, I. Über das Saugorgan von zwei Arten Wassermilbenlarven. Annot. zool. Jap. 15 1936 pp. 306–311 2 pls.

299. — Minac, F. & Oswald, B. Preliminary studies on the poisonous properties of the species of ticks occurring in Yugoslavia. 1. *Hyalomma aegyptium* L. (Neum.). Jugoslav. vet. Glasn. No. 8 1936 pp. 1–7 2 text-figs. [Summary in English.]

300. — Moore, L. R. Some Eurypterids from the English Coal Measures. Proc. Geol. Ass. London 47 part 4 1936 pp. 352–375 7 text-figs.

301. — Morgenthaler, O. Bienenkrankheiten im Jahre 1935. Schweizerischen Bienenzeitung 5b and 6a 1936 pp. 1–11. [Pagination of reprint.]

302.—**Morris, M. L.** *Demodex folliculorum* (Canis), its diagnosis and treatment. J. Amer. Vet. Med. Ass. **88** 1936 pp. 460-467.

303.—**Mueller, J. F.** Notes on some parasitic Copepods and a mite, chiefly from Florida fresh water Fishes. Amer. Midl. Nat. Notre Dame **17** No. 5 1936 pp. 807-815 3 pls. [Supplementary note in author's reprint.]

Mulaik vide Gertsch.

304.—**Münchberg, P.** Über die an den Culicinae (Diptera) schmarotzenden *Arrhenurus*-Larven (Hydracarina). I. Arch. Hydrobiol. Stuttgart **30** Heft 4 1936 pp. 557-573 6 text-figs.

305.—**Münchberg, P.** Zur Morphologie der *Arrhenurus*- und *Georgella*-Larven und -Nymphen mit besonderer Berücksichtigung der Libellenparasiten. Arch. Naturgesch. Leipzig (N.F.) **5** 1936 pp. 93-115 21 text-figs.

306.—**Münchberg, P.** Zur Kenntnis des Larvenparasitismus der Thyasinae (Hydracarina), zugleich ein Beitrag über Schmarotzer der Limnobiinae (Diptera). Int. Rev. Hydrobiol. Leipzig **33** Heft 5-6 1936 pp. 313-326 4 text-figs.

307.—**Münchberg, P.** Über den abweichenden Bau der Genitalplatten bei dem Weibchen von *Arrhenurus tubulator* (O. F. Müll.) (Hydracarina). Zool. Anz. Leipzig Bd. **116** Heft 1-2 1936 pp. 46-48 2 text-figs.

Muniz vide Regendanz.

308.—**Navas, L.** Excursions Entomologiques de L'Istiu de 1922. Arch. Inst. Cienc. Barcelona **8** fasc. 1 1923 pp. 1-34 13 text-figs. [*Pseudoscorpiones* pp. 30-34 3 text-figs.]

309.—**Neveu-Lemaire, M.** Traité d'Helminthologie médicale et vétérinaire. Paris 1936 pp. xxiii + 1514, 787 figs.

310.—**Nicol, J.** A short note on the control and eradication of ticks in the Cape Province. J. S. Afr. Vet. Med. Ass. **6** 1935 pp. 270-273.

311.—**Niezabitowski, E. L.** Observations sur l'Epeire. Prace Kom. mat.-prz. pozn. Tow. Przyj. Nank (B) **8** No. 3 1936 pp. 87-91 1 plate. [Paper in Polish, resumé in French p. 91.]

Nobrega vide Reis.

312.—**Norgaard, E.** Iagttagelser af Biologien hos *Eresus niger* (Petagna) Simon. Flora og Fauna Kjøbenhavn. Aarg. **42** Hæfte 1 1936 pp. 7-13 5 text-figs.

313.—**Ohmori, N.** Studies of the Tropical Rat Mite. Second Report—On the Sex Ratio and Parthenogenesis. Zool. Mag. Tokyo **48** 1936 pp. 627-637 1 fig. [Paper in Japanese, resumé in English p. 627.]

314.—**Ohshima, H.** A List of Pycnogonida Recorded from Japanese and Adjacent Waters. Zool. Mag. Tokyo **48** 1936 pp. 861-869. [Paper in Japanese, resumé in English p. 861.]

315.—**Oka, H.** Quelques embryons malformés du limule et leur signification pour l'embryogénie normale de cet animal. Annot. zool. Jap. **15** 1936 pp. 321-324 1 text-fig.

316.—**Oka, H.** Quelques observations sur le développement de *Limulus longispina*. Proc. Imp. Acad. Tokyo **11** No. 10 1935 pp. 450-452.

317.—**Örösi-Pál, Z.** Neue Untersuchungen über die Ernährung der Acarapislarven. Berl. tierärztl. Wschr. **52** No. 32 1936 pp. 521-522 2 text-figs.

318.—**Örösi-Pál, Z.** Ergänzende Untersuchung über die Entwicklung der äusserlichen Acarapismilben der Honigbiene. Z. Parasitenk. Berlin **8** Heft 5 1936 pp. 617-618.

Oswald vide Mlinac.

319.—**Oudemans, A. C.** Neues über Anystidae (Acari). Arch. Naturgesch. Leipzig (N.F.) **5** 1936 pp. 364-446 28 text-figs.

320.—**Oudemans, A. C.** Acarologische Aanteekeningen XCIII. Ent. Ber. 's Gravenhage Deel **7** No. 163 1928 pp. 346-348.

321.—**Oudemans, A. C.** Neues über *Pediculoides* Targ. Tozz. 1878. Festschrift f. Embrik Strand Riga **1** 1936 pp. 391-404 10 text-figs.

322.—**Page, A. B. P. & Shafik, M.** Control of Mites on Insect-Stocks and on Fungus Cultures by means of Fumigation. Bull. Soc. R. Ent. d'Egypte 1936 pp. 110-143.

323.—**Palmgren, P.** Om trichobotriernas funktion. Forh. skand. naturf. Møte **19** 1936 pp. 499-500. [Paper in Swedish.]

324.—Parat, M. & Jacquiart, C. Sur quelques propriétés physiques et chimiques du noyau vitellin des Araignées. C.R. Soc. Biol. Paris T. 122 No. 21 1936 pp. 626–629 2 text-figs.

325.—Paris, P. Observations sur la biologie de *Dictyna civica* Luc. Bull. sci. Bourgogne Dijon 5 1936 pp. 179–180.

326.—Parrot, L. Un Ornithodore nouveau du Sahara Algérien, *Ornithodoros foleyi* n. sp. Bull. Soc. Path. exot. 21 1928 pp. 520–524 5 text-figs.

327.—Pätau, K. Cytologische Untersuchungen an der haploid-parthenogenetischen Milbe *Pediculoides ventricosus* Newp. Berl. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 277–322 19 text-figs. 1 plate.

Patterson *vide* Pearse.

328.—Paulian, R. Contribution à l'étude de la croissance relative du Scorpion languedocien. Arch. Zool. exp. gén. Paris (Notes et Revue) 78 1936 pp. 92–98 2 text-figs.

329.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill 52 No. 2 1936 pp. 174–222 2 pls.

330.—Pearse, A. S. Parasites from Yucatan. Publ. Carnegie Inst. Washington 457 (7) 1936 pp. 45–59. [*Arachnida* pp. 53, 54, 59.]

331.—Pearse, A. S., Patterson, M. T., Rankin, J. S. & Wharton, G. W. The Ecology of *Passalus cornutus* Fabricius, a beetle which lives in rotting logs. Ecol. Monogr. Durham N.C. 6 No. 4 1936 pp. 455–490 43 text-figs.

332.—Pearson, J. F. W. *Latrodectus geometricus* Koch in Southern Florida. Science N.Y. (new series) Vol. 83 No. 2161 1936 pp. 522–523.

333.—Pellegrin, J. Scorpions. Mission au Tibesti. Mem. Acad. Sci. Paris T. 62 1935 p. 53.

334.—Pelt, W. G. Fauna Buruana, Scorpionidae. Treubia Buitenzorg 7 Suppl. 1936 pp. 401–404.

335.—Péneau, J. Contribution à la faune du Dévonien inférieur du Massif Armoricain. Bull. Soc. géol. Fr. Ser. 5 T. 4 Nos. 6–7 1935 pp. 545–561 1 pl.

336.—Pesson, P. Note sur la présence de *Scutigera coleoptrata* en

Auvergne. Bull. Soc. Hist. nat. Auvergne No. 20 1932 pp. 37–38.

337.—Pesson, P. Notes de faunistique armoricaine. Bull. Soc. Sci. Bretagne T. 12 fasc. 3–4 1935 pp. 190–197 1 text-fig.

338.—Petrunkévitch, A. & Pickford, G. E. On the relative acidity of histological fixing fluids. Anat. Rec. Philadelphia Vol. 65 1936 pp. 461–465.

339.—Petrusewicz, K. Wolfspinnen des nordöstlichen Polesie und des südlichen Gebietes des Kreises Nowogródek. Trav. Soc. Sci. Wilno T. 9 1935 pp. 67–87 1 map. [German summary pp. 87–90.]

340.—Philip, C. B. Epizootic Tick-borne Tularemia in sheep in Montana. J. Parasit. Urbana Vol. 20 No. 6 1934 p. 338.

341.—Philip, C. B. Six years' intensive observation of the seasonal prevalence of a Tick population in Western Montana. J. Parasit. Urbana Vol. 21 No. 6 1935 p. 444.

342.—Phleger, Jr., F. B. Lichadian Trilobites. J. Paleont. Menasha Wis. 10 7 1936 pp. 593–615 83 text-figs.

343.—Picken, L. E. R. The mechanism of urine formation in Invertebrates. I. The excretion mechanism in certain Arthropoda. J. Exp. Biol. Cambridge Vol. 13 No. 3 1936 pp. 309–328 5 text-figs.

Pickford *vide* Petrunkevitch.

344.—Pijper, A. Étude expérimentale comparée de la fièvre boutonneuse et de la tick-bite-fever. Arch. Inst. Pasteur Tunis 25 Nos. 3–4 1936 pp. 388–401.

345.—Piza, S. de T., Jnr. Novos Thomisidas do Brasil. Rev. Biol. Hyg. S. Paulo 6 No. 2 1935 pp. 126–127 1 text-fig.

346.—Pogorely, A. I. Zur Biologie der Zecke *Dermacentor silvianus* Olen. Z. Parasitenk. Berlin 8 Heft 5 1936 pp. 533–537.

Polezoeff *vide* Smirnov.

347.—Porter, C. E. Apuntes sobre Aracnología Chilena. Act. Soc. Sci. Chile (Ser. 2) T. 25 1917 pp. 74–83.

348.—Pullar, E. M. A note on the occurrence of *Linguatula serrata* (Frolich, 1789) in Australia. Aust. Vet. J. Sydney 12 No. 2 1936 pp. 61–64.

349.—Rabaud, E. Notes sur le comportement maternel de *Pisaura mirabilis*. Bouvier, Livre Jubilaire, Paris 1936 pp. 93–96.

350.—Radford, C. D. Notes on the Mites of the genus *Myobia*. Part III. North Western Nat. Arbroath Vol. 11 No. 1 1936 pp. 34–39 8 text-figs.

351.—Radford, C. D. Notes on Mites of the genus *Myobia*. Part IV. North Western Nat. Arbroath Vol. 11 No. 2 1936 pp. 144–151 22 text-figs.

352.—Rahm, G. Tardigraden der Osterinsel (Rapa-Nui). Zool. Anz. Leipzig Bd. 115 Heft 1–2 1936 pp. 27–28 2 text-figs.

353.—Rahm, G. Tardigraden aus Palästina. Zool. Anz. Leipzig Bd. 115 Heft 3–4 pp. 65–76 8 text-figs.

354.—Rakowski, W. Die Cephalopoden aus den Geschieben Grosspolens. Prace Kom. mat.-przr. pozn. Tow. Nauk (B) 8 No. 2 1936 pp. 75–85 13 text-figs. [Paper in Polish with summary in German p. 85.]

355.—Rangnow, H. Neue Beobachtungen an der Wasserspinne. Aquar. Berlin 10 1936 pp. 225–227 1 text-fig.

Rankin *vide* Pearse.

356.—Rastegaieff, E. F. Zur Biologie der *Ornithodoros lahorensis* Neumann 1908. Berl. tierärztl. Wschr. 52 No. 36 1936 p. 585.

357.—Rastegaieff, E. F. & Matschulsky, S. N. Ueber die Ueberträger der Blutparasiten der Schafe. Berl. tierärztl. Wschr. 52 No. 36 1936 p. 585.

358.—Raw, F. Mesonacidae of Comley in Shropshire, with a discussion of classification within the family. Quart. J. Geol. Soc. London 92 3 1936 pp. 236–293 1 text-fig. 8 pls.

359.—Read, W. H. The control of the red spider mite and tomato-leaf mould. Ann. Appl. Biol. Cambridge Vol. 23 No. 1 1936 pp. 183–189.

360.—Redikortzev, V. V. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. Pseudo-scorpiones. Ark. Zool. Stockholm 27 A20 1936 pp. 1–4 3 text-figs.

361.—Redikortzev, V. Entomologische Ergebnisse der schwedischen

Kamtchatka-Expedition 1920–1922. Pseudoscorpiones. Ark. Zool. Stockholm 28 A7 1935 p. 17.

362.—Redikortzev, V. Beiträge zur Opilioniden-Fauna von U.S.S.R. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 33–57 25 text-figs. [Paper in Russian, German summary pp. 52–57.]

363.—Regendanz, P. & Muniz, J. O *Rhipicephalus sanguineus* como transmissor da Piroplasmose canina no Brasil. Mem. Inst. Osw. Cruz. Rio de J. T. 31 fasc. 1 1936 pp. 81–84.

364.—Reimoser, E. Fauna Buruana, Arachnoidea. Treubia Buitenzorg 7 Suppl. 1936 pp. 405–413 4 text-figs.

365.—Reis, J. & Nobrega, P. Doenças das Aves (Tratado de Ornithopathologia). Trabalho Inst. Biol. São Paulo 1936 pp. 1–468 4 pls. 359 text-figs. [Acari pp. 353–369 31 text-figs.]

366.—Remy, P. La ponte et les premiers stades larvaires des Symphytes. Ann. Sci. nat. Paris Ser. 10 19 1936 part 2 pp. 335–345 5 text-figs.

367.—Remy, P. Pauropodes du Muséum National d'Histoire Naturelle II. Bull. Mus. Hist. nat. Paris (2) T. 8 No. 1 1936 pp. 69–76 4 text-figs.

368.—Remy, P. Pauropodes du Muséum National d'Histoire Naturelle III. Bull. Mus. Hist. nat. Paris (2) T. 8 No. 1 1936 pp. 132–137 4 text-figs.

369.—Remy, P. Quelques Pauropodes de France et des Balkans. Bull. Soc. Hist. nat. Metz (3) 34 1935 pp. 271–294 9 text-figs.

370.—Remy, P. *Myriapoda*. I. *Pauropoda*. Mission Scientifique de l'Omo Paris 2 1935 pp. 185–191 5 text-figs.

371.—Remy, P. Beitrag zur Fauna der Myriapoden Deutschlands, mit Beschreibung neuer Arten. Zool. Anz. Leipzig Bd. 116 Heft 11–12 1936 pp. 310–320 7 text-figs.

372.—Resser, C. E. Second contribution to nomenclature of Cambrian Trilobites. Smithsonian. misc. Coll. Vol. 95 No. 4 1936 pp. 1–29.

373.—Richter, E. Ein *Proteus* im Hunsrückschiefer (Tril., Devon). Senckenbergiana Frankfurt Bd. 18 Nr. 1–2 1936 pp. 79–82 1 text-fig.

374.—Richter, R. & E. Phyllitische Schiefer im Ost-Thüringer Hauptsattel, als Vertreter der Griffelschiefer (Ordovizium dyl) des Schwarzbürger Sattels. *Senckenbergiana* Frankfurt Bd. 17 Nr. 5-6 1935 pp. 229-238 2 figs.

Richter, E. *vide* Richter, R.

375.—Ricker, W. E. Studies of Speckled Trout (*Salvelinus fontinalis*) in Ontario. Univ. Toronto Stud. Biol. 36 No. 44 1932 pp. 67-110 4 text-figs.

376.—Riley, W. A. Minnesota records of *Ornithodoros talaje*. J. Parasit. Urbana Vol. 21 No. 3 1935 p. 217.

Riper *vide* D'Amour.

377.—Robins, E. A. Unnatural children. Trans. Herts nat. Hist. Soc. Vol. 20 Part 2 1936 p. 85.

378.—Robson, G. C. Invertebrates (Other than Insects) in Natural History, edited by C. Tate Regan [*Arachnida* and *Myriopoda* pp. 70-82 17 figs.].

379.—Roewer, C. Fr. Alte und neue *Assamiidae*. Weitere Weberknechte VIII (8. Ergänzung der "Weberknechte der Erde" 1923). Veröff. Deuts. Kolon.- u. Uebersee-Mus. Bremen Bd. 1 Heft 1 1935 pp. 1-168 9 pls.

380.—Roewer, C. Fr. Südostasiatische Opiliones. Ann. Mus. Stor. nat. Genova 59 1935 pp. 12-25 6 text-figs.

381.—Roewer, C. Fr. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. Solifugen und Opiliones. Ark. Zool. Stockholm 27 A25 1936 pp. 1-4 2 text-figs.

382.—Roewer, C. Fr. Opiliones (Fünfte Série) zugleich eine Revision aller bisher bekannten europäischen Laniatores. Arch. Zool. exp. gén. Paris 73 1935 pp. 1-96 40 text-figs.

383.—Roewer, C. Fr. Chelonethi oder Pseudoskorpione. Bronns Klassen u. Ordnungen des Tierreichs, Leipzig. Bd. 5 Abt. 4 Buch 6 Lfg. 1 1936 pp. 1-160 155 text-figs.

384.—Roewer, C. Fr. Opiliones aus Malaya. Bull. Raffles Mus. Singapore 12 1936 pp. 72-76 3 text-figs.

385.—Roewer, C. Fr. Opilioniden von Mauritius. Veröff. Deuts. Kolon.- u. Uebersee-Mus. Bremen Bd. 1 Heft 3 1936 pp. 335-341 1 pl.

386.—Roewer, C. Fr. Zwei sonderbare Pachylinen aus Peru. Veröff. Deuts. Kolon.- u. Uebersee-Mus. Bremen Bd. 1 Heft 3 1936 pp. 341-343 1 pl.

387.—Romanova, V. Study on the vital activity of mites. Summary Sci. Res. Work Inst. Plant Protect. Leningrad 1935 [1936] pp. 110-111. [Paper in Russian.]

388.—Rome, D. R. Note sur la microstructure de l'appareil tégumentaire de *Phacops (Ph.) accipitrinus maretii* R. & E. Richter. Bull. Mus. Hist. nat. Belg. T. 12 No. 31 1936 pp. 1-7 2 pls.

389.—Rosas Costa, J. M. Sobre un ecto-parásito de *Phyleurus vervex*, *Achropodophorus Lahillei*, nov. sp. Rev. Soc. ent. Argent. 2 No. 5 1929 pp. 265-268 6 text-figs.

390.—Rosas Costa, J. M. Diagnosis de un nuevo género de ácaro *Achropodophorus* (Thyroglyphidae). Rev. Soc. ent. Argent. 2 No. 5 1929 p. 293.

391.—Rosca, A. Eine neue Spinnenart der Gattung *Tarentula* Sund. 1833 aus der Bucovina (Rumänien). Festschrift f. Embrik Strand Riga 1 1936 pp. 261-263 3 text-figs.

392.—Roubaud, E. & Colas-Belcour, J. Etude sur les Ornithodores du groupe *lahorensis* dans l'Afrique du Nord—Description d'*O. delanoëi*. Bull. Soc. Path. exot. 24 1931 pp. 948-957 4 text-figs. 1 pl.

393.—Ružička, R. A contribution to the knowledge of the Trilobites of the Barrandien. Bull. int. Acad. Prague Ann. 35 1934 pp. 176-183 1 pl. Paper in Polish in Rozpr. české Akad. Praha 44 No. 37 pp. 1-8 1 pl.

394.—Salgues, R. Sur l'huile essentielle des hampes florales d'*Origan* parasitées. C.R. Soc. Biol. Paris T. 121 No. 11 1936 pp. 1074-1076.

395.—Sassuchin, D. Ticks and the problem of the control of piroplasmiasis of horses. Saratow 2nd Edit. 1935 pp. 1-159 45 text-figs. [Paper in Russian.]

396.—Sassuchin, D. Zur Morphologie und Dynamik der Entwicklung von *Nuttallia ninense*. Zool. Anz. Leipzig Bd. 113 Heft 9-10 1936 pp. 219-226 3 text-figs.

397.—Sato, J. On the Chromosomes in Spermatogenesis of the Scorpion *Buthus martensii* Karsch. Zool. Mag. Tokyo 48 1936 pp. 956–957 1 text-fig.

398.—Sautet, J. Invasion domiciliaire de *Rhipicephalus sanguineus* et de *Teutana triangulosa*. Rôle Ixodiphage des Araignées. Ann. Parasitol. Paris T. 14 No. 2 1936 pp. 126–129 1 text-fig.

Savoor *vide* Lewthwaite.

399.—Savory, T. H. Regeneration in Arachnida. Nature London 138 3491 1936 p. 550.

400.—Schenkel, E. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. Scorpiones. Ark. Zool. Stockholm 27 A20 1936 p. 5.

401.—Schenkel, E. Kleine Beiträge zur Spinnenkunde II. Teil. Rev. suisse Zool. Genève T. 43 No. 10 1936 pp. 307–333 9 text-figs.

402.—Schenkel, E. Eine neue *Parasclerosoma*-Art aus Italien. Zool. Anz. Leipzig Bd. 116 Heft 1–2 1936 pp. 24–27.

403.—Schimkewitsch, W. Faune de l'U.R.S.S. et des pays limitrophes fondée principalement sur les collections du Musée Zoologique de l'Académie des Sciences de l'U.R.S.S. Pantopodes (*Pantopoda*). Livraison II pp. 255–554 108 text-figs. 3 pls. Leningrad 1930. [In Russian, with Latin diagnoses.]

404.—Schlottke, E. Biologische, physiologische und histologische Untersuchungen über die Verdauung von *Limulus*. Z. vergl. Physiol. Berlin 22 Heft 3 1935 pp. 359–431 28 text-figs.

405.—Schulze, P. Das Schmelzmuster des Scutums von *Amblyomma*, ein kleiner Nachtrag zu der Arbeit von G. Frick: Über das Zeichnungsmuster der Ixodiden. J. Morph. Ökol. Tiere Berlin 31 1936 pp. 431–432 2 text-figs.

406.—Schulze, P. Zwei neue *Rhipicephalus* und eine neue *Haemaphysalis* nebst Bemerkungen über Zeckenarten aus verschiedenen Gattungen. Z. Parasitenk. Berlin 8 Heft 5 1936 pp. 521–527 6 text-figs.

407.—Schulze, P. Neue und wenig bekannte Amblyommen und Aponomen aus Afrika, Südamerika, Indien,

Borneo und Australien (Ixodidae). Z. Parasitenk. Berlin 8 Heft 6 1936 pp. 619–637 12 text-figs.

408.—Schulze, P. Zwei neue Arten der Gattung *Hyalomma* und die morphologische Bedeutung der Analbeschilderung der Ixodiden. Zool. Anz. Leipzig Bd. 114 Heft 7–8 1936 pp. 187–192 4 text-figs.

409.—Schulze, P. Sind Säugetiere die ursprüngliche Zeckenwirte? Zool. Anz. Leipzig Bd. 115 Heft 1–2 1936 pp. 19–24.

410.—Schulze, P. Die Untergattung *Hyalomma* und die erste Art aus dem tropischen Afrika (Ixod.). Zool. Anz. Leipzig Bd. 116 1936 Heft 9–10 pp. 258–264 3 text-figs.

411.—Seitz, A. Der Bücherskorpion. Natur u. Volk. Bd. 66 Heft 2 1936 pp. 81–82.

412.—Senevet, G. & Caminopetros, J. Une nouvelle variété de l'*Haemaphysalis punctata*. Arch. Inst. Pasteur. Alger. T. 14 No. 1 1936 pp. 24–29 3 text-figs.

413.—Sergent, E. Préparation d'un sérum contre le venin de Scorpion. Ann. Inst. Pasteur Paris 57 3 1936 pp. 240–243.

414.—Sergent, E. Piqures de Scorpion en Algérie. Arch. Inst. Pasteur Alger. T. 14 No. 1 1936 pp. 53–61.

415.—Sergent, E. Habitat des tiques pendant leur vie libre. Bouvier, Livre Jubilaire, Paris 1936 pp. 97–98.

416.—Sergent, E. Obtention d'un sérum actif contre le venin de Scorpion. C.R. Acad. Sci. Paris T. 202 No. 11 1936 pp. 989–990.

Shafik *vide* Page.

417.—Sherriffs, W. Rae. Hong Kong Spiders, III. Hong Kong Nat. Vol. 7 No. 2 1936 pp. 110–114 1 pl. 2 text-figs.

Shillinger *vide* Larson.

Shimer, *vide* Howell.

418.—Shirley, J. Some British Trilobites of the family Calymenidae. Quart. J. Geol. Soc. London 92 4 1936 pp. 384–421 3 pls. 4 text-figs.

419.—Shortt, H. E. 'Life-history and morphology of *Babesia canis* in the dog-tick *Rhipicephalus sanguineus*. Ind. J. Med. Res. 23 No. 4 1936 pp. 885-920 2 text-figs. 9 pl.

420.—Shortt, H. E. & D'Silva, H. A. H. The distribution of Indian tick typhus with notes on laboratory findings. Ind. Med. Gaz. 71 1936 pp. 13-21.

421.—Silvestri, F. Report on Myriapods. Mem. Conn. Acad. Arts Sci. Vol. 10 1936 pp. 241-259 5 text-figs.

Simon *vide* Fage.

422.—Smaragdova, N. Heat and cold resistance of the grain weevils and the grain mites in relation to the temperature of their development. Zool. J. Moscow 14 1935 pp. 737-748. [Paper in Russian, summary in English p. 747.]

Smaragdova *vide* Gause.

423.—Smirnov, E. und Polezaeff, W. Ueber die Einwirkung von Blausäure und Chlorpikrin auf das Hypopialstadium von *Glycyphagus destructor* Schr. Zool. J. Moscow 15 1936 pp. 340-348. [Paper in Russian, summary in German p. 348.]

424.—Smith, B. Geology and mineral resources of the Skaneateles Quadrangle. Bull. New York St. Mus. Albany No. 300 1935 pp. 1-120 1 map 64 figs.

Smith, C. N. *vide* Bishopp.

425.—Sokolow, J. Über die Hydracarien der Quellen und Quelbäche des Leningrader Gebietes. Arch. Hydrobiol. Stuttgart 30 Heft 3 1936 pp. 463-496 26 text-figs.

426.—Sokolow, I. Über zwei neue *Pontarachna*-Formen aus dem Pazifischen Ozean. Zool. Anz. Leipzig Bd. 115 Heft 11-12 1936 pp. 329-334 11 text-figs.

427.—Sokolska, J. Aparat Golgi'ego D komórkach somatycznychipiciowych (Spermatoiowogeneza) pajaka domowego (*Tegenaria domestica* Cl.). Arch. Tow. nauk. Lwow (3) T. 3 5 1923 pp. 1-34 2 pls.

428.—Spasskij, S. A. Species and genera of Spiders unknown up to date in U.S.S.R. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 533-536. [Paper in Russian.]

429.—Spassky, S. Araneae palae-arcticae novae. Festschrift f. Embrik Strand Riga 1 1936 pp. 37-46 9 figs.

430.—Speijer, E. A. M. Die orientalischen Pedipalpen des Zoologischen Museums der Universität Berlin. Mitt. zool. Mus. Berlin Bd. 21 Heft 2 1936 pp. 249-263 15 text-figs.

431.—Speijer, E. A. M. [Notes on Pedipalpi.] Ned. Ent. Ver. op. 26 1933, reprinted. Tijdschr. Ent. Amsterdam Vol. 76 1933 pp. iv-v. [See No. 362 Zoological Record 1934.]

432.—Stammer, H.-J. Leuchtende Tiere in Schlesien. Jber. schles. Ges. vaterl. Kult. 107 1935 pp. 51-52.

433.—Stammer, H. T. Die Wasserfauna der Schneeberghöhlen. Pax. Beitr. Biol. Glatzer Schneeberges Heft 2 Breslau 1936 pp. 199-214.

Stapley *vide* Jary.

434.—Steiniger, F. Schutzanpassungen ohne Annahme einer Lamarckistischen oder Selektionistischen Entstehung? Natur. u. Volk Bd. 66 Heft 1 1936 pp. 17-23 7 figs.

435.—Stephensen, K. Pycnogonida from Norway and adjacent waters. Bergens Mus. Aarb. 1935 No. 7 1936 pp. 1-39 1 text-fig.

436.—Stephensen, K. Sveriges Pycnogonider. Göteborgs Vetensk. Samh. Handl. (5B) Bd. 4 No. 14 1936 pp. 3-56 13 text-figs.

437.—Stoyanow, A. A. Correlation of Arizona Paleozoic formations. Bull. Geol. Soc. Amer. Washington D.C. Vol. 47 No. 4 1936 pp. 459-540 1 pl. 5 figs.

438.—Strand, E. Miscellanea nomenclatorica zoologica et palaeontologica. Folia zool. hydrobiol. Riga Vol. 9 No. 1 1936 pp. 167-170.

439.—Strasser, C. Diplopodi della Laguna di Venezia. Atti Mus. stor. nat. Trieste Vol. 12 1934 pp. 133-143 4 text-figs.

440.—Strickland, E. H. The Distribution of the Black Widow Spider in Alberta. Canad. Ent. 68 1936 pp. 284-285.

441.—Størmer, L. Eurypteriden aus dem Rheinischen Unterdevon. Abh. preuss. geol. LdAnst. N.F. Heft 175 1936 pp. 1-74 10 text-figs. 12 pls.

- 442.—Störmer, L. Über den neuen, von W. Gross beschriebenen Eurypteren aus dem Unterdevon von Overath im Rheinland. Jahrb. preuss. geol. LdAnst. 55 Heft 1 1935 pp. 284–291 3 text-figs.
- 443.—Strouhal, H. Eine Kärntner Höhlen-Koenenia (Arachnoidea, Palpigradi). Zool. Anz. Leipzig Bd. 115 Heft 7–8 1936 pp. 161–168 12 text-figs.
- 444.—Stubblefield, C. J. Cephalic sutures and their bearing on the classification of trilobites. Biol. Rev. Cambridge 11 No. 4 1936 pp. 407–440.
- 445.—Subrahmanyam, T. V. A Dragonfly preying upon a Spider. J. Bombay nat. Hist. Soc. 39 No. 1 1936 p. 190.
- 446.—Subrahmanyam, T. V. Mating of the spider *Tetragnatha*. J. Bombay nat. Hist. Soc. 39 No. 1 1936 pp. 197–198 1 text-fig.
- 447.—Sugimoto, M. On the Formosan Chicken Mite, *Neoschöngastia galinarum* (Hatori, 1920). J. Jap. Soc. vet. Sci. 15 No. 3 1936 pp. 201–213 3 pls. [Paper in Japanese, summary in English pp. 37–38.]
- 448.—Sugimoto, M. On a New Variety and a New Species of Tick from the Formosan Domestic Animals. J. Soc. trop. Agric. Formosa 8 No. 4 1936 pp. 336–346 19 figs. [Paper in Japanese, summary in English.]
- 449.—Syverson, J. T. & Berry, G. P. An Arthropod vector for equine encephalomyelitis, Western strain. Science New York N.S. 84 No. 2173 1936 pp. 186–187.
- 450.—Szalay, L. Zwei neue Hydra-carinen der Gattung *Protzia* Piersig. Zool. Anz. Leipzig Bd. 115 Heft 1–2 1936 pp. 51–54 6 text-figs.
- 451.—Takakuwa, T. Ueber eine neue Subspecies des *Ethmostigmus* aus Marschallinseln und eine neue Spezies des *Nodocephalus* aus Mandschurei. Trans. nat. Hist. Soc. Formosa 26 No. 151 1936 pp. 159–163 3 text-figs. [Paper in Japanese with summary in German.]
- 452.—Takakuwa, T. Eine neue interessante *Mecistocephalus*-Art aus Formosa. Trans. nat. Hist. Soc. Formosa 26 No. 152 1936 pp. 215–216 2 text-figs.
- 453.—Takakuwa, T. Eine neue japanische *Mecistocephalus*-Art. Trans. nat. Hist. Soc. Formosa 26 No. 155–156 1936 pp. 322–323 2 text-figs.
- 454.—Takakuwa, T. Über die japanischen *Mecistocephalus*-Arten mit 49 Beinpaaren. Trans. nat. Hist. Soc. Formosa 26 No. 159 1936 pp. 431–434 6 text-figs. [Paper in Japanese with summary in German.]
- 455.—Takakuwa, T. Über eine neue Gattung und zwei neue Arten von Mecistocephalidae aus Formosa. Trans. nat. Hist. Soc. Formosa 26 No. 159 1936 pp. 435–439 5 text-figs.
- 456.—Takakuwa, T. New Species of Japanese *Queenslandogeophilus*. Zool. Mag. Tokyo 48 1936 pp. 1–4 8 text-figs. [Paper in Japanese.]
- 457.—Takashima, H. A Brief Note on Japanese Pauropoda. Trans. nat. Hist. Soc. Formosa 26 No. 149 1936 pp. 94–96. [Paper in Japanese.]
- 458.—Takashima, H. A Contribution towards the Japanese Species of the Order Symphyla (I). Trans. nat. Hist. Soc. Formosa 26 No. 157 1936 pp. 364–375. [Paper in Japanese with summary in English.]
- 459.—Tauson, A. O. Lake Dikoye and its biology. Sciënt. Mem. Univ. Perm. Vol. 1 Nos. 2–3 1935 pp. 3–51. [English summary pp. 51–55 3 pls.]
- 460.—Thomas, M. La Vue et la Sensibilité tactile chez les Araignées. Bull. Soc. ent. Fr. 41 1936 pp. 95–96.
- 461.—Thompson, G. B. 1. Some new Records of the Occurrence of *Myialges* spp. (Acarina). 2. A new Record of *Microlichus unicus* Vitzthum (Acarina). Ann. Mag. nat. Hist. Ser. 10 18 1936 pp. 315–320.
- 462.—Thompson, G. B. The Parasites of British Birds and Mammals. VII. Records of Ixodoidea from Hedgehogs and their nests. Ent. mon. Mag. London 72 1936 pp. 116–118.
- 463.—Thompson, G. B. The Parasites of British Birds and Mammals. VI. Some Parasites of the Red Deer and Wild Cat. Scot. Nat. Edinb. 1936 No. 219 pp. 75–78.
- 464.—Thor, S. Neue Gattungen in der Familie Trombididae W.E. Leach 1814. Zool. Anz. Leipzig Bd. 114 Heft 1–2 1936 pp. 29–32.

465.—Thor, S. Eine neue *Camero-trombidium*-Art aus den Gebirgen von Mauritius. Zool. Anz. Leipzig Bd. 115 Heft 3-4 1936 pp. 106-108.

466.—Thoral, M. Age et faune des schistes ordoviciens de Cabrières (Héraults) dits "Schistes à *Asaphus*." C.R. Acad. Sci. Paris 203 No. 19 1936 pp. 942-944.

467.—Thorslund, P. Siljansområdets brännkalkstenar och kalkindustri. Sverig. geol. Undersökn. Arsb. C 30 5 1936 pp. 1-64 2 pls.

Tillyard *vide* David.

468.—Tirado, A. O. Araenidismo cutáneo gangrenoso en Chile. Act. Soc. sci. Chile T. 37-42 1935 pp. 163-174.

469.—Tonner, F. Das Hautnervensystem der Arthropoden. Zool. Anz. Leipzig Bd. 113 Heft 5-6 1936 pp. 125-136 5 text-figs.

470.—Townsend, L. H. The Black Widow Spider. Science New York N.S. 84 No. 2183 1936 pp. 392-393.

471.—Trägårdh, I. What is *Notaspis theleproctus* Hermann? Ent. Tidskr. Stockholm. 1936 pp. 127-131.

472.—Trägårdh, I. *Leptogamasus*, a new genus of acari from Sweden. Ent. Tidskr. Stockholm 1936 pp. 227-234 14 text-figs.

473.—Troedsson, G. T. Über die Verbreitung von *Dalmanites eucentrus* und *Dalmanites mucronatus* im untersten Gotlandium Schwedens. Senckenbergiana Frankfurt Bd. 17 Nr. 3-4 1935 pp. 177-181.

474.—Tutaj, J. Die Wassermilben (Hydracarina) der nächsten Umgebung von Poznań mit besondere Berücksichtigung des Kiekrzsees. Prace Kom. mat.-przyr. poznań. Tow. Przyj. Nauk (B) 8 No. 1 1936 pp. 1-73. [Paper in Polish, summary in German p. 72.]

476.—Uchida, T. An Introduction to the Study on the Hydracharina in Japan. Botany and Zool. Tokyo 4 No. 10 1936 pp. 1673-1684 19 text-figs. [Paper in Japanese.]

477.—Uchida, T. Marine Water Mites from Japan. J. Fac. Sci. Hokkaido Univ. Zool. 4 No. 4 1935 pp. 183-195 9 text-figs.

478.—Uchida, H. House-infesting Mite and House-rat. Nat Sci & Mus

Tokyo Vol. 7 No. 1 1936 pp. 10-13 2 text-figs. [Paper in Japanese.]

480.—Vachon, M. Les stades du développement chez les Pseudoscorpions. Bouvier, Livre Jubilaire, Paris 1936 pp. 89-92.

481.—Vachon, M. Sur le développement postembryonnaire des Pseudoscorpions (quatrième note). Bull. Mus. Hist. nat. Paris (2) T. 8 No. 1 1936 pp. 77-83.

482.—Vachon, M. Sur le développement post-embryonnaire des Pseudoscorpions. 3^e Note: La Mue. Bull. sci. Bourgogne Dijon 5 1936 pp. 21-29 10 text-figs.

483.—Vachon, M. Une sous-espèce de Pseudoscorpions nouvelle pour la France. Bull. sci. Bourgogne Dijon 5 1936 p. 81.

484.—Vachon, M. Développement des Pseudoscorpionides: origine du lait maternel. Bull. sci. Bourgogne Dijon 5 1936 pp. 149-150.

485.—Vachon, M. Sur la sac dit "ovigère" des Pseudoscorpions. Bull. sci. Bourgogne Dijon 5 1936 pp. 154-155.

486.—Vachon, M. Sur les stades des Pseudoscorpions. Bull. sci. Bourgogne Dijon 5 1936 pp. 160-161.

487.—Vachon, M. Le rôle nourricier de l'ovaire chez les Pseudoscorpions. Bull. sci. Bourgogne Dijon 5 1936 p. 169.

488.—Vachon, M. Développement des Pseudoscorpions. Bull. sci. Bourgogne Dijon 5 1936 pp. 180-181.

489.—Vachon, M. Sur les Pseudoscorpions qui habitent les maisons et leurs dépendances. Bull. sci. Bourgogne Dijon 5 1936 pp. 187-188.

490.—Vachon, M. Deux nouvelles espèces de Pseudoscorpions Africains *Titanatennus monardi* et *Titanatennus alluardi*. Bull. Soc. zool. Fr. T. 60 No. 6 1936 pp. 510-521 2 text-figs.

491.—Vachon, M. Description d'une nouvelle espèce de Pseudoscorpions *Epaphochernes bouvieri* suivie de quelques remarques sur les genres *Dendrochernes* Beier et *Epaphochernes* Beier. Bull. Soc. zool. Fr. T. 61 No. 3 1936 pp. 140-145 2 text-figs.

492.—Vachon, M. Sur l'anatomie des Pseudoscorpions. Première note préliminaire. Les organes génitaux externes de *Chelifera cancriformis* L. ♀ Bull. Soc. zool. Fr. T. 61 No. 4 1936 pp. 294–298 1 text-fig.

493.—Vaz, Z. Sarna do porco do matto por "*Sarcoptes scabiei* suis," parasita do porco domestico. Arch. Inst. Biol. São Paulo Vol. 6 Art. 8 1935 pp. 69–70.

494.—Veltiščev, P. O. Die Pflanzenmilben (*Tyroglyphidae*, Acari) als Hauptursache des Eingehens der Wurzelkautschukgewächse in Transkaukasien. C.R. Acad. Sci. Moscow N.S. Vol. 2 No. 3 1936 pp. 123–124.

495.—Verhoeff, K. W. Unsere Kenntnisse von den Diplopoden des alemannischen Gaues. Beitr. naturk. Forsch. Südwestdeuts Karlsruhe i. B. 1 Heft 2 1936 pp. 228–254.

496.—Verhoeff, K. W. Über einige Myriapoden und einen Isopoden aus mediterranen Höhlen. Mitt. Höhlen-u. Karstf. Berlin 1936 4 pp. 155–162 13 text-figs.

497.—Verhoeff, K. W. Ueber einige indische Chilognathen gesammelt von Herrn S. Jones, Madras. Rec. Ind. Mus. Calcutta 38 1936 pp. 103–123 4 pls.

498.—Verhoeff, K. Ueber einige Myriapoden und Isopoden aus Dekan, gesammelt von Herrn S. Jones, Madras. Rec. Ind. Mus. Calcutta 38 1936 pp. 503–510 2 plates.

499.—Verhoeff, K. W. Zur Kenntnis der Glyptiduliden (Cambaloidea). Zool. Anz. Leipzig Bd. 113 Heft 3–4 1936 pp. 49–62 15 text-figs.

500.—Verhoeff, K. Die Sphaerotrachopidae der südlichen Halbkugel und ihre Beziehungen. Zool. Anz. Leipzig Bd. 114 Heft 1–2 1936 pp. 1–14 8 text-figs.

501.—Verhoeff, K. W. Kritische Untersuchung asiatischer Scutigleriden. Zool. Anz. Leipzig Bd. 115 Heft 1–2 1936 pp. 1–18 12 text-figs.

502.—Verhoeff, K. Zur Kenntnis ostasiatischer Strongylosomiden und Fontariiden. Zool. Anz. Leipzig Bd. 115 Heft 11–12 1936 pp. 297–311 16 text-figs.

503.—Verhoeff, K. W. Über Myriapoden aus Marokko. Zool. Anz. Leipzig Bd. 116 Heft 9–10 1936 pp. 241–248 6 text-figs.

504.—Verhoeff, K. W. Zur Systematik, Geographie und Ökologie der Diplopoden von Oberwallis und Insubrien. Zool. Jahrb. Jena (Syst.) 68 1936 pp. 205–272 2 plates.

505.—Verhoeff, K. W. Chilognathen aus Nordwestitalien und über einige andere mediterrane Diplopoden. Zool. Jahrb. Jena (Syst.) 68 1936 pp. 353–444 6 pls.

506.—Vetter, H. Zum Vorkommen von *Limulus* im mitteldeutschen Braunkohlensandstein. Z. naturw. Halle 90 Heft 4–6 1933 pp. 61–75 3 text-figs.

507.—Viets, K. Ueber die Synonymie von *Hydrachna cruenta* O. F. M. (Acari). Abh. naturw. Ver. Bremen Bd. 29 Heft 3–4 1934/35 [paper published 1935] pp. 245–251.

508.—Viets, K. Wassermilben aus Finnland. Ann. Zool. Soc. zool.-bot. fenn. Vanamo Helsinki 2 No. 2 1935 pp. 18–20.

509.—Viets, K. Hydracarinae aus Jugoslawien (Systematische, ökologische faunistische und tiergeographische Untersuchungen über die *Hydrachnellae* und *Halacaridae* des Süßwassers). Arch. Hydrobiol. Stuttgart Bd. 29 Heft 3 1936 pp. 351–409 6 pls. 3 tables 6 text-figs.

510.—Viets, K. Wassermilben aus Russisch-Karelien. Arch. Hydrobiol. Stuttgart 30 Heft 4 1936 pp. 574–581.

511.—Viets, K. *Hydrachnellae* (Acari) aus Rovigno d'Istria. Atti Mus. Stor. nat. Trieste Vol. 12 1934 pp. 167–170 1 map.

512.—Viets, K. Exploration biologique des cavernes de la Belgique et du Limbourg hollandais. XXXIII^e Contribution. Hydrachnellae et Poro-halacaridae. Bull. Mus. Hist. nat. Belg. 12 No. 28 1936 pp. 1–10 2 text-figs.

513.—Viets, K. Wassermilben oder Hydracarina in Dahl. Die Tierwelt Deutschlands 31 und 32 pp. 574 1100 text-figs. Jena 1936.

514.—Viets, K. Wassermilben aus unterirdischen Gewässern Jugoslawiens. Verh. mit. Vereinig. Limnol. Beograd Bd. 7 Teil 1 1935 pp. 74–86 8 text-figs.

515.—Viets, K. Weitere brasilianische Wassermilben aus dem Staate Pernambuco. Zool. Anz. Leipzig Bd. 113 Heft 9–10 1936 pp. 209–218 14 text-figs.

516.—Viets, K. Über eine neue Halacaride (Acari) aus Bulgarien. Zool. Anz. Leipzig Bd. 115 Heft 7–8 1936 pp. 199–202 6 text-figs.

517.—Viets, K. Brasilianische Wassermilben III. Zool. Anz. Leipzig Bd. 115 Heft 11–12 1936 pp. 273–287 19 text-figs.

518.—Viets, K. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao und Aruba im Jahre 1930. Nr. 18. Halacariden aus Westindien. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 389–424 54 text-figs.

519.—Viets, K. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao und Aruba im Jahre 1930. Nr. 19. Eine neue *Hyadesia* (Sarcoptiformes, Acari) von Curaçao. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 425–428 2 text-figs.

520.—Vitzthum, H. Graf. Milben aus der Nasenhöhle von Vögeln. J. f. Orn. Berlin 83 1935 pp. 563–587 12 text-figs.

521.—Vitzthum, H. G. Ein akarologischer Nachruf für den "Roland." Tierärztl. Rdsch. 42 No. 14 1936 pp. 266–269.

522.—Volostschuck, V. Mites found in stored grain in the Crimea. Plant Prot. Leningrad 1936 No. 8 pp. 154–156. [Paper in Russian, summary in English p. 156.]

Wallace *vide* Gertsch.

523.—Ward, J. W. A study of some parasites of rabbits of central Oklahoma. Proc. Okla. Acad. Sci. Vol. 14 1934 pp. 31–32.

524.—Warwick, T. The Parasites of the Muskrat (*Ondatra zibethica* L.) in the British Isles. Parasitology Cambridge 28 1936, pp. 395–402.

525.—Wasilewska, S. Aparat Golgi 'ego u drewniaka *Lithobius forficatus* L. Arch. Tow. nauk. Lwow (3) T. 3 14 1935 pp. 1–10 1 pl.

526.—Waterston, A. R. Diplopoda and Chilopoda, in Forrest, J. E., Waterston, A. R. & Watson, E. V.—The Natural History of Barra, Outer

Hebrides. Proc. phys. Soc. Edinb. 22 part 5 1936 p. 271.

Waterston *vide* Crichton.

527.—Weller, J. M. Carboniferous Trilobite Genera. J. Paleont. Menasha Wis. 10 8 1936 pp. 704–714 1 pl.

528.—Wells, F. L. Orbweavers' differential responses to a tuning-fork. Psyche Boston 43 1936 pp. 10–13.

529.—Werner, F. Neu-Eingänge von Skorpionen im Zoologischen Museum in Hamburg. Festschrift f. Embrik Strand Riga 2 1936 pp. 171–193 12 text-figs.

530.—Werner, F. Reptilien und Gliedertiere aus Persien. Festschrift f. Embrik Strand Riga 2 1936 pp. 193–204. [Arachnida pp. 202–204.]

531.—Werner, F. Insekten und Arachnoideen von den Ägäischen Inseln. SitzBer. Akad. Wiss. Wien Abt. I Bd. 144 Heft 5–6 1935 pp. 281–297.

532.—Werner, F. II. Skorpione des Dodekanes. SitzBer. Akad. Wiss. Wien Abt. I Bd. 145 Heft 1–2 1936 pp. 16–17.

533.—Westergård, A. H. *Paradoxides oelandicus* Beds of Öland, with the account of a Diamond Boring through the Cambrian at Mossberga. Sverig. geol. Undersökn. Arsb. C 30 1 1936 pp. 1–66 12 pls. [Trilobita pp. 27–61.]

Wharton *vide* Pearse.

534.—Wheeldon, H. G. Poultry Parasites. Rhodesia Agric. J. 33 1936 pp. 932–944.

Wheeler *vide* Herms.

535.—Whitehouse, F. W. The Cambrian Faunas of North-Eastern Australia. Mem. Qd. Mus. Brisbane Vol. 11 Part 1 1936 pp. 59–112 3 pls. 4 text-figs.

536.—Willard, B. & Jones, T. H. A new Xiphosuran from the Allegheny of Pennsylvania. Proc. Penn. Acad. Sci. 9 1935 pp. 126–131.

537.—Willmann, C. Exploration biologique des Cavernes de la Belgique et du Limbourg hollandais. XXV^e. Contribution: Acari. Bull. Mus. Hist. nat. Belg. 11 No. 29 1935 pp. 1–41 16 text-figs.

538.—Willmann, C. Die Milben der Reyersdorfer Höhle. Mitt. Höhlen-u. Karstf. Berlin 1936 Heft 3 pp. 123–124.

539.—Willmann, C. *Belba nidicola*, eine neue Oribatide aus Vogelnestern in Wölfelsgrund. Pax. Beitr. Biol. Glatzer Schneeberges, Breslau Heft 2 1936 pp. 117–120 2 text-figs.

540.—Willmann, C. Milben aus den Bergwerken von Mährisch-Alstadt, Pax. Beitr. Biol. Glatzer Schneeberges, Breslau Heft 2 1936 pp. 192–199 10 text-figs.

541.—Willmann, C. Neue Acari aus schlesischen Wiesenböden. Zool. Anz. Leipzig Bd. 113 Heft 11–12 1936 pp. 273–290 22 text-figs.

542.—Willmann, C. *Steatonyssus spinosus*, eine neue Milbe von *Solenodon paradoxus* Brdt. Zool. Anz. Leipzig Bd. 114 Heft 5–6 1936 pp. 152–157 5 text-figs.

543.—Willmann, C. Mitteleuropäische Arten der Gattung *Veigata* (Parasitidae, Acari). Zool. Anz. Leipzig Bd. 116 Heft 9–10 1936 pp. 249–258 15 text-figs.

544.—Willmann, C. Die Gattung *Rhagidia* (Rhagidiidae, Acari). Zool. Anz. Leipzig Bd. 116 Heft 11–12 1936 pp. 289–303 20 text-figs.

545.—Willmann, C. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao und Aruba im Jahre 1930. Nr. 20. Oribatiden von Bonaire und Curaçao. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 429–442 1 pl.

546.—Wilson, J. W. *Oribata* and *Belba* from Florida (Acarina, Oribatinae). J. Elisha Mitchell sci. Soc. Chapel Hill 52 No. 2 1936 pp. 255–268 1 pl.

Witt *vide* Gause.

548.—Wolf, B. Animalium Cavernarum Catalogus, s'Gravenhage 1936 Bd. 2 parts 7–10 pp. 225–456.

549.—Wolf, B. Animalium Cavernarum Catalogus, s'Gravenhage 1936 Bd. 3 parts 7–9 pp. 481–663.

550.—Womersley, H. On a new Family of Acarina, with Description of a new Genus and Species. Ann. Mag. nat. Hist. Ser. 10 18 1936 pp. 312–315 7 text-figs.

551.—Womersley, H. Additions to the Trombidid and Erythraeid Acarine Fauna of Australia and New Zealand. J. Linn. Soc. London 40 1936 pp. 107–121 12 text-figs.

Woods *vide* Boynton.

552.—Yakimoff, W. L. Entdeckung der Krätzmilbe vor 100 Jahren. Berl. tierärztl. Wschr. 51 No. 52 1935 pp. 832–833.

553.—Zacher [F.]. Zur Kenntnis der Spinnmilben. Mitt. biol. Anst. Land. Forstw. Berlin Heft 16 1916 pp. 19–25 2 text-figs.

554.—Zachvatkine, A. Notes systématiques sur les Acariens, habitant les greniers. Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45 Livr. 4 1936 pp. 263–270. [Paper in Russian, summary in French pp. 268–270.]

II.—SUBJECT INDEX.

The number in Clarendon indicates the full reference in the list of Titles.

ARTHROCEPHALA.

Pre-Cambrian.—S. Australia, DAVID & TILLYARD, 94.

GIGANTOSTRACA.

General Works.—SHIRLEY, 418; THORAL, 466.

Phylogeny and Classification.—Trilob. BUBNOFF, 67; KOBAYASHI, 220; PHLEGER, 342; RAW, 358; SHIRLEY, 418; WELLER, 527; STUBBLEFIELD, 444.

Nomenclature.—Trilob., DELO, 95; MILLER, 291; RESSER, 372.

Structure.—Eurypt., STØRMER, 441; Histology, Limulus, SCHLOTTKE, 404; Trilob., cephalic sutures, STUBBLEFIELD, 444; microstructure of tegument, ROME, 388; segmentation, LEVEREAULT, 342.

Function.—Append. of Eurypt., STØRMER, 441.

Arthropod Trails.—HUNDT, 186.

Physiology.—Limulus, GUTTMAN, 164; digestion, SCHLOTTKE, 404.

Development.—Eurypt., STØRMER, 441; Limulus, OKA, 315, 316; Trilob., WESTERGÅRD, 533.

Teratology.—Limulus, OKA, 315.

DISTRIBUTION AND FAUNAS.

Palaeozoic.—Scandinavia, Trilob., THORSUND, 467.

Cambrian.—Trilob., RESSER, 372; Alberta, HOWELL, 182, 184; Asia, KOBAYASHI, 217; Australia, WHITEHOUSE, 535; Britain, COBBOLD, 86; RAW, 358; Canada, HOWELL, 183; KOBAYASHI, 216, 219; Korea, KOBAYASHI, 218; South America, KOBAYASHI, 216; Sweden, KOBAYASHI, 217; WESTERGÅRD, 533; United States, HOWELL, 185; KOBAYASHI, 216; MILLER, 290; STOYANOW, 437.

Cambrovisian.—KOBAYASHI, 221.

Cambro-Silurian.—Trilob., Sweden, TROEDSSON, 473.

Ordovician.—Trilob., Austria, RICHTER, 374; Britain, SHIRLEY, 418; DELO, 96; Bohemia, DELO, 96; Canada, COOPER & KINDLE, 89; KOBAYASHI, 219; Europe, DELO, 96; PHLEGER, 342; France, THORAL, 466; Karakorum, KOBAYASHI, 217; North America, DELO, 96; PHLEGER, 342; Sweden, ASKLUND, 17, 18; Tasmania, KOBAYASHI, 217; United States, GOLDRING, 152; STOYANOW, 437.

Silurian.—Eurypt., United States, SMITH, 424; Trilob., Bohemia, BOUČEK, 48; Britain, SHIRLEY, 418; England, Europe, DELO, 96; Europe, North America, PHLEGER, 342; Poland, RAKOWSKI, 354; Spain, GAERTNER, 140; United States, GOLDRING, 152.

Devonian.—Eurypt., Germany, STØRMER, 441, 442; North America, EHLERS, 110; Trilob., MAILLIEUX, 266; Argentina, Bolivia, Falkland Is., N. America, Europe, DELO, 96; Altai, HALFEEN, 166; Belgium, MAILLIEUX, 267; Europe, PHLEGER, 342; France, PÉNEAU, 335; Germany, RICHTER, 373; New Zealand, ALLAN, 2; Poland, RUŽIČKA, 393; Spain, COMTE, 88; United States, GOLDRING, 152; SMITH, 424.

Carboniferous.—Eurypt., Britain, MOORE, 300; Trilob., WELLER, 527; Manchuria, INAI, 190; Xiphos., United States, WILLARD & JONES, 536.

Permian.—Trilob., Sicily, GRECO, 161; GREGORIO, 162.

Oligocene.—Germany, Xiphos., VETTER, 506.

ARACHNIDA.

(Incl. Tardigrada Pantopoda and Pentastomida.)

GENERAL AND HISTORICAL.

General Works.—BODENHEIMER, 42; MCKEOWN, 265; ROBSON, 378; Aran., Acar., Scorp., Pseudoscorp., FROGGATT, 138; Tardig., MARCUS, 272; Pseudoscorp., ROEWER, 383; Hydrach., VIETS, 513.

Historical.—Acar., ANDRÉ, 5; GRANDJEAN, 153; Jacot, 202; OUDEMANS, 319; YAKIMOFF, 552; Ikod., DELPY, 98; Pentast., HEYMONS, 178.

Nomenclature.—Aran., STRAND, 438; Acar., TRÄGÅRDH, 471; Hydrach., VIETS, 507; Tardig., MARCUS, 272.

Phylogeny and Classification.—Aran., CHICKERING, 83; Acar., GRANDJEAN, 157; Hydrach., VIETS, 513; Pentast., HEYMONS, 178.

Errata.—Acar., GRANDJEAN, 157.

Methods.—Aran., KASTON, 211; fixing fluids, Aran., PETRUNKEVITCH & PICKFORD, 338; Aran., SOKOLSKA, 427;

study of sheep scab, DOWNING, 106; interaction of two species of mites, GAUSE, SMARAGDOVA & WITT, 141; Acar., OUDEMANS, 319; PATAU, 327; section-cutting technique, IXOD., SHORTT, 419; Hydrach., VIETS, 513; Tardig., ENGLISH, 111.

Economics; Venoms.—Anti-serum for Scorp., SERGENT, 413, 416; Scorp., SERGENT, 414; Aran., Scorp., McKEOWN, 265; Aran., BINNS, 34; BORNE, 46, 47; MILLER, 292; MILLOT, 293; TIRADO, 468; experimental, Aran., D'AMOUR, BECKER & VAN RIFER, 93.

Economics; Medical.—Ixod. and disease, BRUMPT, 63; ROUBAUD & COLAS-BELCOUR, 392; Ixod. and rocky mountain fever, BISHOPP & SMITH, 40; relapsing fever, Ixod., HERMS & WHEELER, 174, 175; tickborne fever, PIJPER, 344; tick typhus, SHORTT & D'SILVA, 420; Scorp. sting, DEY, 101; Aran., ALEXANDER, 4; LOWRIE, 254; TOWNSEND, 470; TIRADO, 468; Acari and typhus, ANON., 13; ANON., 14; LEWTHWAITE & SAVOOR, 243; MEGAW, 279; Tsutsugamushi disease, KAWAMURA & IKEDA, 212; Pentast., HEYMONS, 178.

Economics; Veterinary.—Ixod., BISHOPP & HIXSON, 39; transmission of anaplasmosis, Ixod., BOYNTON & OTHERS, 50; transmission of disease, Ixod., BRUMPT, 62; Protozoa in gut of Ixod., CARPANO, 74; control of Ixod., DIESEL, 102; Bovine anaplasmosis, Ixod., HERMS & HOWELL, 172; Bovine anaplasmosis, experimental, Ixod., HERMS & HOWELL, 173; Ixod. on domestic animals, JACK, 192; Ixod. as vectors of piroplasmosis, KOLOMIETZ, 223; transmission of rabbit papillomatosis, Ixod., LARSON, SHILLINGER & GREEN, 233; Bovine babesiosis, LEGG, 238; Tick-borne fever of sheep, MACLEOD, 261; Tick paralysis, MLINAC & OSWALD, 299; control of Ixod., NICOL, 310; Tularaemia in sheep, Ixod., PHILLIP, 340; ticks as vectors of blood parasites, RASTEGATIEFF, 356; RASTEGATIEFF & MATSCHULSKY, 357; Canine piroplasmosis, Ixod., REGENDANZ & MUNIZ, 363; *Babesia canis* in dog-tick, SHORTT, 419; equine encephalomyelitis, Ixod., SYVERTON & BERRY, 449; sheep scab, DOWNING, 106; control of scab mite,

DOWNING, 107; follicular mange of dogs, MORRIS, 302; Acar. on birds, REIS & NOBREGA, 365; Acar. on pig, VAZ, 493; Acar. on poultry, WHEELDON, 534; Pentast., PULLAR, 348.

Economics; Miscellaneous.—Acar. in houses, ANDRÉ, 12; UCHIDA, 478; Ticks in houses, HERRICK, 176; Acar. on bulbs of *Narcissus*, DOUCETTE, 105; mites in stored grain, VOLOSTSCHUCK, 522; Acari and plant disease, SALGUES, 394; VELTISCEV, 494; control of red spider mite, JARY, 203; KLEIN, 215; READ, 359; Acari on mushrooms, JARY & STAPLEY, 205; Acar., vectors of Dutch elm disease, JACOT, 194; spruce needles eaten by Acar., JACOT, 196; control of Acar., PAGE & SHAFIK, 322; control of gall mite, LINDBLOM, 244; Acar., resistance to poisonous gases, SMIRNOV & POLEZAEFF, 423; dispersal of mites in faeces of mice, BOULANOVA, 49; dispersal of gall mites by gall midges, MANI, 271; Ixod., preyed upon by Aran., SAUTET, 398; Ixod., as intermediate hosts for Helminths, NEVEU-LEMAIRE, 309; transmission of piroplasm among hedgehogs, Ixod., SASSUCHIN, 396; Arachnida as food of fish, PEARSE, 330; RICKER, 375.

Parasitology.—*Arachnids parasitic on other animals.*—PEARSE, 330, 329; Acar. on insects and man, ANDRÉ, 6; Acar. on voles, KAWAMURA & IKEDA, 212; Acar. on lizards, LAWRENCE, 236; Acar. on bees, BRÜGGER, 53; MORGENTHAUER, 361; ÖRÖSI-PÁL, 317; Acar. on beetles, PEARSE, ETC., 331; Acar. on rodents, ELTON & KEAY, 112; Acar. on rats, FONSECA, 127, 129; UCHIDA, 478; Acar. on Chiroptera, FONSECA, 131; Acar. on reptiles and rats, FONSECA, 132; Acar. on rat, FONSECA, 133; Acar. on mammals, FONSECA, 128; RADFORD, 350, 351; Acar. on gills of freshwater fish, MUELLER, 303; Acar. on birds, REIS & NOBREGA, 365; Acar. on lice, THOMPSON, 461; Acar. on pig, VAZ, 493; Acar. on seal, VITZTHUM, 521; Acar. on rabbits, WARD, 523; Acar. on muskrat, WARWICK, 524; Acar. on *Solenodon*, WILLMANN, 542; Ixod. on domestic and other animals, BISHOPP & HIXSON, 39; Ixod. on mammals, BISHOPP & SMITH, 40; Ixod., KIRSCHENBLATT, 214; Ixod. on bats, MATHESON, 277; Ixod. on hedgehogs, SASSUCHIN, 396;

THOMPSON, 462; Ixod. on sheep, SENEVET & CAMINOPETROS, 412; Ixod. on Red Deer and Wild Cat, THOMPSON, 463; Ixod. vectors for piroplasmiasis, SASSUCHIN, 395; Hydrach. on Diptera, MÜNCHBERG, 304, 306; Hydrach. on dragon-flies, MÜNCHBERG, 305; Pentast., HILL, 180; Acar., Pentast., on Rodents, HARKEMA, 167; Pentast. on cattle, dogs, etc., PULLAR, 348; Pentast. list of hosts, HEYMONS, 178; original hosts of Ixod., SCHULZE, 409. *Other animals parasitic on Arachnids.*—Protozoa in gut of ticks, CARPANO, 74. Protozoa in Ixod., SHORTT, 419; Dragonfly on Spider, SUBRAHMANYAM, 445; Parasites on Ixod., MACLEOD, 260; wasps on Aran., MCKEOWN, 265; Correlation of parasite and host, LAWRENCE 236.

Experimental.—Anti-serum for Scorp. venom., SERGENT, 413; transmission of disease by ticks, BOYNTON & OTHERS, 50; BRUMPT, 54, 55, 56, 57, 58, 60, 62, 65; longevity of spirochaetes in body of Ixod., BRUMPT, 59; longevity of virus in body of Ixod., BRUMPT, 60, 61; tick-borne fever, PIPPER, 344; viability of Ixod., POGORELY, 346; tick typhus, SHORTT & D'SILVA, 420; Ixod. as vectors of disease, SYVERTON & BERRY, 449; interaction of two species of Acar., GAUSE, SMARAGDOVA & WITT, 141; viability of Acar. in gut of mice, BOULANOVA, 49; control of Acar., PAGE & SHAFIK, 322.

STRUCTURE.

General.—Pseudoscorp., ROEWER, 383; Acar., OUDEMANS, 319; Hydrach., MÜNCHBERG, 305; Tardig., MARCUS, 272; Pantop., STEPHENSEN, 436.

External anatomy.—Legs, Acar., GRANDJEAN, 155; Acar., GRANDJEAN, 157, 158; Ixod., DELPY, 98; SCHULZE, 408; Hydrach., VIETS, 513.

Nervous System and Sense Organs.—Arachnida, TONNER, 469; Aran., KASTON, 211; MILLOT, 295.

Alimentary System.—Aran., MILLOT, 295; mouth parts, Acar., BECKER, 27; Ixod., JACK, 192; vasa malpighii, Tardig., ENGLISH, 111.

Reproductive System.—Secondary sexual organs, Aran., BLAUVELT, 41;

external genital organs, Pseudoscorp., VACHON, 492; Acar., PATAU, 327.

Musculatory System.—Aran., MILLOT, 296.

Cytology and Histology.—Scorp., SATO, 397; Aran., MILLOT, 295; PARAT & JACQUIERT, 324; PETRUNKEVITCH & PICKFORD, 338; SOKOLSKA, 427; Acar., PATAU, 327

Miscellaneous.—Claws, Aran., BONNET, 43; palpus and epigyne, Aran., EXLINE, 115; venom gland, Aran., MILLOT, 293; silk glands, Aran., MILLOT, 294; metamerization, Aran., MILLOT, 296; ovigerous sac, Pseudoscorp., VACHON, 485; attachment organ, Hydrach., MIYAZAKI, 298; gynandromorphism, Ixod., FONSECA, 130; ornate markings and segmentation, Ixod., FRICK, 137; SCHULZE, 405.

PHYSIOLOGY AND BIOCHEMISTRY.

Miscellaneous.—Peripheral nervous system, TONNER, 469; Senses involved in courtship, Aran., KASTON, 210; growth, Scorp., PAULIAN, 328; trichobothria, Aran., PALMGREN, 323; sight and touch, Aran., THOMAS, 460; reaction to tuning fork, Aran., WELLS, 528; maternal "milk," Pseudoscorp., VACHON, 484; nutrition rôle of ovary, Pseudoscorp., VACHON, 487; reproduction, Pseudoscorp., VACHON, 488; function of mouth parts, Acar., BECKER, 27; locomotion, Acar., KOZOUKINA, 227; nutrition, Acar., ÖRÖSI-PAL, 317; vital activity, Acar., ROMANOVA, 387; resistance to temperature, Acar., SMARAGDOVA, 422; nutrition, Pantop., HELFER, 170.

Biochemistry.—Aran., ABBOTT, 1; PARAT & JACQUIERT, 324.

DEVELOPMENT.

General.—Comparative development, Scorp., Aran., Pseudoscorp., Solif., Pedip., Opil., Acar., Pentast., Tardig., Pantop., KORSCHULT, 226; Aran., D'AMOUR, BECKER & VAN RIPER, 93; Pseudoscorp., ROEWER, 383; VACHON, 480, 488; Acar., Grandjean, 157; OUDEMANS, 319; Ixod., BISHOPP & HIXSON, 39; POGORELY, 346; Tardig., MARCUS, 272.

Life History and Larval Development.

—Aran., BONNET, 44; McKEOWN, 265; Pseudoscorp., VACHON, 482, 486; Acar., BRÜGGER, 53; DOWNING, 106, 107; JARY, 204; JARY & STAPLEY, 205; KAWAMURA & IKEDA, 212; KLEIN, 215; ÖRÖSI-PÁL, 318; Ixod., BRUMPT, 62, 64; HERMS & HOWELL, 173; HERMS & WHEELER, 175; JACK, 192; KOLOMIETZ, 223; MACLEOD, 260; RASTEGALEFF, 356; Hydrach., MÜNCHBERG, 305; MEUCHE, 288; VIETS, 513.

Postembryonic development.—Pseudoscorp., VACHON, 481.

Spermatogenesis.—Aran., SOKOLSKA, 427; Scorp., SATO, 397.

Oögenesis.—Acar., PÄTAU, 327.

Parthenogenesis.—Acar., ANDRÉ, 6; OHMORI, 313; PÄTAU, 327; VITZTHUM, 521.

Miscellaneous.—Temperature of development in relation to heat resistance, Acar., SMARAGDOVA, 422; maternal "milk," Pseudoscorp., VACHON, 484; ovigerous sac, Pseudoscorp., VACHON, 485.

Regeneration. — LOCKET, 245; SAVORY, 399.

ETHOLOGY.

Ecology.—Acar., GAUSE, SMARAGDOVA & WITT, 141; Hydrach., TUTAJ, 474.

Limnology.—Hydrach., BÜREN, 68.

General Habits.—BODENHEIMER, 42; Aran., Scorp., Ixod., Acar., FROGGATT, 138; Aran., BHATTACHARYA, 32; BARRETT, 24; BONNET, 44; D'AMOUR, BECKER & VAN RIPER, 93; DENIS, 100; DURY, 108; EXLINE, 115; GERTSCH & WALLACE, 148; McKEOWN, 265; MILLER, 292; NØRGAARD, 312; PARIS, 325; RABAUD, 349; RANGNOW, 355; Opil., CANALS, 69; Acar., DOWNING, 106; JACOT, 194; KAWAMURA & IKEDA, 212; KLEIN, 215; KOZOULINA, 227; Ixod., MACLEOD, 260; POGORELY, 346; Hydrach., VIETS, 513; Pantop., HELFER, 169; STEPHENSEN, 436.

Habitat.—Aran., PARIS, 325; Ixod., MACLEOD, 260; SERGENT, 415; Hydrach., VIETS, 513; Tardig., RAHM,

353; cavernicolous fauna, WOLF, 549; Aran., KRATOCHVIL, 229; LERUTH, 240; Aran., Opil., Acar., GRIEFENBURG & SCHEE, 163; Aran., Opil., Acar., Pseudoscorp., LERUTH, 239; Aran., Acar., MASCHKE, 276; Acar., WILLMANN, 537, 538; Hydrach., Tardig., STAMMER, 433; Hydrach., VIETS, 512; Acar. on gills of freshwater fish, MUELLER, 303; granary, Acar., ZACHRATKINE, 554; houses, Pseudoscorp., VACHON, 489; intertidal zone, Acar., GRANOJEAN, 154; meadowland, Acar., WILLMANN, 541; mines, Acar., WILLMANN, 540; Moss & lichen, Tardig., ENGLISH, 111; Acar. in birds' nests, WILLMANN, 539; Acar. in nostrils of birds, VITZTHUM, 520; Spring water, Hydrach., SOKOLOV, 425; Subterranean waters, Tardig., Acar., KARAMAN, 209; Hydrach., VIETS, 514; termitophilous Aran., FAGE, 118.

Sexual Relations.—Aran., BHATTACHARYA, 32; BONNET, 44; DENIS, 100; KASTON, 210; LOCKET, 246; SUBRAHMANYAM, 446; Aran., Scorp., McCANN 233.

Dispersal.—Acar., MANI, 271.

Mimicry.—Aran., STEINIGER, 434.

Longevity.—Aran., McCANN, 262.

Miscellaneous Habits.—Parental care, cannibalism, Scorp., Aran., McCANN, 263; drumming by Aran., ALLARD, 3; diving Aran., BHATTACHARYA, 33; aeronautical Aran., CROSBY & BISHOP, 92; Spider nests, FRANZ, 136; cocoon forming, Aran., NIEZABITOWKI, 311; behaviour of young, Aran., ROBINS, 377; Aran. preying upon Ixod., SAUTET 398; reaction to tuning fork, Aran., WILLS, 528; Pseudoscorp., SEITZ, 411; relation to hosts, Ixod., SCHULZE, 409; larval parasitism by Hydrach., MÜNCHBERG, 306.

VARIATION AND AETIOLOGY.

Variation.—Male spiders with one palp, of teratological significance? BONNET, 45.

Miscellaneous.—Gynandromorphism, Aran., BALOGH, 21; sex ratio, Acar., OHMORI, 313.

Teratology.—Ixod., DELPY, 97; Pantop., ARITA, 16.

DISTRIBUTION AND
FAUNAS.

General.—KIRJANOVA, 213; Acar., BRÜGGER, 53; Ixod., BRUMPT, 63; MACLEOD, 260; KIRSCHENBLATT, 214.

PALAEARCTIC REGION.

British Isles.—Aran., Opil., Pseudoscorp., BRITTEN & FALCONER, 52; Aran., Opil., Pseudoscorp., Acar., Pantop., CRICHTON & WATERSTON, 90; Acar., DOWNING, 106; ELTON & KEAY, 112; JARY & STAPLEY, 205; RADFORD, 350, 351; Ixod., THOMPSON, 462, 463.

Scilly Islands.—Acar., RADFORD, 351.

Europe. — WOLF, 548; Aran., BALOGH, 22; Opil., ROEWER, 382; Acar., OUDEMANS, 319, 321; VITZTHUM, 520; WILLMANN, 543, 544; Austria, Pedip., STROUHAL, 443; Belgium, Aran., Opil., Acar., LERUTH, 239; Aran., LERUTH, 240; Pseudoscorp., FERUTH, 122; Hydrach., VIETS, 512; Acar., WILLMANN, 537; Bulgaria, Acar., VIETS, 516; Czechoslovakia, Aran., KRATOCHVIL, 230; Opil., KRATOCHVIL, 228; Hydrach., SZALAY, 450; Tardig., BARTOŠ, 25; Denmark, Aran., NØRGAARD, 312; Ixod., CHRISTIANSEN, 85; Finland, Aran., SCHENKEL, 401; Hydrach., VIETS, 508; France, Aran., DENIS, 99; Pseudoscorp., VACHON, 483; Acar., ANDRÉ, 6; GRANDJEAN, 153, 154, 159; JACOT, 201; Germany, Aran., Opil., Acar., GRIEPENBURG-SCHÉE, 163; Opil., Aran., HESSE, 177; Aran., Acar., MASCHKE, 276; Pseudoscorp., BEIER, 29; Acar., JACOT, 202; WILLMANN, 538, 539, 540, 541; ZACHER, 553; Hydrach., KOEP, 222; MEUCHE, 288; VIETS, 513; Tardig., ENGLISCH, 111; Hydrach., Tardig., STAMMER, 433; Greece, Solif., Aran., Opil., WERNER, 531; Holland, Aran., Opil., Acar., LERUTH, 239; Pseudoscorp., FERUTH, 122; Acar., WILLMANN, 537; Hydrach., BESSELING, 31; VIETS, 512; Hungary, Aran., KOLOSVÁRY, 224; Tardig., IHAROS, 189; Italy, CAPORACCO, 72; Aran., Opil., Pseudoscorp., CAPORACCO, 70; Opil., KRATOCHVIL, 231; SCHENKEL, 402; Hydrach., VIETS, 511; Norway, Pantop., DONS, 103; Poland, Aran., KOLOSVÁRY, 225; MIEDZINSKI, 289; PETRUSEWICZ, 339; Hydrach., TUJAJ, 474; Portugal, Aran., BACELAR,

19; Pseudoscorp., NAVAS, 308; Acar., RADFORD, 350; Romania, Aran., ROSCA, 391; Pseudoscorp., IONESCU, 191; Hydrach., HUSIATINSCHI, 187, 188; Tardig., IHAROS, 189; Russia, Aran., CHARITONOV, 79, 80; SPASSKIJ, 428; Opil., REDIKORZEV, 362; Acar., VOLOSTSCHUCK, 522; ZACHVATKINE, 554; Ixod., KOLOMIETZ, 223; Hydrach., LOUKIN, 252, 253; SOKOLOV, 425; TAUSON, 459; VIETS, 510; Tardig., BARTOŠ, 26; BOZHKO, 51; Pantop., SCHIMKEWITSCH, 408; Spain, Pseudoscorp., NAVAS, 308; Opil., MELLO-LEITÃO, 287; Ixod., SCHULZE, 408; Sweden, Acar., LINDBLOM, 244; TRÄGÅRDH, 472; Switzerland, Aran., Opil., Pseudoscorp., SCHENKEL, 401; Hydrach., BÜREN, 68; Yugoslavia, Aran., KRATOCHVIL, 229; Opil., HADŽI, 165; Ixod., MLINAC & OSWALD, 299; Hydrach., VIETS, 509; 514; Tardig., Acar., KARAMAN, 209.

Aegean Islands.—Scorp., Solif., Aran., Opil., WERNER 531, 532.

Crete.—Ixod., SENEVET & CAMINO-PETROS, 412.

Lofoten Islands.—Pantop., DONS, 104.

North Africa.—Scorp., Aran., Solif., Pseudoscorp., CAPORACCO, 73; Scorp., SERGENT, 414; Aran., Opil., Solif., CAPORACCO, 71; Acar., ANDRÉ, 8; OUDEMANS, 319; Ixod., PARROT, 326; ROUBAUD & COLAS-BELCOUR, 392.

Great Salvage Island.—Acar., ANDRÉ, 8.

Asia.—Solif., BIRULA, 35; Arabia, Scorp., WERNER, 529; Ixod., SCHULZE, 406; Asia minor, Ixod., KIRSCHENBLATT, 214; China, Scorp., SCHENKEL, 400; Pedip., SPEIJER, 430; Aran., FOX, 134; SHERRIFFS, 417; Solif., Opil., ROEWER, 381; Pseudoscorp., REDIKORTZEV, 360; Acar., JACOT, 201; Ixod., SCHULZE, 406; Formosa, Pedip., SPEIJER, 430; Acar., SUGIMOTO, 447; Ixod., SUGIMOTO, 448; Indochina, Scorp., FAGE, 119; Iran, Solif., Scorp., WERNER, 530; Ixod., MINNING, 297; SCHULZE, 408; Japan., Acar., KAWAMURA & IKEDA, 212; Hydrach., UCHIDA, 476, 477; Kamchatka, Pseudoscorp., REDIKORTZEV, 361; Palestine, Acar., KLEIN, 215; Tardig.,

RAHM, 353; Russia, Aran., CHARITONOV, 80; SPASSKI, 428, 429; Opil., REDIKORTZEV, 362; Pantop., SCHIMKEWITSCH, 403; Siam, Opil., ROEWER, 379; Turkey, Solif., BIRULA, 36.

ETHIOPIAN REGION.

West Africa.—Scorp., WERNER, 529; Pseudoscorp., VACHON, 490; Opil., ROEWER, 379.

East Africa.—Pedip., Scorp., Solif., Aran., FAGE & SIMON, 120; Aran., FAGE, 118; LESSERT, 241; Pseudoscorp., BEIER, 28; VACHON, 490, 491; Opil., ROEWER, 379; Acar., ANDRÉ, 7, 8, 9, 10, 11; Ixod., SCHULZE, 410; Tardig., MARCUS, 273.

Central Africa.—Scorp., PELLEGRIN, 333; Pedip., GILTAY, 151; Opil., ROEWER, 379.

South Africa.—Scorp., WERNER, 529; Aran., LAWRENCE, 234; Opil., ROEWER, 379; Acar., LAWRENCE, 236; WHEELDON, 534; Ixod., DIESEL, 102; JACK, 192; NICOL, 310; SCHULZE, 406, 407.

Mauritius.—Opil., ROEWER, 385; Acar., JACOT, 195; THOR, 465.

INDIAN REGION.

Fernando Po Island.—Opil., ROEWER, 379.

São Thomé Island.—Opil., ROEWER, 379.

Príncipe Island.—Opil., ROEWER, 379.

India.—Scorp., WERNER, 529; Aran., DYAL, 109; BHATTACHARYA, 32; Ixod., SCHULZE, 407; MINNING, 297; Opil., ROEWER, 379.

Burma.—Opil., ROEWER, 380.

Ceylon.—Opil., ROEWER, 379.

Malaya.—Opil., ROEWER, 384, 379; Ixod., SCHULZE, 406, 407; Dutch East Indies, Pedip., SPEIJER, 430; Java, Aran., BALOGH, 21; Hydrach., LUNDBLAD, 256; Moluccas, Scorp., PELT, 334; Aran., Pedip., REIMOSER, 364; Philippine Islands, Pedip., SPEIJER, 430; Sumatra, Opil., ROEWER, 380; Acar., OUDEMANS, 319.

AUSTRALIAN REGION.

Australia.—Scorp., WERNER, 529; Aran., Scorp., Ixod., MCKEOWN, 265; Aran., BARRETT, 24; Opil., ROEWER, 379; Acar., WOMERSLEY, 550, 551; Ixod., SCHULZE, 406, 407; Pentast., PULLAR, 348.

New Zealand.—Acar., WOMERSLEY, 551.

Tasmania.—Aran., HICKMAN, 179.

New Guinea.—Aran., BALOGH, 23; Opil., ROEWER, 379.

Polynesia.—Caroline Islands, Pedip., ESAKI, 113; Easter Island, Tardig., RAHM, 352.

NEOTROPICAL REGION.

Central America and West Indies.—Aran., BALBOA, 20; BRYANT, 66; CHICKERING, 84; Pseudoscorp., BEIER, 30; Acar., PEARSE, 330; VIETS, 519; VITZTHUM, 520; Acar., WILLMANN, 542, 545; Ixod., MATHESON, 277; Hydrach., MARSHALL, 274; VIETS, 518.

Hawaiian Islands.—Acar., JACOT, 201.

South America.—Scorp., Opil., Solif., Aran., MELLO-LEITÃO, 286; Scorp., MELLO-LEITÃO, 284; Aran., MELLO-LEITÃO, 280, 281, 283, 285; PIZA, 345; PORTER, 347; Opil., CANALS, 69; MELLO-LEITÃO, 282; ROEWER, 386; Acar., FONSECA, 127, 128, 129, 131, 132, 133; GRANDJEAN, 156, 159; ROSAS COSTA, 389; Ixod., FONSECA, 126; SCHULZE, 407; Hydrach., LUNDBLAD, 257, 258, 259; VIETS, 515, 517.

NEARCTIC REGION.

United States.—Aran., ALEXANDER, 4; ALLARD, 3; BISHOP & CROSBY, 37, 38; CHAMBERLIN, 75, 77; CHAMBERLIN & IVIE, 78; CHICKERING, 83; CROSBY & BISHOP, 92; DURY, 108; EXLINE, 117; FIELD, 123; GERTSCH, 142; GERTSCH & DAVIS, 144; GERTSCH & IVIE, 145; GERTSCH & MULAİK, 146, 147; GERTSCH & WALLACE, 148; JONES, 208; LOWRIE, 254; MILLER, 292; PEARSON, 332; TOWNSEND, 470; Acar., DOUCETTE, 105; JACOT, 193, 194, 197, 198, 199, 200; MCGREGOR,

264; PEARSE, ETC., 331; WARD, 523; WILSON, 546; Acar., Pentast., HARKEMA, 167; Ixod., BISHOPP & HIXSON, 39; HERRICK, 176; PHILIP, 341; RILEY, 376; Hydrach., Aran., PEARSE, 329; Hydrach., MARSHALL, 275; Pentast., HILL, 180; Pantop., EXLINE, 116.

Canada.—Aran., BLAUVELT, 41; CHAMBERLIN, 76; COCKERELL, 87; CROSBY & BISHOP, 91; EXLINE, 115; GERTSCH, 143; STRICKLAND, 440; Acar., EWING, 114; Hydrach., LUNDBLAD, 255.

THE OCEANS.

Atlantic, Pantop., GILTAY, 150; Japanese waters, Pantop., OHSHIMA, 314; Mediterranean, Pantop., GILTAY, 149; HELFER, 171; North Sea, Pantop., HELFER, 170; STEPHENSEN, 435; Pacific, Hydrach., SOKOLOV, 426; Pantop., LOU, 251; Swedish waters, Pantop., STEPHENSEN, 436.

MYRIOPODA.

GENERAL AND HISTORICAL.

General Works.—BODENHEIMER, 42; FROGGART, 138; LAMEERE, 232; ROBSON, 378.

Methods.—Chilop., WASILEWSKA, 525.

Economics; Venoms.—Diplop., repugnatorial ejection harming man and other animals, LOOMIS, 248.

Economics; Medical.—Diplop. intermediate host for Cestode, NEVEU-LEMAIRE, 309.

Economics; Miscellaneous.—Myriop. as food of fish, PEARSE, 330; Symphil. injurious to plants, FILINGER, 124.

STRUCTURE.

General.—LAMEERE, 232; Symphil., FILINGER, 124.

Cytology.—Chilop., WASILEWSKA, 525.

Miscellaneous.—Diplop., appendages, VERHOEFF, 495; gonopods, VERHOEFF, 500; pigment, VERHOEFF, 505.

PHYSIOLOGY.

Miscellaneous.—Locomotion, FOXON, 135; phosphorescence, STAMMER, 432.

DEVELOPMENT.

General.—Comparative development, KORSCHULT, 226; Paurop., RÉMY, 371; Symphil., RÉMY, 366.

Spermatogenesis.—Chilip., GADHOKE, 139.

ETHOLOGY.

General Habits.—BODENHEIMER, 42; Symphil., FILINGER, 124; Diplop., Chilop., FROGGART, 138.

Miscellaneous Habits.—Locomotion, Diplop., Chilop., FOXON, 135; oviposition, Symphil., RÉMY, 366.

Habitat.—Cavernicolous fauna, GRIEPPENBURG-SCHÉE, 163; VERHOEFF, 496; WOLF, 548, 549; Diplop., LERUTH, 240; MASCHKE, 276; Littoral, MAURY, 278; Diplop., CHAUCHARD, 81.

VARIATION AND AETIOLOGY.

Teratology.—Diplop., VERHOEFF, 505.

Miscellaneous.—Pigment, Diplop., VERHOEFF, 505.

DISTRIBUTION AND FAUNAS.

General.—Diplop., LOHMANDER, 247; VERHOEFF, 495, 504, 505; Symphil., FILINGER, 124.

PALAEARCTIC REGION.

British Isles.—Chilop., Diplop., WATERSTON, 526.

Europe.—WOLF, 548; Balkans, Paurop., RÉMY, 369; Belgium, Diplop., LERUTH, 240; FERUTH, 122; Bulgaria, Chilop., FOLKMANOVÁ, 125;

France, Chilop., Diplop., LEGENDRE, 237; Chilop., PESSON, 336; MAURY, 278; Diplop., CHAUCHARD, 81; Paurop., RÉMY, 367, 368, 369; PESSON, 337; Germany, GRIEPENBURG-SCHÉE, 163; Diplop., MASCHKE, 276; VERHOEFF, 495; Paurop., RÉMY, 371; Holland, Diplop., FERUTH, 122; Italy, Diplop., Chilop., MANFREDI, 270; Chilop., MANFREDI, 269; Diplop., STRASSER, 439; VERHOEFF, 504, 505; Poland, Diplop., JAWLOWSKI, 207; Romania, Diplop., JAWLOWSKI, 206; Paurop., RÉMY, 368; Yugoslavia, Chilop., HOFFER, 181.

North Africa.—Chilop., Diplop., VERHOEFF, 503; Chilop., MANFREDI, 268; Morocco, Chilop., Diplop., VERHOEFF, 496.

Asia Minor.—Caucasus, Diplop., LOHMANDER, 247; Turkey, Diplop., VERHOEFF, 496.

Asia.—Formosa, Chilop., FAHLANDER, 121; TAKAKUWA, 452, 455; Diplop., VERHOEFF, 499; Japan, Chilop., TAKAKUWA, 453, 454, 456; VERHOEFF, 501; Paurop., TAKASHIMA, 457; Symphil., TAKASHIMA, 458; Korea, Diplop., VERHOEFF, 502; Manchuria, TAKAKUWA, 451; Chilop., VERHOEFF, 501; Palestine, Chilop., VERHOEFF, 501; Riu-Kiu Islands, Diplop., VERHOEFF, 502; Turkestan, KIRJANOVA, 213.

ETHIOPIAN REGION.

South Africa.—Chilop., LAWRENCE, 235; Diplop., VERHOEFF, 500.

East Africa.—Paurop., RÉMY, 370.

INDIAN REGION.

India.—Chilop., Diplop., VERHOEFF, 498; Diplop., VERHOEFF, 497, 499; Chilop., Diplop., Symphil., SILVESTRI, 421.

AUSTRALIAN REGION.

Australia.—Diplop., VERHOEFF, 500.

New Zealand.—Chilop., ARCHEY, 15.

Polynesia.—Marshall Is., TAKAKUWA, 451.

(N-3598 n)

NEOTROPICAL REGION.

Central America and West Indies.—Hispaniola, Diplop., LOOMIS, 248.

South America.—Diplop., VERHOEFF, 500.

NEARCTIC REGION.

United States.—Chilop., FAHLANDER, 121; Diplop., LOOMIS, 249, 250.

PROTOTRACHEATA.

GENERAL AND HISTORICAL.

General Works.—GRAVIER & FAGE, 160; ROBSON, 378.

Experimental.—PICKER, 343; Digestive enzymes, HEATLEY, 168.

PHYSIOLOGY.

Miscellaneous.—Digestion, HEATLEY, 168; excretion, PICKER, 343.

DEVELOPMENT.

General.—Comparative development, KORSCHULT, 226.

DISTRIBUTION AND FAUNAS.

[Vacant.]

III.—SYSTEMATIC INDEX.

N.B.—*The number in Clarendon, when not that of a volume, refers to the list of Titles.*

ARTHROCEPHALA.

†Arthrocephala, class n. p. 64 DAVID & TILLYARD Mem. on fossils of the late Pre-Cambrian, Sydney 1936.

†*Protadelaidea* gen. n. [*Protadelaidea*idae] p. 64 for type †*P. howchini* p. 65 figs. sp. n., *P. browni* p. 75 figs. sp. n., Pre-Cambrian S. Australia DAVID & TILLYARD Mem. on fossils of the late Pre-Cambrian, Sydney 1936

†*Protadelaidea* fam. n. p. 64 DAVID & TILLYARD Mem. on fossils of the late Pre-Cambrian, Sydney 1936.

†*Protadelaidea* ord. n. p. 64 DAVID & TILLYARD Mem. on fossils of the late Pre-Cambrian, Sydney 1936.

GIGANTOSTRACA.

TRILOBITA.

†*Achatella* gen. n. [*Pterygometopinae*] p. 416 figs. for type †*Dalmanites achates* Billings 1860 Ordovician, Britain, North America DELO J. Paleont. Sharon Mass. 9.—†*A.* sp., figs., COOPER & KINDLE 89.

†*Agnostus subobesus* sp. n. Cambrian, Canada, p. 161 pl. KOBAYASHI J. Paleont. Menasha Wis. 10.—†*A. gibbus praecurrens* p. 29 figs. var. n. Cambrian, Sweden, WESTERGÅRD Sverig. geol. Undersökn. Arsb. C 30.

†*Akantharges* gen. n. [*Trochuridae*] p. 610 figs. for type †*Lichas gourdouni* Barrois 1885 Devonian, France, PHLEGER J. Paleont. Menasha Wis. 10.

†*Albertella similis* for *A. bosworthi* Walcott (part) and *A. helena* Walcott (part), *A. rossensis* for *A. helena* Walcott (part), *A. nitida* for *A. bosworthi* Walcott (part) and *A. helena* Walcott (part) p. 2, *A. robsonensis* for *A. bosworthi* Walcott (part) p. 3 spp. n. Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Ameura* gen. n. [near *Phillipsia*] p. 713 for type †*Phillipsia sangamonensis* Meek and Worthen 1865, Carboniferous, North America, WELLER J. Paleont. Menasha Wis. 10.

†*Amphilichas rubrus* p. 368 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.—†*A. wahlenbergi* fig., THORSLUND 467.—†*A.* p. 606 figs. PHLEGER 342.

†*Ampyx inflata* p. 362 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Anchiopsis* gen. n. [*Synphorinae*] p. 412 figs. for type †*Calymene anchiops* Green 1832, Devonian, North America, DELO J. Paleont. Sharon Mass. 9.

†*Anorina* gen. n. p. 76 for type *Liostracus* (?) *superstes* Linnarsson 1875, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Antagmus* gen. n. [near *Kochiella*] for type †*Ptychoparia teucer* Walcott p. 4 Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Arapahoia* gen. n. [*Opisthoparia*] p. 24 for type *A. typa* sp. n., *A. levis*, *A. spatulata* p. 25 pl. spp. n. Cambrian, United States, MILLER J. Paleont. Menasha Wis. 10.

†*Arctinuroides* gen. n. [*Lichadidae*] p. 602 figs. for type †*Arctinurus chicagensis* Weller 1907, Silurian, North America, PHLEGER J. Paleont. Menasha Wis. 10.

†*Asaphellus* (= *Hemigyraspis*) *desideratus* Ordovician, Austria p. 231 figs., R. & E. RICHTER 374.

†*Asaphopsis nakamurai* sp. n. p. 175 pl. *A.* cfr. *nakamurai* p. 176 pl. Japan, *A. florentiensis* p. 177 pl. Tasmania, *A.* (?) *elongatulus* p. 177 pl. Karakorum, Ordovician, KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Asaphus expansus* p. 75 figs., *A. raniceps* p. 76 fig., *A. testicaudatus* p. 77 fig., RAKOWSKI 354.

†*Aspidagnostus* gen. n. [Family uncertain] p. 104 for type *A. parmatum* sp. n. p. 105 pl. Cambrian, Australia, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Asteraspis* gen. n. [*Ptychoparidae*] for type †*Acrocephalites aster* Walcott p. 224, KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.

†*Asteropyginae* subfam. n. [*Dalmanitidae*] p. 413, DELO J. Paleont. Sharon Mass. 9.

†*Atops reticulata comleyensis* var. n. p. 231 figs., Cambrian, Britain, COBBOLD Quart. J. Geol. Soc. London 92.

†*Autoloxolichas* gen. n. [*Trochuridae*] p. 614 figs. for type †*Lichas st-mathiae* Schmidt 1885 Ordovician, Europe, PHLEGER J. Paleont. Menasha Wis. 10.

†*Bailiaspis* gen. n. (near *Bailiella*) for type *Conocephalites* Hartt 1868 p. 18 Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Bailiella cobboldi* for *Conocoryphe* (*Liocephalus*) *impressa* Cobbold, *B. comleyensis* for *Conocoryphe aequalis* Cobbold spp. n. Cambrian p. 17, RESSER Smithsonian. misc. Coll. 95.—†*B. emarginata* p. 58 figs., WESTERGÅRD 533.

†*Blountia globosa* p. 25 pl. *B. dunoirensis* p. 27 pl. spp. n., MILLER J. Paleont. Menasha Wis. 10.

†*Bolaspis* ? *resseri* sp. n. Cambrian, United States, p. 27 pl., MILLER J. Paleont. Menasha 10.

†*Bonnaspis* gen. n. p. 5 for type *Karlia stephensis* Walcott p. 6 Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Bonnia matthewi* for *Dorypyge parvula* Matthew (not Billings) and *Corynexochus* (*Bonnia*) *parvulus* Walcott (part) p. 8, *B. columbensis* for *Corynexochus* (*Bonnia*) *senectus* Walcott p. 9, *B. salemensis* for *Corynexochus clavatus* Walcott (part), *B. bicensis* for *Corynexochus bubaris* Walcott (part), *B. quebecensis* for *Corynexochus bubaris* Walcott (part), *B. wanneri* for *Corynexochus bubaris* Walcott (part) p. 10, *B. tumifrons* for *Corynexochus bubaris* Walcott (part), *B. lata* for *Protypus senectus* Walcott (part) and *Corynexochus capito* Walcott (part), *B. swantonensis* for *Corynexochus capito* Walcott (part), *B. vermontensis* for *Protypus senectus* Walcott (part) and *Corynexochus capito* Walcott (part) p. 11 spp. n. Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Brachyaspidion* p. 417 nom. n. pro *Brachyaspis* Miller (nec Salter), MILLER J. Paleont. Menasha Wis. 10.

†*Brachyaspis* gen. n. [nearest to *Plethometopus*] for type *B. rhynchina* sp. n. *B. ?* sp. Cambrian, United States, p. 28 pl. MILLER J. Paleont. Menasha Wis. 10.—†*B. schucherti* p. 363 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Burlingia laevis* p. 32 figs., WESTERGÅRD 533.

†*Callavia hastata* p. 259 figs. sp. n., *C. (Cobboldus)* subgen. n. for *C. (Cobboldus) cobboldi* sp. n. p. 261 figs.,

C. ? brevioculata p. 266 figs. sp. n., *C. bröggeri* p. 245 figs., *C. callavei* p. 250 figs., *Callavia* sp. p. 265 figs Cambrian, Britain, RAW Quart. J. Geol. Soc. London 92.

†*Calliops* gen. n. [*Pterygomotopinae*] p. 417 figs. for type †*Phacops callicephalus* Hall 1847 Ordovician, North America, DELO J. Paleont. Sharon Mass. 9.

†*Calodiscus oelandicus* p. 30 figs. sp. n. Cambrian, Sweden, WESTERGÅRD Sverig. geol. Undersökn. Arsb. C 30.

†*Calymene* emend. p. 395, *C. replicata* p. 411 figs., *C. planicurvata* p. 412 figs., *C. aspera* p. 412 figs., *C. lata* p. 414 figs., spp. n. Silurian, Britain, SHIRLEY Quart. J. Geol. Soc. London 92.—†*C. tuberculata* p. 83 fig., RAKOWSKI 354.

Calymenidae, diagnosis, classification, SHIRLEY 418.

†*Calmoninae* subfam. n. [*Phacopidae*] p. 409, DELO J. Paleont. Sharon Mass. 9.

†*Cedaria* aff. *C. prolifica* Cambrian, United States p. 28 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Ceratocephala* (*Leonaspis*) *minuta*, Silurian, Spain p. 180 fig., GAERTNER 140.

†*Ceratolichas* p. 604 figs., PHLEGER 342.

†*Ceraurus binodosus* p. 369 fig., sp. n. *Ceraurus* sp. 1, *C. sp.* 2 figs. p. 370 Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Chancia canadensis* sp. n. p. 164 pl. *C. ? clusia* p. 165 pl. Cambrian, Canada, KOBAYASHI J. Paleont. Menasha Wis. 10.

†*Chasmops macroura* p. 78 fig., RAKOWSKI 354.

†*Chierurus transiens* sp. n. Silurian, Bohemia, p. 1 pl., BOUČEK Rozpr. české Akad. Praha 44 and p. 200 pl. Bull. int. Acad. Prague 35.—†*C. percensis* p. 370 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Choneilobarges* gen. n. [*Trochuridae*] p. 610 figs. for type †*Corydocephalus maccullochi* Reed 1913 Ordovician, Europe, PHLEGER J. Paleont. Menasha Wis. 10.

†*Chuangiella* gen. n. [*Leioestegidae*] for type †*C. elongata* sp. n. Cambrian, Korea, p. 191 fig., KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.

†*Cobboldus* subgen. n. see *Callavia*.

†*Condylopyge carinata* p. 27 figs. sp. n. *C. regia* figs. Cambrian, Sweden, WESTERGÅRD Sverig. geol. Undersökn. Arsb. C 30.

†*Conolichas* p. 605 figs., PHLEGER 342.

†*Cotalognostus* gen. n. p. 92 for type †*Agnostus lens* Grönwall 1902, *C. aff. kushanensis* p. 93 pl. Cambrian, Australia, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Craspedarges* p. 612 fig., PHLEGER 342.

†*Crepicephalus*? *wyomingensis* sp. n. Cambrian, United States p. 29 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Cryphaeoides* gen. n. [*Asteropyginae*] p. 416 figs. for type †*Cryphaeus rostratus* Kozłowski 1923 Devonian, Bolivia, DELO J. Paleont. Sharon Mass. 9.

†*Ctenocephalus hartti* sp. n. for *Conocoryphe* (Subgenus?) *matthewi* Walcott (part) p. 20 Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Cyclopyge angustata* p. 367 figs., sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Cypholichas* gen. n. [*Lichadidae*] p. 604 figs. for type †*Homolichas brancensis* Pompecki 1980, "Boulders," Germany, PHLEGER J. Paleont. Menasha Wis. 10.

†*Cyphoproetus rugosus* sp. n. Silurian Bohemia p. 201 pl., BOUČEK Bull. Int. Acad. Prague 35 and p. 3 pl. Rozpr. české Acad. Praha 44.

†*Cyranolichas* gen. n. [*Lichadidae*] p. 605 figs. for type †*Hoploichas proboscoides* Dames 1877 "Boulders," Germany, PHLEGER J. Paleont. Menasha Wis. 10.

†*Cyrtometopus olešnaensis* sp. n. Cambrian, Poland p. 176 pl., RUŽIČKA Bull. int. Acad. Prague 35 and p. 1 pl. Rozpr. české Acad. Praha 44.

†*Dalmania caudata* p. 79 fig., RAKOWSKI 354.

†*Dalmanites altaicus* sp. n. Devonian, Altai, p. 26 pl. (p. 36 in summary), HALFEEN Rec. Geol. West. Siberian

Region 20.—†*D. asselbergshi* sp. n. Devonian, Belgium p. 136 pl., MAILLIEUX Mem. Mus. Hist. nat. Belg. 73.—†*D. eucentrus*, *D. mucronatus* Cambro-Silurian, Sweden p. 177, TROEDSSON 473.

†*Dalmanitidae* fam. n. p. 410, DELO J. Paleont. Sharon Mass. 9.

†*Dalmanitoides* gen. n. [*Synphorinae*] p. 413 figs. for type †*Dalmanites drevermanni* Ivor Thomas 1906 Devonian, Argentina, DELO J. Paleont. Sharon Mass. 9.

†*Dartonaspis* gen. n. [near *Irvingella* Ulrich & Resser, 1924] for type *D. knighti* sp. n., Cambrian, United States p. 29 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Dasometopus* gen. n. [near *Holocephalina* and *Bailiella*] for type *Harpides breviceps* Angelin, Cambrian p. 22, RESSER Smithsonian. misc. Coll. 95.

†*Dechenella* (*Eudechenella*) *mackayi* p. 27 fig. sp. n. Devonian, New Zealand, ALLAN Paleont. Bull. N.Z. 14.

†*Diacalymene* p. 396, *D. marginata* p. 415 figs. Ordovician, *D. crassa* p. 416 figs. Silurian spp. n., Britain, SHIRLEY Quart. J. Geol. Soc. London 92.

†*Dicelloccephalina ulrichi* sp. n. Cambrian, Poland p. 178 pl., RUŽIČKA Bull. int. Acad. Prague 35 and p. 3 pl. Rozpr. české Acad. Praha 44.

†*Dicranogmus* p. 608 figs., PHLEGER 342.

†*Dicranopeltinae* subfam. n. p. 612 PHLEGER J. Paleont. Menasha Wis. 10.

†*Dicranopeltis* p. 612 figs., PHLEGER 342.

†*Dicranopeltoides* gen. n. [*Trochuridae*] p. 612 figs. for type †*Lichas decipiens* Winchell and Marcey 1865, Ordovician, Europe, Silurian, Europe and North America, PHLEGER J. Paleont. Menasha Wis. 10.

Dikelocephalininae subfam. n. [*Dikelocephalidae*] p. 173, KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Dionide euglypta* p. 4 figs., ASKLUND 18.

Diplagnostidae fam. n. [*Agnostida*] for *Diplagnostus*, *Tomagnostus* and *Enetagnostus* p. 90, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Diplolichas* gen. n. [*Trochuridae*] p. 608 figs. for type †*Lichas maueri* Novak 1890, Devonian, Germany, PHLEGER J. Paleont. Menasha Wis. 10.

†*Diplorrhina normata* sp. n. p. 89 pl., *D. elkedraensis* p. 88 pl. Cambrian, Australia, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Ditomopyge* emend, WELLER 527.

†*Dolichometopsis humei* sp. n. Cambrian, Canada p. 162 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.

†*Dunderbergia* ? *declivita* sp. n. Cambrian, United States p. 30 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Echinolichadinae* subfam. n. p. 600, PHLEGER J. Paleont. Menasha Wis. 10.

†*Echinolichas* figs. p. 604, PHLEGER 342.

†*Eifliargse* fig., p. 612, PHLEGER 342.

†*Ellipsocephalus polytomus* p. 56 figs., WESTERGÅRD 533.

†*Elvinia roemeri*, Cambrian, United States, p. 30 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Encrinurus rialpensis* sp. n. Silurian, Spain, p. 181 figs., GAERTNER Nachr. Ges. Wiss. Göttingen (4) 1.—†*E. punctatus* p. 82 fig., RAKOWSKI 354.

†*Enetagnostus* gen. n. [*Diplagnostidae*] for type *E. humilis* sp. n. Cambrian, Australia p. 91 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Eosaphus* gen. n. [*Asaphidae*] p. 178 for type *Liostracus* (?) *superstes* Linnaeus Cambrian, Sweden, KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Eomonorachus* gen. n. [*Pterygometo-pinae*] p. 417 figs. for type †*Dalmanites intermedius* Walcott 1877 Ordovician, North America, DELO J. Paleont. Sharon Mass. 9.

†*Euagnostus* gen. n. [*Agnostidae*] for type *E. opimus* sp. n. Cambrian, Australia p. 87 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Euargus* p. 610 figs., PHLEGER 342.

†*Eudolatites* gen. n. [*Dalmanitinae*] p. 411 figs. for type †*Dalmanites angelini* Barrande 1852, Upper Ordovician and Silurian, Europe, DELO J. Paleont. Sharon Mass. 9.

†*Exochops* gen. n. [near *Griffithides*] p. 707 figs. for type †*Phillipsia portlocki*

Meek and Worthen 1865, Carboniferous North America, WELLER J. Paleont. Menasha Wis. 10.

†*Flexicalymene* gen. n. [*Calymenidae*] p. 395 for type †*Calymene caractaci* Salter, *F. onniensis* p. 405 figs. sp. n., *F. cf. meeki* p. 404 fig., *F. planimarginata* Ordovician, Britain, SHIRLEY Quart. J. Geol. Soc. London 92.

†*Gaspelichas* fig. p. 602, PHLEGER 342.

†*Glossapleura williamsi* sp. n. Cambrian, Canada p. 162 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.

†*Glyphasps* cf. *G. perconcava* Poulsen 1927, Cambrian, United States p. 30 pl., MILLER.

†*Glyptagnostidae* fam. n. [*Agnostida*] for *Glyptagnostus* and *Lotagnostus* p. 101, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Glyptagnostus* gen. n. [*Glyptagnostidae*] p. 101 for type *G. toreuma* sp. n. Cambrian, Australia p. 102 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Gravicalymene* gen. n. [*Calymenidae*] p. 395 for type *G. convoluta* p. 409 figs. sp. n. Ordovician, Britain, SHIRLEY Quart. J. Geol. Soc. London 92.

†*Greenops* gen. n. [*Asteropyginae*] p. 415 figs. for type †*Cryphaeus boothi* Green 1837, Devonian, North America, DELO J. Paleont. Sharon Mass. 9.

†*Griffithides verrucosus* Permian, Sicily p. 151 pls., GRECO 161.—†*G.* emend., WELLER 527

†*Hadrorachus* gen. n. [*Asteropyginae*] p. 415 figs. for type †*Cryphaeus australis* Clarke 1913, Devonian, S. America, Falkland Is., S. Africa, DELO J. Paleont. Sharon Mass. 9.

†*Harpes bupthalmus* sp. n. Silurian, Bohemia, p. 204 pl., BOUČEK Bull. Int. Acad. Prague 35 and p. 6 pl. Rozpr. české Acad. Praha 44.—†*Harpes* sp. Devonian, Poland p. 182 pl., RUŽIČKA Bull. int. Acad. Prague 35 and p. 6 pl., Rozpr. české Acad. Praha 44.—†*H. costatus* fig., THORSUND 467.

†*Hebdiscus* gen. n. [*Eodiscidea*] p. 80 for type †*Ptychoparia attleboroensis* Shaler and Foerste 1888, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Helioccephalus* p. 417 nom. n. for *Malvernina* Delo (nec Jacoby), DELO J. Paleont. Menasha Wis. 10.

†*Hemiarges* p. 610 figs., PHLEGER 342.

†*Hesperaspis ransomei* p. 468 pl., *H. butleri* p. 469 pl. spp. n. Cambrian, United States, STOYANOW Bull. Geol. Soc. Amer. Washington D.C. 47.

†*Holmia* ? sp. n. p. 268 figs. Cambrian, Britain, RAW Quart. J. Geol. Soc. London 92.

†*Holotrachelus punctillosus* figs., THORSUND 467.

†*Homalonotus* (*Burmeisteria*) *huttoni* p. 28 figs. sp. n., *H. (Digonus) expansus* p. 29 fig. Devonian, New Zealand, ALLAN Palaeont. Bull. N.Z. 14.—†*H. barrandei* Devonian, France p. 547 pl. text-fig., PÉNEAU 335.

†Homolichadinae subfam. n. p. 604, PHLEGER J. Paleont. Menasha Wis. 10.

†*Homolichas* p. 604 figs., PHLEGER 342.

†*Hoploichas* p. 605 figs., PHLEGER 342.

†*Hoploichoides* gen. n. [*Lichadidae*] p. 605 fig. for type †*Lichas conico-tuberculatus* Nieszkowski 1857 Ordovician, Europe, PHLEGER J. Paleont. Menasha Wis. 10.

†*Humilogriffithides* gen. n. [*Proetidae*] for type *H. divinopleurus* sp. n. p. 299 figs. Carboniferous, Manchuria, INAI Proc. Imp. Acad. Tokyo 12.

†*Hungioides* gen. n. [*Dikelocephalidae*] p. 178 for type *D. bohemia* Novak. s. str., KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Hypagnostus vortex* sp. n. Cambrian, Australia p. 103 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Illaenus crassicauda* p. 79 fig., RAKOWSKI 354.—†*I. fallax*, *I. gigas* figs., THORSUND 467.

†*Inglefieldia ? birdsalli* p. 30 fig. sp. n. Cambrian, Alberta, *I. porosa*, *I. venulosa* figs., HOWELL Bull. Wagner Free Inst. Philad. 11.

†*Irvingella gibba* sp. n. Cambrian, United States p. 31 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Irvingelloides* gen. n. [*Komaspidae*] for type †*Irvingella* (?) *orientalis* Kobayashi p. 141, KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.

†*Isotelus* sp. fig., COOPER & KINDLE 89

†*Jujuyaspis* gen. n. [*Olenidae*, *Leptoplastinae*] p. 89 for type *J. keideli* sp. n. p. 90 pl. Cambrian, South America, KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Kaskia* gen. n. [near *Griffithides*] p. 708 for type †*K. chesterensis* p. 708 figs. sp. n. Carboniferous, North America, WELLER J. Paleont. Menasha Wis. 10.

†*Kayserops* gen. n. [*Asteropyginae*] p. 415 figs. for type †*Cryphaeus kochi* Kayser 1883, Middle Devonian, Rheinische Schiefergebirge, DELO J. Paleont. Sharon Mass. 9.

†*Kerakephalichas* gen. n. [*Lichadidae*] p. 606 fig. for type *Amphilichas rhinoceras* Slocom 1913 Ordovician, North America, PHLEGER J. Paleont. Menasha Wis. 10.

†*Kingstonia sublettensis* sp. n. Cambrian, United States p. 31 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Kjerulfia ? granulata* p. 270 figs. sp. n., *K. lundgreni* p. 269 figs. Cambrian, Britain, RAW Quart. J. Geol. Soc. London 92.

†*Kochaspis* ? sp. Cambrian, United States p. 32 pl., MILLER J. Paleont. Menasha Wis. 10.

†“*Kochiella*” *crito* fig., HOWELL 182.

†*Kyphocephalus* gen. n. [nearest to *Eurekia* Walcott 1924] for type *K. bridgerensis* sp. n. Cambrian, Canada p. 32 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Labradoria* gen. n. for type *Conocephalites miser* Billings p. 25 Cambrian, RESSER Smithson. misc. Coll. 95.

†*Leioliclas* p. 605 figs., PHLEGER 342.

†*Lejopyge exilis* sp. n. Cambrian, Australia p. 96 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Lichadacea superfam. n.* p. 599, PHLEGER J. Paleont. Menasha Wis. 10.

†*Lichas nitidulus* Devonian, Poland p. 179 pl., RUŽIČKA Bull. int. Acad. Prague 35 and p. 4 pl. Rozpr. české Akad. Praha 44.—†*Lichas* p. 599 figs., PHLEGER 342.

†*Lingucephalichas* gen. n. [*Trochuridae*] p. 614 figs. for type †*Platylichas planifrons* Warburg 1925, Ordovician, Europe, PHLEGER J. Paleont. Menasha Wis. 10.

†*Lotagnostus* gen. n. [*Glyptagnostidae*] for *Agnostus trisectus* Salter p. 101, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Makromuktis* gen. n. [*Trochuridae*] p. 612 figs. for type †*Dicranopeltis nasuta* Weller 1907, Silurian, North America, PHLEGER J. Paleont. Menasha Wis. 10.

†*Malvernina* gen. n. [*Dalmanitinae*] p. 411 fig. for type †*Phacops* (*Dalmania*) *coronatus* H. H. Thomas 1900, Silurian, England, DELO J. Paleont. Sharon Mass. 9.

†*Marjumia* ? *teutonensis*, *M.* ? *tipperaryensis* spp. n. Cambrian, United States p. 33 pl., MILLER J. Paleont, Menasha Wis. 10.

†*Megalaspis limbata* p. 77 fig., RAKOWSKI 354.

†*Mephiargus* p. 612 fig., PHLEGER 342.

†*Metacalymene* p. 395, SHIRLEY 418.

†*Metalichas* p. 614, PHLEGER 342.

†*Metopolichas* p. 600 figs., PHLEGER 342.

†*Nevadia cartlandi* p. 274 figs., RAW 358.

†*Olenellus mackenziensis* sp. n. Cambrian, Canada, p. 161 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.

†*Olenidae*, notes on family p. 98, KOBAYASHI 216, p. 176 figs., KOBAYASHI 220.

†*Oligometopus* gen. n. p. 28 for type *Ptychoparia* (*Solenopleura* ?) *breviceps* Walcott p. 29 Cambrian, RESSER Smithsonian. misc. Coll. 95.

†*Oncagnostus* gen. n. [*Agnostidae*] p. 84 for type †*Agnostus hoi* Sun 1924, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Otarion novaki* sp. n. Silurian, Bohemia p. 203 pl., BOUČEK Bull. Int. Acad. Prague 35 and p. 5 pl. Rozpr. české Acad. Praha 44.—†*O.* sp. fig., COOPER & KINDLE 89.—†*O.* sp. Silurian, Spain p. 185 figs., GAERTNER 140.

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†*Paladin* gen. n. [near *Griffithides*] p. 707 for type †*Griffithides morrowensis*

Mather 1915, Carboniferous, North America, WELLER J. Paleont. Menasha Wis. 10.

†*Papillicallymene* gen. n. [*Calymenidae*] p. 396 for type *Calymene papillata* Lindström Silurian, SHIRLEY Quart. J. Geol. Soc. London 92.

†*Parabolinella argentinensis*, South America p. 88 pl., *P.* (?) *evansi* British Columbia p. 92 pl. spp. n. Cambrian, KOBAYASHI Jap. J. Geol. Geogr. 13.—†*P.* (?) *punctolineata* sp. n. Cambrian, Canada p. 166 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.

†*Paracoosia* gen. n. [*Dikelocephalidae*] for type *P. mansuyi* sp. n. [†*Coosia asiatica* Mansuy] *P. asiatica* (Walcott) p. 172 pl. Cambrian, Eastern and Southeastern Asia, KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Paradoxides bidentatus* p. 36 figs., *P. insularis* p. 39 figs., spp. n. *P. oelandicus*, *P. quadrimucronatus*, *P. torelli*, *P. sjögreni*, *P.* spp. Cambrian, Sweden, WESTERGÅRD Sverig. geol. Undersökn. Arsb. C. 30.—†*P.*, HOWELL 183, HOWELL, SHIMER & LORD 185.

†*Peltura scaraboides* p. 82 fig., RAKOWSKI 354.

†*Peronopsis integra*, *P. fallax* p. 28 figs., WESTERGÅRD 533.

†*Phacopidella grimburgi* Silurian, Spain p. 184 figs., GAERTNER 140.

†*Phacops Domningiae* p. 78 fig., RAKOWSKI 354.—†*P.* (*Phacops*) *fecundus* var. *minor* Silurian, Spain p. 183 figs., GAERTNER 140.

†*Phaethonides bellus* p. 365 fig. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Phaethonides striatus* var. *praecedens* var. n. Silurian, Bohemia, p. 201 pl., BOUČEK Bull. Int. Acad. Prague 35 and p. 3 pl. Rozpr. české Acad. Praha 44.

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†*Phillipsia sicula*, Permian, Sicily p. 150, GRECO 161.—†*P.*, emend., WELLER 527.

- †*Phoidagnostus* gen. n. [*Phalacromidae*] for type *P. limbatus* sp. n. Cambrian, Australia p. 93 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.
- †*Phylacops* gen. n. [*Cyclopygidae*] p. 366 for type †*P. vigilans* p. 367 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.
- †*Platopolichas* p. 599 figs., PHLEGER 342.
- †*Platycalymene* gen. n. [*Calymenidae*] p. 395 for type †*Calymene duplicata* (Murchison), *P. tasgarensis* p. 402 figs. sp. n. Ordovician, Britain, SHIRLEY Quart. J. Geol. Soc. London 92.
- †*Platylichadinae* subfam. n. p. 614 PHLEGER J. Paleont. Menasha Wis. 10.
- †*Platylichas parvus* p. 368 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.—†*P. planifrons* figs., THORSLUND 467.—†*P.* 6 p. 14 figs., PHLEGER 342.
- †*Poulsenia* gen. n. [near *Inglefieldia*] for type *Solenopleura grönnwalli* Poulsen 1927, Cambrian p. 26, RESSER Smithson. misc. Coll. 95.
- †*Proaulacopheura buttsi* sp. n. Cambrian, United States, p. 93 pl., KOBAYASHI Jap. J. Geol. Geogr. 13.
- †*Probolichas* gen. n. [*Lichadidae*] p. 606 figs. for type †*Hoplolichas robbinsi* Ulrich 1892, Ordovician, North America, PHLEGER J. Paleont. Menasha Wis. 10.
- †*Probolops* gen. n. [*Calmoninae*] p. 410 figs. for type †*Proboloides glabellirostris* Kozłowski 1923, Lower Devonian, Bolivia, DELO J. Paleont. Sharon Mass. 9.
- †*Proetus* (*Cornuproetus*) *hunsrückianus* sp. n. Devonian, Germany p. 80 fig., RICHTER Senckenbergiana Frankfurt 18.—†*P. subornatus* p. 364 figs. sp. n. *P.* cf. *P. convexus* p. 365 fig. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.—†*P. postcarbonarius* Permian, Sicily p. 149 pl., GRECO 161.—†*P.* sp. p. 83 fig., RAKOWSKI 354.
- †*Pseudagnostidae* fam. n. [*Agnostida*] for *Pseudagnostus*, *Plethagnostus* and *Rhaptagnostus* p. 97, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.
- †*Pseudagnostus vastulus* p. 99 pl. *P. nuperus* p. 100 pl. spp. n. *P.* cf. *Cyclo-*
- p yge* p. 100 pl. Cambrian, Australia, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.
- †*Pseudolisania* gen. n. [*Pagodidae*] for type †*Lisania* (?) *breviloba* Walcott p. 162, KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.
- †*Pseudophillipsia gemmellaroi* Permian, Sicily p. 152 pl., GRECO 161.
- †*Pseudosphaerexochus granulatus* figs., THORSLUND 467.
- †*Pseudotupolichas* gen. n. [*Lichadidae*] p. 602 figs. for type †*Lichas ornatus* Angelin 1854, Silurian, Europe and North America, PHLEGER J. Paleont. Menasha Wis. 10.
- †*Ptarmingia gordonensis* sp. n. for *Albertella helena* Walcott (part) Cambrian p. 27, RESSER Smithson. misc. Coll. 95.
- †*Ptychopleura* gen. n. [between *Solenopleuridae* and *Ptychoparidae*] for type *P. brevifrons* sp. n. Cambrian, Canada p. 165 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.
- †*Radiolichas* p. 604 figs., PHLEGER 342.
- †*Reacalymene* gen. n. [*Calymenidae*] p. 395 for type *R. limba* p. 409 figs. sp. n., *R. pusulosa* p. 407 figs. sp. n. Ordovician, Britain, SHIRLEY Quart. J. Geol. Soc. London 92.
- †*Redlichaspis* gen. n. [*Redlichidae*] for type †*Redlichia* (?) *finalis* Walcott p. 121, KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.
- †*Redlichia* ? sp. Cambrian, Canada p. 162 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.
- †*Remopleurides striatus* p. 362 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.
- †*Remopleurides* ? sp. p. 6 fig., ASKLUND 18.
- †*Rhaptagnostus* gen. n. for type †*Agnostus cyclopygeformis* Sun. 1924 p. 97, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.
- †*Richterarges* gen. n. [*Trochuridae*] p. 608 figs. for type †*Dicranogmus ptyonurus* Hall 1888, Silurian, Europe and North America, PHLEGER J. Paleont. Menasha Wis. 10.
- †*Robergia microphthalmia* p. 12 figs., ASKLUND 17.

†*Schaderthalis* gen. n. for *S. bruhmii* p. 250 Devonian, Germany, HUNDT Geol. Zbl. Leipzig 8.

†*Schizostylus* gen. n. [*Calmoninae*] p. 410 figs. for type †*Dalmanites brevicaudatus* Kozłowski 1923, Lower Devonian, Bolivia, DELO J. Paleont. Sharon Mass. 9.

†*Scutellum laticauda* figs., THORSLUND 467.

†*Sevillia* gen. n. [near *Phillipsia*] p. 711 for type †*S. sevillensis* p. 712 figs., sp. n. Carboniferous, North America, WELLER J. Paleont. Menasha Wis. 10.

†*Solenagnostus* gen. n. [*Agnostidae*] p. 86 for type †*Agnostus longifrons* Nicholas 1915, *S. acuminatus* sp. n. Cambrian, Australia p. 86 pl., WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Solenopleura cristata* p. 59 figs., WESTERGÅRD 533.

†*Sphaeragnostus* gen. n. p. 361 for type †*Agnostus similis* Barrande 1872, *S. gaspensis* p. 361 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Sphaerexochus bridgei* p. 371 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.—†*S. calvus* figs., THORSLUND 467.

†*Sphaerocorypae* sp., figs., COOPER & KINDLE 89.

†*Symphysops spinifera* p. 367 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.

†*Symphysurina*, notes on genus p. 163, *S.* aff. *S. woosteri*, Lower Ordovician, Canada, *S. spicata* Cambrian, Canada, p. 164 pl., KOBAYASHI 219.

†*Synhomalonotus* p. 394, *S. monensis* p. 401 figs. sp. n. Ordovician, Britain, SHIRLEY Quart. J. Geol. Soc. London 92.

†*Synphorinae* subfam. n. [*Dalmanitidae*] p. 411, DELO J. Paleont. Sharon Mass. 9.

†*Syspacephalus* gen. n. for type *Agraulos charops* Walcott, Cambrian, p. 28, RESSER Smithsonian. misc. Coll. 95.

†*Taenicephalus cordillerensis* sp. n. Cambrian, United States p. 33 pl., MILLER J. Paleont. Menasha Wis. 10.

†*Tasmanocephalus* gen. n. [related to *Chosenia*] p. 180 pls. for type *Cono-*

cephalites stephensis Etheridge, Ordovician, Tasmania, KOBAYASHI Jap. J. Geol. Geogr. 13.

†*Telephus granulatus* p. 9, *T. biserialatus* p. 11 figs., ASKLUND 17.

†*Terataspis* p. 604 figs., PHLEGER 342.

†*Tetralichadinae*, subfam. n. p. 605 PHLEGER J. Paleont. Menasha Wis. 10.

†*Tetralichas* gen. n. [*Lichadidae*] p. 605 figs. for type †*Lichas laevis* Eichwald Ordovician, Europe and North America, PHLEGER J. Paleont. Menasha Wis. 10.

†*Tollaspis* gen. n. [*Solenopleurinae*] for type †*Anomocare pawłowskii* Schmidt p. 263, KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.

†*Tretaspis elevata* p. 361 figs. sp. n. Ordovician, Quebec, COOPER & KINDLE J. Paleont. Menasha Wis. 10.—†*T. seticornis* p. 4 figs., ASKLUND 18.

†*Triarthrus beekii* p. 3, *T. jemtlandicus* p. 7 figs., ASKLUND 17.

†*Trimerolichas* gen. n. [*Lichadidae*] p. 604 fig. for type †*Lichas marginatus* Lindström 1885, Silurian, North America and Europe, PHLEGER J. Paleont. Menasha Wis. 10.

†*Triplagnostus gibbus* p. 85 pls. *T. atavus* p. 85 pls. Cambrian, Australia, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Trochuridae*. fam. n. p. 607, PHLEGER J. Paleont. Menasha Wis. 10.

†*Trochurinae* subfam. n. p. 607, PHLEGER J. Paleont. Menasha Wis. 10.

†*Trochurus* p. 607 figs., PHLEGER 342.

†*Trypaulites* gen. n. [*Synphorinae*] p. 412 figs. for type †*Dalmania calypso* Hall 1861, Devonian, North America, DELO J. Paleont. Sharon Mass. 9.

†*Uralichas* p. 600 figs., PHLEGER 342.

†*Wanneria?* *pennapyga* p. 277 figs. sp. n. Cambrian, Britain, RAW Quart. J. Geol. Soc. London 92.

†*Welleraspis* gen. n. [*Solenopleurinae*] for type †*Solenopleura jerseyensis* Weller p. 263 figs., KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.

†*Xystridura* nom. nov. p. 74 to replace *Milesia* Chapman 1929 for †*Olenellus browni* Etheridge, WHITEHOUSE Mem. Qd. Mus. Brisbane 11.

†*Yukonaspis* gen. n. [near *Illæenurus*, *Cholopilus* and *Chuangiella*] for type *Y. kindlei* sp. n. Cambrian, Canada p. 164 pl., KOBAYASHI J. Paleont. Menasha Wis. 10.

†*Zeliszella* gen. n. [*Dalmanitidae*] p. 418 figs. for type †*Phacops deshayesi* Barrande 1846, Ordovician, Bohemian Basin, DELO J. Paleont. Sharon Mass. 9.

†*Zeliszellinae* subfam. n. [*Dalmanitidae*] p. 418, DELO J. Paleont. Sharon Mass. 9.

XIPHOSURA.

†*Euproöps packardi* p. 127 figs. sp. n. Carboniferous, WILLARD & JONES Proc. Penn. Acad. Sci. 9.

†*Limulus decheni*, VETTER 506.

EURYPTERIDA.

†*Eurypterus arnoldi* p. 291 figs. sp. n. Devonian, U.S.A., EHLERS Contr. Mus. Pal. Univ. Michigan 4.—†*E. statzi* p. 54 figs. sp. n. Devonian, Germany, STÖRMER Abh. preuss. geol. LdAnst. 175.—†*E. wilsoni* p. 353, *E. moyseyi* p. 364 figs., MOORE 300.

†*Grossopterus* gen. n. [*Pterygotidae*] p. 285 figs. for type †*G. overathi* (Gross) 1933, Devonian, Germany, STÖRMER Jahrb. preuss. geol. LdAnst. 55.

†*Hughmilleria* (?) *pygmaea* p. 53 figs., STÖRMER 441.

†*Pterygotus* (*Pterygotus*) *rhenaniae* p. 42 figs., STÖRMER 441.

†*Rhenopterus* gen. n. [*Stylonuridae*] p. 62 for type †*R. diensti* p. 63 figs. sp. n., *R. latus* p. 70 figs., *R. tuberculatus* p. 71 fig. spp. n. Devonian, Germany, STÖRMER Abh. preuss. geol. LdAnst. 175.

†*Tarsopterus laticeps* p. 59 figs. sp. n. Devonian, Germany, STÖRMER Abh. preuss. geol. LdAnst. 175.

INCERTAE SEDIS.

†*Myona* gen. n. for type †*M. flabelliformis* sp. n. Cambrian, Korea, KOBAYASHI J. Fac. Sci. Univ. Tokyo (Geol.) 4.

PANTOPODA.

Faunal lists. — Japanese waters, OHSHIMA 314; North Sea, HELFER 170; Norway and adjacent waters, STEPHENSEN 435; Swedish waters, STEPHENSEN 436.

Ammothea discoidea p. 418 figs. sp. n. *A. alaskensis* Puget Sound, EXLINE Proc. U.S. nat. Mus. 83.—*A. (Achelua) echinata sinensis* p. 19 figs. var. n. Chinese waters, LOU Contr. Inst. Zool. Peiping 3.—*A. echinata* Swedish waters p. 49 fig., notes and general distribution, STEPHENSEN 436.—*A. magnirostris*, *A.* sp. figs., HELFER 171.

Anoplodactylus parvus sp. n. Caribbean Sea p. 1 figs., GILTAY Bull. Mus. Hist. nat. Belg. 10.—*A. aculeatus* fig., HELFER 169.—*A. petiolatus* p. 43 figs., *A. exiguus* p. 44 fig., Swedish waters, notes and general distribution, STEPHENSEN 436.

Ascorhynchus ramipes tsingtaoensis p. 3 figs. var. n. Chinese waters, LOU Contr. Inst. Zool. Peiping 3.

Chaetonymphon hirtum p. 30 figs., *C. spinosissimum* p. 32 figs. Swedish waters, notes and general distribution, STEPHENSEN 436.—*Chaetonymphon* p. 321, *C. hirtum*, *C. spinosum*, *C. macronyx* figs., SCHIMKEWITSCH 403.

Colossendeis proboscidea fig., HELFER 169.

Cordylochele p. 292, *C. malleolata*, *C. brevicollis* figs., SCHIMKEWITSCH 403.—*C. longicollis* Swedish waters p. 39 figs., notes and general distribution, STEPHENSEN 436.

Discoarachne brevipes fig., HELFER 169.

Metapallene p. 287, SCHIMKEWITSCH 403.

Nymphon solitarium p. 414 figs., *N. turritum* p. 416 figs. spp. n. Puget Sound, EXLINE Proc. U.S. nat. Mus. 83.—*Nymphon* p. 372 Russian spp. described and figured, SCHIMKEWITSCH 403.—*N. jan-mayensis*, notes, North Sea p. 18 figs., STEPHENSEN 435.—*N. gracile*, *N. rubrum* figs., DONS 103.—*N. strömi*, *N. macrum*, *N. grossipes* figs., DONS 104.—*N. strömi* fig., HELFER 169.—*N. rubrum* p. 17 figs., *N. brevirostre* p. 21 figs., *N. mixtum* p. 22 figs., *N. leptocheles* p. 25 fig., *N. stroemi* (s. str., excl. *N. gracilipes* Heller) p. 26

figs., *N. gracilipes* p. 29 figs. Swedish waters, notes and general distribution, STEPHENSEN 436.

Nymphonidae, key to spp., HELFER 170.

Oropallene gen. n. [*Pallenidae*] p. 291 for *Pallene dimorpha* Hoek, SCHIMKEWITSCH Faune de l'U.R.S.S. Pantopoda II.

Pallene phantoma Mediterranean (French coast) p. 1 fig., GILTAY 149.—*P. brevirostris*, *P. spectrum* fig., HELFER 171.—*P.* p. 240, *P. brevirostris*, *P. phantoma* figs., SCHIMKEWITSCH 403.—*P. brevirostris* p. 34 figs., *P. producta* p. 36 figs. Swedish waters, notes and general distribution, STEPHENSEN 436.

Pallenella p. 289, SCHIMKEWITSCH 403.

Pallenidae, key to spp., HELFER 170.

Pallenopsis p. 226, Russian spp. described, SCHIMKEWITSCH 403.—*P. fluminensis* fig., HELFER 169.

Pentanympheon antarcticum fig., HELFER 169.

Phoxichilidiidae, key to spp., HELFER 170.

Phoxichilidium femoratum figs., DONS 103, 104; Swedish waters p. 41 figs., notes and general distribution, STEPHENSEN 436.

Phoxichilus spinosus Swedish waters p. 45 fig., notes and general distribution, STEPHENSEN 436.

Propallene p. 282, SCHIMKEWITSCH 403.

Pseudopallene p. 257, *P. circularis*, *P. spinipes* figs., SCHIMKEWITSCH 403.—*P. circularis* Swedish waters p. 37 figs. notes and general distribution, STEPHENSEN 436.

Pycnogonum crassirostre, *P. littorale* figs., DONS 103.—*P. littorale*, *P. tumulosum* figs., HELFER 169.—*P. littorale* Swedish waters p. 50 fig. notes and general distribution, STEPHENSEN 436.

ARACHNIDA.

[including Tardigrada and Pentastomida.]

SCORPIONES.

Faunal lists.—Algeria, SERGENT 414; Boeroe (Moluccas), PELT 334; Caverni-

colous, WOLF 549; Indo-China, FAGE 119; Italy, CAPORICCO 72; Persia, WERNER 530.

Babycurus ornatus p. 181 sp. n. Moçambique, *B. büttneri*, *B. sp.* near *Kirki* fig., WERNER Festschrift f. Embrik Strand Riga 2.

Bothriurus, key to spp., *B. ypsilon* p. 90 fig. sp. n. *B. keyserlingi* fig., Brazil, MELLO-LEITÃO Rev. chil. Hist. nat. 39.

Buthacus frontalis p. 176 fig. sp. n. Erythraea, WERNER Festschrift f. Embrik Strand Riga 2.

Buthoscorpio gen. n. [*Scorpionidae*] for *B. laevicauda* sp. n. p. 191 fig. India, WERNER Festschrift f. Embrik Strand Riga 2.

Buthus extremus p. 173 sp. n. Straits Settlements, notes on other spp. of *Buthus*, WERNER Festschrift f. Embrik Strand Riga 2.—*B. agnetis* sp. n. p. 202 Persia, WERNER Festschrift f. Embrik Strand Riga 2.

Cheloctonus anthracinus, WERNER 529.

Euscorpium carpathicus, WERNER 529.

Hadogenes spp., WERNER 529.

Heterometrus spp., WERNER 529.

Hormurus spp., WERNER 529.

Iomachus politus p. 191 fig., WERNER 529.

Jurus dufourei, WERNER 529.

Opisthacanthus asper p. 190 fig., WERNER 529.

Opisthophthalmus pilosus p. 187 fig. sp. n. S.W. Africa, other spp. listed, WERNER Festschrift f. Embrik Strand Riga 2.

Pandinus spp., WERNER 529.

Pandinus pallidus, FAGE & SIMON 120.

Parabuthus quadrilineatus p. 180 sp. n. S. Africa, many other spp. listed, WERNER Festschrift f. Embrik Strand Riga 2.

Scorpio maurus yemenensis p. 183, *S. m. occidentalis* p. 184 subspp. n., WERNER Festschrift f. Embrik Strand Riga 2.

Urodacus bicolor p. 182 fig. sp. n. S.W. Australia, WERNER Festschrift f. Embrik Strand Riga 2.

PEDIPALPI.

Faunal lists.—Boeroe (Moluccas), REIMOSER 364; Cavernicolous, WOLF 549.

Chajnus gen. n. [*Thelyphonidae*] for type *C. renschi* sp. n. Sunda Islands p. 258 figs., SPEIJER Mitt. Zool. Mus. Berlin 21.

Charinus Jeanneli p. 300, *C. dilemma* p. 301 spp. n. E. Africa, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Charon grayi papuanus figs., ESAKI 113.

Ginosigma gen. n. [*Thelyphonidae*], SPEIJER Tijdschr. Ent. Amsterdam 76.—*G. lombokensis* sp. n. Sunda Islands p. 256 figs., SPEIJER Mitt. Zool. Mus. Berlin 21.

Minbosius gen. n. [*Thelyphonidae*], SPEIJER Tijdschr. Ent. Amsterdam 76.

Myodalis gen. n. [*Tarantulinae*] p. 298 for type *Phrynus scaber* Gervais, *M. tenella* sp. n. p. 299 figs., *M. Deflersi*, E Africa, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Schizomidae, list of species, GILTAY 151.

Tarantula, key to spp., *T. Alluaudi* sp. n. p. 297 figs., *T. bacillifera*, *T. Telekii*, E. Africa, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.—*T. palmata typica* Philippine Islands p. 260 figs., SPEIJER 430.

Teltus gen. n. [*Mastigoproctidae*] for type *T. vanoorti* sp. n. China p. 259, SPEIJER Mitt. Zool. Mus. Berlin 21.

Thelyphonus vanoorti sp. n. Philippine Islands p. 255 figs., SPEIJER Mitt. Zool. Mus. Berlin 21.

Trithyreus ghesquieri p. 3 figs. sp. n. Belgian Congo, GILTAY Bull. Mus. Hist. nat. Belg. 11 No. 32.

Typopeltis cantonensis sp. n. p. 252 figs., *T. niger* p. 251 fig. China, SPEIJER Mitt. Zool. Mus. Berlin 21

PALPIGRADI.

Faunal list.—Cavernicolous, WOLF 549.

Koenenia austriaca subsp. *stinyi* subsp. n. Carinthia p. 161 figs., STROUHAL Zool. Anz. Leipzig 115.

ARANEAE.

Faunal lists. — Boeroe (Moluccas), REIMOSER 364; Brazil, MELLO-LEITÃO 283; Cavernicolous, WOLF 549; Cavernicolous, Belgium and Holland, LERUTH 239; Italy, CAPORACCO 72; Krotoszyn region, Poland, MIEDZINSKI 289; Mark, HESSE 177; Outer Hebrides, CRICHTON & WATERSTON 90; Panama, CHICKERING 84; Portugal, BACELAR 19; U.S.S.R., CHARITONOV 80; Whitby District [England], BRITTEN & FALCONER 52.

CTENIZIDAE.

Ancylotrypa fasciata sp. n. E. Africa p. 310, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Bothriocyrtum californicum figs., GERTSCH & WALLACE 148.

Chorizops, notes on genus, *C. lorincatus* fig., GERTSCH & WALLACE 148.

Cyclocosmia, notes on genus, *C. truncata* figs., GERTSCH & WALLACE 148.

Eutychides arizonicus p. 20 figs. sp. n. N. America, GERTSCH & WALLACE Amer. Mus. Nov. 884.

Myrmekiaphila, notes on genus, *M. torreyi* p. 15 figs. sp. n. N. America, GERTSCH & WALLACE Amer. Mus. Nov. 884.

Pachylomerus audouini, GERTSCH & WALLACE 148.—*P. funereus* figs. p. 1 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

ATYPIDAE.

Atypus, notes on genus, key to spp., *A. abboti*, *A. bicolor*, *A. milberti* figs., GERTSCH 143.

DIPLURIDAE.

Hexathele, key to spp., *H. fentoni* p. 132 figs. sp. n. Tasmania, HICKMAN Pap. roy. Soc. Tasm. 1935.

Ischnothele karschi p. 207, LESSERT 241.

BARYCHELIDAE.

Agersborgia nom. n. for *Heteromma* MELLO-LEITÃO 1935 p. 167, STRAND Folia zool. hydrobiol. Riga 9.

Harpactirella flavipilosa sp. n. Kalahari p. 145, LAWRENCE Ann. Transv. Mus. 17.

AVICULARIIDAE

[vide THERAPHOSIDAE].

THERAPHOSIDAE.

Aphantopelma venosa p. 119 figs. sp. n. Chili, MELLO-LEITÃO Rev. chil. Hist. nat. 40.

Ceratogyrus brachycephalus p. 208 figs., LESSERT 241.

Cyrtopholis gibbosus sp. n. Cuba p. 259 pl. text-figs. BALBOA Mem. Soc. cubana Hist. nat. 9.

Lasiodora porteri p. 122 figs. sp. n. Chili, MELLO-LEITÃO Rev. chil. Hist. nat. 40.

Selenocosmia pritami p. 241 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

FILISTATIDAE.

Filistatinella gen. n. for type *Filistata crassipalpus* Gertsch 1935, GERTSCH & IVIE Amer. Mus. Nov. 858.

DYSDERIDAE.

Harpactocrates verna sp. n. p. 331 fig. Italy, CAPORIACCO Festschrift f. Embrik Strand Riga 1.

OONOPIDAE.

Dysderina perarmata, *D. straba* figs. p. 314 spp. n. E. Africa, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.—*D. speculifera* p. 213 figs., LESSERT 241.

Gamasomorpha Jeanneli sp. n. E. Africa p. 312 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.—*G. Kulczyński* p. 212, LESSERT 241.

Oonops stylifer figs., *O. furtivus* figs. p. 6, *O. secretus* figs. p. 8, spp. n. Texas, *O. spinimanus*, *O. floridanus*, GERTSCH Amer. Mus. Nov. 852.

Opopea devia fig. p. 5 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.—*O. meditata* p. 20 figs. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

Stenoonops (?) *juvenilis* p. 21 fig. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

Triaeris macrophthalmus fig., FAGE & SIMON 120.

CAPONIIDAE.

Caponia chelifera p. 214 fig. sp. n. *C. capensis* fig., *C. hastifera* p. 214 E. Africa, LESSERT Rev. suisse Zool. Genève 43.

UROCTEIDAE.

Uroctea malthai p. 125 figs. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.—*U. Nadiæ* sp. n. p. 43 figs. Samarkand, SPASSKY Festschrift f. Embrik Strand Riga 1.

PSECHRIDAE.

Fecenia buruana sp. n. Moluccas p. 406 fig., REIMOSER Treubia Buitenzorg 7.

AGELENIDAE.

Agelena actiosa figs. p. 22, *A. singula* figs., *A. approximata* figs. p. 23, *A. confusa* figs. p. 25 spp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.—*A. difficilis* p. 121 fig. *A. injuria* p. 122 fig. spp. n. China, Fox J. Wash. Acad. Sci. 26.—*A. oklahoma* figs. p. 12, *A. absoluta* fig. p. 13 spp. n. U.S.A., GERTSCH Amer. Mus. Nov. 852.

Antistea elegans, biology, DENIS 100.

Argyroneta aquatica, habits, RANGNOW 355.

Chorizomma minorata p. 6 fig. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

Cicurina, key to spp. p. 6, *C. bryantae* figs. p. 13, *C. schultzei* fig. p. 16, *C. gertschi* fig. p. 17, *C. davisii* fig. p. 18 spp. n. U.S.A., *C. pallida*, *C. brevis*, *C. brevifera*, *C. placida*, *C. tersa*, *C. pusilla*, *C. nevadensis*, *C. atomaria*, *C. idahoana*, *C. simplex*, *C. ludoviciana*, *C. intermedia*, *C. cavendishii*, *C. robusta* figs., EXLINE Amer. Mus. Nov. 850.

Cybaeus minoratus p. 14 nom. n. for *C. minor* Banks, GERTSCH Amer. Mus. Nov. 852.

Hadites bidens krivosijanus subsp. n. in cave, Yugoslavia p. 21, KRATOCHVIL Acta Soc. Sci. nat. Moraviae 9, 12.

Halocryphoea gen. n., *H. veneta* sp. n. Italy p. 124 figs., CAPORIACCO Atti Mus. stor. nat. Trieste 12.

Tegenaria quadrata p. 22 fig., *T. magnacava* p. 23 fig. spp. n. *T. gigantea*, *T. nana*, *T. californica* figs. U.S.A., EXLINE Psyche Boston 43.—*T. simplex* sp. n. Bryant nom. nud. United States, p. 69, JONES Field and Lab. Dallas 4.—*T. bayeri* in cave, Yugoslavia p. 20 pl., KRATOCHVIL 229.

Tetrilus Strandi sp. n. p. 355 fig. Italy, CAPORIACCO Festschrift f. Embrik Strand Riga 1.

Wadotes tennesseensis fig. p. 14 sp. n.
U.S.A., GERTSCH Amer. Mus. Nov.
552.

HERSILIIDAE.

Hersilia savignyi p. 128 figs., DYAL
109.

ZODARIIDAE.

Chariobas cylindraceus p. 229 figs.
LESSERT 241.

Cydrela nasuta p. 30 figs. sp. n. E.
Africa, LESSERT Rev. suisse Zool.
Genève 43.

Caesetius bevisi p. 232, LESSERT
241.

Caphaeris fitzsimonsi p. 149 fig. *C.*
langi p. 150 fig. spp. n. Kalahari,
LAWRENCE Ann. Transv. Mus. 17.

Diore delicatula sp. n. Kalahari p. 151
fig., LAWRENCE Ann. Transv. Mus. 17.

Zodarium nitidum, Cirenaica p. 85
fig., CAPORIACCO 71.

PALPIMANIDAE.

Hermipella gen. n. for *H. gibbosa* sp.
n. p. 226 figs. E. Africa, LESSERT Rev.
suisse Zool. Genève 43.

Palpimanus gillayi p. 222 figs., *P.*
crudeni p. 224 figs. spp. n. E. Africa
LESSERT Rev. suisse Zool. Genève 43.

ERESIDAE.

Adonea splendens sp. n. Kalahari p.
146, LAWRENCE Ann. Transv. Mus.
17.

Stegodyphus mimosarum p. 210, *S.*
dumicola p. 211, LESSERT 241.—*S.*
sarsinorum p. 129 figs., *S. mirandus* p.
131, *S. pacificus* p. 131 fig., DYAL 109.

PISAURIDAE.

Cispius bidentatus p. 278 figs. sp. n.
E. Africa, LESSERT Rev. suisse Zool.
Genève 43.

Dolomedes chinesus duoformis subsp.
n. China p. 123 fig., Fox J. Wash. Acad.
Sci. 26.—*D.*, key to the males p. 238,
D. pinicola, *D. striatus* figs., BISHOP &
CROSBY 37.

Euprosthops ellioti p. 133, DYAL
109.—*E. pavesii* p. 278 fig., LESSERT
241.—*E. proximus* Kilimandjaro p. 328
fig., SCHENKEL 401.

Thanatidius dubius p. 242 figs.,
BISHOP & CROSBY 37.

Thaumasia peregrina p. 243 figs.,
BISHOP & CROSBY 37.

LYCOSIDAE.

Anomalomma harishi p. 148 figs. sp.
n. India, DYAL Bull. Dep. Zool. Panjab
Univ. 1.

Hippasa aglenoides p. 142, *H.*
pisaurina p. 143 figs., DYAL 109.

Lycosa, keys to spp. p. 134, *L.*
basiri p. 137 figs., *L. arorai* p. 140 figs.
spp. n. *L. chaperi*, *L. birmanica*, *L.*
bistriata, *L. mackenziei*, *L. mandani*, *L.*
kempi, *L. wroughtoni* figs. India, DYAL
Bull. Dep. Zool. Panjab Univ. Lahore
1.—*L. pallide-flava* sp. n. Kalahari p.
156 fig., LAWRENCE Ann. Transv. Mus.
17.—*L. vinticolens* sp. n. U.S.A. p. 15
fig., CHAMBERLIN Proc. Biol. Soc.
Washington 49.—*L. gulosa*, ALLARD 3.

Ocyale kumari p. 147 fig. sp. n. India
DYAL Bull. Dep. Zool. Panjab Univ. 1.

Pardosa lahorensis p. 145 figs., *P.*
mulani p. 146 figs. spp. n. *P. leucopalpis*
p. 144 India, DYAL Bull. Dep. Zool.
Panjab Univ. 1.—*P. (Acantholycosa)*
strandii Switzerland p. 326 fig., SCHENKEL
401.—*P. manubriata* p. 282 figs., LESSERT
241.—*P. observans* p. 111 fig., CAPORI-
ACCO 73.

Pirata garamantica sp. n. Cirenaica p.
89 fig., CAPORIACCO Atti Soc. ital.
Milano 75.

Pseudevippa plumipes p. 283 figs.
sp. n. E. Africa, LESSERT Rev. suisse
Zool. Genève 43.

Schizocosa perplexa sp. n. Bryant
nom. nud. United States, p. 69, JONES
Field & Lab. Dallas 4.

Tarentula Strandii sp. n. p. 261 figs.
Romania, ROSCA Festschrift f. Embrik
Strand Riga 1.

OXYOPIIDAE.

Oxyopes, key to spp. p. 149, *O.*
raviensis p. 150 sp. n. *O. wroughtoni* p.
150, *O. rufisternus*, *O. ryvesii*, *O.*
hindostanicus p. 151 figs. India, DYAL
Bull. Dep. Zool. Panjab Univ. 1.

Peucetia fasciventris p. 285 fig., *P.*
lucasi var. (?) figs., LESSERT 241.—*P.*
viridana p. 152, DYAL 109.

LEPTONETIDAE.

Paraleptoneta hofferi sp. n. p. 8 pl.,
P. orientalis p. 6 pl. in caves, Yugo-
slavia, KRATOCHVIL Acta Soc. Sci. nat.
Moravicae 9, 12.

SICARIIDAE.

Scytodes, key to genus p. 153, *S. sordidus* p. 155 sp. n., *S. propinqua*, *S. thoracica* p. 154, *S. domestica* p. 155 figs. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Thomisoides tropicus p. 133 fig. sp. n. Brazil, MELLO-LEITÃO Ann. Acad. Bras. Sci. Rio 8.

PHOLCIDAE.

Artema atlanta p. 170 figs., DYAL 109.—*A. mauriciana* p. 233, LESSERT 241.

Crossopriza brasiliensis p. 94 figs. sp. n. Brazil, MELLO-LEITÃO Rev. chil. Hist. nat. 39.—*Crossopriza lyoni* p. 168 figs., DYAL 109.

Holocnemus (Stygopholcus) subgen. n. for *H. pluchii* (Scop.) p. 2 figs., KRATOCHVIL Bull. Inst. nat. agron. Brünn (C) 23.

Pholcus Chappuisi sp. n. E. Africa p. 315 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.—*P. Nenjukovi* sp. n. p. 40 figs. Buchara, SPASSKY Festschrift f. Embrik Strand Riga 1.

Psilochorus hesperus p. 1 figs. sp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.

Smeringopus Arambourgi sp. n. E. Africa p. 319 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.—*S. lesnei* p. 234 figs. sp. n. *S. peregrinus* E. Africa, LESSERT Rev. suisse Zool. Genève 43.—*S. elongatus* China p. 113 pl. text-fig., SHERRIFFS 417.

Spermophora Berlandi sp. n. p. 317 figs., *S. sp. ?* fig. E. Africa, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Stygopholeus subgen. n. vide *Holocnemus*.

DICTYNIDAE.

Altella conglobata p. 156 figs. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Argenna monticola p. 2 fig. sp. n. New Mexico, GERTSCH & MULAİK Amer. Mus. Nov. 851.

Argennina gen. n. for type *A. unica* sp. n. p. 2 fig. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.—*A. reclusa* p. 3 figs. sp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.

Dictyna callida figs., *D. horta* figs. p. 4, *D. consulta* figs. p. 6, *D. reticulata* fig., *D. phylax* figs. p. 7, *D. vigilans* fig. p. 8, *D. cambridgei* figs., *D. voluta* fig. p. 10, *D. semota* fig. p. 11 spp. n., *D. formidolosa* p. 10 nom. nov. U.S.A. GERTSCH & IVIE Amer. Mus. Nov. 858.—*D. meditata* fig. p. 5 sp. n. Mexico, GERTSCH Amer. Mus. Nov. 852.—*D. segregata* figs. p. 4, *D. annexa* fig. p. 6, *D. iviei* figs., *D. stulta* fig. p. 7, *D. provida* fig. p. 8, *D. declarata* fig., *D. personata* fig. p. 9 spp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.—*D. albida* p. 157 fig., DYAL 109.

Scotolathys delicatulus fig. p. 4 sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.

Tricholathys knulli fig. p. 1 sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.

ANAPIDAE.

Anapidae fam. n. for the genera *Anapis*, *Pseudanapis* and *Anapogonia* of Simon p. 17, KRATOCHVIL Acta Soc. Sci. nat. Moravicae 9, 12.

Pseudanapis relictus sp. n. in cave, Yugoslavia p. 18 pl., KRATOCHVIL Acta Soc. Sci. nat. Moravicae 9, 12.

THERIDIIDAE.

Key to genera p. 158, DYAL 109.

Achaea quadripunctata p. 160 fig., DYAL 109.

Argyrodes gibbosus p. 237, *A. sextuberculatus* p. 238 figs., LESSERT 241.

Ariamnes flagellum p. 163 fig., DYAL 109.

Calodipoena gen. n. [Latrodectinae] for type *C. incredula* p. 8 figs. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

Dipoena abdita fig. p. 6 sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 863.—*D. jocosa* p. 7 fig. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.—*D. notata* p. 166 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Episinus minusculus fig. p. 9 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Euryopsis dentatus figs. p. 6, *E. deridens* fig. p. 7 spp. n., GERTSCH & MULAİK Amer. Mus. Nov. 863.

Latrodectus geometricus Florida p. 522, PEARSON 332.—*L. hasseltii* p. 165 DYAL 109.—*L. mactans* Wisconsin p. 186, FIELD 123.—*L. mactans* figs., MILLER 292.

Paidisca illudens figs. p. 3 sp. n., *P. marai* U.S.A., GERTSCH & MULAİK Amer. Mus. Nov. 863.

Rhomphaea affinis p. 236 figs. sp. n. E. Africa, LESSERT Rev. suisse Zool. Genève 43.—*R. ornatissima* p. 167 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Spintharus argenteus p. 159 figs. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Theridion submissum p. 10 fig. *Th. credulum* p. 11 fig. spp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 861.—*T. edinburgensis* figs., *T. expulsum* figs. p. 9, *T. cynicum* fig. p. 10, *T. insulsum* figs., *T. realisticum* figs. p. 11, *T. redemptum* figs. p. 13, *T. detractum* fig. p. 14, *T. schullei* fig. p. 15 spp. n. *T. conjunctum* p. 10 nom. n. U.S.A., GERTSCH & MULAİK Amer. Mus. Nov. 863.—*T. cabriolatum* p. 325 figs., BRYANT 66.—*T. sisyprium* p. 161, DYAL 109.

Trigonobothrys aheneus p. 162 figs. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

LINYPHIIDAE.

Aduva gen. n. for type *Tmeticus longisetosus* Emerton p. 39, *A. alata*, *A. flaveola*, *A. longisetosa* figs., BISHOP & CROSBY Proc. Biol. Soc. Washington 49.

Asthenargus helveticus sp. n. Switzerland, Germany p. 317 fig., SCHENKEL Rev. suisse Zool. Genève 43.—*A. inermis* fig., FAGE & SIMON 120.

Centromerus aluicola sp. n. Hannover p. 321 fig., *C. similis*, *C. palleus* Waldenburg p. 319 figs., SCHENKEL Rev. suisse Zool. Genève 43.

Ceraticelus anomalus figs. p. 14, *C. desertus* fig. p. 15 spp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.

Eperigone credula p. 2 figs. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 861.

Erigone personata p. 1 figs. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 861.

Estrandia gen. n. for type *Linyphia nearctica* Banks p. 164 figs. N. America, BLAUVELT Festschrift f. Embrik Strand Riga 2.

Eulaira suspecta p. 1 figs. sp. n. U.S.A., GERTSCH & MULAİK Amer. Mus. Nov. 863.

Floricomus mulaiki p. 4 figs. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 861.—*F. ornatulus* figs. p. 13 sp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.

Frontinella, key to spp., *F. communis* p. 145, *F. coccinea* p. 149 figs. N. America, BLAUVELT 41.

Grammonota nigrifrons figs., *G. suspiciosa* figs. p. 2, *G. confusa* figs. p. 3 spp. n., GERTSCH & MULAİK Amer. Mus. Nov. 863.

Helophora pallescens p. 151, *H. ontariensis* p. 154, *H. insignis* p. 155, *H. reducta* p. 158 figs. N. America, BLAUVELT 41.

Labulla utahana fig., *L. hespera* figs. p. 16, *L. jellisoni* figs. p. 18, spp. n., *L. alticulata* figs. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.

Lepthyphantes kolosvaryi p. 349, *L. falteronensis* p. 350 figs. spp. n. Italy, CAPORIACCO Festschrift f. Embrik Strand Riga 1.—*L. valentinae* sp. n. Kiev p. 75, CHÁRITONOV Scient. Mem. Univ. Perm. 1.—*L. valentinae* Finnland p. 325 fig., SCHENKEL 401.

Linyphia, notes on species p. 94, key to American spp. p. 95, *L. strandia* p. 116 figs. sp. n. *L. clathrata* p. 96, *L. digna* p. 100, *L. maculata* p. 103, *L. litigiosa* p. 107, *L. marginata* p. 110, *L. emphana* p. 118, *L. peltata* p. 119, *L. furta* p. 121, *L. montana* p. 122, *L. triangularis* p. 124, *L. hortensis* p. 125, *L. cayuga* p. 127, *L. pusilla* p. 130, figs. N. America, BLAUVELT Festschrift f. Embrik Strand Riga 2.

Linyphiinae, key to genera, p. 93, BLAUVELT 41.

Lophocarenum alticola p. 322 figs., *L. Pasteuri* p. 323 figs., *L. phyteter* p. 324 figs. spp. n. E. Africa, FAGE & SIMON Mém Mus. Hist. nat. Paris 4.

Macrargus rabeleri sp. n. Lüneburg p. 323 fig., SCHENKEL Rev. suisse Zool. Genève 43.

Microneta llanoensis p. 11 figs. **sp. n.** Texas, GERTSCH & DAVIS Amer. Mus. Nov. **881**.—*M. meridionalis* **sp. n.** U.S.A. p. 47 figs., CROSBY & BISHOP J. N.Y. ent. Soc. **44**.

Pityohyphantes, key to spp. p. 136, *P. phrygiana* p. 137, *P. limatanea* p. 142 figs. N. America, BLAUVELT **41**.

Plaesiocraerus tiberinus **sp. n.** p. 347 fig. Italy, CAPORIACCO Festschrift f. Embrik Strand Riga **1**.

Rhaebothorax elgonensis **sp. n.** E. Africa p. 328 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris **4**.

Sciastes gargopa p. 63 fig., CROSBY & BISHOP **91**.

Sintula roeveri **sp. n.** in cave, Yugoslavia p. 11 pl., KRATOCHVIL Acta Soc. Sci. nat. Moraviae **9 12**.

Smodigoides **gen. n.** p. 52 for type *Tmeticus rectangularis* Emerton figs. *S. retinax* p. 53 fig. **sp. n.**, *S. thoracicus* p. 54 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Soucron **gen. n.** for type *Gongylidium arenarium* Emerton p. 60 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Soudinus **gen. n.** for type *Gongylidium canaliculatum* Emerton p. 59 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Souessa **gen. n.** for type *Erigone spinifera* Cambridge p. 57 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Souessoula **gen. n.** for *Tmeticus parvus* p. 62 N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Sougambus **gen. n.** for type *Tmeticus bostoniensis* Emerton p. 61 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Soudias **gen. n.** p. 56 for type *Tmeticus tibialis* Emerton p. 57 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Soulgas **gen. n.** for type *Tmeticus corticarius* Emerton p. 55 figs. N. America, CROSBY & BISHOP Festschrift f. Embrik Strand Riga **2**.

Stemonyphantes bucculentus p. 159 figs., BLAUVELT **41**.

Tapinocyba conspecta p. 4 figs. **sp. n.** Texas, GERTSCH & DAVIS Amer. Mus. Nov. **881**.—*T. bicarinata* p. 63, CROSBY & BISHOP **91**.

Troglohyphantes diurnus p. 11 figs. **sp. n.** Moravia, KRATOCHVIL Bull. Inst. nat. Agron. Brünn (C) **23**.—*T. lesserti* **sp. n.** p. 13 pl. in cave, Yugoslavia, KRATOCHVIL Acta Soc. Sci. nat. Moraviae **9 12**.

Wubana, key to spp., *W. utahana*, *W. ornata* p. 89 figs., *W. suprema* p. 90 figs., *W. atypica* p. 91 figs., **spp. n.** *W. drassoides*, *W. pacifica* figs. U.S.A., CHAMBERLIN & IVIE Ann. Ent. Soc. Amer. Columbus **29**.

ULOBORIDAE.

Miagrammopes latens p. 326 fig. **sp. n.** Cuba, BRYANT Mem. Soc. cubana Hist. nat. **10**.

Uloborus arizonicus fig. p. 2, *U. segregatus* fig. p. 4 **spp. n.** U.S.A., GERTSCH Amer. Mus. Nov. **852**.—*U. plumipes* p. 172 figs., DYAL **109**.

ARGIOPIDAE.

Araeoncus victorianyanzae **sp. n.** E. Africa p. 326 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris **4**.

Araneus, key to spp. p. 177, *A. fulvus* p. 178 fig., *A. alboquadratus* p. 183, *A. formosus* p. 185 fig. **spp. n.** *A. camilla*, *A. excelsus* p. 179, *A. umbricata* p. 180, *A. laglaizei* p. 181, *A. nympha* p. 182, *A. melanocrania* p. 183, *A. pavidus* p. 184 figs. India, DYAL Bull. Dep. Zool. Panjab Univ. **1**.—*A. redempta* fig. p. 18, *A. illaudata* figs. p. 19 **spp. n.** Texas, GERTSCH & MULAİK Amer. Mus. Nov. **863**.—*A. dromaderia* var. *strandiana* var. **n.** Poland p. 97 fig., KOLOSVARY Folia zool. hydrobiol. Riga **9**.—*A. holzapfeli* p. 246 figs. **sp. n.** E. Africa, LESSERT Rev. suisse Zool. Genève **43**.—*A. albisectus* p. 127 fig. **sp. n.** Chili, MELLO-LEITÃO Rev. chil. Hist. nat. **40**.

Archemorus occidentalis p. 409 figs., *A. toxopeusi* p. 410 fig. **spp. n.** Moluccas, REIMOSER Treubia Buitenzorg **7**.

Argiope pulchella p. 190 fig., DYAL **109**.

Argiopidae, key to genera p. 174, DYAL **109**.

Callitrichia gen. n. [Erigoneae] for type *C. hamifer* sp. n. p. 330 figs.; *C. marakveti* p. 332 figs., *C. kenya* p. 333 figs. spp. n. E. Africa, FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Cyclosa mohini p. 192 sp. n., *C. confraga* p. 191 figs., *C. walkenaerii* p. 192, India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Cyrtarachne finnigani p. 249 figs. sp. n. E. Africa, LESSERT Rev. suisse Zool. Genève 43.

Cyrtophora citricola p. 174, *C. cica-trosus* p. 175, figs., DYAL 109.

Eustala brevispina p. 12 figs., *E. cameronensis* p. 13 fig. spp. n. *E. rosae* figs., Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.—*E. unimaculatum* p. 327 figs., BRYANT 66.

Gea bimucronata p. 125 fig. sp. n. Chili, MELLO-LEITÃO Rev. chil. Hist. nat. 40.

Leucauge reimoseri nom. n. for *L. annulipedella* Strand (part) p. 167, STRAND Folia zool. hydrobiol. Riga 9.—*L. celebesiana*, *L. decorata* China p. 111 pl. text-figs., SHERRIFFS 417.—*L. decorata* p. 187, *L. ventralis* p. 188, *L. venusta* p. 189, figs., DYAL 109.

Mastophora obtusa p. 134 fig. sp. n. Brazil, MELLO-LEITÃO Ann. Acad. Bras. Sci. Rio 8.

Metepeira foxi figs. p. 20 sp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.—*M. minima* fig. p. 10 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Micrathena Reimoseri p. 97 figs. sp. n. Brazil, MELLO-LEITÃO Rev. chil. Hist. nat. 39.

Nemoscolus niger p. 101 fig. sp. n. Libia, CAPORACCO Mem. Soc. ent. ital. Genova 15.

Neoscona eximia fig. p. 19 sp. n. *N. minima* fig., *N. neotheis* fig. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 863.

Neosconella devia fig. p. 16 sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 863.

Nephila (*Dasynephila*) *fenestra venusta* p. 242 fig., *N. (Lionephila) senegalensis keyserlingi* p. 243, LESSERT 241.

Nephilengys cruentata p. 244 fig., LESSERT 241.

Strongyliceus gen. n. [Erigoneae] for type *S. Alluaudi* sp. n. E. Africa p. 320 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Tetragnatha laudativa figs. p. 15 sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 863.—*T. seminola* figs. p. 10 sp. n. Florida, GERTSCH Amer. Mus. Nov. 852.—*T. steckleri* figs. p. 19 sp. n. U.S.A., GERTSCH & IVIE Amer. Mus. Nov. 858.

Theridiosoma gemmosum, mid-euro-pean distribution p. 68 map, BALOGH 22.

Wagneriana grandicornis p. 96 figs. sp. n. Brazil, MELLO-LEITÃO Rev. chil. Hist. nat. 39.

Wixia incerta p. 328 figs., *W. nigro-ventris* p. 329 fig. spp. n. Cuba, BRYANT Mem. Soc. cubana Hist. nat. 10.

Zilla nawazi p. 186 figs. sp. n. India DYAL Bull. Dep. Zool. Panjab Univ. 1.

MIMETIDAE.

Gelanor muliebris p. 194 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

ZOROPSIDAE.

Zorocrates alternatus p. 14 figs., *Z. isolatus* p. 16 spp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

ACANTHOCTENIDAE.

Acanthoctenus, keys to spp. p. 182, *A. exilis* p. 198 figs. sp. n., *A. marshii* figs., *A. omega* figs., *A. lineatus* figs. *A. spinulosus* figs., *A. spinigerus* fig., *A. gaujoni*, *A. spinipes*, *A. andicola*, *A. saraensis*, *A. impar*, *A. ridleyi* fig., *A. sericeus* fig., *A. abauratus*, *A. dumicola*, *A. plebejus*, *A. paraguayensis*, *A. bahiensis*, *A. maculatus* S. America, MELLO-LEITÃO Ann. Acad. Bras. Sci. Rio 8.

CTENIDAE.

Acantheinae, key to genera p. 22, MELLO-LEITÃO 283.

Argotheninae, key to genera p. 26, MELLO-LEITÃO 283.

Cteninae, key to genera, MELLO-LEITÃO 283.

Ctenus, key to spp. males p. 2, females p. 3, *C. binotatus* p. 6 fig., *C. griseolus* p. 7 figs., *C. gynheraldicus* p. 8 fig., *C. iophorus* p. 9 fig., *C. jamaicensis* p. 9 fig., *C. originalis* p. 11 fig., *C. taperae* p.

13 figs., *C. xerophilus* p. 14 fig. **spp. n.**, *C. amphora* p. 6 fig., *C. brevipes* p. 7 fig., *C. crulsi* p. 7 fig., *C. cuminaensis* p. 7 fig., *C. longipes* p. 10 figs., *C. medius* p. 10 fig., *C. minusculus* p. 11 figs., *C. ocelliventer* p. 11 figs., *C. ornatus* p. 12 fig., *C. sanguineus* p. 12 fig., *C. vehemens* p. 13 fig., *C. velox* p. 14 figs. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Cupiennius diplocellatus **sp. n.** p. 21 key to spp. p. 600 Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Enoploctenus, key to spp. p. 22, *E. strandi* p. 24 figs. **sp. n.**, *E. cyclothorax* p. 23 comb. **n.**, *E. zonatulus* p. 24 fig. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Horiocentrus vittatus **sp. n.** p. 27 fig. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Isoctenus, key to spp. p. 18, *I. eupalaestrus* p. 18 figs., *I. Strand* p. 20 fig. **spp. n.**, *I. janczevici* p. 20 fig. **comb. n.**, *I. foliiferus* p. 19 fig. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Nothroctenus bahiensis **sp. n.** p. 25 figs. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Odo, key to spp. p. 28, *O. obscurus* p. 28 figs., *O. serrimanus* p. 29 fig. **spp. n.**, *O. pulcher*, *O. similis*, *O. blumenauensis* p. 28 figs. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

Phoneutria, key to spp. p. 15, *P. Andrews* **comb. n.** p. 15 fig., *P. nigri-venter* **comb. n.** p. 16 figs., *P. fera* p. 16 figs., *P. ochracea* p. 17 fig., *P. rufibarbis* p. 18 fig. Brazil, MELLO-LEITÃO Festschrift f. Embrik Strand Riga 1.

DRASSIDAE.

Aphantaulax cincta var. p. 218 fig., LESSERT 241.

Callilepis altitudinis fig. p. 14, *C. munda* figs. p. 16 **spp. n.** U.S.A., CHAMBERLIN Amer. Mus. Nov. 841.

Cesonia sincera figs. p. 10 **sp. n.** Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.

Drassodes hispanus var. *lesserti* var. **n.** Switzerland p. 315 fig., SCHENKEL Rev. suisse Zool. Genève 43.

Drassyllus adocetus fig. p. 21, *D. conformans* fig., *D. amissus* fig. p. 22, *D. fratrellus* figs. p. 23, *D. gertschi* figs., *D. lutz* fig., p. 25, *D. monicus* fig., *D. mormon* figs. p. 27, *D. ostegae* figs., *D. saphes* fig. p. 29, *D. viduus* fig. p. 30 **spp. n.**, *D. frigidus* figs. p. 24, U.S.A., CHAMBERLIN Amer. Mus. Nov. 841.—*D. dentelifer* figs., *D. devevus* fig. p. 13, *D. fractus* fig., *D. mephisto* figs. p. 14, *D. abdalbus* figs., *D. finium* figs. p. 15, *D. gynosphes* figs., *D. prosaphes* figs. p. 16, *D. texamans* fig. **spp. n.** U.S.A., CHAMBERLIN Amer. Mus. Nov. 853.

Gnaphosa mulaiki p. 6 fig. **sp. n.** Texas, CHAMBERLIN Amer. Mus. Nov. 853.

Haplodrassus uncifer figs. p. 18 **sp. n.** U.S.A., CHAMBERLIN Amer. Mus. Nov. 841.

Herpyllus convallis figs. p. 2 **sp. n.** U.S.A., CHAMBERLIN Amer. Mus. Nov. 841.—*H. bryophilus* p. 1 fig., *H. itamus* fig., *H. cepens* fig., *H. regnans* fig. p. 2, *H. reservatus* p. 3 fig. **spp. n.**, *H. emertoni* fig. North America, CHAMBERLIN Amer. Mus. Nov. 853.

Liodrassus **gen. n.** for type *L. arizonicus* **sp. n.** p. 4 figs., *L. florissantus* figs. p. 5, *L. utus* fig. p. 7 **spp. n.** U.S.A., CHAMBERLIN Amer. Mus. Nov. 841.—*L. deceptus* figs. p. 12 **sp. n.** Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.—*L. floridicolens* p. 3 fig. **sp. n.** Florida, CHAMBERLIN Amer. Mus. Nov. 853.

Neoanagraphis **gen. n.** [Drassodinae] for type *N. chamberlini* **sp. n.** p. 11 fig. New Mexico, GERTSCH & MULAİK Amer. Mus. Nov. 851.

Nodocion moronius p. 5 fig., *N. zelo- toides* p. 6 fig., **spp. n.** U.S.A., CHAMBERLIN Amer. Mus. Nov. 853.—*N. agilis* **sp. n.** Bryant **nom. nud.** United States p. 69, JONES Field & Lab. Dallas 4.—*N. barbaranus* fig., CHAMBERLIN 75.

Orodassus durranti fig. **sp. n.**, *O. coloradensis* fig. p. 7 U.S.A., CHAMBERLIN Amer. Mus. Nov. 853.

Platyoides lawrencei p. 217 figs. **sp. n.** E. Africa, LESSERT Rev. suisse Zool. Genève 43.

Poecilochroa abjecta figs. p. 7 **sp. n.** Arizona, CHAMBERLIN Amer. Mus. Nov. 841.

Pseudodrassus scortecii sp. n. Cirenaica p. 73 fig., CAPORACCO Atti. Soc. ital. Milano 75.

Pterotricha Strandi sp. n. p. 37 figs. Transcaspien, SPASSKY Festschrift f. Embrik Strand Riga 1.

Sergiolus bebius fig., *S. clarus* figs., p. 9, spp. n., *S. tribolus*, *S. decipiens* figs. U.S.A., CHAMBERLIN Amer. Mus. Nov. 841.—*S. amphilogus* fig., *S. bellior* fig. p. 4, *S. segregatus* figs. p. 5 spp. n. Texas, CHAMBERLIN Amer. Mus. Nov. 853.

Zelotes minimus p. 114 fig. sp. n., Libya, CAPORACCO Mem. Soc. ent. ital. Genova 15.—*Z. anthereus* p. 8 figs., *Z. lymnophilus* fig., *Z. monodens* fig. p. 9, *Z. nannodes* fig., *Z. pananus* fig. p. 10, *Z. petrophilus* figs., *Z. shoshoneus* figs. p. 11, *Z. cymbiolus* figs. p. 12 spp. n. U.S.A., CHAMBERLIN Amer. Mus. Nov. 853.—*Z. longestylus* sp. n. Cirenaica p. 75 figs., CAPORACCO Atti. Soc. ital. Milano 75.—*Z. solitaria* sp. n. Kalahari p. 148 fig., LAWRENCE Ann. Transv. Mus. 17.—*Z. omissus* fig. p. 19 sp. n. California, CHAMBERLIN Amer. Mus. Nov. 841.—*Z. atrocaeruleus*, DENIS 99.

PRODIDOMIDAE.

Prodidomus maximus p. 215 fig. sp. n. E. Africa, LESSERT Rev. suisse Zool. Genève 43.

Zimiris indica p. 197 figs., DYAL 109.

SPARASSIDAE.

Eusparassus impudicus p. 205, *E. flavidus* p. 206 fig., DYAL 109.

Heteropoda amphora, *H. grahami* p. 125 figs., *H. virgata* p. 127 fig. spp. n. China, FOX J. Wash. Acad. Sci. 26.—*H. kandiana* p. 208, *H. venatoria* p. 209, DYAL 109.—*H. venatoria* China p. 110 pl., SHERRIFFS 417.

Micrommata longipes p. 271 figs., LESSERT 241.

Olios aristophanei p. 269 fig., *O. triarmatus* p. 268 fig., spp. n. *O. correboni choupangensis* p. 267 fig. subsp. n. E. Africa, LESSERT Rev. suisse Zool. Genève 43.—*O. punjabensis* p. 208 figs. sp. n. *O. lutescens* fig., *O. fugax* p. 207 India, DYAL Bull. Dep. zool. Panjab Univ. 1.

Palystes flavidus p. 210, DYAL 109.

Sparassidae, key to genera p. 204, DYAL 109.

Spariolenus tigris p. 211, DYAL 109.

Thelcticopis telonotata p. 212 figs., *T. ancorum* p. 213 fig. spp. n. *T. nalandicus* p. 213 India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

SELENOPIDAE.

Selenops lesnei p. 265 figs. sp. n. *S. radiatus peryensis* p. 263 figs. subsp. n., LESSERT Rev. suisse Zool. Genève 43.

THOMISIDAE.

Dixa terrena p. 199 fig. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Paramystaria variabilis p. 253, LESSERT 241.

Parastrophius vishwai p. 203 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Philodromus cufrae p. 104 figs. sp. n. Libya, CAPORACCO Mem. Soc. ent. ital. Genova 15.

Platythomisus deserticolus sp. n. Kalahari p. 154 fig., LAWRENCE Ann. Transv. Mus. 17.

Runcinia depressa p. 259 fig., LESSERT 241.

Senoculifer gen. n. p. 238 for type *S. dentibulbis* sp. n. New Guinea p. 239 figs., *S. simplicibulbis* New Guinea, Java p. 241 figs., *S. convulva* p. 242 fig. New Guinea spp. n., BALOGH Zool. Anz. Leipzig 113.

Simorcus cotti p. 251 figs. sp. n. E. Africa, LESSERT Rev. suisse Zool. Genève 43.

Synaema bragantinum p. 260 figs., LESSERT 241.

Terrocanus viridus p. 200 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Thomisidae, key to genera p. 198, DYAL 109.

Thomisops pupa p. 254, LESSERT 241.

Thomisus kalaharinus sp. n. Kalahari p. 153, LAWRENCE Ann. Transv. Mus. 17.—*T. lesnei* p. 256 fig. sp. n. *T. spinifer* p. 255, *T. malevolus* fig. p. 258, E. Africa, LESSERT Rev. suisse Zool. Genève 43.—*T. tuberculata* p. 202 fig. sp. n. *T. pugilis* p. 201, *T. albens* p. 202, India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Tmarus paulensis p. 126 fig. sp. n. Brazil, PIZA Rev. Biol. Hyg. S. Paulo 6.—*T. unicus* p. 14 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Xysticus barbatus p. 115 sp. n.—*X. peccans* p. 103 Libya, CAPORACCO Mem. Soc. ent. ital. Genova 15.—*X. furtivus* p. 15 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.—*X. sabulosus*, *X. Embriki* KOLOSVÁRY 224.

PHILODROMIDAE.

Pseudopsellonus gen. n. p. 244 for type *P. papuanus* sp. n. New Guinea p. 245 fig., BALOGH Zool. Anz. Leipzig 113.

CLUBIONIDAE.

Andromma bouvieri p. 83 figs. sp. n., FAGE Bouvier Livre Jubilaire Paris 1936.—*A. raffrayi inhacorensis* p. 220 figs. subsp. n. E. Africa, LESSERT Rev. Suisse Zool. 43.

Anyphaena diversa p. 330 fig. sp. n. Cuba, BRYANT Mem. Soc. cubana Hist. nat. 10.

Castanilla gen. n. [*Micariinae*] p. 82, *C. quinque maculata* sp. n. Cirenaica p. 83 fig., CAPORACCO Atti Soc. ital. Milano 75.—*C. marchesii* p. 110 fig. Libya, CAPORACCO Mem. Soc. ent. ital. Genova 15.

Chemmis bruneri p. 311 fig. sp. n. Cuba, BRYANT Mem. Soc. cubana Hist. nat. 10.—*C. steckleri* p. 17 sp. n. U.S.A., GERTSCH Amer. Mus. Nov. 852.

Chiracanthium auenati p. 118 fig. sp. n. Libya, CAPORACCO Mem. Soc. ent. ital. Genova 15.—*C. vansonii* sp. n. Kalahari p. 155 fig., LAWRENCE Ann. Transv. Mus. 17.

Clubiona adjacens p. 19 fig. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.—*C. Andreinii* sp. n. p. 343 fig. Italy, CAPORACCO Festschrift f. Embrik Strand Riga 1.—*C. revilliodi* p. 273 figs. sp. n. E. Africa, LESSERT Rev. suisse zool. Genève 43.—*C. transversa* sp. n. Bryant nom. nud. United States p. 69, JONES Field & Lab. Dallas 4.

Drassylochemmis gen. n. [*Liocraniinae*] for type *D. captiosus* p. 17 fig. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

Graptartia granulosa p. 276 fig., LESSERT 241.

Lansus properus p. 214 figs. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Liocranum bisaticum p. 216, DYAL 109.

Micaria swansoni p. 21 fig. sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 863.—*M. similis strandi* subsp. n. Poland p. 96 fig., KOLOSVÁRY Folia zool. hydrobiol. Riga 9.—*M. vinnula* p. 18 figs. sp. n. Texas, GERTSCH & DAVIS Amer. Mus. Nov. 881.

Phrurolithus leviculus figs. p. 18 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Scortecchia gen. n. [*Corinninae*] p. 84, *S. termitarum* sp. n. Cirenaica p. 84, CAPORACCO Atti Soc. ital. Milano 75.

Strotarchus alboater p. 215, *S. vittatus* p. 216 fig., spp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

ATTIDAE.

Akela fulva p. 235 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Attidae, key to genera p. 218, DYAL 109.

Attulus tschoni p. 105 figs. sp. n. Libya, CAPORACCO Mem. Soc. ent. ital. Genova 15.

Bellota fascialis p. 223 fig., *B. livida* p. 224 figs. spp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Bredana gen. n. [*Marpissinae*] for type *B. complicata* sp. n. p. 20 figs., *B. alternata* fig. p. 21 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Carrhotus affinis p. 108 figs. CAPORACCO 73.

Cheliferoides longimanus p. 22 fig. sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Chrysilla albens p. 232 fig. sp. n., *C. versicolor* p. 233 India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Corythalia delicatula fig. p. 14 sp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.

Cosmophasis fazanica sp. n. Cirenaica p. 81, CAPORACCO Atti. Soc. ital. Milano 75.—*C. umbratica* p. 234, DYAL 109.

Cyllobelus tristellatus p. 289 fig., LESSERT 241.

Dendryphantes niveornatus p. 127 figs. sp. n. Chili, MELLO-LEITÃO Rev. chil. Hist. nat. 40.

Evophrys, key to spp. p. 235, *E. auricolor* p. 236, *E. rubroclypea*, *E. rufa* p. 237 spp. n. *E. trifasciata* p. 236 fig. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Flacilla purpurea p. 238 sp. n. India DYAL Bull. Dep. Zool. Panjab Univ. 1.

Gophoa splendida p. 231 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Habrocestum veratti p. 107 figs. Libya, CAPORIACCO Mem. Soc. ent. ital. Genova 15.—*H.*, key to spp., *H. algericum*, *H. coronatum* p. 228, *H. rubroclypeatum* p. 229, DYAL 109.—*H.* sp. Cirenaica p. 80, CAPORIACCO 71.

Holcolaetis vidua p. 222, DYAL 109.

Hytia fornicis p. 239 fig. sp. n. India DYAL Bull. Dep. Zool. Panjab Univ. 1.—*H. grata* figs. p. 25 sp. n. U.S.A., GERTSCH Amer. Mus. Nov. 852.—*H. gridellii* sp. n. Italy p. 119 fig., CAPORIACCO Atti Mus. Stor. nat. Trieste 12.

Menemerus lesnei p. 290 figs. sp. n. E. Africa, LESSERT Rev. suisse Zool. Genève 43.—*M. raji* p. 240 fig. sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Metaphidippus furcifera p. 26 fig. sp. n. Arizona, GERTSCH Amer. Mus. Nov. 852.

Mithion memorabilis p. 106 figs., CAPORIACCO 73.

Myrmarachne, key to spp., *M. laetus* p. 220 figs., *M. providens*, *M. ramunni* p. 221, DYAL 109.

Neonella gen. n. [Sitticinae] p. 23, for type *N. vinnula* sp. n. figs. p. 24 Texas, GERTSCH Amer. Mus. Nov. 852.

Oningis lahorensis p. 227 sp. n. India DYAL Bull. Dep. Zool. Panjab Univ. 1.

Peckhamia seminola p. 18 figs. sp. n. Florida, GERTSCH Amer. Mus. Nov. 852.

Pellenes tuberculatus fig. p. 14, *P. oothae* fig., *P. rutherfordi* p. 16, *P. moratus* figs. p. 17, *P. forticulus* figs. p. 18 spp. n. Texas, GERTSCH & MULAİK Amer. Mus. Nov. 851.

Plexippus paykulli p. 225 figs., DYAL 109.

Pystira versicolor p. 226 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Rhetenor texanus figs. p. 25 sp. n. Texas, GERTSCH Amer. Mus. Nov. 852.

Roeweriella gen. n. p. 5 for *R. balcanica* sp. n. p. 8 figs. Moravia, KRATOCHVIL Bull. Inst. nat. agron. Brünn (C) 23.

Salticus austinensis p. 20 nom. n. for *S. albocinctus* Peckham, GERTSCH Amer. Mus. Nov. 852.

Sitticus absolutus figs. p. 19, *S. callidus* figs., *S. floridanus* fig. p. 20, *S. welchi* fig. p. 21 spp. n. U.S.A., GERTSCH & MULAİK Amer. Mus. Nov. 851.—*S. auricomus* sp. n. Bryant nom. nud. United States p. 70, JONES Field & Lab. Dallas 4.—*S. niger* p. 241 sp. n. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Stenaelurillus giovae sp. n. Cirenaica p. 79, CAPORIACCO Atti Soc. ital. Milano 75.

Thiania aura p. 230 fig. sp. n., *T. demissa* p. 230 fig. India, DYAL Bull. Dep. Zool. Panjab Univ. 1.

Valloa bianoriformis p. 291 figs., LESSERT 241.

SOLIFUGAE.

Galeodopsis Strandi sp. n. p. 47 fig. Central Asia, BIRULA Festschrift f. Embrik Strand Riga 1.

Rhagodes kurdistanicus sp. n. p. 50 Kurdistan, BIRULA Festschrift f. Embrik Strand Riga 1.

Solpuga Roeweri sp. n. E. Africa p. 307 figs., FAGE & SIMON Mém. Mus. Hist. nat. Paris 4.

Zeriassa Ruspolii fig., FAGE & SIMON 120.

PSEUDOSCORPIONES.

Faunal lists.—Cavernicolous, WOLF 549; Italy, CAPORIACCO 72.

Allowithius crassus p. 127 fig. *A. litoreus* p. 128 fig. spp. n., *A. somalicus* major subsp. n. p. 129 fig. East Africa, BEIER Mission Scientifique de l'Omo Paris 2.

Apocheiridium caribicum p. 446 fig. sp. n. W. Indies, BEIER Zool. Jahrb. Jena (Syst.) 67.

Chelifer masi sp. n. Spain p. 31 fig., NAVAS ARX. Inst. Cienc. Barcelona 8.

Chernes pallidus sp. n. p. 86 fig. Germany, BEIER Zool. Anz. Leipzig 114.

Dactylochelifer gansuensis sp. n. China p. 3 figs., REDKORTZEV Ark. Zool. Stockholm 27 A20.

Dendrochernes, notes on genus p. 144, VACHON 491.

Dolichowithius abnormis p. 446 fig. sp. n. Venezuela, BEIER Zool. Jahrb. Jena 67.

Epaphochernes, notes on genus p. 144, *E. bouvieri* sp. n. p. 141 figs., VACHON Bull. Soc. zool. Fr. 61.

Garypus bonairensis p. 444 fig. sp. n. W. Indies, BEIER Zool. Jahrb. Jena (Syst.) 67.—*G. lusitanus* sp. n. Portugal p. 32 fig., NAVAS Arx. Inst. Cienc. Barcelona 8.

Minniza rollei p. 119 figs. sp. n. Libya CAPORACCO Mem. Soc. ent. ital. Genova 15.

Neobisium (Blothrux) vulpinum sp. n. p. 85 fig. Germany, BEIER Zool. Anz. Leipzig 114.

Nudochernes gen. n. [near *Pselaphochernes* and *Allochernes*] p. 122 for type *N. montanus* sp. n. p. 124 fig., *N. nidiicola* p. 122 fig., *N. lucifugus* p. 125 fig., *N. robustus* p. 126 fig. spp. n. East Africa, BEIER Mission Scientifique de l'Omo Paris 2.

Obisium barrosi sp. n. Portugal p. 33 fig., NAVAS Arx. Inst. Cienc. Barcelona 8.

Pachyolpium arubense p. 443 fig. sp. n. W. Indies, BEIER Zool. Jahrb. Jena (Syst.) 67.

Titanatemnus chappuisi p. 119 fig. *T. montanus* p. 120 fig. spp. n. East Africa, BEIER Mission Scientifique de l'Omo Paris 2.—*T. monardi* Angola p. 510 fig., *T. alluardi* East Africa p. 513 fig. spp. n., VACHON Bull. Soc. zool. Fr. 60.

Tyrannochthonius brevimanus sp. n. East Africa p. 118 fig., BEIER Mission Scientifique de l'Omo Paris 2.

Verrucadithella jeanneli sp. n. East Africa p. 117 fig., BEIER Mission Scientifique de l'Omo Paris 2.

OPILIONES.

Faunal lists.—Brazil, MELLO-LEITÃO 282; Catalonia, MELLO-LEITÃO 287; Cavernicolous, WOLF 549; Czechoslovakia, KRATOCHVIL 228; Italy, CAPORACCO 72; Outer Hebrides,

CRICHTON & WATERSTON 90; Whitby District [England], BRITTEN & FALCONER 52.

PHALANGODIDAE.

Brigestus gen. n. [Tricommatinae] for *B. robustus* sp. n. p. 46 figs. and *B. granulatus* p. 47 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Bukowina gen. n. [Tricommatinae] for *B. monticola* sp. n. *Bukowina* p. 51 figs., ROEWER Arch. zool. exp. gén. Paris 78.

Holoscotolemon unicolor pp. 21, 52, figs., ROEWER 382.

Laponcea gen. n. [Podoctinae] for *L. cippata* sp. n. Mauritius p. 339 fig., ROEWER Veröff. Deuts. Kolon.-u.-Uebersee Mus. Bremen 1.

Lucassa gen. n. [Tricommatinae] for *L. ferruginea* sp. n. Austria p. 48 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Metascotolemon jaqueti pp. 19, 50, ROEWER 382.

Querilhacia gen. n. [Phalangodinae] for *Scotolemon querilhaci* Lucas p. 12, 38 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Phalangodinae, key to genera p. 91, MELLO-LEITÃO 282; key to European genera p. 27, ROEWER 382.

Ptychosoma vitellinum p. 16, 36 figs., ROEWER 382.

Scotolemon, key to spp., *S. reclinatus* sp. n. Spain p. 35 figs., *S. lespesi* p. 11, 28, figs., *S. lucasi* pp. 13, 30, figs., *S. terricola* pp. 13, 32, figs., *S. doriae* pp. 15, 33, figs. Europe, ROEWER Arch. Zool. exp. gén. Paris 78.

Scotolemoniscus gen. n. [Phalangodinae] p. 42 for *S. austriacus* p. 42 figs. *S. styriacus* p. 43 figs. spp. n. C. Europe, ROEWER Arch. Zool. exp. gén. Paris 78.

Scotolemons gen. n. [Phalangodinae] for *S. dacicus* sp. n. Hungary p. 40 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Tegestria gen. n. for *T. johorea* sp. n. p. 74 figs. Malaya, ROEWER Bull. Raffles Mus. Singapore 12.

Tithaeus rudispina p. 73 figs. sp. n. Malaya, ROEWER Bull. Raffles Mus. Singapore 12.

Tricommatainae, key to genera, MELLO-LEITÃO 282.

Tryssetus gen. n. [*Podoctinae*] for *T. spinarmatus* sp. n. Mauritius p. 338 fig., ROEWER Veröff. Deuts. Kolon.-u.-Uebersee Mus. Bremen 1.

TRAVUNIIDAE.

Key to European genera, ROEWER 382.

Abasola sarea sp. n. Pyrenees p. 74 figs., *A. troglodytes* p. 72 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Arbasus gen. n. for *Phalangodes caecus* Simon p. 71 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Dinariai vjetrenicae p. 75 figs., ROEWER 382.

Hadziana gen. n. for *H. postumicola* sp. n. Carniola p. 69 figs., ROEWER Arch. Zool. exp. gén. Paris 78.

Kratochviliola gen. n., key to spp., p. 64, *K. parolinia* p. 67 figs., *K. cavernicola* p. 68 figs. spp. n., *K. navarica* p. 64 figs., Europe, ROEWER Arch. Zool exp. gén. Paris 78.

Peltonychia gen. n. p. 55, key to spp., p. 56, *P. tenuis* p. 59 figs., *P. gabria* p. 60 figs. spp. n., *P. leprieuri* pp. 12, 56, figs. *P. helvetica* pp. 21, 57, figs., *P. clavigera* pp. 13, 61 figs., *P. piochardi* pp. 17, 63, figs. Europe, ROEWER Arch. Zool. exp. gén. Paris 78.

Travunia anophthalma p. 77 figs., ROEWER 382.

ASSAMIIDAE

Aburista gen. n. [*Aburistinae*], *A. termitarum* sp. n. Gold Coast p. 9 fig., ROEWER Veröff. Deuts. Kolon.-u. Uebersee-Mus. Bremen 1.

Aburistinae subfam. n. p. 8, ROEWER Veröff. Deuts. Kolon.-u. Uebersee-Mus. Bremen 1.

Aburitus gen. n. [*Selencinae*], *A. inermis* sp. n. Gold Coast p. 114 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Acaca gen. n. [*Acacinae*] p. 139, *A. albatra* sp. n. Abyssinia p. 140 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Acacinae subfam. n. [*Assamiidae*] p. 139, ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Adamanna gen. n. [*Hypoxestinae*] p. 31, *A. maculatipes* sp. n. Cameroons p. 32 fig., ROEWER Veröff. Deuts. Kolon.-u. Uebersee-Mus. Bremen 1.

Anaimalus gibbulus India p. 86 fig., ROEWER 379.

Anassamia gen. n. [*Assamiinae*] p. 36 Further India, ROEWER Veröff. Deuts. Kolon.-u. Uebersee Mus. Bremen 1.

Argobba gen. n. [*Harsadiinae*], *A. nigrescens* sp. n. Abyssinia p. 44 fig., ROEWER Veröff. Deuts. Kolon.-u. Uebersee Mus. Bremen 1.

Assamiinae, key to genera p. 32, ROEWER 379.

Attakattius spinifrons India p. 150 fig., ROEWER 379.

Balnissa gen. n. [*Trionyxellinae*], *B. parva* sp. n. India p. 143 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Bibundina gen. n. [*Erecinae*] p. 70, *B. pectinata* sp. n. Cameroons p. 71 fig., ROEWER Veröff. Deuts. Kolon.-u. Uebersee-Mus. Bremen 1.

Bindercola gen. n. [*Polycoryphinae*], *B. albatra* sp. n. Cameroons p. 94 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Binderella gen. n. [*Polycoryphinae*], *B. bistriata* sp. n. Cameroons p. 95 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Binderia gen. n. [*Tsadseinae*] p. 119, *B. spinarmata* sp. n. Cameroons p. 120 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Bolama spinosa Portuguese Guinea p. 118 fig., ROEWER 379.

Bryisma gen. n. [*Trionyxellinae*], *B. atra* sp. n. India p. 144 fig., ROEWER Veröff. Deut. Kolon.-u. Uebersee-Mus. Bremen 1.

Bueana ehippiata Cameroons p. 94 fig., ROEWER 379.

Buembra gen. n. [*Erecinae*], *B. filipes* sp. n. Belgian Congo p. 74 fig., ROEWER Veröff. Deuts. Kolon.-u. Uebersee-Mus. Bremen 1.

Bulobana gen. n. [*Erecinae*] p. 61, *B. octopunctata* sp. n. Belgian Congo p. 62 fig., ROEWER Veröff. Deuts. Kolon.-u. Uebersee-Mus. Bremen 1.

Calloristus gen. n. [*Trionyxe*llinae], *C. granipes* sp. n. India p. 142 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Carduella gen. n. [*Erecinae*], *C. atar* (Soerensen) p. 63 fig. Australia, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Cassinia macrochelis Portuguese Guinea p. 116 fig., ROEWER 379.

Cerea, key to species, *C. feae* Fernando Po p. 78 fig., ROEWER 379.

Cereatta gen. n. [*Erecinae*], key to species p. 78, *C. elegans* sp. n. Cameroons p. 79 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Cereipes gen. n. [*Erecinae*], *C. angusta* (Roewer 1912, sub *Cerea*) p. 80, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Cereoides gen. n. [*Erecinae*], *C. nebulosa* (Soerensen 1897, sub. *Cerea*) Cameroons p. 79, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Congolla gen. n. [*Sidaminae*], *C. hispidipalpus* sp. n. Belgian Congo p. 102 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Congonella gen. n. [*Hypoxestinae*], *C. frontalis* sp. n. Belgian Congo p. 20 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Congonia gen. n. [*Maruinae*], *C. spinifrons* sp. n. Belgian Congo p. 106 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Cryptopygoplus africanus East Africa p. 67 fig., ROEWER 379.

Dampetrus, key to species p. 123, *D. australis*, *D. fuscus* p. 124 figs. Australia, ROEWER 379.

Dampretinae p. 120, key to genera p. 121, ROEWER 379.

Dawnabius gen. n. [*Assamiinae*], *D. pectinatus* Burma p. 35, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Djemia gen. n. [*Erecinae*] p. 64, *D. cooperi* sp. n. Abyssinia p. 65 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Dodabetta conigera India p. 64 fig., ROEWER 379.

Doloressus gen. n. [*Hypoxestinae*], *D. cippatus* sp. n. East Africa p. 21 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Drugius parvus Nilgiris p. 152 fig., ROEWER 379.

Dulitellus gen. n. [*Trionyxe*llinae] p. 146, *D. maculatus* sp. n. Borneo p. 147 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Dunkeriana, key to species p. 126, *D. borneensis* sp. n. Borneo p. 127 fig., ROEWER Veröff. Duet. Kolon-u. Uebersee-Mus. Bremen 1.

Edeala palpiplus Cameroons p. 100 fig., ROEWER 379.

Ereca, key to species p. 49, ROEWER 379.

Erecella gen. n. [*Erecinae*] p. 53, *E. lutea*, Uganda, *E. flava* East Africa p. 54 figs. spp. n., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Erecinae subfam. n. [*Assamiidae*], key to genera p. 45, ROEWER Veröff. Deuts. Kolon-u. Uebersee Mus. Bremen 1.

Erecula gen. n. [*Erecinae*], *E. pachypes* sp. n. Belgian Congo p. 53 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Eubaeorix graveleyi Burma p. 72 fig., ROEWER 379.

Eudampetrus gen. n. [*Dampretinae*], *E. geniculatus* (Soerensen 1886, sub. *Dampetrus*) Australia p. 124, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Eupodaucheninae subfam. n. [*Assamiidae*] p. 106, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Eupygoplus birmanicus sp. n. Burma p. 15 fig., ROEWER Ann. Mus. Stor. nat. Genova 59.—*E.*, key to species, *E. gracilis* p. 69 fig. India, ROEWER 379.

Euseleuca feae French Congo p. 113 fig., ROEWER 379.

Gapotus gen. n. [*Erecinae*], *G. frontalis* sp. n. Malacca p. 76 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Gomezzyta gen. n. [*Assamiinae*], *G. africana* sp. n. Abyssinia p. 42 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Gulufia gen. n. [*Polycoryphinae*], *G. frontalis* sp. n. Abyssinia p. 91 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Harpeuna gen. n. [*Polycoryphinae*], *H. denticulata* sp. n. India p. 90 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Harsadia gen. n. [*Harsadiinae*], *H. spinosa* sp. n. Abyssinia p. 43 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Harsadiinae subfam. n. [*Assamiidae*], key to genera p. 43, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Henriquea spinigera Principé Is. p. 92 fig., ROEWER 379.

Humbea gen. n. [*Selencinae*], *H. bimaculata* sp. n. Angola p. 115 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Hypoxestinae subfam. n., key to genera p. 10, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Hypoxestinus frontalis sp. n. Cameroons p. 16 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Irnia gen. n. [*Erecinae*], *I. scabra* sp. n. Abyssinia p. 68 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Izea armata sp. n. Cameroons p. 119 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Jaundea gen. n. [*Selencinae*] p. 113, *J. spinulata* (Roewer 1912, sub. *Selenca*) Cameroons p. 114, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Kavalaica atroscutata India p. 89 fig., ROEWER 379.

Kodaika exheri India p. 83 fig., ROEWER 379.

Kukkala trispinifrons Further India, p. 55 fig., ROEWER 379.

Lawrenciola gen. n. [*Erecinae*], key to species p. 65, *E. damarana* (Lawrence), Southwest Africa, *L. rhodesiana* (Lawrence), Rhodesia p. 66 figs., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Maccabeesa gen. n. [*Erecinae*] for *M. lawrencei* sp. n. Mauritius p. 340 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Macrobunus, key to species, *M. singularis* Malacca and Assam p. 73 fig., ROEWER 379.

Mandaria gen. n. [*Erecinae*] p. 59, *M. caeca* sp. n. Cameroons p. 59 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Marua gen. n. [*Maruinae*], key to species p. 104, *M. spinosa* Cameroons. *M. schenkeli* Belgian Congo p. 105 figs. spp. n., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Maruinae subfam. n. [*Assamiidae*], key to genera p. 104, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Mecutina gen. n. [*Hypoxestinae*] p. 21, *M. filipes* sp. n. Mozambique p. 22 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Merucola gen. n. [*Erecinae*], *M. granulata* sp. n. East Africa p. 62 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Metahyamus, key to species p. 131, *M. bicolor* sp. n. Borneo p. 132 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Metanothippus bicolor New Guinea p. 138 fig., ROEWER 379.

Metassamia furcidenis sp. n. Assam p. 39 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Metereca, key to species p. 51, *M. aspersa* Uganda, *M. papillata* East Africa p. 52 figs. spp. n., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Mormuga uncifrons India p. 87 fig., ROEWER 379.

Mudumalus partialis India p. 87 fig., ROEWER 379.

Mysorea gen. n. [*Mysoreinae*], *M. brevipes* sp. n. India p. 148 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Mysoreinae subfam. n. [*Assamiidae*] key to genera p. 148, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Namutonion scabra Southwest Africa p. 142 fig., ROEWER 379.

Neassamia gen. n. [*Assamiinae*] p. 35 *N. siamensis* sp. n. Siam p. 36 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Neopygoplus jacobsoni Sumatra p. 73 fig., ROEWER 379.

Nothippus, key to species p. 132, *N. tigrinus* sp. n. Malacca p. 133 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Opcochinae subfam. n. [Assamiidae] key to genera p. 151, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Opcochina p. 152, key to species, *O. gravelyni* Cochín, *O. carli* India p. 153 figs., ROEWER 379.

Oppalnia brevipes India p. 85 fig., ROEWER 379.

Orsimonia gen. n. [Sidaminae], *O. filipes* sp. n. Abyssinia p. 101 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Othmar gen. n. [Sidaminae], *O. gracillimus* sp. n. Abyssinia p. 99 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Pahangius gen. n. [Dampretinae], *P. fasciatus* sp. n. Malacca p. 137 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Palmanella tigrina São Thomé Island p. 92 fig., ROEWER 379.

Paradampetrus leopoldi Sumatra p. 138 fig., ROEWER 379.

Paraselenca marginata sp. n. Cameroons p. 110 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Parassamia gen. n. [Assamiinae], *P. sexdentata* p. 41 Further India, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Pashokia laeviscutum India p. 89 fig., ROEWER 379.—*P. rufa* sp. n. Burma p. 16, ROEWER Ann. Mus. Stor. nat. Genova 59.

Panchganius gen. n. [Polycoryphinae], *P. blatteri* sp. n. India p. 86 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Pechota gen. n. [Assamiinae], *P. marginalis* sp. n. Malacca p. 40 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Phalcochina albistriata India p. 85 fig., ROEWER 379.

Phezilbus gen. n. [Sidaminae], *P. spiniger* sp. n. Abyssinia p. 103 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Polycoryphinae subfam. n. [Assamiidae], key to genera p. 80, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Pungoicinae subfam. n. [Assamiidae], key to genera p. 150, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Pykara coxalis India p. 84 fig., ROEWER 379.

Randilea gen. n. [Hypoxestinae], *R. scabricula* sp. n. East Africa p. 23 figs., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Rhaddygyella gen. n. [Hypoxestinae] p. 18, *R. laevis* East Africa, *R. ferruginea* Central Africa p. 19 figs., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Rhaddygyus maculatus sp. n. East Africa p. 17, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Sampitius [Trionyxellinae], *S. opacus* sp. n. Borneo p. 147 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Santhomea scabra São Thomé Is. p. 93 fig., ROEWER 379.

Sassandria bicolor West Africa p. 115 fig., ROEWER 379.

Selencasta gen. n. [Selencinae], *S. minuscula* (Rower 1927, sub. *Selenca*) Fernando Po p. 113 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Selencinae subfam. n. [Assamiidae] p. 107, key to genera p. 108, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Selencula gen. n. [Selencinae] p. 109, *S. filipes* (Rower 1927, sub. *Selenca*) Fernando Po p. 110 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Senarba, key to species, *S. rudicoxa*, *S. acanthicoxa* p. 88 figs. India, ROEWER 379.

Sesostranus gen. n. [Hypoxestinae] p. 26, *S. niger* sp. n. p. 27 fig. East Africa, ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Sesostrellus gen. n. [*Hypoxestinae*] p. 29, *S. robustus* sp. n. East Africa p. 30 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Sesostriis umbonatus sp. n. Uganda p. 29 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Seuthesplus gen. n. [*Selencinae*], *S. nigeriensis* sp. n. Nigeria p. 112 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Sidaminae subfam. n. [*Assamiidae*] key to genera p. 97, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Sonega gen. n. [*Polycoryphinae*] *S. scutata* sp. n. India p. 93 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Sudaria key to species p. 135, *S. atrolutea* sp. n. Sumatra p. 136, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Talaspus gen. n. [*Hypoxestinae*], *T. spinimanus* sp. n. Mozambique p. 25 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Tavoybia gen. n. [*Assamiinae*], *T. quadrispina* sp. n. Malacca p. 41 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Telecus gen. n. [*Erecinae*], *T. tenuis* Mozambique p. 75 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Tengelinia gen. n. [*Polycoryphinae*], *T. paradoxa* sp. n. Cameroons p. 96 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Thomecola gen. n. [*Polycoryphinae*], *T. quadrispina* (Roewer 1927) São Thomé Is. p. 92 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Trionychiperna carli India p. 146 fig., ROEWER 379.

Trionyxella, key to species, *T. granulata* sp. n. India p. 145 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Trionyxellinae p. 140, key to genera p. 141, ROEWER 379.

Tundabia gen. n. [*Erecinae*], *T. semicaeca* sp. n. East Africa p. 59 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Tsadsea gen. n. [*Tsadseinae*], *T. picta* sp. n. Cameroons p. 117 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Tsadseinae subfam. n. [*Assamiidae*], key to genera p. 117, ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Tusipulla gen. n. [*Hypoxestinae*], *T. coxalis* sp. n. East Africa p. 27 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Typestus gen. n. [*Mysoreinae*], *T. sulcatus* sp. n. India p. 149 fig., ROEWER Veröff. Deut. Kolon-u. Uebersee-Mus. Bremen 1.

Valpara albitarsus Further India p. 55 fig., ROEWER 379.

Vandarawella gen. n. [*Erecinae*], *V. bicolor* sp. n. Ceylon p. 77 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Yadoa gen. n. [*Polycoryphinae*] for *Y. feae* sp. n. Burma p. 17 fig., ROEWER Ann. Mus. Stor. nat. Genova 59.

COSMETIDAE.

Key to genera, MELLO-LEITÃO 282.

GONYLEPTIDAE.

Key to sub-fams., MELLO-LEITÃO 282.

Biconisoma gen. n. [*Pachylinae*] for *B. mirabilis* sp. n. Peru p. 342 fig., ROEWER Veröff. Deuts. Kolon-u. Uebersee-Mus. Bremen 1.

Coelopyginae, MELLO-LEITÃO 282.

Cranaina, key to genera, MELLO-LEITÃO 282.

Goniosominae p. 109 subfam. n. [*Gonyleptidae*], MELLO-LEITÃO Arch. Mus. nac. Rio de J. 36.

Gonyleptinae, key to genera, MELLO-LEITÃO 282.

Metabaltia, key to spp., *M. porteri* p. 113 figs. sp. n. Chili, MELLO-LEITÃO Rev. chil. Hist. nat. 40.

Metagyndes, key to spp., *M. longispina* p. 115 figs. sp. n. Chili MELLO-LEITÃO Rev. chil. Hist. nat. 40.

Mitobatinae, MELLO-LEITÃO 282.

Pachylinae, key to genera, MELLO-LEITÃO 282.

Pirunipygus gen. n. [*Pachylinae*] for *P. paradoxus* sp. n. Peru p. 341 fig., ROEWER Veröff. Deuts. Kolon.-u.-Uebersee Mus. Bremen 1.

Stygninae, MELLO-LEITAO 282.

TROGULIDAE.

Trogulus tricarinatus p. 291, HADŽI 165.

NEMASTOMATIDAE.

Nemastoma dubium p. 8 pl., *N. ventilloi* p. 9 pl. spp. n. Spain, MELLO-LEITAO Treb. Mus. Cien. nat. Barcelona 11.—*N. tenebricosum* p. 52 figs., *N. brunneum* figs., *N. funebre* figs., *N. caucasicum* figs. p. 53, *N. gracile* figs. p. 54 spp. n. Russia, REDIKORZEV Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Nemastomella gen. n. p. 10 for type *N. integripes* sp. n. Spain p. 11 figs., MELLO-LEITAO Treb. Mus. Cien. nat. Barcelona 11.

Paranemastoma gen. n. for type *P. superbum* sp. n. p. 54 figs. Caucasasia, REDIKORZEV Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

ISCHYROPSALIDAE.

Ischyropsalis Strandi sp. n. p. 248 figs. Italy, KRATOCHVIL Festschrift f. Embrik Strand Riga 1.—*I. helvetica milleri* subsp. n. Czechoslovakia p. 13 fig., KRATOCHVIL Acta Soc. Sci. nat. Moravicae 9 5.

PHALANGIIDAE.

Astrobunus dinaricus p. 291, HADŽI 165.

Biceropsis gen. n. [*Gagrellinae*] for *B. maculata* sp. n. Burma p. 24 fig., ROEWER Ann. Mus. Stor. nat. Genova 59.

Chebabius gen. n. [*Gagrellinae*] for *C. angulatus* sp. n. Burma p. 23 fig., ROEWER Ann. Mus. Stor. nat. Genova 59.

Eudasilobus georginae p. 303 figs. sp. n. Jugo-Slavia, HADŽI Glasnik hrv. prirodosl. Dr. Zagreb 41-48.

Gagrella carinia sp. n. Burma p. 19 fig., ROEWER Ann. Mus. Stor. nat. Genova 59.

Gagrellula didyma p. 20 fig., *G. brunnea* p. 21, spp. n. Burma, ROEWER Ann. Mus. Stor. nat. Genova 59.

Lacinius regis-alexandri sp. n. Czechoslovakia p. 19 figs., KRATOCHVIL Acta

Soc. Sci. nat. Moravicae 9 5.—*L. labacensis* p. 292, HADŽI 165.

Liobunum hedinii sp. n. China p. 3 ROEWER Ark. Zool. Stockholm 27 A25.

Lophacanthus gen. n. for type *L. cobius* sp. n. p. 56 figs. Russia, REDIKORZEV Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Metagagrella ussuriensis p. 56 figs., sp. n. Russia, REDIKORZEV Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Opilio parietinus silhavyi subsp. n. Czechoslovakia p. 24 fig., KRATOCHVIL Acta Soc. Sci. nat. Moravicae 9 5.—*O. pallens* fig., ROEWER 381.

Papillophus gen. n. [*Oligolophinae*] for *P. crassus* sp. n. p. 293 figs. Jugo-Slavia, HADŽI Glasnik hrv. prirodosl. Dr. Zagreb 41-48.

Parasclerosoma buchneri sp. n. p. 25 Italy, SCHENKEL Zool. Anz. Leipzig 116.

Phalangium coronatum p. 54 fig. sp. n. Caucasasia, REDIKORZEV Trav. Inst. zool. Acad. Sc. U.R.S.S. 3.

Proscclerosoma hispanicum sp. n. Spain p. 13 fig., MELLO-LEITAO Treb. Mus. Cien. nat. Barcelona 11.

Pseudogagrella gen. n. for type *P. sinensis* sp. n. figs. p. 57 China, REDIKORZEV Trans. Inst. zool. Acad. Sci. U.R.S.S. 3.

Roeweriolus slavicus sp. n. Czechoslovakia p. 16 figs., KRATOCHVIL Acta Soc. Sci. nat. Moravicae 9 5.

Strandia spinacantha p. 76 figs. sp. n. Malaya, ROEWER Bull. Raffles Mus. Singapore 12.

Zacheus birulae, *Z. hyrcanus* p. 55 figs. spp. n. C. Asia, REDIKORZEV Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Zaleptus scaber sp. n. Burma p. 22, ROEWER Ann. Mus. Stor. nat. Genova 59.

RICINULEI.

[Vacant.]

ACARI.

GRANDJEAN 155.

Spinning Mites, ZACHER 553.

Faunal lists. — Outer Hebrides, CRICHTON & WATERSTON 90; caver-

nicolous acari, Belgium and Holland, WILLMANN 537; cavernicolous acari. WOLF 549.

ACARI

[with the exceptions of
Hydrachnoidea and Ixodoidea.]

Acarapis dorsalis, *A. externus*, *A. woodi* figs., BRÜGGER 53.

Acaroceras gen. n. for *A. odontatus* sp. n. p. 77 figs. Venezuela, GRANDJEAN Bull. Soc. zool. Fr. 61.

Achropodophorus gen. n. [*Tyroglyphidae*] p. 293 for type *A. Lahillei* sp. n. p. 265 figs. Argentine, ROSAS COSTA Rev. Soc. ent. Argent. 2.

Aleurobius farinae hypopus, JARY 204.

Aleuroglyphus ovatus, SMARAGDOVA 422.

Allogalumna gen. n. [*Galumnidae*] p. 105, 107 for type *Galumna alamellae* Jacot, GRANDJEAN Ann. Soc. ent. Fr. 105.

Allothrombium pumilio p. 422 fig., *A. brachytrichotum* p. 424 fig., *A. Arambourgi* p. 425 fig., *A. vicinum* p. 426 fig., *A. innocens* p. 429 fig., *A. geminatum* p. 430 fig., *A. barbuligerum* p. 432 fig., spp. n., *A. cursorium* Berlese, E. Africa, ANDRÉ Bull. Soc. zool. Fr. 61.

Anachipteria achipteroides milleri subsp. n. United States p. 551 figs., JACOT Amer. Midl. Nat. Notre Dame 17.

Anandia alticola p. 445, OUDEMANS 319.

Anomalothrombium gen. n. [*Thrombidiidae*] for *A. nasigerum* sp. n. East Africa p. 323 fig., ANDRÉ Bull. Soc. zool. Fr. 61.

Anychus clarki sp. n. on Citrus, Texas p. 162 figs., MCGREGOR Proc. Ent. Soc. Washington 37.—*A. orientalis*, KLEIN 215.

Anystidae, diagnosis, structure, OUDEMANS 319.

Anystis p. 384, *A. berlesei* p. 395 figs., Italy, *A. rosae* p. 397 figs., Holland, *A. sellnicki* p. 401 figs., *A. germanica* p. 403 figs., *A. borussica* p. 405 figs., *A. voigtsi* p. 405 figs., Germany, *A. andréi* p. 408 figs. France spp. n. *A. kochi* p. 399 figs.

nom. n. *A. baccarum* figs., *A. salicinus* figs., notes on other species. OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Autenriethia gen. n. [*Anystidae*] for type *Actineda vellox* Berl. p. 425, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Barellea gen. n. [*Anystidae*] for type *Anystis sinensis* Berl. p. 427, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Bechsteinia gen. n. [*Anystidae*] for type *B. schneideri* sp. n. p. 436 figs. Italy, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Belba jacoti p. 263 figs., *B. alachua* p. 265 figs., spp. n. *B. globifer florida* p. 260 fig. subsp. n. *B. michaeli* p. 262 Florida, WILSON J. Elisha Mitchell sci. Soc. Chapel Hill 52.—*B. nidicola* p. 117 figs. sp. n. Germany, WILLMANN Pax. Beitr. Biol. Glatzer Schneeberges 2.—*B. corynopus* p. 56 figs., GRANDJEAN 153.

Blomia kulagini, *B. thori* p. 270 spp. n. Russia, ZACHVATKINE Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45.

Bochartia oudemansi sp. n. p. 121 figs. Australia, WOMERSLEY J. Linn. Soc. London 40.

Brachychthonius perpusillus p. 247 fig., *B. latus* p. 248, *B. fimbriatus* p. 248 figs., *B. bifurcatus* p. 249 figs., *B. rostratus* p. 250 fig. spp. n., *B. italicus spiciger* p. 249 fig. comb. n. North Carolina JACOT J. Elisha Mitchell sci. Soc. Chapel Hill 52.—*B. bimaculatus* sp. n. in meadow land Germany p. 290 fig., WILLMANN Zool. Anz. Leipzig 113.

Caeculus notes on genus p. 79, *C. sclerodermatum* Tunis p. 106 figs., *C. hoggarensis* Hoggar p. 111 figs., *C. mosambicensis* Mozambique p. 115 figs., *C. insolitus* Gt. Salvage Island p. 119 figs., *C. pisanus* (larva) Italy p. 23 figs. spp. n., *C. echinipes* notes p. 85 figs., *C. sudanensis* notes p. 95 figs., ANDRÉ Bull. Soc. Hist. nat. Alger. 26.—*C. laoshanensis* p. 21 figs., *C. sinensis* p. 22 figs. spp. n., *C. sinensis taishanicus* p. 23 figs. subsp. n. China, *C. echinipes crosbyi* p. 19 figs. subsp. n. France, JACOT J. N.Y. ent. Soc. 44.

Callidosoma gen. n. [*Erythraeidae*] for *Caeculisoma ripicola* Womersley p. 120, WOMERSLEY J. Linn. Soc. London 40.

Caloglyphus rodionovi, SMARAGDOVA 422.

Camerotrombidium gen. n. [Trombididae] for type *Trombidium pexatum* C. L. Koch p. 32, THOR Zool. Anz. Leipzig 114.—*C. emendment*, type species preocc., *Ottonica vesiculosa* Thor substituted, THOR Zool. Anz. Leipzig 115.—*C. globiferum* p. 106 sp. n. Mauritius, THOR Zool. Anz. Leipzig 115.

Camisia segnis p. 38, *C. horridus* p. 51 figs., GRANDJEAN 153.

Cavilaelaps gen. n. [Laelaptidae] for type *C. bresslaui* sp. n., on *Caviella*, Argentine p. 25 figs., FONSECA Mem. Inst. Butantan S. Paulo 10.

Cerachipteria gen. n. [near *Achipteria*, *Oribatidae*] p. 283, type species *C. digita* sp. n. France p. 284 fig., GRANDJEAN Bull. Mus. Hist. nat. Paris (2) 7.

Ceratomyssus musculi, synonymy, WILLMANN 542.

Ceratoppia bipilis p. 70, GRANDJEAN 153.

Ceratozetes subaquila p. 549, *C. subaquila longispina* subsp. n., *C. subaquila subaquila curtispina* form. n. p. 550 figs., *C. subaquila longispina minor* form. n. p. 550 United States, JACOT Amer. Midl. Nat. Notre Dame 17.

Chabrieria gen. n. [Anystidae] for type *Tarsotomus terminalis* Banks p. 446, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Coleolaelaps integer figs., WILLMANN 537.

Cometacarus gen. n. [Tyroglyphidae] for type *C. smirnovi* sp. n., *C. oudemansi* nom. n. p. 269, ZACHVATKINE Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45.

Conoppia, synonymy, GRANDJEAN 157.

Copidognathus (Cop. s. str.) *angustus* p. 393 figs., *C. (C. s. str.) cristatus* p. 396 figs., *C. (C. s. str.) curassaviensis* p. 399 figs., *C. (C. s. str.) gibberipes* p. 403 figs., *C. (C. s. str.) triops* p. 405 figs., *C. (Copidognathopsis) gracilis* p. 409 figs., *C. (C.) hummelincki* p. 411 figs., *C. (C.) bonairensis* p. 415 figs., *C. (C.) manubriatus* p. 418 figs. spp. n. West Indies, VIETS Zool. Jahrb. Jena (Syst.) 67.—*C. magnipalpus ponticus*, subsp. n. Bulgaria p. 199 figs., VIETS Zool. Anz. Leipzig 115.—*C.*, key to subgenera and spp., *C. loricatus*, *C. rhodostigma*, *C.*

brevirostris fig., *C. fabricii* figs., *C. gracilipes* figs., *C. oculatus* fig., VIETS 513.

Cyrtolaelaps montanus sp. n. in meadow land Germany, p. 273 figs. WILLMANN Zool. Anz. Leipzig 113.

Damaeus clavipes p. 69, GRANDJEAN 153.

Dendrotrombidium gen. n. [Trombididae] for type *Trombidium perligerum* Berlese p. 30, THOR Zool. Anz. Leipzig 114.

Dermanyssus, key to North American spp., *D. scutatus* p. 49 fig., *D. brevis* p. 54 fig. spp. n. U.S.A., *D. prognephilus*, *D. oti*, *D. evotomydis*, *D. gallinae*, figs., EWING Proc. Ent. Soc. Washington 38.—*D. brasiliensis* sp. n. on rat Brazil, p. 51 figs., FONSECA Mem. Inst. Butantan S. Paulo 10.

Diapterobates humeralis p. 77 figs., GRANDJEAN 153.

Digamasellus frenzeli p. 277 figs., *D. (?) angulosus* p. 280 figs. spp. n. in meadow land Germany, WILLMANN Zool. Anz. Leipzig 113.

Drymobatoides gen. n. [Oribatoidea] for type *D. mauritius* sp. n. p. 397 figs. Mauritius JACOT Ann. Mag. nat. Hist. Ser. 10 17.

Epactozetidae fam. n. p. 108, GRANDJEAN Ann. Soc. ent. Fr. 105.

Epilohmannoides gen. n. [near *Epilohmannia*, *Oribatoidea*] for type *E. terrae* sp. n. United States p. 546, JACOT Amer. Midl. Nat. Notre Dame 17.

Epitetranynchus althaeae, KLEIN 215.—*E.* subgen. n. vide *Tetranychus*.

Ereynetus simplex sp. n. in graphite mine Germany p. 196 figs., WILLMANN Pax. Beitr. Biol. Glatzer Schneeberges Heft 2.

Eriophyes thomasi on *Origanum vulgare*, notes on effects of parasitism on host plant p. 1074, SALGUES 394.—*E. similis* figs., LINDBLOM 244.

Erythracarinae subfam. n. [Anystidae] p. 427, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Erythracarus parietinum p. 429 figs., notes on other spp., OUDEMANS 319.

Erythraeus serratus sp. n. p. 117 figs. Australia, WOMERSLEY J. Linn. Soc. London 40.

Etmülleria australis p. 114, *E. obscura* p. 116 figs. spp. n. Australia, WOMERSLEY J. Linn. Soc. London 40.

Eubrachylaelaps rotundus sp. n. on rats Brazil p. 20, FONSECA Mem. Inst. Butantan S. Paulo 10.

Eugamasus loricatus, *E. magnus* fig., WILLMANN 537.—*E. oudemansi* Germany in graphite mine p. 195 figs., WILLMANN 540.

Euphthiracarus, JACOT 202.

Euthrombium scalaris sp. n. p. 112 fig. New Zealand, WOMERSLEY J. Linn. Soc. London 40.

Exoribatula gen. n. p. 547 for type *Oribatula tibialis* [Nicolet], *E. biundatus* sp. n. United States p. 547, JACOT Amer. Midl. Nat. Notre Dame 17.

Ferminia gen. n. [Carpoglyphidae] for *Glycyphagus fuscus* Oudms. p. 347, OUDEMANS Ent. Ber. 's Gravenhage 7.

Galumna (*Pergalumna*) subgen. n. for type *Oribates nervosus* Berlese, p. 106, *G. alatus* p. 94 figs., GRANDJEAN Ann. Soc. ent. Fr. 105.—*G. alatum halli* figs., JACOT 200.

Geckobia, key to spp. p. 19, *G. ovambica* p. 4 fig., *G. tasmani* p. 6 fig., *G. oedurae* p. 6 fig., *G. natalensis* p. 8 fig., *G. hewitti* p. 8 fig., *G. namaquensis* p. 10 fig., *G. rhoptropi* p. 11 fig., *G. pachydactyli* p. 12 fig., *G. homopholis* p. 15 figs., *G. phyllodactyli* p. 15 figs., *G. transvaalensis* p. 17 fig., *G. karrooica* p. 18 fig., spp. n., *G. australis*, *G. hemidactyli* fig. South Africa, LAWRENCE Parasitology Cambridge 28.

Glycyphagus (*Oudemansium*) subgen. n. for type *C. domesticus* de Geer p. 269, ZACHVATKINE Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45.

Halacaridae, key to subfams., VIETS 513.

Halacarinae, key to genera, VIETS 513.

Halacarus, key to subgenera and spp. Many spp. described and figured. Germany, VIETS 513.

Halarachne halichoeri, VIETS 513.—*H. halichoeri*, VITZTHUM 521.

Hannemania hepatica sp. n. on *Leptodactylus* Brazil p. 49 figs., FONSECA Mem. Inst. Butantan S. Paulo 10.

Histiogaster fungivorax p. 630 figs., sp. n. U.S.A., JACOT Ann. Ent. Soc. Amer. Columbus 29.

Hirstiosoma novae-hollandiae sp. n. p. 118 figs. New Zealand, WOMERSLEY J. Linn. Soc. London 40.

Histiostoma rostro-serratum figs., JARY & STAPLEY 205.

Holozetes, JACOT 200.

Hoplophorella cucullata curassensis p. 437 fig. subsp. n. W. Indies, WILLMANN Zool. Jahrb. Jena (Syst.) 67.

Humerobates humeralis mauritius p. 401 subsp. n. Mauritius, JACOT Ann. Mag. nat. Hist. Ser. 10 17.

Hyadesia curassaviensis p. 426 figs. sp. n. W. Indies, VIETS Zool. Jahrb. Jena (Syst.) 67.—*H. fusca*, VIETS 513.

Hydrozetes spp., VIETS 513.

Hypoaspis rhinarium p. 583 figs. sp. n. West Indies, VITZTHUM J. f. Orn. Berlin 83.

Hypochthoniinae, key to E. Amer. genera, JACOT 199.

Hypochthonius gracilis p. 251 fig. sp. n. *H. luteus*, *H. rufulus carolinicus* North Carolina, JACOT J. Elisha Mitchell sci. Soc. Chapel Hill 52.

Ischnolaelaps gen. n. [Laelaptidae] for type *I. reticulatus* sp. n. on rats Brazil p. 19, FONSECA Mem. Inst. Butantan S. Paulo 10.—*I. coelogenys* p. 31 on *Coelogenys*, *I. sciureus* p. 32 on *Sciurus* spp. n. Brazil, FONSECA Mem. Inst. Butantan S. Paulo 10.

Laelaps paulistanensis p. 33, *L. manguinhos* p. 34, *L. differens* p. 35, *L. exceptionalis*, *L. lativentralis* p. 36 spp. n. on rats Brazil, FONSECA Mem. Inst. Butantan S. Paulo 10.

Lawrencoppia gen. n. [Oribatoidea] for type *L. mauritius* sp. n. p. 395 fig. Mauritius, JACOT Ann. Mag. nat. Hist. Ser. 10 17.

Lepidoglyphus gen. n. [Tyroglyphidae] for type *Glycyphagus destructor* Schrk. p. 269, ZACHVATKINE Bull. Soc. Nat. Moscou Sect. Biol. N.S. 45.

Leptogamasus gen. n. [Parasitidae] for type *L. suecicus* p. 227 figs. sp. n. Sweden, TRÄGÄRDH Ent. Tidskr. Stockholm 1936.

Limnohalacarinae, key to genera and subgenera, VIETS 513.

Limnohalacarus wackeri fig., *L. mauritzi* fig., VIETS 513.

Liodes theleproctus p. 54, GRANDJEAN 153.

Liponissus haematophagus sp. n. on bats Brazil p. 43 figs., FONSECA Mem. Inst. Butantan S. Paulo 10.

Lohmannella falcata fig., *L. norvegica*, VIETS 513.

Lohmannellinae, key to genera, VIETS 513.

Lohmannia bifoliata sp. n. p. 438 figs. West Indies, WILLMANN Zool. Jahrb. Jena (Syst.) 67.

Macrocheles tridentatus p. 473 figs. sp. n. N. Carolina, PEARSE & WHARTON Ecol. Monogr. Durham N.C. 6.

Macrolaelaps butantanensis p. 21, *M. mattogrossensis*, *M. brachyspinosus* p. 22 spp. n. on rats Brazil, FONSECA Mem. Inst. Butantan S. Paulo 10.

Megisthanus floridanus p. 472 figs., PEARSE, ETC. 331.

Megninietta gen. n. [Tyroglyphidae] p. 631 for type *M. ulmi* p. 632 figs. sp. n. U.S.A., JACOT Ann. Ent. Soc. Amer. Columbus 29.

Metabelba gen. n. [Oribatidae] for type *Damaeus papillipes* Nicolet p. 67, GRANDJEAN Ann. Soc. ent. Fr. 105.

Microlichus uncus, THOMPSON 461.

Microthrombidium (*Microthrombidium*) *crassitarsale* p. 406 figs., *M. (M.) fissipilosum* p. 408 figs., *M. (Enemothrombium) longisetosum* p. 413 figs., *M. (E.) imbricatum* p. 414 figs., *M. (E.) Jeanneli* p. 418 figs. spp. n. *M. (E.) bipapillatum* figs., *M. (E.) carduigerum* figs., *M. (E.) strobiligerum* figs. E. Africa, ANDRÉ Bull. Mus. Hist. nat. Paris Ser. 2 8.—*M. zelandicus* p. 107, *M. pritchardi* p. 109, New Zealand, *M. (Enemothrombium) cygnus* p. 109 Australia figs. spp. n., WOMERSLEY J. Linn. Soc. London 40.

Microzetes auxiliaris sp. n. Venezuela p. 138 figs., GRANDJEAN Bull. Mus. Hist. nat. Paris (2) 8.

Microzetidae fam. n. p. 60, key to genera p. 66, GRANDJEAN Bull. Soc. zool. Fr. 61.

Monieziella arborea p. 628 figs. sp. n. U.S.A., JACOT Ann. Ent. Soc. Amer. Columbus 29.

Myialges anchora, *M. caulotoon*, THOMPSON 461.

Myobia, notes on the genus, *M. zibethicalis* sp. n. from musk-rat,

Scotland p. 34 fig., *M. mystacinalis* notes p. 35 figs., *M. ingens* from Muskshrew Portugal p. 37 figs., *M. chiropteralis* notes p. 38 fig., RADFORD North Western Nat. Arbroath 11.—*M. blairi* sp. n. from White-toothed Shrews, Scilly Isles p. 147 figs., *M. chiropteralis* from Lesser Horse-Shoe Bat England p. 145 figs., *M. breviamata* p. 149 figs., *M. multivaga* p. 150 figs. notes, RADFORD North Western Nat. Arbroath 11.

Mysolaelaps gen. n. [Laelaptidae] for type *M. parvispinosus* sp. n. p. 17, *M. microspinosus* sp. n. p. 18, on rats, Brazil, FONSECA Mem. Inst. Butantan S. Paulo 10.

Nellacarus gen. n. for *N. petrocoriensis* sp. n. p. 84 figs. France, GRANDJEAN Bull. Soc. zool. Fr. 61.

Neocephus gen. n. [Oribatidae] p. 433 for type *N. hummelinki* sp. n. p. 434 figs. West Indies, WILLMANN Zool. Jahrb. Jena (Syst.) 67.

Neonyssus intermedius, *N. nucifragae*, VITZTHUM 520.

Neoparalaelaps nom. n. for *Paralaelaps* Fonseca 1935, FONSECA Mem. Inst. Butantan S. Paulo 10.

Neoschöngastia brasiliensis sp. n. on rat Brazil p. 50 figs., FONSECA Mem. Inst. Butantan S. Paulo 10.—*N. gallinarum*, SUGIMOTO 447.

Notaspis segnis p. 38, *N. horridus* p. 51, *N. theleproctus* p. 54, *N. corynopus* p. 56, *N. clavipes* p. 69, *N. bipilis* p. 70, *N. tegeocranus* p. 73, *N. castaneus* p. 75, *N. humeralis* p. 77, *N. acromios* p. 83, *N. alatus* p. 94, figs. GRANDJEAN 153.—*N. theleproctus*, TRÄGÅRDH 471.

Oribata grossmani p. 256 figs. sp. n. Florida, WILSON J. Elisha Mitchell sci. Soc. Chapel Hill 52.

Oribatula (*Zygoribatula*) *thalassophila* sp. n. intertidal zone France p. 280 fig., GRANDJEAN Bull. Mus. Hist. nat. Paris (2) 7.

Oudemansium subgen. n. see *Glycyphagus*.

Pachygnathidae, notes on structure. GRANDJEAN 155.

Pachygnathus, notes on genus, GRANDJEAN 158.

Pachyseius angustiventris p. 20 fig. sp. n. Belgium, WILLMANN Bull. Mus. Hist. nat. Belg. 11 No. 29.

Parakalummidæ fam. n. p. 107, GRANDJEAN Ann. Soc. ent. Fr. 105.

Paralaelaps gen. n. [*Laelaptidae*] for type *P. bispinosus* sp. n. on *Cavia* Brazil p. 29 figs., FONSECA Mem. Inst. Butantan S. Paulo 10 [cf. *Neoparalaelaps*].

Parasitus maschkeae sp. n. Germany Antimony mine p. 193 figs., WILLMANN Pax. Beitr. Biol. Glatzer Schneeberges Breslau Heft 2.

Passalacarus gen. n. [*Parasitinae*] p. 474 for type *P. sylvestris* p. 475 figs. sp. n. N. Carolina, PEARSE & WHARTON Ecol. Monogr. Durham N.C. 6.

Pediculoides Herfsi p. 397 figs., *P. scolyti* p. 399 figs., *P. fortuitus* p. 401 figs. spp. n., *P. Hartigi* p. 392, *P. Bruckeri* p. 396 nom. n., *P. tritici*, *P. rhynchitinus*, *P. ventricosus* Europe, OUDEMANS Festschrift f. Embrik Strand Riga 1.—*P. ventricosus* figs., ANDRÉ 6.

Pelops acromios p. 83 figs., GRANDJEAN 153.

Pentagonella gen. n. for type *Trombidium ardeae* Trägårdh p. 30, THOR Zool. Anz. Leipzig 114.

Pergalumna subgen. n. see *Galumna*.

Pergamasus robustus figs., GRANDJEAN 155.

Phthiracarus laevigatus p. 167 figs., *P. testudineus* p. 170 figs., *P. crinitus* p. 172 figs., *P. lentulus* p. 175 figs., *P. stramineus* p. 177 figs., *P. ferrugineus* p. 179 figs., *P. boresetosus* p. 181, JACOT 202.

Phthiroides gen. n. for *P. megnini* nom. n. p. 403 France, OUDEMANS Festschrift f. Embrik Strand Riga 1.

Phylacozetes gen. n. for *P. membranulifer* sp. n. p. 67 figs. Venezuela, GRANDJEAN Bull. Soc. zool. Fr. 61.

Phyllotegeus, synonymy, GRANDJEAN 157.

Platytrombidium gen. n. for type *Trombidium vagabundum* Berlese p. 31, THOR Zool. Anz. Leipzig 114.

Porobelba gen. n. [*Oribatidae*] for type *Oribata spinosus* Sellnick p. 67, GRANDJEAN Ann. Soc. ent. France 105.

Porohalacaridae, key to subfams., VEITS 513.

Porohalacarinae, key to genera, VIETS 513.

Porohalacarus hydrachnoides, *P. alpinus* fig., VIETS 513.

Porolohmannella violacea fig., VIETS 513.

Procaeculus gen. n. [*Cheyletidae*] for type *P. bryani* sp. n. Hawaiian Is. p. 25 figs., JACOT J. N.Y. ent. Soc. 44.

Propeschelobates gen. n. p. 547 for type *Oribatula albida*, JACOT Amer. Midl. Nat. Notre Dame 17.

Protoribates capucinus bonairensis subsp. n. p. 437 W. Indies, WILLMANN Zool. Jahrb. Jena (Syst.) 67.

Pseudotritia, JACOT 202.

Psoroptes communis var. *ovis* figs., DOWNING 106.

Pterygosoma, key to spp. p. 31, *P. hirsti* p. 22 fig., *P. bedfordi* p. 24 fig., *P. longipalpe* p. 25 fig., *P. aculeatum* p. 25 fig., *P. triangulare* p. 28 fig., *P. transvaalense* p. 28 fig., *P. armatum* p. 30 fig., spp. n., *P. melanum*, *P. agamae* South Africa, LAWRENCE Parasitology Cambridge 28.

Ptilonyssoides gen. n. [*Rhinonyssidae*] for type *P. triscutatus* sp. n. p. 581 figs. Europe, VITZTHUM J. f. Orn. Berlin 83.

Ptilonyssus stresemanni p. 579 figs. sp. n. Brazil, *P. echinatus*, *P. nudus*, VITZTHUM J. f. Orn. Berlin 83.

Pygmeophorus silvestris p. 129 figs., *P. disparisetae* p. 131 figs., *P. formosus* p. 132 figs. spp. n. U.S.A., JACOT Canad. Ent. 68.

Rhagidia, notes on genus, *R. mucronata* p. 297 fig. sp. n. Germany, *R. gelida intermedia* var. n. p. 293 fig. Württemberg, *R. mordax grandis* p. 296 fig., var. n. France, *R. reflexa wolmsdorfensis* p. 302 figs., var. n. Germany, *R. gelida*, *R. terricola* with vars. *gigas* and *longipes*, *R. mordax*, *R. saxonica*, *R. diversicolor*, *R. strasseri*, *R. recussa*, *R. pratensis*, *R. reflexa* figs., WILLMANN Zool. Anz. Leipzig 116.—*R.* (sp. ?) larva in meadow land, Germany p. 287 figs., WILLMANN Zool. Anz. Leipzig 113.

Rhinonyssidae, key to genera p. 568, VITZTHUM 520.

Rhinonyssoides trouessarti, VITZTHUM 520.

Rhinonyssus squamosus p. 576 figs. sp. n. West Indies, *R. nitzschi* p. 572 figs., other spp. listed, VITZTHUM J. f. Orn. Berlin 83.

Rhodacarellus silesiacus sp. n. in meadow land, Germany p. 282 figs., WILLMANN Zool. Anz. Leipzig 113.

Rhombognathus pectinatus p. 391 figs. sp. n. West Indies, VIETS Zool. Jahrb. (Syst.) 67.—*R.* key to subgenera and spp., many spp. described and figured, Germany, VIETS 513.

Scapheremaeus carinatus p. 431 fig., *S. latirostris* p. 432 fig., spp. n. W. Indies, WILLMANN Zool. Jahrb. Jena (Syst.) 67.

Scharfenbergia gen. n. [*Anystidae*] for type *Actineda hilaris* C. L. Koch p. 412 figs., *S. gauthieri* sp. n. p. 414 figs., Algeria, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Scheloribates milleri sp. n. United States p. 548 figs., JACOT Amer. Midl. Nat. Notre Dame 17.

Schellenbergia gen. n. [*Anystidae*] for type *Erythraeus domesticus* C. L. Koch p. 433 figs., *S. berleseii*, *S. venustissimus*, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Scutacaridae, key to genera, JACOT 198.

Scutacarus echidna amicus p. 229 subsp. n. U.S.A., JACOT Canad. Ent. 53.

Seiodes trifidus p. 474 figs. sp. n. N. Carolina, PEARSE & WHARTON Ecol. Monogr. Durham N.C. 6.

Sibylia gen. n. [*Anystidae*] for type *Erythraeus ignipes* Dug. p. 445, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Simognathinae, key to genera, VIETS 513.

Simognathus, key to spp. p. 423, *S. fuscus* p. 421 figs. sp. n. West Indies, VIETS Zool. Jahrb. Jena (Syst.) 67.—*S. sculptus* fig., VIETS 513.

Snartia gen. n. [*Anystidae*] for type *S. repentinus* sp. n. p. 417 figs. Sumatra, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Soldanellonyx chappuisi fig., *S. monardi* fig., *S. parviscutatus* fig., VIETS 513.

Spelaognathidae fam. n. p. 312, WOMERSLEY Ann. Mag. nat. Hist. Ser. 10 18.

Speleognathus gen. n. for *S. australis* sp. n. p. 313 figs. Australia, WOMERSLEY Ann. Mag. nat. Hist. Ser. 10 18.

Sphaerobates, notes on genus, JACOT 195.

Sphaerotarsus gen. n. [*Erythraeidae*] for type *E. allmani* sp. n. p. 119 figs. Australia, WOMERSLEY J. Linn. Soc. London 40.

Steatonyssus, synonymy, *S. spinosus* sp. n. p. 152 figs. Haiti (on *Solenodon*), WILLMANN Zool. Anz. Leipzig 114.

Steganacarus, notes on genus, JACOT 202.

Sternostomum technavi sp. n. p. 569 figs. (on Water Ousel) *S. rhinolethrum*, *S. levinsi*, *S. caledonicum*, *S. waterstoni* VITZTHUM J. f. Orn. Berlin 83.—*S. cryptorhynchum*, VITZTHUM 520.

Tarsolarkus articulatus p. 422 figs., OUDEMANS 319.

Tarsonemus approximatus var. *narcissi* control, DOUCETTE 105.

Tarsotomus callunae sp. n. p. 438 figs., Holland, notes on other spp., OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Tencateia gen. n. p. 422 [*Anystidae*] for type *T. besselingi* sp. n. p. 424 figs.; *T. toxopei* p. 425 figs. Holland, OUDEMANS Arch. Naturgesch. Leipzig (N.F.) 5.

Terrazetes mauritius p. 400 figs. sp. n. Mauritius, JACOT Ann. Mag. nat. Hist. Ser. 10 17.

Tetranychus (*Epitetranychus*) subgen. n. p. 22 for type *Epitetranychus althaeae* Hanstein p. 24, ZACHER Mitt. biol. Anst. Land. Forstw. Berlin 16.

Thrombella favosa sp. n. (Berlese m.s.) East Africa p. 9 figs., ANDRÉ Bull. Soc. zool. Fr. 61.

Trombicula travassosi sp. n. on snake, Brazil p. 47 fig., FONSECA Mem. Inst. Butantan S. Paulo 10.—*T. tindalei* p. 110, *T. macropus* p. 112 figs., spp. n. Australia, WOMERSLEY J. Linn. Soc. London 40.—*T. autumnalis*, ELTON & KEAY 112.

Tropacarus, JACOT 202.

Tyrophagus bülleri sp. n. Crimea p. 155, VOLOSTSCHUCK Plant Prot. Leningrad 1936.

Udetatiodes mauritius p. 393 figs. sp. n. Mauritius, JACOT Ann. Mag. nat. Hist. Ser. 10 17.

Uroobovella setosa p. 479 figs., *U. spinosa* p. 480 figs., *U. levis* p. 481 figs. spp. n. N. Carolina, PEARSE & WHARTON Ecol. Monogr. Durham N.C. 6.

Uroseius quercus p. 478 figs. sp. n. N. Carolina, PEARSE & WHARTON Ecol. Monogr. Durham N.C. 6.

Variatipes pennaticlavatum p. 226 figs., *V. elongatus* p. 228 fig. spp. n. U.S.A., JACOT Canad. Ent. 68.

Veigaia serrata p. 10 figs., *V. leruthi* p. 12 figs., spp. n. *V. herculeana* p. 9 fig., Belgium, Holland, WILLMANN Bull. Mus. Hist. nat. Belg. 11 No. 29.—*V.*, notes on genus, *V. propinqua* p. 251 figs. sp. n. Austria, *V. transisalae*, *V. cervus*, *V. leruthi*, *V. serrata*, figs., WILLMANN Zool. Anz. Leipzig 116.

Walterella weberi fig., VIETS 513.

Walzia gen. n. [*Anystidae*] for type *Actinoda antiquensis* Stoll. p. 419 figs., OUDEMANS Arch. Naturgesch. Leipzig N.F.) 5.

Xenillus tegeocranus p. 73, GRAND-JEAN 153.

Zercon passalorum p. 477 figs. sp. n. N. Carolina, PEARSE & WHARTON Ecol. Monogr. Durham N.C. 6.—*Z. tuberosus* sp. n. in meadow land, Germany p. 285 fig., WILLMANN Zool. Anz. Leipzig 113.

Zetes sequoiae, *Z. californiae*, *Z. macroptera* figs., JACOT 260.

Zygoribatula bonairensis sp. n. p. 436 figs. W. Indies, WILLMANN Zool. Jahrb. Jena (Syst.) 67.

HYDRACHNOIDEA.

VIETS 513.

Faunal lists.—Belgium, Holland, cavernicolous, VIETS 512; Finland, VIETS 508; Outer Hebrides, CRICHTON & WATERSTON 90; Holland, BESSELING 31; Kharkov district, Russia, LOUKIN 253; Leningrad, SOKOLOV 425; North Russia, VIETS 510; Wisconsin, MARSHALL 275; Yugoslavia, VIETS 509; cavernicolous, WOLF, 549.

Acercinae, key to genera and subgenera, VIETS 513.

Acercus keys to spp. Many spp. described and figured, Germany, VIETS 513.

Acherontacarus halacaroides, subterranean waters Yugoslavia p. 82 figs., VIETS 514.

Albia nobilis sp. n. ♀ Brazil p. 41, LUNDBLAD Zool. Anz. Leipzig 115.—*A. stationis* figs., VIETS 513.

Albiinae, key to genera, VIETS 513.

Amazonella polypora ♂ sp. n. p. 18 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Anisitsiellidae, key to subfams., VIETS 513.

Anisitsiellinae, key to genera, VIETS 513.

Arrenurhd [? = *Arrenurus*] *sulcator* sp. n. fig. p. 99, LOUKIN Trav. Soc. Nat. Charkow 50 Liv. 2.

Arrenurus (*Arrenurus*) *flagellatus* ♂ p. 22, *A. brevipetiolatus* ♂ p. 23, *A. dentipalpis* ♀ p. 23 fig. spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*A.* notes on genus, keys to subgenera and spp., *A. brunsvicensis* ♀ sp. n. fig. Many spp. described and figured, Germany, VIETS in Dahl Die Tierwelt Deutschlands 32.—*A. (Megaluracarus) crassus*, *A. (M.) longisetus* p. 209, *A. (M.) ribagai*, *A. (M.) spathulifer*, *A. (Arrenurus) plaumanni* p. 210 spp. n. ♂, *A. promacrus* p. 211 sp. n. ♀ Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*A. (Megaluracarus) bituberculatus* p. 216 fig., *A. (M.) mediopunctatus* p. 216 fig., *A. (M.) brevicaudatus* p. 217 figs. spp. n. Brazil, VIETS Zool. Anz. Leipzig 113.—*A. Megaluracarus*, key to species, males, p. 283, *A. (Megaluracarus) perlongus* p. 280 figs., *A. (Megaluracarus) productus* p. 281 figs., *A. (Megaluracarus) tenuicollis* p. 287 fig. spp. n., *A. (Megaluracarus) corniger* p. 274 figs., *A. (Megaluracarus) apetirolata* p. 276 fig., *A. (Megaluracarus) uncatus* p. 276, *A. (Megaluracarus) ludificator* p. 277, *A. (Megaluracarus) cornicularis* p. 278, *A. (Megaluracarus) triconicus* p. 278 figs., *A. (Megaluracarus) epimerosus* p. 280 figs., *A. (Megaluracarus) megalurus* p. 284 fig., *A. (Megaluracarus) expansus* p. 285 figs. Brazil, VIETS Zool. Anz. Leipzig 115.—*A. (Megaluracarus) tubulator* figs., *A. (M.) caudatus* fig., *A. (Micruracarus) pugionifer* figs., MÜNCHBERG 304.—*A. radiatus*, *A. bruzelii*, *A. papillator*, *A. neumanni*, *A. robustus*, *A. tricuspidator*, *A. claviger*, *A. abbreviator*, *A. globator*, *A. maculator*, *A. ornatus*, *A.*

crenatus, *A. compactus* figs., larvae and nymphs, MÜNCHBERG 305.—*A. sp.* ♀ p. 135 figs. Yucatan, MARSHALL 274.

Arrhenurinae, key to genera, VIETS 513.

Atax (Pentatax) simplicipes, *A. (P.) brasiliensis* spp. n. ♂ Brazil p. 42, LUNDBLAD Zool. Anz. Leipzig 115.—*A. (Pentatax) acutidens* ♂ p. 17, *A. (P.) vicinisetia* ♀ p. 17, *A. (P.) tumidipalpis* ♀ p. 17, *A. (P.) gracilipes* ♀ p. 18 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

A-Thienemannia schermerei figs., VIETS 513.

Athienemanniidae, key to subfams., VIETS 513.

Atractidella gen. n. ♀, *A. hamata* p. 35, *A. magna* p. 36 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Atractides latissimus p. 369 pl., *A. tenuirostris* p. 370 pls. spp. n., *A. dudichi cognatus* subsp. n. p. 368 pls. Yugoslavia, VIETS Arch. Hydrobiol. Stuttgart 29.—*A. (Atractides) macrognathus* figs., LUNDBLAD 256.—*A.*, keys to subgenera and spp. Many spp. described and figured VIETS 513.

Atractidinae, key to genera, VIETS 513.

Atractidopsis gen. n. ♂ for *A. digitata* sp. n. p. 36 Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Aturinae, key to genera, VIETS 513.

Aturus (Subaturus) setipes, *A. (S.) dentatus* spp. n. ♂ p. 207 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*A. (Subaturus) projectus* ♂ p. 37, *A. (S.) dentatus* p. 38 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 115.—*A.*, key to species p. 389, *A. karamani* p. 381 pl., *A. barbatulus* p. 385 pls., *A. brachypus* p. 387 pl. spp. n. Yugoslavia, VIETS Arch. Hydrobiol. Stuttgart 29.—*A. natangensis* p. 484 figs., SOKOLOW 425.—*A.*, keys to spp. Many spp. described and figured, Germany, VIETS 513.

Axonopsella plaumanni ♀, *A. hamata* ♀, p. 40 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 115.—*A. vaginalis* p. 214 fig. sp. n. Brazil, VIETS Zool. Anz. Leipzig 113.

Axonopsidae, key to subfams., VIETS 513.

Axonopsinae, key to genera, VIETS 513.

Axonopsis, keys to subgenera and spp., *A. complanata*, *A. gracilis*, *A. (Hexaxonopsis) rotundifrons*, VIETS 513.

Bandakia concreta figs., VIETS 513.

Brachypoda, key to spp., *B. versicolor* figs., *B. celeripes*, *B. modesta*, VIETS 513.

Calonyx, key to spp., *C. rotundus*, *C. squamosus* figs., *C. multiporus*, VIETS 513.—*C. javanensis* figs., LUNDBLAD 256.

Clathrosperschon gen. n. ♂ for *C. crassipalpis* sp. n. Brazil p. 30, LUNDBLAD Zool. Anz. Leipzig 115.

Copidognathopsis tectiporus profundus subsp. n. Yugoslavia p. 391 pl., VIETS Arch. Hydrobiol. Stuttgart 29.

Corticacarus gen. n. for *C. dentipalpis* sp. n. Brazil p. 31, LUNDBLAD Zool. Anz. Leipzig 115.—*C. malleifer* ♂ sp. n. Brazil p. 19, LUNDBLAD Zool. Anz. Leipzig 116.—*C. labialis* sp. n. ♂ p. 206 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Ctenothyas gen. n. [*Ctenothyasidae*] p. 145 for type *C. verrucosa* sp. n. Java p. 146 figs., LUNDBLAD Ent. Tidskr. Stockholm 57.

Ctenothyasidae fam. n. p. 145, LUNDBLAD Ent. Tidskr. Stockholm 57.

Ctenothyasinae subfam. n. p. 145, LUNDBLAD Ent. Tidskr. Stockholm 57.

Dartia borneri fig., VIETS 513.

Diplodontinae, key to genera, VIETS 513.

Diplodontus despiciens fig., VIETS 513.

Diplokoenikea subgen. n. see *Koenikea*.

Eupatra scapularis fig., VIETS 513.

Euthyas truncata fig., VIETS 513.

Euthyasinae, key to genera, VIETS 513.

Eylais, notes on genus, key to spp. Many spp. described and figured, Germany, VIETS 513.

Feltria westfalica lychnida p. 376 pls., *F. brevipes drilonensis* p. 377 pls., *F. brevipes liburnica* p. 378 pl. subspp. n. *F. cornuta* p. 373 pls., *F. rouxi romijni* p. 376 pls. Yugoslavia, VIETS Arch. Hydrobiol. Stuttgart 29.—*F.*, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.

Feltriella rubra Yugoslavia p. 379 pl. VIET 509.

Forelia liliacea, *F. ovalis*, Wisconsin p. 278 pl., MARSHALL 275.—*F.*, keys to spp. Many spp. described and figured, Germany, VIETS 513.

Forelinae, key to genera, VIETS 513.

Frontipoda virescens sp. n. Brazil p. 37, LUNDBLAD Zool. Anz. Leipzig 115.—*F. crassipes* ♀ sp. n. p. 22 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*F. musculus* figs., VIETS 513.

Geayia (*Geayella*) subgen. n. for *G. (G.) catharinensis*, p. 48, *G. (G.) coeruleocruciata* ♀, *G. (G.) coeruleolineata* ♀ p. 49 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Geayella subgen. n. see *Geayia*.

Georgella helvetica (?) figs., larva and nymph, MUNCHBERG 305.—*G.*, key to spp., *G. helvetica*, *G. apsteini* figs., VIETS 513.

Gnaphiscus setosus fig., VIETS 513.

Hydrachna, key to N. American spp., p. 41, *H. (Tetrahydrachna)* subgen. n. for *H. miliaria* Ribaga p. 30, *H. (Scutohydrachna) hutchinsoni* p. 20 figs., *H. (Diplohydrachna) hungerfordi* p. 23 figs., *H. (Rhabdohydrachna) stipata* p. 35 figs., *H. (R.) hesperia* p. 38 figs. spp. n. *Hydrachna cruenta diminuta* p. 10 fig., *H. magniscutata reducta* p. 13 figs., *H. m. separata* p. 15 figs., vars. n. *H. (Rhabdohydrachna) geographica americana* p. 30 fig. form. n. *H. (R.) marshallae* p. 34 fig. nom. n. *H. cruenta* p. 3, *H. magniscutata* p. 10, *H. (Scutohydrachna) crenulata* p. 16, *H. (S.) rotunda* p. 18, *H. (Diplohydrachna) conjecta* p. 21, *H. (Tetrahydrachna) miliaria* p. 25, *H. (R.) canadensis* p. 32, figs., LUNDBLAD Ark. Zool. Stockholm 28 A3.—*H. cruenta*, synonymy p. 245, VIETS 507.—*H.*, keys to subgenera and spp. German spp. described and figured, VIETS 513.

Hydrachnellae, key to superfams. and fams. p. 41, to subfams. (imago) p. 49, to genera and spp. (nymphs) p. 472, (larvae) p. 488, (spawn) p. 507, general key for living specimens p. 559, VIETS 513.

Hydrachninae, key to genera, VIETS 513.

Hydrochoreutes, key to spp., *H. unguatus*, *H. krameri* figs., VIETS 513.

Hydrovolzia placophora figs., VIETS 513.

Hydrovolziinae, key to genera and subgenera, VIETS 513.

Hydryphantes (*Polyhydryphantes*) *papillosus* sp. n. ♂ p. 208 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*H. fontinalis* p. 471 figs. sp. n. Russia, SOKOLOV Arch. Hydrobiol. Stuttgart 30.—*H.*, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.

Hydryphantidae, key to subfams., VIETS 513.

Hydryphantinae, key to genera, VIETS 513.

Hygrobatas ampliatus p. 211 figs., *H. apertus* p. 213 fig., *H. procursus* p. 213 figs. spp. n. *H. ampliatus productus* p. 212 fig. subsp. n. Brazil, VIETS Zool. Anz. Leipzig 113.—*H. (H.) longiporus* p. 477 figs., SOKOLOV 425.—*H.*, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.

Hygrobatidae, key to subfams., VIETS 513.

Hygrobatides gen. n. *H. pachydermis* p. 33, *H. gracilidens* ♂, *H. plavmanni* ♀ p. 34 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Hygrobatinae, key to genera, LUNDBLAD 257.—Hygrobatinae, key to genera, VIETS 513.

Huitfeldtia rectipes Wisconsin p. 277 pl., MARSHALL 275.—*H. rectipes* fig., VIETS 513.

Koenikea (*Koenikea*) *coerulescens* p. 42, *K. (K.) hamulata*, *K. (K.) gibberipalpis* p. 43, *K. (K.) longipes*, *K. (K.) tigrina* p. 44 spp. n. ♂: *K. (Diplokoenikea)* subgen. n. for *K. (D.) pectinata* sp. n. ♂ p. 45: *K. (Recifella) latipes* sp. n. ♂ p. 45; *K. (Neokoeneikea)* subgen. n. for *K. (N.) armipes* sp. n. ♂ p. 46: *K. (Koenikella)* subgen. n. for *K. (Koenikella) crassipalpis* sp. n. ♂ p. 46: *K. (Parakoeneikea)* subgen. n. for *K. (P.) curvipalpis* sp. n. ♂ p. 47, Brazil, LUNDBLAD Zool. Anz. Leipzig 115.—*K. (Koenikea) plicata* ♂ p. 14, *K. (K.) cruciata* ♂ p. 14, *K. (K.) medioposita* ♂ p. 15, *K. (? K.) furcaticulata* ♀ p. 15, *K. (? K.) excavata* ♀ p. 16, *K. (? K.) rectirostris* ♀ p. 16 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*K. (Koenikea) rosea* ♂ p. 200, *K. (K.) undulata* ♂ p. 201, *K. (? K.) longiuscula* ♀ p. 201 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—

K. indistincta sp. n. p. 134 figs. Yucatan, MARSHALL Publ. Carnegie Inst. Washington 457.—*K. concava* p. 274 pl., *K. haldemanti*, *K. wolcottii* p. 275 pl., *K. marshallae*, *K. spinipes* p. 276 pl. Wisconsin MARSHALL 275.

Koenikella subgen. n. see *Koenikea*.

Kongsbergia, keys to spp., *K. materna* figs., *K. ruttneri*, VIETS 513.

Krendowskia (*Krendowskia*) *dorso-lineata* sp. n. ♂ p. 47 Brazil, LUNDBLAD Zool. Anz. Leipzig 115.—*K. (Krendowskia) rufolineata* ♀ sp. n. p. 22 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*K. latissima* fig., VIETS 513.

Krendowskiinae, key to genera, VIETS 513.—Krendowskiinae, key to genera, VIETS 515.

Kyphohygrobatella gen. n. [*Hygrobatinae*] for *K. serratipalpis* sp. n. ♂ p. 206 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Lebertia (*Pilolebertia*) *macedonica* p. 360 pl., *L. (Lebertia) jadrensis* p. 362 pls., *L. (Lebertia) dalmatica* p. 364 pls., *L. (Hexalebertia) longipalpis* p. 366 pl. text-fig. spp. n. Yugoslavia, VIETS Arch. Hydrobiol. Stuttgart 29.—*L. (Pilolebertia) saxonica* p. 474 figs., *L. (L.) rufipes* var. *zachariasi* p. 475, SOKOLOV 425.—*L. (Mixolebertia) densa*, *L. (L.) gladiator*, *L. (L.) olonensis*, VIETS 510.—*L.*, notes on genus, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.

Lebertiidae, key to subfams., VIETS 513.

Limnesia circumcincta sp. n. Brazil p. 209, figs. *L. (Allolimnesia)* subgen. n. for type *L. (A.) polypora* sp. n. Brazil p. 210 fig., VIETS Zool. Anz. Leipzig 113.—*L. dorsalis* sp. n. ♀ Brazil p. 41, LUNDBLAD Zool. Anz. Leipzig 115.—*L. (Neolimnesia)* subgen. n. p. 202 for *L. (N.) plaumanni* sp. n. ♂ p. 203 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*L. (Limnesia) incognita* ♂ p. 20, *L. (L.) falsificata* ♂ p. 21, *L. (Tetralimnesia) acanthoscelus* ♀ p. 21 spp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*L. maculata*, pupa, figs., MEUCHE 288.—*L.*, notes on genus, keys to subgenera and species, *L. maculata*, *L. fulgida*, *L. undulata*, *L. polonica*, *L. koenikei*, *L. connata* figs., VIETS 513.

Limnesides gen. n. [*Limnesiinae*] for *L. epimerata* sp. n. ♀ p. 202 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Limnesiinae, key to genera, VIETS 513.

Limnochares aquatica figs., VIETS 513.

Limnocharinae, key to genera, VIETS 513.

Litarachna kamui sp. n. p. 191 figs., *L. divergens* p. 187 figs. Japan, UCHIDA J. Fac. Sci. Hokkaido Univ. Zool. 4.

Ljania, key to spp., *L. bipapillata*, *L. macilenta* figs., VIETS 513.

Mamersopsinae, key to genera, VIETS 513.

Megapella gen. n. for *M. longimaxillaris* sp. n. Brazil p. 32, LUNDBLAD Zool. Anz. Leipzig 115.

Megapoides gen. n. for *M. porosus* ♂ sp. n. p. 20 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Megapus plaumanni ♂ sp. n. Brazil p. 19, LUNDBLAD Zool. Anz. Leipzig 116.—*M. samsoni* p. 480 figs. sp. n., *M. nodipalpis nondilatata* p. 479 figs. var. n. Russia, SOKOLOV Arch. Hydrobiol. Stuttgart 30.—*M. cisternarum* sp. n. subterranean waters Yugoslavia p. 83 figs., VIETS Verh. mit. Vereinig. Limnol. Beograd. 7.—*M.*, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.

Megapusinae, key to genera, VIETS 513.

Midea orbiculata figs., VIETS 513.

Mideopsidae, key to subfams., VIETS 513.

Mideopsinae, key to genera, VIETS 513.

Mideopsis (Neoxystonotus) proximalis ♀ p. 49, *M. (N.) lineatus* ♀, *M. (N.) clavipes* ♀ p. 50, *M. (N.) genitalis* ♂ p. 51 spp. n. Brazil LUNDBLAD Zool. Anz. Leipzig 115.—*M.*, key to spp., *M. orbicularis*, *M. crassipes* figs., VIETS 513.

Miraxona gen. n. ♂ p. 38, *M. clavipes* sp. n. p. 39, *Miraxona (Miraxonella)* subgen. n. ♂ for *M. (Miraxonella) complicata* sp. n. p. 39 Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Miraxonella subgen. n. see *Miraxona*.

Momoniinae, key to genera, VIETS 513.

Mundamella germanica fig., VIETS 513.

Nautarachna crassa figs., VIETS 513.

Neoalbia gen. n. p. 23 for *N. violacea* sp. n. p. 24 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Neoaxona gen. n. ♀ for *N. oblonga* sp. n. p. 40 Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Neokoenikea subgen. n. see *Koenikea*.

Neolimnesia subgen. n. see *Limnesia*.

Neumania loricata sp. n. ♂ Brazil p. 41, LUNDBLAD Zool. Anz. Leipzig 115.—*N. cenotea* sp. n. p. 133 figs. Yucatan, MARSHALL Publ. Carnegie Inst. Washington 457.—*N.*, keys to subgenera and sp. Many spp. described and figured, Germany, VIETS 513.

Neumaniinae, key to genera, VIETS 513.

Neotorrenticola gen. n. [*Neotorrenticolidae*] for *N. violacea* sp. n. p. 204 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Neotorrenticolidae fam. n. Neotorrenticolinae subfam. n. for type genus *Neotorrenticola* gen. n., LUNDBLAD Zool. Anz. Leipzig 116.

Nilotoniinae, key to genera, VIETS 513.

Oxinae, key to genera, VIETS 513.

Oxus magnus p. 383 nom. n. for *O. orientalis* Sok., SOKOLOW Zool. Zahrb. Jena (Syst.) 65.—*O.*, key to spp., *O. oblongus*, *O. longisetus*, *O. nodigerus*, *O. ovalis*, *O. strigatus*, *O. angustipositus* figs., *O. tenuisetis*, VIETS 513.

Panisellus theinmanni fig., VIETS 513.

Panisoides setipes fig., VIETS 513.

Panisopsis, key to spp., *P. vigilans*, *P. thori*, *P. curvifrons*, VIETS 513.

Panisus longiscutatus sp. n. Yugoslavia p. 355 pl. fig., VIETS Arch. Hydrobiol. Stuttgart 29.—*P.*, key to spp., *P. michaeli*, *P. torrenticolus* figs., VIETS 513.

Parakoenikea subgen. n. see *Koenikea*.

Parasoldanellonyx typhlops, subterranean waters Jugoslavia p. 86 fig., VIETS 514.

Parathyas thoracata fig., VIETS 513.

Partnunia steinmanni fig., VIETS 513.

Piersigia, key to species p. 283, *P. botezati* sp. n. Romania p. 171 figs., HUSIATINSCHI Zool. Anz. Leipzig 115.—*P. intermedia* Romania, description of male p. 331 figs., HUSIATINSCHI 187.—*P.*, key to spp., *P. limnophila*, *P. intermedia*, *P. koenikei* figs., VIETS 513.

Piona, key to subgenera p. 332, to spp. ♂ p. 332, ♀ p. 349, *P. litoralis* ♀ fig. p. 354 sp. n. Many spp. described and figured, VIETS in Dahl. Die Tierwelt Deutschlands 32.—*P.* (? *Piona*) *juncta* sp. n. p. 208 Brazil, LUNDBLAD Zool. Anz. Leipzig 116.—*P. pearsei* sp. n. p. 134 figs. Yucatan, MARSHALL Publ. Carnegie Instn. Washington 457.—*P. crassa* p. 279 pl., *P. rotunda*, *P. reighardi* p. 280 pl., *P. media* p. 282 pl., *P. inconstans* p. 283 pl., *P. conglobata* p. 284 pl. Wisconsin, MARSHALL 275.—*P. ambigua* p. 282 fig., *P. discrepans* p. 284 fig., *P. conglobata*, BESSILING 31.

Pionacercus, keys to spp., *P. uncinatus*, *P. leuckarti*, *P. norvegicus*, *P. (Pionacercopsis) vatrax* figs., VIETS 513.

Pionidae, key to subfams., VIETS 513.

Pionopsis lutescens fig., VIETS 513.

Plaumannia gen. n. p. 30 for *P. arrenuripalpis* sp. n. ? ♂, p. 31 Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Pontarachna pacifica sp. n. Japan p. 183 figs., UCHIDA J. Fac. Sci. Hokkaido Univ. Zool. 4.—*P. anellata* sp. n. p. 332 figs., *P. pacifica* var. *pilosa* var. n. p. 330 figs. Pacific Ocean, SOKOLOW Zool. Anz. Leipzig 115.

Protzia sculptopetiolata p. 51 figs. sp. n., *P. invalvaris* var. *barsica* p. 54 figs. var. n. Czechoslovakia, SZALAY Zool. Anz. Leipzig 115.—*P.*, key to spp., *P. eximia*, *P. invalvaris* figs., *P. reticulata*, VIETS 513.

Protziinae, key to genera, VIETS 513.

Pseudofeltria scutigera fig., VIETS 513.

Pseudohydryphantes parvulus fig., VIETS 513.

Pseudotorrenticola rhynchota fig., VIETS 513.

Rhyncholimnochares gen. n. for *R. lamellipalpis* sp. n. Brazil, LUNDBLAD Zool. Anz. Leipzig 116.

Rhynchohydracaridae fam. n. Rhynchohydracarinae subfam. n. for *Rhynchohydracarus* gen. n. p. 29, LUNDBLAD Zool. Anz. Leipzig 115.

Rhynchohydracarus gen. n. ♂ for *R. testudo* sp. n. ♂ p. 29 Brazil, LUNDBLAD Zool. Anz. Leipzig 115.

Rhyncholimnocharinae subfam. n. [*Limnocharidae*] p. 203 for *Rhyncholimnochares* gen. n., LUNDBLAD Zool. Anz. Leipzig 116.

Rhyncholimnochares gen. n. [*Rhyncholimnocharinae*] for *R. lamellipalpis* sp. n. Brazil p. 203 LUNDBLAD Zool. Anz. Leipzig 116.

Roqueella, diagnosis p. 215, VIETS 515.

Sperchon, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.—*S. (Sperchon) cornutus*, ♂, figs., LUNDBLAD 256.

Sperchoninae, key to genera, VIETS 513.

Sperchonopsis verrucosa fig., VIETS 513.

Soldanellonyx typhlops belgicus var. n. p. 7 figs. Belgium, VIETS Bull. Mus. Hist. nat. Belg. 12 No. 28.

Tetrahydrachna subgen. n. see *Hydrachna*.

Teutonia cometes figs., VIETS 513.

Thoracohygrobates gen. n. [*Hygrobatinae*] for *Th. cancellatus* sp. n. ♂ p. 205 Brazil, LUNDBLAD Zool. Anz. LEIPZIG 116.

Thoracophoracarus sinearcus fig., VIETS 513.

Thyas, keys to spp., *Th. barbiger*, *Th. pachystoma*, *Th. rivalis*, *Th. palustris*, *Th. dirempta*, VIETS 513.

Thyasella mandibularis fig., VIETS 513.

Thyasidae, key to sub-fams., VIETS 513.

Thyasides dentata fig., VIETS 513.

Thyasinae, key to genera, VIETS 513.

Thyopsis cancellata p. 471, SOKOLOV 425.—*T. cancellata* figs., VIETS 513.

Unionicola, keys to subgenera and spp. Many spp. described and figured, Germany, VIETS 513.

Unionicolidae, key to subfams., VIETS 513.

Vietsia scutata figs., VIETS 513.

Wettina podagrica figs., VIETS 513.

Xystonotus willmanni figs., VIETS 513.

Zschokkea oblonga, VIETS 513.

IXODOIDEA.

Faunal list.—Cavernicolous, WOLF 549.

Amblyomma leucozomum p. 619 fig., *A. curruca* p. 621 fig. S. America, *A. serpentinum* p. 622 fig. Malaysia spp. n., *A. infestum borneense* subsp. n. p. 623 Borneo, *A. fuscum* p. 624, SCHULZE Z. Parasitenk. Berlin 8.—*A. cajennense*, gynandromorph figs., FONSECA 130.—*A. hebraeum* p. 911 fig., *A. marmoreum* p. 914 figs., JACK 192.—*A. caelaturum*, SCHULZE 406.

Aponomma, keys to spp., *A. auruginans* p. 625 figs. Australia, *A. patagonicum* p. 634 Patagonia, *A. laevatum* p. 629 fig. S. America spp. n., *A. falso-laeve* p. 628 fig. nom. n., *A. oudemansi* p. 627, *A. spp.* of the groups *laeve* and *gervaisii*, *A. fuscolineatum*, *A. exornatum*, *A. arcanum*, SCHULZE Z. Parasitenk. Berlin 8.—*A. ecinctum*, SCHULZE 406.

Argas persicus p. 927 fig., JACK 192.—*A. reflexus* figs., CHRISTIANSEN 85.

Boophilus notes on genus p. 365, key to spp. p. 366, *B. intraoculatus* Iran p. 368 fig.—*B. (Urob.) occidentalis* Iran p. 368 fig. *B. (U.) indicus* India p. 369 fig. spp. n. *B. calcaratus persicus* subsp. n. Iran p. 366 figs., MINNING Z. Parasitenk. Berlin 8.—*B. decoloratus* p. 919 fig., JACK 192.

Haemaphysalis renschi sp. n. p. 524 figs. Malay Archipelago, SCHULZE Z. Parasitenk. Berlin 8.—*H. cornigera taiwana* p. 342 figs. var. n. Formosa, SUGIMOTO J. Soc. trop. Agric. Formosa 8.—*H. punctata* var. *cretica* var. n. on sheep Crete p. 25 figs., SENEVET & CAMINOPETROS Arch. Inst. Pasteur. Alger. 14.—*H. leachii* p. 920 fig., JACK 192.

Hyalomma (*Hyalommina*) notes on subgenus, *H. (Hyalommina) lewisi* sp. n. p. 261 figs. Tanganyika, *H. rhipicephaloides* fig., SCHULZE Zool. Anz. Leipzig 116.—*H. delpyi* p. 187 fig. Persia, *H. steineri* Spain, spp. n., *H. steineri steineri* p. 188 fig., *H. steineri codinaei* p. 189 subsp. n., SCHULZE Zool. Anz. Leipzig 114.—*H. (Hyalomma) dromedarii*, teratology p. 49 figs., *H. (Hyalomma) asiaticum* teratology p. 54 fig., DELPY 97.—*Hyalomma*, notes on genus p. 206, *H. dromedarii* notes p. 220 figs., DELPY 98.—*H. aegyptium impressum* p. 909 fig., JACK 192.—*H. schulzei*, *H. lusitanicum*, SCHULZE 406.

Ixodes taiwanensis p. 342 figs. sp. n. Formosa, SUGIMOTO J. Soc. trop. Agric. Formosa 8.—*I. ricinus aragãoi* subsp. n. Brazil p. 31 figs., FONSECA Bol. biol. S. Paulo N.S. 2.—*I.*, distrib. in Transcaucasia, *I. arboricola bogatschevi* subsp. n. fig. p. 95, *I. laguri* figs., ♂ described, *I. signatus* fig., *I. transcausicus* fig., KIRSCHENBLATT Zool. Anz. Leipzig 114.—*I. pilosus* p. 921 fig., JACK 192.—*I. persulcatus*, *I. simplex*, SCHULZE 406.

Margaropus winthemi p. 920 fig. JACK 192.

Ornithodoros foleyi sp. n. Algeria p. 520 figs., PARROT Bull. Soc. Path. exot. 21.—*O.* notes on N. African spp., *O. delanoëi* sp. n. Morocco p. 951 figs., ROUBAUD & COLAS-BELCOUR Bull. Soc. Path. exot. 24.—*O. dunni* on little Bull Bat p. 347 pl. text-figs., *O. azteci* on Bats p. 349 pl. text-figs., *O. brodyi* on Bat p. 351 pl. text-figs. spp. n. Panama, MATHESON J. Parasit. Urbana 21.—*O. megnini* p. 922 figs., *O. moubata* p. 925, JACK 192.—*O. lahorensis*, RASTEGATIEFF 356.

Rhipicephalus macropis p. 521 figs. Aden, *R. pilans* p. 524 figs. Malay Archipelago spp. n., *R. haemaphysaloides* vars., SCHULZE Z. Parasitenk. Berlin 8.—*R.* spp. p. 915 figs., JACK 192.—*R. rossicus*, KOLOMIETZ 223.

TARDIGRADA.

Monograph on the class, MARCUS 272.

Faunal lists.—Cavernicolous, WOLF 549; Palestine, RAHM 353.

Actinartus doryphorus fig., MARCUS 272.

Bathyechiniscus tetronyx fig., MARCUS 272.

Batillipes mirus fig., MARCUS 272.

Brychoerus subgen. n. see *Echiniscus*.

Diphasccon emmautinum p. 75 figs. sp. n. Palestine, RAHM Zool. Anz. Leipzig 115.—*D. pascuense* sp. n. p. 28 figs., Easter I., RAHM Zool. Anz. Leipzig 115.

Echiniscoides sigismundi fig., MARCUS 272.

Echiniscus, key to subgenera, *E. Brychoerus* subgen. n. for *E. (Brychoerus) intermedius* (John Murr.), *E. (B.) intermedius laevis* form. n. *E. (Bryodelphax) parvulus*, *E. (Hyechiniscus) gladiator*, *E. (Echiniscus)* key to spp. Many spp. described and figured, MARCUS Das Tierreich Leipzig 66.—*E. batramiae* sp. n. Hungary p. 219 fig., IHAROS Zool. Anz. Leipzig 115.—*E. melanophthalmus* sp. n. p. 45 fig. Russia, BARTOŠ Zool. Anz. Leipzig 114.

Halechiniscus gutteli fig., MARCUS 272.

Hypsibius, key to subgenera and spp. *H. (H.) novemcinctus* sp. n. p. 281 fig. Europe, *H. (Diphasccon) brevipes* p. 302 fig. Hungary, *H. (D.) pinguis* p. 308 fig., Switzerland; *D. (D.) sp.* 16 p. 309 fig., Germany spp. n. Many spp. described and figured, MARCUS Das Tierreich Leipzig 66.—*H. complex*, *H. donetzi* p. 215 figs. spp. n. Russia, BOZHKO Proc. Zool.-Biol. Inst. Scient. Res. Charkov 1.—*H. (Ischybsibius) schaudinni* p. 250, *H. (Ischybsibius) augusti* p. 251 fig. East Africa, MARCUS 273.

Macrobiotus morulatus sp. n. p. 47 fig., Russia, BARTOŠ Zool. Anz. Leipzig 114.—*M. terrae-sanctae* figs. sp. n., *M. occidentalis betschârensis* fig. var. n. p. 74 Palestine, RAHM Zool. Anz. Leipzig 115.—*M. ucrainica* p. 214 figs., *M. carelica* p. 215 figs. spp. n. Russia, BOZHKO Proc. Zool.-Biol. Inst. Scient. Res. Charkov 1.—*M. pullari* East Africa p. 249, MARCUS 273.

Microlyda dujardini fig., MARCUS 272.

Milnesium tardigradum fig., MARCUS 272.

Oreella mollis, *O. vilucensis*, figs., MARCUS 272.

Parechiniscus chitonides figs., MARCUS 272.

Pseudechiniscus transsylvanicus sp. n. S. Carpathians p. 219 fig., IHAROS Zool. Anz. Leipzig 115.—*P. tridentifer* p. 45 fig. sp. n. Moravia, BARTOŠ Zool. Anz. Leipzig 113.

Tetrakentron synaptae figs., MARCUS 272.

PENTASTOMIDA.

Monograph on systematics of Pentastomida, HEYMONS 178.

Alafia ginae, *A. merki*, *A. platycephala* *A. indica*, *A. adriatica*, *A. travassosi*, HEYMONS 178.

Armillifer armillatus, *A. grandis*, *A. annulatus*, *A. pomeroiyi*, *A. moniliformis*. *A. brumpti*, figs., HEYMONS 178.

Cephalobaena tetrapoda fig., HEYMONS 178.

Diesingia megastoma, *D. kachugensis*, figs., HEYMONS 178.

Elenia australis figs., HEYMONS 178.

Kiricephalus coarctatus, *K. pattoni*, *K. tortus*, figs., HEYMONS 178.

Leiperia cincinnalis figs., *L. gracilis*, HEYMONS 178.

Ligamifer mazzai figs., HEYMONS 178.

Linguatula serrata, *L. dingophila*, *L. nuttali*, *L. recurvata*, figs., HEYMONS 178.—*L. serrata*, PULLAR 348.

Pentastomum gracile, *P. crocidurae* figs., HEYMONS 178.

Porocephalus crotali, *P. clavatus*, *P. stilesi*, *P. subulifer*, *P. siamensis*, figs., HEYMONS 178.

Raillietiella geckonis, *R. affinis*, *R. mabuia*, *R. gehyae*, *R. indica*, *R. kochi*, *R. shipleyi*, *R. orientalis*, *R. boulengeri*, *R. mediterranea*, *R. spiralis*, *R. furcocerca*, *R. giglioli*, *R. bicaudata*, figs., HEYMONS 178.

Reighardia sternae fig., HEYMONS 178.

Sambonia lohmanni figs., *S. wardi*, HEYMONS 178.

Sebekia oxycephala, *S. acuminata*, *S. samboni*, *S. divestei*, *S. wedli*, *S. cesarisi*, *S. jubini* figs., HEYMONS 178.

Subtriquetra subtriquetra, *S. shipleyi* fig., HEYMONS 178.

Waddycephalus teretiusculus, *W. vitiensis* figs., HEYMONS 178.

MYRIOPODA.

CHILOPODA.

Faunal list.—Outer Hebrides, WATERSTON 526.

Faunal list.—Cavernicolous, WOLF 549.

Asanada socotrana kalaharina subsp. n. Kalahari p. 160, LAWRENCE Ann. Transv. Mus. 17.

Ballophilus hounselli p. 45 figs., sp. n. New Zealand, ARCHEY Rec. Auckland Inst. and Mus. 2.

Bothropolys magnificus sp. n. Yugoslavia p. 67 figs., HOFFER Sbor. přir. Brne 18.

Cormocephalus rubriceps, *C. violascens*, ARCHEY 15.

Craterostigma tasmanianus, ARCHEY 15.

Cryptops, key to New Zealand spp., *C. arapuni*, *C. spinipes*, *C. megalopora*, *C. polyodontus*, *C. lamprothrus*, *C. dilagus*, *C. australis*, ARCHEY 15.

Ethmostigma platycephalus hiroi subsp. n. p. 163 Marshall Is., TAKAKUWA Trans. nat. Hist. Soc. Formosa 26.

Geophilus intermissus var. *crenulata* var. n. Karakorum p. 244 fig., SILVESTRI Mem. Conn. Acad. Arts. Sci. 10.—*G.*, key to New Zealand spp. p. 47, *G. spenceri*, *G. zygethus*, *G. xylophagus*, figs., ARCHEY 15.—*G. carpophagus* p. 247, VERHOEFF 503.

Hydroschendyla submarina, MAURY 278.

Lithobius falteronensis p. 125 sp. n., *L. tricuspis zangherii* p. 127 var. n. Italy, MANFREDI Mem. Soc. ent. ital. Genova 15.—*L. (Archilithobius) bispinosus* p. 248 fig., *L. (Archilithobius) materiatus* p. 250 fig. spp. n. *L. (Archilithobius) electus* var. *imminuta* p. 245 fig., *L. (Archilithobius) electus* var. *secessa* p. 246 fig., *L. (Archilithobius) erraticulus* var. *plurispinata* p. 249 fig. vars. n. Northern India, SILVESTRI Mem. Conn. Acad. Arts. Sci. 10.—*L. chikerensis* sp. n. *L. dieuzeidei atlantidis* subsp. n. fig. p. 243, comparison with *L. boettgeri* p. 244, *L. melanops protectus* p. 245 fig., Morocco.

VERHOEFF Zool. Anz. Leipzig 116.—*L. chikerensis* sp. n. p. 158 figs. Morocco, VERHOEFF Mitt. Höhlen-u. Karstf. Berlin 1936.

Madagassophora gen. n. for *Scutigera hova* SAUSS. u. ZEHNT. p. 6, VERHOEFF Zool. Anz. Leipzig 115.

Maoriella, notes on genus p. 62, key to spp. p. 59, *M. australis* p. 63 figs. sp. n. *M. aucklandica*, *M. macrostigma*, *M. zelanicus*, figs., New Zealand ARCHEY Rec. Auckland Inst. & Mus. 2.

Mecistocephalidae, key to genera, TAKAKUWA 455.

Mecistocephalus longichilatus p. 215 figs. sp. n. Formosa, TAKAKUWA Trans. nat. Hist. Soc. Formosa 26.—*M. multidentatus* p. 322 figs. sp. n. Japan, TAKAKUWA Trans. nat. Hist. Soc. Formosa 26.—*M.*, key to spp., *M. pauroporus*, *M. yamashinae* p. 434 figs. Japan, TAKAKUWA Trans. nat. Hist. Soc. Formosa 26.

Nesogeophilus japonicus sp. n. p. 1 fig. Japan, FAHLANDER Ark. Zool. Stockholm 28 B7.

Nodocephalus pauroporus p. 163 sp. n. Manchuria, compar. with *N. edentulus*, TAKAKUWA Trans. nat. Hist. Soc. Formosa 26.

Oligobothrus maculipes p. 95 figs. sp. n. Bulgaria, notes on other spp., FOLKMANOVÁ Bull. Inst. Roy. Hist. nat. Sophia 9.

Oranobius gen. n. [*Lithobiidae*] for *Lithobius microdon* LATZEL p. 246, VERHOEFF Zool. Anz. Leipzig 116.

Otostigmus ghiblanus sp. n. Tripoli p. 421, MANFREDI Atti Soc. ital. Milano 74.—*O. chiltoni*, ARCHEY 15.

Pachymerium ferrugineum maroccanum subsp. n. p. 247 Morocco, VERHOEFF Zool. Anz. Leipzig 116.

Polybothrus ochraceus p. 93 sp. n. Bulgaria, FOLKMANOVÁ Bull. Inst. Roy. Hist. nat. Sophia 9.

Queenslandogeophilus trichochilus p. 1 figs., *Q. macropalpus* p. 3 figs., spp. n. Japan, TAKAKUWA Zool. Mag. Tokyo 48.

Rhysida longipes, GADHOKE 139.

Schizoribautia, key to spp. p. 64, *S. brittini* figs., ARCHEY 15.

Scolioptanes laevipes, FAHLANDER 121.—*S. maritimus*, MAURY 278.

Scolopendridae, key to New Zealand spp., ARCHEY 15.

Scutigera, key to spp., *S. mohamedanica* p. 15 fig. sp. n. Palestine, *S. coleoprata* fig., VERHOEFF Zool. Anz. Leipzig 115.

Tachytherena maroccana p. 248 fig., VERHOEFF 503.

Taiwanella gen. n. [*Mecistocephalidae*] p. 435 for *T. yanagiharai* p. 436 figs. and *T. sculptulatus* p. 437 figs. spp. n. Formosa, TAKAKUWA Trans. nat. Hist. Soc. Formosa 26.

Taiyuna occidentalis, FAHLANDER 121.

Teletelson gen. n. for *Thereuonema dolichopoda* SILV. p. 13, VERHOEFF Zool. Anz. Leipzig 115.

Thereuonema, key to spp., *Th. dilatationis* p. 10 fig., *Th. mandschuria* p. 11 fig., Manchuria, *Th. acinacifera* p. 13 fig. Palestine, spp. n., *Th. hilgendorfi* var. *koreana*, VERHOEFF Zool. Anz. Leipzig 115.

Thereuopoda (*Thereuopoda*) *ferox* sp. n. p. 16 figs. Japan, VERHOEFF Zool. Anz. Leipzig 115.

Thereuopodina adjutrix p. 508 sp. n. India, VERHOEFF Rec. Ind. Mus. Calcutta 38.

Thereuopriana gen. n. for *Scutigera malagassa* SAUSS. u. ZEHNT p. 6, VERHOEFF Zool. Anz. Leipzig 115.

Zelanion, key to spp. p. 54, *Z. dux*, *Z. antipodus*, *Z. morbosus*, figs., ARCHEY 15.

Zelanophilus, key to spp. p. 51, *Z. provocator*, *Z. ferrugineus* figs., ARCHEY 15.

DIPLOPODA.

Faunal lists.—Caucasus, LOHMANDER 247; Cavernicolous, WOLF, 549; Outer Hebrides, WATERSTON 526.

Achromoporus gen. n. [*Chelodesmidae*]. p. 112 for type *A. coloratus* sp. n. p. 113 figs.; key to spp. p. 113, *A. enneriensis* p. 115 fig., *A. furcipes* p. 117 fig., *A. robustus* p. 118 figs., spp. n. Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Alcimbolus gen. n. [*Spirobolidae*] p. 56 for type *A. angustipes* sp. n. Hispaniola p. 57 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Amblyiulus (*Heteropachyiulus*) subgen. n. p. 159 for *A. (H.) adsharicus* p. 156 figs. sp. n.: *A. (H.) continentalis* p. 156 Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Anuroleptophyllum caucasicum p. 53 fig., LOHMANDER 247.

Aplopodesmus gen. n. [*Chelodesmidae*] p. 139 for type *A. longipes* sp. n. Hispaniola p. 140 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Archileucogeorgia gen. n. [*Leucogeorgiidae*] p. 99, compar. with *Leucogeorgia* p. 97, type sp. *A. abchasica* p. 91 figs. sp. n.; *A. satunini* p. 95 fig. sp. n. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Archiulus rutilans, CHAUCHARD 81.

Armeniobrachiulus subgen. n. see *Chromatoiulus*.

Ascospermophora, LOHMANDER 247.

Atractosoma, key to subgg. p. 369 *Mesatractosoma* subgen. n. p. 370 for *A. (Mesatractosoma) blechnorum* sp. n. p. 371 figs. Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Attemsocypus subgen. n. see *Urodesmus*.

Brachycybe p. 364, key to species p. 365, *B. petasata* p. 365 fig., *B. producta* p. 367 fig. spp. n. *B. lecontei* p. 366 fig., *B. rosea* p. 367 fig. United States, LOOMIS Proc. U.S. Nat. Mus. 83.

* *Brachydesmus* (*Brachydesmus*) *assimilis* p. 12 fig., *B. (Lophobrachydesmus) furcatus* p. 16 figs., *B. (Haplobrachydesmus)*, notes on subgen. p. 32, *B. (H.) ferrugineus* p. 22 figs., *B. (H.) italyschanius* p. 26 figs., spp. n., *B. (H.) kalischewskyi* p. 18 figs., *B. (H.) karavajewi* p. 28 figs., Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Brembosoma aspidiorum sp. n. ♂ p. 360 figs. Italy. Notes on genus p. 359, VERHOEFF Zool. Jahrb. Jena 68.

Callipus p. 418, key to spp. p. 421, *C. faucium* p. 422 fig., *C. taranus* p. 423 fig. spp. n. *C. sorrentinus* p. 421 fig. Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Ceratosoma (*Triacantazona*) *pusillum strasserii* subsp. n. p. 406 figs., *C. (Limnalpium) luganense* p. 404 figs. Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Cervosoma subgen. n. vide *Thaumatopora*.

Ceylonpeltis subgen. n. see *Polydesmopeltis*.

Chelodesmidae, key to Hispaniolan genera, LOOMIS 248.

Chondrotropis gen. n. [*Chelodesmidae*] p. 120 for type *C. niger* sp. n. p. 121 fig.; key to spp. p. 121, *C. pictus* p. 123 figs., *C. venustus* p. 126 fig. spp. n. Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Chordeuma silvestre, comp. with *Craspedosoma taurinorum*, VERHOEFF 504.

Chromatoiulus, notes on subgenera p. 143, *Ch. (Ch.) spathulatus* p. 104 figs. sp. n., *Ch. (Donbrachiulus)* subgen. n. p. 144 for type *Ch. (D.) rossicus* Timotheew p. 109: *Ch. (Colchiobrachiulus)* subgen. n. p. 145 for type *Ch. (C.) dioscoriadis* Lignau p. 113: *Ch. (Omobrachiulus)* subgen. n. p. 147 for type *Ch. (O.) brachyurus* Attems p. 114 figs., *Ch. (O.) brachyurus dagestanus* subsp. n. p. 121 figs., *Ch. (O.) adsharicus* p. 123 figs., *Ch. (O.) divaricatus* p. 135 figs. *Ch. (O.) implicatus*, *Ch. (O.) macrourus abchasicus* p. 131 figs. subsp. n. *Ch. (O.) curvicaudatus* p. 126 figs., *Ch. (O.) geniculatus* p. 129 figs. *Ch. (Armeniobrachiulus)* subgen. n. p. 146 for *Ch. (A.) sevangensis* Lohmander, Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.—*C. silvaticus silvaticus* fig., JAWLOWSKI 207.

Chytodesmidae, key to Hispaniolan spp., LOOMIS 248.

Coccoelasma gen. n. [*Chytodesmidae*] p. 167 for type *C. incisura* sp. n. Hispaniola p. 170 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Colchiobrachiulus subgen. n. see *Chromatoiulus*.

Cottodesminae subfam. n. for genus *Cottodesmus* gen. n. p. 357 Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Cottodesmus gen. n. [Polydesmidae] p. 356 for *C. crissolensis* sp. n. p. 358 figs. Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Craspedoprion subgen. n. vide *Craspedosoma*.

Craspedosoma, key to subgenera p. 372, *C. (Craspedosoma) oropense* sp. n. p. 373 figs., *Creagrosoma* subgen. n. for *C. (Creagrosoma) furculigerum* sp. n. p. 375 figs. and *C. (C.) furculigerum aspidicomes* subsp. n. p. 377 figs.—*Craspedoprion* subgen. n. for *C. (C.) taurinorum* p. 377 figs., key to subsp. p. 378, *C. (C.) taurinorum visense*, *C. (C.) t. pinerolense*, *C. (C.) t. castanearum*, *C. (C.) t. alense*, subsp. n. figs., Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.—*C. simile*, *C. alemanicum*, VERHOEFF 495.—*C. taurinorum*, variation, VERHOEFF 504.

Creagrosoma subgen. n. vide *Craspedosoma*.

Cubobolus consutus sp. n. Hispaniola p. 53 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Cyclodesmus, key to spp., *C. crasartus* p. 81 fig., *C. obesus* p. 83 fig., *C. nudatus* p. 85 fig., *C. angustipes* p. 86 fig., *C. incisus* p. 88 figs., *G. geobulus* p. 90 fig., *C. ennergensis* p. 92 figs., *C. insularis* p. 93 fig., *C. montanus* p. 95 fig., *C. rubellus* p. 97 fig., *C. falcarius* p. 98 fig., *C. setosus* p. 101, spp. n. *C. haitianus* p. 100 fig., Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Cylindroiulus (Olisthroiulus) subgen. n. p. 53 for *C. (O.) kacheticus* p. 49 figs., sp. n. *C. placidus* p. 42 fig., *C. parvus* p. 45, *C. (Caucasoiulus) ruber* p. 46, *C. (Caucasoiulus) schestoperovi* p. 48 fig. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.—*C. (Bracheioliulus) generosensis* sp. n. p. 220 figs., comp. with *C. teutonicus*, *C. (B.) allobrogicus muscivagus* subsp. n. p. 221 figs. Alps, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.—*C. teutonicus*, *C. nitidus*, *C. silvarum*, VERHOEFF 495.

Cynedesmus varilobatus sp. n. Hispaniola p. 184 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Cyphotylus gen. n. [Chytodesmidae] p. 170 for type *C. prolatus* sp. n. Hispaniola p. 172 fig., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Cyrtaphe gen. n. [Chelodesmidae] p. 142 for type *C. alternata* sp. n. p. 143 figs.; key to spp. p. 143, *C. lobipes* p. 145 fig., *C. continuata* p. 147 fig. spp. n. Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Dactylophorosoma p. 366, *D. nivisatellis* p. 368 figs. Italy, VERHOEFF 505.

Dasyodontus gen. n. [Polydesmidae] p. 156 for type *D. hispaniolus* sp. n. Hispaniola p. 158 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Docodesmus, key to spp., *D. semi-septus* p. 163 fig. sp. n., *D. haitiensis* *D. parvior* fig., p. 162, Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Donbrachyiulus subgen. n. see *Chromatoiulus*.

Dorasoma helveticum p. 214 figs., VERHOEFF 504.

Eoromidae fam. n. p. 173, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Eoromus gen. n. [Eoromidae] p. 175 for type *E. aberrans* sp. n. Hispaniola p. 176 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Epinannolene, key to spp., *E. convexus* p. 32 fig., *E. virgata* p. 34 fig. spp. n. Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Erythroprosopon gen. n. [Spiromimidae] p. 503 for *E. phoenix* sp. n. p. 505 figs. India, VERHOEFF Red. Ind. Mus. Calcutta 38.

Euxinoiulus subgen. n. see *Iulus*.

Fontaria Parafontaria subgen. n. for *F. (Parafontaria) armigera* sp. n. p. 301 figs. Japan, VERHOEFF Zool. Anz. Leipzig 115.

Fontariidae, key to genera p. 298, VERHOEFF 502.

Formosoglyphius gen. n. [Glyphiulidae] for *F. tuberculatus* sp. n. p. 57 figs. Formosa, VERHOEFF Zool. Anz. Leipzig 113.

Geopachyiulus (Nesopachyiulus) lepinyei sp. n. p. 155 figs. Morocco, VERHOEFF Mitt. Höhlen-u. Karstf. Berlin 1936.—*G. (Nesopachyiulus) lepinyei* sp. n. p. 241, comparison with *G. oraniensis* p. 242, Morocco, VERHOEFF Zool. Anz. Leipzig 116.

Gervaisia varallense sp. n. p. 238 fig., comp. with *G. ormeana*, Alps, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.—*G. ormeana* p. 436, VERHOEFF 505.

Glomeridella germanica p. 436, VERHOEFF 505.

Glomeridesmus jenkinsi sp. n. p. 10 figs., *G. concolor*, Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Glomeris, key to spp. p. 437, *G. oropensis* p. 429, *G. (Stenopleuromeris) judicaria* p. 438 spp. n. *G. conspersa*, key to subsp. p. 432, *G. conspersa spezziana* subsp. n. p. 433, *G. romana pellicensis* p. 431 var. *cavouri* var. n. p. 432, *G. undulata* p. 434, *G. primordialialis* [Dev. of pigment] p. 434 Zool. Jahrb. Jena (Syst.) 68.—*G. undulata* var. *kandelia* and var. *belchenia* subsp. n. p. 252, *G. conspersa* Germany, VERHOEFF Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i B. 1.—*G.*, key to Alpine species p. 226, *G. conspersa* p. 232, key to varieties p. 233, VERHOEFF 504.

Glyphiulidae, key to genera, VERHOEFF 499.

Gosodesmus claremontus United States p. 364 fig., LOOMIS 250.

Grusiniulus gen. n. [*Brachyiulidae*] p. 152 for type *G. redikorzevi* p. 148 figs. sp. n. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Haploglomeris (Simplomeris) subgen. n. for *H. montivaga* Faës. p. 224 fig., *H. (S.) montivaga simploneris* var. n., *H. (S.) montivaga berisalensis* var. n. p. 225 Alps, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Heteropachyiulus subgen. n. see *Amblyiulus*.

Heteroporatia bosniense fig., *H. vihorlaticum* figs., JAWLOWSKI 207.

Hungaroilulus subgen. n. see *Iulus*.

Iulus, notes on genus p. 84, key to subgenera p. 86 *I. (Orescioilulus)* subgen. n. p. 87 for type *I. (O.) subalpinus* p. 66 figs. sp. n.; *I. (O.) lindholmi* p. 71 figs. sp. n.: *I. (Porrhoilulus)* subgen. n. p. 87 for type *I. (P.) kubanus* Verhoeff p. 73 figs.: *I. (Euxinoilulus)* subgen. n. p. 88 for type *I. (E.) colchicus* p. 77 figs. sp. n.: *I. (Hungaroilulus)* subgen. n. p. 87 for type *I. (H.) curvicornis* Verhoeff Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Jonespeltis gen. n. [*Prionopeltidae*] for *J. splendidus* sp. n. India p. 115 figs., VERHOEFF Rec. Ind. Mus. Calcutta 38.

Karpatophyllon polinskii fig., JAWLOWSKI 207.

Kochliopus trilobatus sp. n. p. 310 figs. Riu-Kiu Is., VERHOEFF Zool. Anz. Leipzig 115.

Kubaniulus gen. n. [nr. *Microiulus*] p. 65 for type *K. gracilis* p. 62 figs. sp. n. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Leiocricus gen. n. [*Spirobolidae*] for type *L. diversipes* sp. n. Hispaniola p. 51 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Leptoiulus (Parviulus) disparatus p. 60 figs., sp. n. *L. (P.) tanymorphus* p. 57 figs. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.—*L. czarnohoricus* figs., JAWLOWSKI 207.—*L. simplex glacialis*, *L. belgicus*, VERHOEFF 495.—*L. notes*, p. 423, *L. gilvicollis* p. 429, VERHOEFF 505.

Leucogeorgia p. 97, LOHMANDER 247.

Lobodesmus gen. n. [*Chytodesmidae*] p. 164 for type *L. granosus* sp. n. Hispaniola p. 165 figs., LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Lophocyclus gen. n. [*Cyclodesmidae*] p. 102 for type *L. laxatus* sp. n. p. 106 fig.; key to spp. p. 103, *L. passus* p. 103 figs., *L. munitus* p. 105 fig., *L. pumilus* p. 108 fig. spp. n. Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Lophodesmus caraibianus figs. p. 186, LOOMIS 248.

Lophoproctus aequatus sp. n. p. 7 fig., *L. niveus*, Hispaniola, LOOMIS Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Macheiriophoron cervinum, *M. wehranum*, VERHOEFF 495.

Merorcheta, key to Hispaniolan fams., LOOMIS 248.

Mesatractosoma subgen. n. vide *Atractosoma*.

Mesoilulus key to genus p. 142, *M. gridellii* sp. n. Italy p. 140 figs., STRASSER Atti Mus. stor. nat. Trieste 12.—*M. kosswigi* sp. n. p. 156 figs., Turkey, VERHOEFF Mitt. Höhlen- u. Karstf. Berlin 1936.

Microspirobolus, key to spp., *M. esulcatus* p. 41 figs., *M. erythrotermus* p. 43 figs., *M. concinnus* p. 45 figs., *M. furcians* p. 48 figs., spp. n. *M. lineatus* figs., Hispaniola, Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Nedyopus koreanus sp. n. p. 308 figs. Korea, VERHOEFF Zool. Anz. Leipzig 115.

Nesobolus, key to Hispaniolan spp. p. 58, *N. indus* figs., *N. maltzani*, *N. domingensis*, Loomis 248.

Nopoiulus palmatus, VERHOEFF 504.

Olistheroilulus subgen. n. see *Cylindroiulus*.

Omobrachiululus subgen. n. see *Chromatoiulus*.

Ophiululus p. 423, *O. spezianus* sp. n. p. 427 figs., *O. germanicus* (= *strandi*, ATT.) p. 428 fig. Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.—*O. strandi*, Italy p. 165 figs., MANFREDI 270.

Orescioilulus subgen. n. see *Iulus*.

Organognathus gen. n. [*Harpagophoridae*] p. 103 for *O. multidentatus* sp. n. India p. 105 figs., VERHOEFF Rec. Ind. Mus. Calcutta 38.

Oroposoma gen. n. [*Craspedosomidae*] p. 366 for *O. fagorum* sp. n. p. 367 figs. Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.—*O.*, comp. with *Dorasoma*, key to spp. p. 210, notes on larvae, *O. catascaphium* p. 212, *O. varallense* p. 213, *O. granitivagum* p. 214 spp. n. figs. Switzerland, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Orthochordeuma germanicum, VERHOEFF 495.

Orthoporus, key to spp., *O. triquetrus* p. 37, *O. caelatus* p. 38 figs., spp. n. *O. haitiensis* figs., Hispaniola, Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Pachyiulus foetidissimus p. 153, *P. flavipes* p. 155, LOHMANDER 247.

Parafontaria subgen. n. vide *Fontaria*.

Penteporus gen. n. [*Stiodesmidae*] p. 180 for type *P. crenellatus* sp. n. Hispaniola p. 181 figs., Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Podoglyphiulus, notes on genus, *P. jonesii* p. 51 figs. sp. n. S. India, VERHOEFF Zool. Anz. Leipzig 113.

Pogonodesmus gen. n. [*Chelodesmidae*] p. 137 for type *P. pullus* sp. n. Hispaniola p. 138 fig., Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Polydesmidae, key to Hispaniolan genera, Loomis 248.—Notes on family p. 355, VERHOEFF 505.

Polydesminae, redefined p. 357, VERHOEFF 505.

Polydesmopeltis gen. n. [*Prionopeltidae*] p. 111 for type *Prionopeltis kelaarti* Humb., *P. (Ceylonpeltis)* subgen. n. p. 113 for type *Pr. xanthotrichus* Att., *P. (C.) xanthotrichus hirsutus* subsp. n. p. 114, India, VERHOEFF Rec. Ind. Mus. Calcutta 38.—*P. (Ceylonpeltis) xanthotrichus homuligerus* subsp. n. p. 507 figs. India, VERHOEFF Rec. Ind. Mus. Calcutta 38.

Polydesmus (Polydesmus) lambranus p. 218 figs. sp. n., *P. clavator* p. 219, Switzerland, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.—*P. (Polydesmus) muralewiczi* p. 9 fig. sp. n. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.—*P. (Polydesmus) taranus* sp. n. p. 361 figs., *P. (P.) asthenestatus borgotarensis* p. 362 figs., *P. susensis sturani* p. 363 fig. subsp. n., *P. (P.) pellicensis* var. *cottianus* var. n. p. 364 figs. Italy, key to subsp., VERHOEFF Zool. Jahrb. Jena 68.—*P. complanatus*, JAWLOWSKI 207.—*P. denticulatus*, *P. verhoeffii*, *P. testaceus*, *P. helveticus*, VERHOEFF 495.

Polygonium germanicum fig., JAWLOWSKI 207.

Porrhoiulus subgen. n. see *Iulus*.

Prionopeltidae, key to genera, VERHOEFF 497.

Prosopodesmus jakobsoni figs., VERHOEFF.

Prostemmiulus, key to spp., *P. venustus* p. 16, *P. abditus* p. 18 figs., *P. subulatus* p. 20 figs., *P. quadristriatus* p. 22 figs., *P. interruptus* p. 24 figs., *P. cognatus* p. 25 figs., *P. clavipes* p. 26 fig., *P. affinis* p. 28 figs., *P. heterops* p. 29 figs., spp. n. *P. clarus* p. 17 fig., Hispaniola, Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Pterygiodesmus gen. n. [*Chelodismidae*] p. 149 for type *P. strumosus* sp. n. Hispaniola p. 150 figs., Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Pyrhocyphosoma p. 382, key to spp. and subsp. p. 383 *P. fonticuli* sp. n. p. 398 figs., *P. fonticuli quercuum* subsp. n. p. 400 figs., *P. pontremolense* p. 400 figs., *P. serravallense* p. 401 figs. spp. n., *P. tridentinum ravinense* subsp. n. p. 403 figs., Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Quisquicia gen. n. [*Chelodesmidae*] p. 128 for type *Q. scitula* sp. n. p. 130 figs.; key to spp. p. 129, *Q. engonata* p. 132 figs., *Q. rubens* p. 135 fig., spp. n. *Q. sallei*, *Q. insignis* figs., Hispaniola, Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Rhinocricus, key to spp., *R. scobinellus* p. 63 figs., *R. curtior* p. 64 fig., *R. lethifer* p. 67 figs., *R. albolatus* p. 71 figs., *R. cinctus* p. 72 figs., *R. ramulus* p. 76 figs., spp. n. *R. curtior*, *R. mediator*, *R. furcians*, *R. nigrescens*, figs., Hispaniola, Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Riukiaria gen. n. [*Fontariidae*] p. 298 for *R. pugionifera* p. 299 figs., *R. falcifera* p. 300 fig. spp. n. *Riu-Kiu* Is., VERHOEFF Zool. Anz. Leipzig 115.

Sarmatiulus kessleri p. 160, LOHMANDER 247.

Schizophyllum caspium p. 163, LOHMANDER 247.

Sichotanus longipes sp. n. p. 306 figs. Korea, VERHOEFF Zool. Anz. Leipzig 115.

Simplomeris subgen. n. see *Haploglomeris*.

Siphonocybe alba sp. n. Hispaniola p. 13 figs., Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Siphonophora, key to spp., Hispaniola, Loomis 248.—*S. limitare* sp. n. United States p. 362 fig., Loomis Proc. U.S. Nat. Mus. 83.

Sphaerotrichopidae, keys to genera, VERHOEFF 500.

Sphaerotrichopus cornutus sp. n. p. 10, figs. Australia, VERHOEFF Zool. Anz. Leipzig 114.

Spirobolidae, key to Hispaniolan genera, p. 39, Loomis 248.

Spiromimidae, key to genera, compar. with *Trigoniulidae*, VERHOEFF 498.

Stiodesmidae, key to Hispaniolan spp., Loomis 248.

Striaria, key to spp. p. 406, *S. nana* p. 407 figs., *S. imberbis* p. 408 fig., spp. n. *S. californica* figs., *S. nazinta* United States, Loomis J. Wash. Acad. Sci. 26.

Strongylosoma kordylamythrurum p. 32 figs., *S. leukoranum* p. 40 figs., LOHMANDER 247.

Strongylosomidae, notes on family p. 355, VERHOEFF 505.—Key to genera p. 303, VERHOEFF 502.

Styloceylonius gen. n. [*Styloidesmidae*] for *S. lobatus* sp. n. India p. 120 figs., VERHOEFF Rec. Ind. Mus. Calcutta. 38.

Styloidesmidae, notes p. 122, VERHOEFF 497.

Styraxodesmus ater sp. n. Hispaniola p. 188 fig., Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Synischiosoma, notes on genus p. 407, key to spp. p. 409 figs. *S. buchneri* sp. n. *S. buchneri ischianum* subsp. n. p. 41C figs., Italy, VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Tachypodoiulus albipes, VERHOEFF 495.

Tasmaniosoma gen. n. [*Sphaerotrichopidae*] p. 11 for *T. armatum* sp. n. p. 12 figs. Australia, VERHOEFF Zool. Anz. Leipzig 114.

Taurinosoma p. 412, *T. graniticolum* p. 418, VERHOEFF 505.

Thaumaporatia, key to subgenera p. 412, *Cervosoma* subgen. n. for *T.* (*Cervosoma*) *oropense* sp. n. p. 413 figs. Italy, *T.* (*T.*) *appeninorum* [abnormality] p. 416 figs., VERHOEFF Zool. Jahrb. Jena (Syst.) 68.

Trachydesmus simoni p. 365, *T. attamsii* p. 366 Italy, VERHOEFF 505.

Trachyulus, comparison with *Podoglyphiulus*, *T. ceylanicus costatus* subsp. n. p. 59 fig. Ceylon, *T. humberti*, VERHOEFF Zool. Anz. Leipzig 113.

Trematodesmus gen. n. [*Polydesmidae*] p. 153 for type *T. setiger* sp. n. Hispaniola p. 155 figs., Loomis Bull. Mus. Comp. Zool. Harvard 80 No. 1.

Unciger kubanus p. 88 figs. sp. n. Caucasus, LOHMANDER Göteborgs Vetensk. Samh. Handl. (B) 5 No. 1.

Uncigerinae p. 103, LOHMANDER 247

Urodesmus, key to subgenera p. 118, *U. (Attemsocypus)* subgen. n. for type *U. (A.) serratus* sp. n. India p. 118 figs., VERHOEFF Rec. Ind. Mus. Calcutta 38.

Xylophageuma vomrathii, VERHOEFF 495.

SYMPHILIDA.

Faunal list.—Cavernicolous, WOLF 549; Japan, TAKASHIMA 458.

Scutigera immaculata, FILINGER 124.—*S. immaculata* figs., RÉMY 366.

PAUROPODA.

Faunal list.—Germany, RÉMY 371.

Allopauropus (*Decapauropus*) *Amaudruti* p. 314 fig., *A. (D.) multiplex* p. 316 fig., spp. n. Germany, RÉMY Zool. Anz. Leipzig 116.—*A. (Decapauropus) helophorus* Romania p. 132 fig., *A. (Allopauropus) fusciniifer* Romania p. 133 fig., *A. (Allopauropus) denisi* France p. 134 fig., *A. (Allopauropus) sceptriifer* France p. 136 fig. spp. n., RÉMY Bull. Mus. Hist. nat. Paris (2) 8.—*A. jeanneli* sp. n. East Africa p. 185 figs., RÉMY Mission Scientifique de l'Omo, Paris 2.—*A. (Allopauropus) zerlingae* sp. n. France

p. 71 figs., RÉMY Bull. Mus. Hist. nat. Paris (2) 8.—*A. helveticus* var. *obtusicornis* France p. 289 fig., *A. barcinonensis* France p. 290 fig., RÉMY 369.

Brachypauropus tuberosus p. 318 figs. sp. n. Germany, RÉMY Zool. Anz. Leipzig 116.

Decapauropus sabaudianus France p. 285 fig., RÉMY 369.

Pauropus huxleyi France p. 278 fig. *P. furcifer* France and Balkans p. 278 figs., *P. bagnalli* France p. 278 figs., RÉMY 369.

Schleropauropus grassei sp. n. France p. 73 figs., RÉMY Bull. Mus. Hist. nat. Paris (2) 8.—*S. lyrifer* p. 316 fig. sp. n. Germany, RÉMY Zool. Anz. Leipzig 116.

Stylopauropus pedunculatus p. 271 fig., *S. pedunculatus* var. *brevicornis* p. 273 fig. France and Balkans, RÉMY 369.

PROTOTRACHEATA.

Faunal list.—Cavernicolous, WOLF 549.

XI. INSECTA

BY

THE IMPERIAL INSTITUTE OF ENTOMOLOGY

FOREWORD

THE attention of readers is directed to the fact that owing to the necessity of keeping the "Insecta" part within reasonable limits, entomological papers written entirely from an economic standpoint are omitted, but abstracts of these will be found in the *Review of Applied Entomology*. Very brief systematic papers, usually those dealing only with a single species, are noticed in the systematic portion only and do not appear in the list of titles.

CONTENTS

| | PAGE |
|--|---------|
| I. TITLES | 9 |
| II. SUBJECT INDEX :— | |
| General | 174 |
| Morphology | 176 |
| Development | 185 |
| Physiology | 190 |
| Aetiology | 193 |
| Ethology | 197 |
| Geography or Faunistic | 209 |
| III. SYSTEMATIC :—[Orders and families in alphabetical order.] | |
| General | 219 |
| Anoplura | 417-418 |
| (N-3598 j) | 1 1 |

| PAGE | | | | PAGE | | | |
|------------------------|-----|-----|-----|----------------------|-----|-----|---------|
| Coleoptera ... | ... | ... | ... | ... | ... | ... | 219-290 |
| Aclopidae | ... | ... | — | Curculionidae | ... | ... | 263 |
| Aculagnathidae | ... | ... | — | Cyathoceridae | ... | ... | 241 |
| Adimeridae | ... | ... | — | <i>Cyphonidae</i> | ... | ... | 242 |
| Aegialiidae | ... | ... | — | Dascillidae | ... | ... | 242 |
| <i>Aegialitidae</i> | ... | ... | — | Dasytidae | ... | ... | 244 |
| <i>Alleculidae</i> | ... | ... | 254 | Dermestidae | ... | ... | 240 |
| Amphizoidae | ... | ... | — | Derodontidae | ... | ... | — |
| Anobiidae | ... | ... | 243 | <i>Dicronychidae</i> | ... | ... | 246 |
| Anthicidae | ... | ... | 258 | Discolomidae | ... | ... | 238 |
| Anthribidae | ... | ... | 276 | Donaciidae | ... | ... | 284 |
| Aphodiidae | ... | ... | 261 | Drilidae | ... | ... | — |
| <i>Aspidiphoridae</i> | ... | ... | 243 | <i>Dryopidae</i> | ... | ... | 240 |
| <i>Boridae</i> | ... | ... | 252 | Dynastidae | ... | ... | 263 |
| Bostrychidae | ... | ... | 243 | Dytiscidae | ... | ... | 230 |
| Brenthidae | ... | ... | 275 | Elateridae | ... | ... | 246 |
| Bruchidae | ... | ... | 284 | Endomychidae | ... | ... | 239 |
| Buprestidae | ... | ... | 247 | Erotylidae | ... | ... | 239 |
| Byrrhidae | ... | ... | — | Euchiridae | ... | ... | 262 |
| Byturidae | ... | ... | — | Eucnemidae | ... | ... | 246 |
| <i>Cantharidae</i> | ... | ... | 244 | Eumolpidae | ... | ... | 285 |
| Carabidae | ... | ... | 222 | Galerucidae | ... | ... | 286 |
| Cassididae | ... | ... | 290 | Georyssidae | ... | ... | 241 |
| <i>Catopochrotidae</i> | ... | ... | 237 | Geotrupidae | ... | ... | 261 |
| Cebrionidae | ... | ... | 242 | Glaphyridae | ... | ... | — |
| Cephaloidae | ... | ... | — | Gnostidae | ... | ... | — |
| Cerambycidae | ... | ... | 277 | Gyrinidae | ... | ... | 231 |
| <i>Cerophytidae</i> | ... | ... | 246 | Halipidae | ... | ... | 229 |
| Cetoniidae | ... | ... | 263 | Halticidae | ... | ... | 286 |
| Chironidae | ... | ... | — | <i>Helmidae</i> ... | ... | ... | — |
| Chrysomelidae | ... | ... | 285 | Helodidae | ... | ... | 242 |
| Cicindelidae | ... | ... | 221 | Helotidae | ... | ... | — |
| Ciidae | ... | ... | 242 | Hemipeplidae | ... | ... | — |
| Cistelidae | ... | ... | 254 | Heteroceridae | ... | ... | 241 |
| Clambidae | ... | ... | — | Hispidae | ... | ... | 289 |
| Cleridae | ... | ... | 243 | Histeridae | ... | ... | 237 |
| Clytridae | ... | ... | 285 | Hybosoridae | ... | ... | — |
| Coccinellidae | ... | ... | 239 | Hydrophilidae | ... | ... | 241 |
| Colydiidae | ... | ... | 238 | Hydroscaphidae | ... | ... | — |
| Copridae | ... | ... | 260 | Hygrobiidae | ... | ... | — |
| Corylophidae | ... | ... | — | Hylophilidae | ... | ... | 258 |
| Cossyphodidae | ... | ... | — | Idiostomidae | ... | ... | — |
| Crioceridae | ... | ... | 284 | <i>Ipidae</i> | ... | ... | 273 |
| Cryptocephalidae | ... | ... | 285 | <i>Karumiidae</i> | ... | ... | — |
| Cryptophagidae | ... | ... | 238 | Lagriidae | ... | ... | 255 |
| Cucujidae | ... | ... | 238 | Lamellicornia | ... | ... | 260 |
| Cupesidae | ... | ... | — | Lamiidae | ... | ... | 280 |

Coleoptera (contd.) :—

| | PAGE | | PAGE |
|--------------------|------|----------------------|---------|
| Lampyridae ... | 246 | Platypsyllidae ... | — |
| Languriidae ... | 239 | Pleocomidae ... | — |
| Laridae ... | 284 | Prionidae ... | 277 |
| Lathridiidae ... | — | Proterhinidae ... | 273 |
| Leptinidae ... | 237 | Pselaphidae ... | 236 |
| Liodidae ... | 237 | Psephenidae ... | — |
| Longicornia ... | 276 | Ptiliidae ... | — |
| Lucanidae ... | 260 | Ptinidae ... | 243 |
| Lycidae ... | 245 | Pyrochroidae ... | 258 |
| Lyctidae ... | 243 | Pythidae ... | 257 |
| Lymexylonidae ... | 243 | Rhagophthalmidae ... | — |
| Malachiidae ... | 244 | Rhipiceridae ... | 242 |
| Megalopidae ... | 284 | Rhipiphoridae ... | 259 |
| Megascelidae ... | — | Rhysodidae ... | — |
| Melandryidae ... | 257 | Rhysopaussidae ... | 252 |
| Melasidae ... | 246 | Rutelidae ... | 262 |
| Meloidae ... | 258 | Sagridae ... | — |
| Melolonthidae ... | 262 | Sandalidae ... | 242 |
| Melyridae ... | 244 | Scalidiidae ... | — |
| Micromalthidae ... | — | Scaphidiidae ... | — |
| Monommidae ... | — | Scolytidae ... | 273 |
| Mordellidae ... | 259 | Scraptiidae ... | 257 |
| Mycetophagidae ... | — | Scydmaenidae ... | 236 |
| Nilionidae ... | 255 | Serropalpidae ... | 257 |
| Nitidulidae ... | 238 | Silphidae ... | 237 |
| Ochodaeidae ... | 261 | Sphaeriidae ... | 237 |
| Oedemeridae ... | 257 | Sphaeritidae ... | — |
| Orphnidae ... | — | Sphindidae ... | 242 |
| Orsodacnidae ... | 284 | Staphylinidae ... | 231 |
| Ostomidae ... | — | Stylopidae ... | 260 |
| Othniidae ... | 257 | Taurocerastidae ... | — |
| Parnidae ... | 240 | Telephoridae ... | 244 |
| Passalidae ... | 260 | Temnochilidae ... | — |
| Paussidae ... | 229 | Tenebrionidae ... | 252 |
| Pedilidae ... | 258 | Thorictidae ... | — |
| Pelobiidae ... | — | Throscidae ... | — |
| Perothopidae ... | — | Tretothoracidae ... | 252 |
| Phalacridae ... | — | Trichopterygidae ... | — |
| Phengodidae ... | 246 | Trictenotomidae ... | — |
| Phylloceridae ... | 246 | Trixagidae ... | — |
| Phytophaga ... | 284 | Trogidae ... | 261 |
| Platypidae ... | 275 | Trogositidae ... | — |
| Collembola ... | ... | ... | 438-439 |
| Dermaptera ... | ... | ... | 429-430 |
| Diptera ... | ... | ... | 364-397 |
| Acanthomeridae ... | — | Anisopodidae ... | — |
| Agromyzidae ... | 395 | Anthomyiidae ... | 389 |

Diptera (*contd.*):—

| | PAGE | | PAGE |
|------------------------------|------|----------------------------------|------|
| <i>Anthomyzidae</i> ... | 395 | <i>Micropezidae</i> ... | 393 |
| <i>Apioceridae</i> ... | — | <i>Milichiidae</i> ... | 395 |
| <i>Asilidae</i> ... | 378 | <i>Mormotomiidae</i> ... | 390 |
| <i>Bibionidae</i> ... | 366 | <i>Muscidae (s. str.)</i> ... | 388 |
| <i>Blepharoceridae</i> ... | 367 | <i>Muscidae Acalyptratae</i> ... | 390 |
| <i>Bombyliidae</i> ... | 379 | <i>Muscidae Calyptratae</i> ... | 384 |
| <i>Borboridae</i> ... | 390 | <i>Mycetophilidae</i> ... | 365 |
| <i>Braulidae</i> ... | — | <i>Mydidae</i> ... | 378 |
| <i>Calliphoridae</i> ... | 386 | <i>Nemestrinidae</i> ... | 378 |
| <i>Cecidomyiidae</i> ... | 365 | <i>Neottiophilidae</i> ... | 390 |
| <i>Celyphidae</i> ... | 390 | <i>Neriidae</i> ... | 393 |
| <i>Ceratopogonidae</i> ... | 367 | <i>Nycteribiidae</i> ... | 397 |
| <i>Chamaemyiidae</i> ... | 395 | <i>Nymphomyiidae</i> ... | — |
| <i>Chiromyzidae</i> ... | — | <i>Ochthiophilidae</i> ... | 395 |
| <i>Chironomidae</i> ... | 368 | <i>Oestridae</i> ... | 384 |
| <i>Chloropidae</i> ... | 393 | <i>Omphralidae</i> ... | 378 |
| <i>Clusiidae</i> ... | 390 | <i>Orphnephilidae</i> ... | 372 |
| <i>Clythiidae</i> ... | 383 | <i>Ortalidae</i> ... | 391 |
| <i>Coelopidae</i> ... | — | <i>Oscinidae</i> ... | 393 |
| <i>Coenomyiidae</i> ... | — | <i>Pachyneuridae</i> ... | — |
| <i>Conopidae</i> ... | 383 | <i>Pantophthalmidae</i> ... | — |
| <i>Cordyluridae</i> ... | 390 | <i>Petauristidae</i> ... | 372 |
| <i>Culicidae</i> ... | 370 | <i>Phoridae</i> ... | 381 |
| <i>Cyrtidae</i> ... | 378 | <i>Phryneidae</i> ... | — |
| <i>Deuterophlebiidae</i> ... | — | <i>Phycodromidae</i> ... | — |
| <i>Diopsidae</i> ... | 394 | <i>Phytomyzidae</i> ... | 395 |
| <i>Dixidae</i> ... | 371 | <i>Piophilidae</i> ... | 392 |
| <i>Dolichopodidae</i> ... | 380 | <i>Pipunculidae</i> ... | 382 |
| <i>Drosophilidae</i> ... | 394 | <i>Platypezidae</i> ... | 383 |
| <i>Dryomyzidae</i> ... | 390 | <i>Platystomidae</i> ... | 391 |
| <i>Empidae</i> ... | 380 | <i>Psilidae</i> ... | 393 |
| <i>Ephydriidae</i> ... | 394 | <i>Psychodidae</i> ... | 372 |
| <i>Erinnidae</i> ... | 376 | <i>Ptychopteridae</i> ... | — |
| <i>Fungivoridae</i> ... | 365 | <i>Pyrgotidae</i> ... | 391 |
| <i>Geomyzidae</i> ... | 395 | <i>Rhagionidae</i> ... | 378 |
| <i>Helcomyzidae</i> ... | 390 | <i>Rhopalomeridae</i> ... | 392 |
| <i>Helomyzidae</i> ... | — | <i>Rhyphidae</i> ... | — |
| <i>Heteroneuridae</i> ... | 390 | <i>Sapromyzidae</i> .. | 390 |
| <i>Hippoboscidae</i> ... | 396 | <i>Sarcophagidae</i> ... | 386 |
| <i>Itonididae</i> ... | 365 | <i>Scatomyzidae</i> ... | 390 |
| <i>Lauzanidae</i> ... | 390 | <i>Scatophagidae</i> ... | 390 |
| <i>Leptidae</i> ... | 378 | <i>Scatopsidae</i> ... | 366 |
| <i>Liriopidae</i> ... | — | <i>Scenopinidae</i> ... | 378 |
| <i>Lonchaeidae</i> ... | 390 | <i>Sciaridae</i> ... | 365 |
| <i>Lonchopteridae</i> .. | — | <i>Sciomyzidae</i> ... | 390 |
| <i>Lycoridae</i> .. | 365 | <i>Sepsidae</i> ... | 392 |

Diptera (*contd.*) :—

| | PAGE | | PAGE |
|------------------------------|------|---------------------------|---------|
| Simuliidae ... | 366 | Termitoxeniidae ... | 382 |
| <i>Sphaeroceridae</i> ... | 390 | Tethinidae ... | 395 |
| Stratiomyidae ... | 376 | <i>Thaumaleidae</i> ... | 372 |
| Streblidae ... | 396 | Therevidae ... | 378 |
| Syrphidae ... | 383 | Tipulidae ... | 372 |
| Tabanidae ... | 377 | Trichoceridae ... | 372 |
| Tachinidae ... | 384 | <i>Triaxoscelidae</i> ... | 395 |
| Tachiniscidae ... | — | Trypetidae ... | 391 |
| Tanyderidae ... | — | <i>Tylidae</i> ... | 393 |
| <i>Tanypezidae</i> ... | 391 | Xylophagidae ... | 376 |
| Tendipedidae ... | — | | |
| Embioptera ... | ... | | 422-423 |
| Ephemeroptera ... | ... | | 424-426 |
| Fossils ... | ... | | 440-444 |
| Hemiptera ... | ... | | 398-414 |
| Acanaloniidae ... | 405 | Dysodiidae ... | — |
| <i>Acanthiidae</i> ... | — | Eurybrachidae ... | — |
| Achilidae ... | 405 | Flatidae ... | — |
| Achilixiidae ... | — | Fulgoridae ... | 404 |
| Aëpophilidae ... | — | Gelastocoridae ... | — |
| Aleurodidae ... | 411 | Gerridae ... | 403 |
| Anthocoridae ... | 403 | Hebridae ... | — |
| Aphelocheiridae ... | — | Helotrephidae ... | 404 |
| Aphidae ... | 410 | Henicocephalidae ... | — |
| Aradidae ... | 401 | Hydrometridae ... | — |
| Belostomatidae ... | 403 | Isometopidae ... | 403 |
| Berytidae ... | 401 | Issidae ... | 405 |
| Capsidae ... | 403 | Jassidae ... | 406 |
| Ceratocombidae ... | — | Kinnaridae ... | — |
| Cercopidae ... | 405 | Leotichiidae ... | — |
| <i>Chermidae</i> ... | 410 | Leptopodidae ... | — |
| <i>Cicadellidae</i> ... | 406 | Lophopidae ... | — |
| Cicadidae ... | 404 | Lygaeidae ... | 401 |
| Cimicidae ... | — | Meenopliidae ... | — |
| Cixiidae ... | 405 | Membracidae ... | 406 |
| Coccidae ... | 412 | Mesoveliidae ... | — |
| Colobathristidae ... | — | Microphysidae ... | — |
| <i>Coptosomatidae</i> ... | 399 | <i>Miridae</i> ... | 403 |
| Coreidae ... | 400 | <i>Myodochidae</i> ... | 401 |
| Corixidae ... | 404 | Nabidae ... | 403 |
| <i>Cryptostemmatidae</i> ... | — | Naucoridae ... | 403 |
| Cydnidae ... | 399 | <i>Neididae</i> ... | 401 |
| Delphacidae ... | 405 | Nepidae ... | — |
| Derbidae ... | — | Notonectidae ... | 404 |
| Dietyopharidae ... | 404 | Ochteridae ... | — |
| Dipsocoridae ... | — | Peloriidiidae ... | — |

| Hemiptera (<i>contd.</i>):— | | | | PAGE | | PAGE |
|-------------------------------|-----|-----|-----|----------------------------|-----|---------|
| Pentatomidae | ... | ... | 399 | Saldidae | ... | — |
| Phymatidae | ... | ... | 402 | Scytinopteridae | ... | — |
| Piesmidae | ... | ... | — | Termitaphidae | ... | — |
| Plataspidae | ... | ... | 399 | Tettigometridae | ... | — |
| Pleidae | ... | ... | — | <i>Thyreocoridae</i> | ... | 399 |
| Polyctenidae | ... | ... | — | Tingidae | ... | 401 |
| Psyllidae | ... | ... | 410 | Tropiduchidae | ... | — |
| Pyrrhocoridae | ... | ... | — | Urostylidae | ... | 399 |
| Reduviidae | ... | ... | 402 | Veliidae | ... | 403 |
| Ricaniidae | ... | ... | — | | | |
| Hymenoptera | ... | ... | ... | ... | ... | 291–321 |
| Agaonidae | ... | ... | — | Methocidae | ... | 301 |
| Agriotypidae | ... | ... | — | Miscogasteridae | ... | 310 |
| Aphelinidae | ... | ... | 309 | Mutillidae | ... | 301 |
| Aphidiidae | ... | ... | 319 | Mymaridae | ... | 311 |
| Apidae (<i>s. l.</i>) | ... | ... | 291 | Myrmosidae | ... | 301 |
| Belytidae | ... | ... | — | Pachylommatidae | ... | — |
| Bethylidae | ... | ... | 300 | Pelecinidae | ... | — |
| Braconidae | ... | ... | 317 | Perilampidae | ... | 309 |
| Calliceratidae | ... | ... | 308 | Platygasteridae | ... | 308 |
| <i>Callimomidae</i> | ... | ... | 308 | Pompilidae | ... | 302 |
| <i>Ceraphronidae</i> | ... | ... | 308 | Proctotrupidae | ... | — |
| Chalcididae | ... | ... | 309 | <i>Psammocharidae</i> | ... | 302 |
| Chrysididae | ... | ... | 304 | Pteromalidae | ... | 310 |
| Cleonymidae | ... | ... | 310 | Rhopalosomidae | ... | — |
| Cynipidae | ... | ... | 311 | Sapygidae | ... | 301 |
| Diapriidae | ... | ... | — | Scelionidae | ... | 308 |
| Dryinidae | ... | ... | 300 | Scoliidae | ... | 300 |
| Elasmidae | ... | ... | 310 | <i>Serphidae</i> | ... | — |
| Encyrtidae | ... | ... | 309 | Sphegidae (<i>s. l.</i>) | ... | 298 |
| Eucharidae | ... | ... | — | Stephanidae | ... | — |
| Eulophidae | ... | ... | 310 | Tenthredinoidea | ... | 319 |
| Eumenidae | ... | ... | 303 | Thynnidae | ... | — |
| Eupelmidae | ... | ... | 309 | Tiphiidae | ... | 300 |
| Eurytomidae | ... | ... | 309 | Torymidae | ... | 308 |
| Evaniidae | ... | ... | 319 | Trichogrammatidae | ... | 311 |
| Formicidae | ... | ... | 304 | Trigonalidae | ... | 312 |
| Ichneumonidae | ... | ... | 312 | Vespidae | ... | 303 |
| Masaridae | ... | ... | 303 | | | |
| Isoptera | ... | ... | ... | ... | ... | 422 |
| Lepidoptera | ... | ... | ... | ... | ... | 322–356 |
| Aegeriidae | ... | ... | 350 | Apoprogenidae | ... | — |
| Agaristidae | ... | ... | 334 | <i>Arbelidae</i> | ... | — |
| <i>Alucitidae</i> | ... | ... | 350 | Arctiidae | ... | 332 |
| Amathusiidae | ... | ... | 325 | <i>Baroniidae</i> | ... | 330 |
| Anthelidae | ... | ... | 339 | Bombycidae | ... | 344 |

Lepidoptera (*contd.*):—

| | PAGE | | PAGE |
|---------------------------|------|--------------------------------------|---------|
| Brahmaeidae ... | ... | Megalopygidae ... | ... |
| Brassolidae ... | 325 | Metarbelidae ... | ... |
| Callidulidae ... | ... | Micropterygidae (<i>s. l.</i>) ... | 356 |
| Castniidae ... | 346 | <i>Mimallonidae</i> ... | ... |
| Ceratocampidae ... | 344 | Morphidae ... | 325 |
| Cercophanidae ... | 344 | Neocastniidae ... | ... |
| Charideidae ... | ... | Noctuidae ... | 334 |
| Chrysopolomidae ... | ... | Notodontidae ... | 339 |
| Chrysotypidae ... | ... | Nymphalidae ... | 325 |
| <i>Cochlidionidae</i> ... | 345 | <i>Oenochromidae</i> ... | 339 |
| Cocytidae ... | ... | Oxytenidae ... | 344 |
| Cossidae ... | 345 | Papilionidae ... | 330 |
| <i>Cymatophoridae</i> ... | 339 | <i>Parnassiidae</i> ... | 330 |
| Dalceridae ... | ... | Pericopidae ... | 332 |
| Danaidae ... | 323 | <i>Phalaenidae</i> ... | 334 |
| Dioptidae ... | ... | Pieridae ... | 329 |
| Drepanidae ... | ... | Psychidae ... | 344 |
| Endromidae ... | 345 | Pterophoridae ... | 350 |
| Epichnopterygidae ... | ... | Pterothysanidae ... | ... |
| <i>Epicopeidae</i> ... | 344 | Pyalidae ... | 347 |
| Epipleidae ... | 344 | Ratardidae ... | ... |
| Epipyropidae ... | ... | <i>Riodinidae</i> ... | 327 |
| Erycinidae ... | 327 | Saturniidae ... | 344 |
| Eupterotidae ... | ... | Satyridae ... | 323 |
| Geometridae ... | 339 | Sematuridae ... | ... |
| Hepialidae ... | 356 | <i>Sesiidae</i> ... | 350 |
| Hesperiidae ... | 331 | Sphingidae ... | 339 |
| Heterogynidae ... | 346 | Syntomidae ... | 332 |
| Hypoptidae ... | ... | <i>Syssphingidae</i> ... | 344 |
| Hypsidae ... | 332 | Tascinidae ... | ... |
| <i>Indarbelidae</i> ... | ... | <i>Teinopalpidae</i> ... | 330 |
| Lacosomidae ... | ... | <i>Teragridae</i> ... | ... |
| Lasiocampidae ... | 345 | Thyatiridae ... | 339 |
| Lemoniidae ... | ... | Thyrididae ... | 347 |
| <i>Lepidarbelidae</i> ... | ... | Tineidae (<i>s. l.</i>) ... | 350 |
| Libytheidae ... | 327 | Tortricidae (<i>s. l.</i>) ... | 355 |
| Limacodidae ... | 345 | Uraniidae ... | ... |
| Lycaenidae ... | 327 | Zygaenidae ... | 346 |
| Lymantriidae ... | 338 | | |
| Mallophaga ... | ... | | 418-421 |
| Mecoptera ... | ... | | 364 |
| Megaloptera ... | ... | | 361 |
| Neuroptera ... | ... | | 361-364 |
| Odonata ... | ... | | 426-429 |

| | PAGE | | | | | | PAGE |
|------------------------|------|-----|-----|---------------|-----|-----|---------|
| Orthoptera ... | ... | ... | ... | ... | ... | ... | 430-438 |
| Acrididae | ... | ... | 434 | Mantidae | ... | ... | 431 |
| Blattidae | ... | ... | 430 | Phasmidae | ... | ... | 431 |
| Gryllacridae | ... | ... | 433 | Tetrigidae | ... | ... | 437 |
| Gryllidae... | ... | ... | 432 | Tettigoniidae | ... | ... | 433 |
| Grylloblattidae | ... | ... | — | | | | |
| <i>Paraneuroptera</i> | ... | ... | ... | ... | ... | ... | 426-429 |
| Plecoptera ... | ... | ... | ... | ... | ... | ... | 423-424 |
| <i>Plectoptera</i> ... | ... | ... | ... | ... | ... | ... | 424-426 |
| Protura ... | ... | ... | ... | ... | ... | ... | ... 440 |
| Psocoptera ... | ... | ... | ... | ... | ... | ... | 421-422 |
| Siphonaptera | ... | ... | ... | ... | ... | ... | 397-398 |
| Thysanoptera | ... | ... | ... | ... | ... | ... | 414-417 |
| Thysanura ... | ... | ... | ... | ... | ... | ... | 439-440 |
| Trichoptera... | ... | ... | ... | ... | ... | ... | 357-361 |
| Zoraptera ... | ... | ... | ... | ... | ... | ... | ... 440 |
| <hr/> | | | | | | | |
| <i>Errata</i> ... | .. | ... | ... | ... | ... | ... | ... 445 |

I.—TITLES.

1.—Memoria de la Comisión Central de Investigaciones sobre la langosta correspondiente al año 1934. Buenos Aires, Ministr. Agric. Argent., 1936 249 pp. 35 pls. figs. graphs, maps. [Orth.]

2.—[Reprints of papers on silk-worms.] Annu. Staz. bacol. sper. Padova 48 1936 832 pp.

3.—New species of insects from Japan described during the year 1935. Insecta matsum., Sapporo 10 1936 pp. 163–173.

4.—Une invention remarquable due à l'entomologie. "Le procédé Helio-phore Dufay." Lambillionne, Brussels 36 1936 pp. 90–93, 1 pl.

5.—International Commission on Zoological Nomenclature. Opinions 124–133. Smiths. misc. Coll., Washington 73 1936 no. 8 44 pp.

6.—Abbeyes, H. des. *Celerio livornica* Esp. (Lépidoptère Sphingide). Description de sa chenille et d'une, aberration nouvelle: *Ab. perlimbata* nova. Bull. Soc. sci. Bretagne, Rennes 8 1931 pp. 18–20, 1 pl.

7.—Abbeyes, H. des. A propos de quelques *Carabus* capturés en forêt de Rennes (I.-et-V.). Bull. Soc. sci. Bretagne, Rennes 9 1932 pp. 24–25. [Col.]

8.—Abbeyes, H. des. Matériaux pour la faune des Coccinellides armoricains. Bull. Soc. sci. Bretagne, Rennes 9 1932 pp. 26–27; 12 (1935) 1936 pp. 183–184. [Col.]

9.—Abbeyes, H. des. La répartition des Lépidoptères dans les groupements floristiques des formations littorales de la Vendée: dunes, marais salants. Bull. Soc. sci. Bretagne, Rennes 9 (1932) 1933 pp. 70–78.

10.—Abbeyes, H. des. Phénomènes de végétation et d'activité sexuelle en période anormale. Bull. Soc. sci. Bretagne, Rennes 10 (1933) 1934 pp. 141–144.

11.—Abbeyes, H. des. Simples notes sur quelques Lépidoptères des Monts-Dore (P.-de-D.). Amat. Papillons, Paris 8 1936 pp. 11–16.

12.—Abbeyes, H. des and Pesson, P. *Hylophila fiorii* Costantini (Lépidoptère Noctuidae), sa répartition géographique et sa présence en Bretagne. Amat. Papillons, Paris 8 1936 pp. 67–72.

13.—Abbott, C. E. On the olfactory powers of a necrophilous beetle. Bull. Brooklyn ent. Soc. 31 1936 pp. 73–75. [Col.]

14.—Abbott, C. E. On the olfactory powers of *Megarhyssa lunator* (Hymenoptera: Ichneumonidae). Ent. News, Philadelphia 47 1936 pp. 263–264.

15.—Abbott, C. E. The toxicity of trimethylamine for *Necrophorus orbicollis* (Say). Psyche, Boston 43 1936 pp. 37–39, 1 fig. [Col.]

16.—Abbott, M. J. The Rugby humble-bees. Rep. Rugby Sch. nat. Hist. Soc. 69 (1935) 1936 pp. 26–31. [Hym.]

17.—Abercrombie, W. F. Studies on cell number and the progression factor in the growth of Japanese beetle larvae (*Popillia japonica* Newman). J. Morph., Philadelphia 59 1936 pp. 91–112, 2 figs. [Col.]

Abercrombie, W. F. see Ludwig & Abercrombie.

18.—Abraham, R. Wanzen (Heteroptera) an Obstbäumen. IV. Mitteilung. *Orthotylus marginalis* Reut. (Hemiptera-Heteroptera) an der Niederelbe. Z. PflKrankh., Stuttgart 46 1936 pp. 225–240, 5 figs.

19.—Acqua, C. Sulla eventuale emissione di raggi mitogenetici capaci d'impressionare la lastra fotografica durante lo sviluppo delle uova di *Bombyx mori*, L. [With French summary p. 231.] Boll. Sta. Sper. Gelsicolt. Bachic. Ascoli Piceno 14 1935 pp. 159–164, 1 fig.

20.—Adamczewski, S. Etude sur la morphologie des espèces du genre *Cnephassa* Curt. (Lep. Tortricidae) et sur leur distribution géographique en Pologne. Ann. Mus. zool. polon., Warsaw 11 1936 pp. 263–294, 6 pls. 2 figs.

- 21.—Adamczewski, S. Notes sur *Phaloniarutilana* Hb. (Lep. Tortricidae). Ann. Mus. zool. polon., Warsaw 11 1936 pp. 327–334, 1 pl.
- 22.—Adamczewski, S. Apparitions des lépidoptères dans les environs de Warszawa en 1934. Fragm. Fn. Mus. zool. polon., Warsaw 2 1936 pp. 305–313.
- 23.—Adams, J. A. The firebrat, *Thermobia domestica* (Packard), and its gregarine parasites. Iowa St. Coll. J. Sci., Ames 11 1936 pp. 23–25. [Thysanura.]
- 24.—Adams, N. B. Ant-Lions. Aust. Mus. Mag., Sydney 6 1936 pp. 22–25, 5 figs. [Neur.]
- 25.—Adamson, A. M. Marquesan insects: Environment. Bull. Bishop Mus., Honolulu 139 1936 pp. 1–73, 10 maps, 8 pls.
- 26.—Adan, R. Oeil de guêpe. Bull. Nat. Mons 15–16 1932–34 pp. 220–221, 1 fig. [Hym.]
- 27.—Adlersparre, A. Zum Thema "Vögel und Ameisen." Ornith. Monatsber., Berlin 44 1936 pp. 129–135. [Hym.]
- 28.—Ahmad, T. The influence of ecological factors on the Mediterranean flour moth, *Ephestia kuehniella* and its parasite, *Nemeritis canescens*. J. anim. Ecol., Cambridge 5 1936 pp. 67–93, 4 figs. [Lep., Hym.]
- 29.—Ahmad, T. The influence of constant and alternating temperatures on the development of certain stages of insects. Proc. nat. Inst. Sci. India, Calcutta 2 1936 pp. 67–91, 7 graphs.
- Ahmad, T. see Husain & Ahmad.
- 30.—Aitkins, A. E. The spruce cone bug, *Gastroles abietis* Linn. (Hemiptera-Heteroptera: Lygaeidae). Ent. mon. Mag., London 72 1936 pp. 139–149, 1 pl. 1 map.
- 31.—Akalın, M. S. Ein atypisches Verhalten bei den Eiern von *Anopheles elutus*. Arch. Schiffa- u. Tropenhyg., Leipzig 40 1936 pp. 514–516, 19 figs. [Dipt.]
- 32.—Alexander, C. P. New species of crane flies from South America. Part VII (Family Tipulidae, Order Diptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 749–769.
- 33.—Alexander, C. P. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 32. Diptera. 7. Tipulidae. Ark. Zool., Stockholm 27A (sep. dated 1934) 1936 no. 17, 24 pp., 3 pls.
- 34.—Alexander, C. P. The maximum number of antennal segments in the order Diptera, with the description of a new genus of Cecidomyiidae. Bull. Brooklyn ent. Soc. 31 1936 p. 12–14.
- 35.—Alexander, C. P. A new species of *Perlodes* from the White Mountains, New Hampshire (Family Perlidae; Order Plecoptera). Bull. Brooklyn ent. Soc. 31 1936 pp. 24–27.
- 36.—Alexander, C. P. The crane-flies (Tipulidae) of New England. Fourth supplementary list. Occ. Pap. Boston Soc. nat. Hist. 8 1936 pp. 273–293, 4 figs. [Dipt.]
- 37.—Alexander, C. P. New or little-known Tipulidae from eastern Asia (Diptera), XXVIII–XXXI. Philipp. J. Sci., Manila 58 1935 pp. 385–426, 4 pls.; 1936 59 pp. 225–257, 2 pls.; 60 pp. 165–204, 3 pls., pp. 323–360, 4 pls.
- 38.—Alexander, C. P. Contribution to a knowledge of Papuan Tipulidae (Diptera). Proc. Linn. Soc. N.S.W., Sydney 61 1936 pp. 122–127, 7 figs.
- 39.—Alexander, C. P. The Diptera of the territory of New Guinea. IV. Family Tipulidae, Part II. Proc. Linn. Soc. N.S.W., Sydney 61 1936 pp. 169–183; pp. 322–340, 27 figs.
- 40.—Alexander, C. P. Records and description of Chilean Tipulidae (Order Diptera) Part II. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 99–105, 1 pl.
- 41.—Alexander, C. P. Records and descriptions of Brazilian Tipulidae (Dipt.) Part I. Rev. Ent., Rio de Janeiro 6 1936 pp. 10–23.
- 42.—Alexander, C. P. Crane-flies (Tipulidae, Diptera) from the Malayan Islands and Northern Australia. Rev. suisse Zool., Geneva 43 1936 pp. 73–97, 16 figs.
- Alexander, C. P. see Curran, Alexander & Cresson.

- 43.—Alferi, A. Sur deux Rhyncho-
phores galligènes (Coleoptera-Curcu-
lionidae). Bull. Soc. ent. Egypte,
Cairo 20 1936 pp. 21–23, 5 figs.
- 44.—Alfken, J. D. Die Bienen Nord-
westdeutschlands als Blütenbesucher.
Abh. naturw. Ver. Bremen 29 (1934–35)
1935 pp. 193–206. [Hym.]
- 45.—Alfken, J. D. Beitrag zur
Kenntnis der Bienenfauna von Persien.
Mitt. ent. Ver. Bremen 23 1935 pp.
21–24. [Hym.]
- 46.—Alfken, J. D. Ueber die Rassen
zweier *Anthidium*-Arten aus Ungarn.
Mitt. ent. Ver. Bremen 23 1935 pp.
25–26. [Hym.]
- 47.—Alfken, J. D. Schwedisch-
chinesische wissenschaftliche Expedi-
tion nach den nordwestlichen Provinzen
Chinas. 55. Hymenoptera. 9. Apidae
mit Ausnahme der *Bombus*-, *Halictus*-,
und *Sphecodes*-Arten. Ark. Zool.,
Stockholm 27A 1936 no. 37, 24 pp.
- 48.—Alfken, J. D. Beitrag zur
Kenntnis der *Eucera hispana* Lep.
(Hym. Apid.). Dtsch. ent. Z., Berlin
1936 pp. 1–13.
- 49.—Alfken, J. D. Neue *Prosopis*-
Arten vom Libanon. Konowia, Vienna
15 1936 pp. 51–53. [Hym.]
- 50.—Alfken, J. D. Beiträge zur
Kenntnis paläarktischer Bienen. (Hym.
Apid.). Mitt. dtsh. ent. Ges., Berlin 6
1936 pp. 57–60.
- 51.—Alfken, J. D. Ueber die Fär-
bungsveränderlichkeit von *Anthidium*
strigatum Pz. Zum Problem der
Rassenbildung. Stettin. ent. Ztg. 97
1936 pp. 189–194. [Hym.]
- 52.—Alfken, J. D. Beitrag zur
Kenntnis der *Megachile*-Arten von
Turkmenien. Veröff. dtsh. kol. Mus.
Bremen 1 1936 pp. 307–316. [Hym.]
- 53.—Alfken, J. D. Ueber eine
Bienenausbeute aus Venezuela. Veröff.
dtsh. kol. Mus. Bremen 1 1936 pp.
316–320. [Hym.]
- 54.—Alfken, J. D. Neue *Andrena*-
Arten vom Wiener Becken, aus dem
Burgenland und Ungarn. Veröff.
dtsh. kol. Mus. Bremen 1 1936 pp.
377–383. [Hym.]
- 55.—Alfken, J. D. Beitrag zur
Kenntnis der *Prosopis*-Arten von Tad-
- zhikistan und Turkmenien. Veröff.
dtsh. kol. Mus. Bremen 1 1936 pp.
384–388. [Hym.]
- 56.—Alfken, J. D. Ueber eine seltene
Gattung der Kuckucksbienen (Hym.
Apid.). Zool. Anz., Leipzig 114 1936
pp. 56–57.
- 57.—Alin, V. N. Aus dem Leben
mandschurischer Schmetterlinge. Arb.
morph. taxon. Ent. Berlin 3 1936 pp.
89–94, 13 figs.
- 58.—Alluand, C. Sur l'aire géo-
graphique des *Omophron* du sous-genre
Phrator (Coleoptera Carabidae). C.R.
Soc. Biogéogr., Paris 12 1935 pp. 37–38.
- 59.—Alluand, C. Carabidae recueillis
à Madagascar par MM. Seyrig, G.
Olsoufieff, Vadon, R. Catala, etc.
Afra, Paris no. 11 1936 pp. 1–13, 5 figs.
- 60.—Alluand, C. Carabiques nou-
veaux de Madagascar. Afra, Paris
no. 12 1936 pp. 1–10, 2 figs. [Col.]
- 61.—Alluand, C. Mission de M. A.
Chevalier aux îles du Cap Vert (1934).
III. Coléoptères. Rev. franç. Ent.,
Paris 3 1936 pp. 123–134, 2 figs.
- 62.—Almeida, E. de. Subsídios para
o estudo da quermofauna do Ribatejo.
I.a Lista das Cochoilhas da região de
Santarém. Arq. Secç. Biol. Mus. zool.
Univ. Coimbra 2 1935 pp. 165–171.
[Hem.]
- 63.—d'Almeida, R. F. Revisão das
Terias americanas (Lepid.: Pieridae).
I, II. Mem. Inst. Oswaldo Cruz, Rio
de Janeiro 31 1936 pp. 11–54, 17 pls.,
pp. 189–347, 18 pls.
- 64.—[Alpatov, V. V.] Алпатов,
B. B. Contribution to the study of
variation in honey bees. III. [In
Russian with English summary.] Zool.
J., Moscow 14 1935 pp. 664–673, 4 figs.
[Hym.]
- 65.—Altenburg, E. The production
of mutations by the polar cap method
of treatment. Biol. J., Moscow 5 1936
pp. 27–34. [Dipt.]
- 66.—Amaral, M. Insectos colectados
en las termas de Catillo. Act. Soc. sci.
Chili, Santiago 37–42 (1927–32) 1935
pp. 10–15.
- 67.—Amiot, P. Der neue primäre
Saturnia-Hybrid *S. pavonia* ♂ ×
atlantica ♀ = hybr. *kleini* Amiot.
Ent. Z., Frankfurt a. M. 50 1936 pp.
9–12, 21–24, 10 figs. [Lep.]

68.—Amoroso, C. Sugli spiracoli tracheali degli ortotteri. *Boll. Zool.*, Torino 7 1936 pp. 128–136, 4 figs.

69.—Amsel, H. G. Hat die Flugfähigkeit eine Bedeutung für die Verbreitung der Insekten? *Ent. Rdsch.*, Stuttgart 53 1936 pp. 268–271.

70.—Amsel, H. G. Zur Kenntnis der Kleinschmetterlingsfauna Sardiniens. Veröff. dtsch. kol. Mus. Bremen 1 1936 pp. 344–365, 1 pl. 4 figs. [Lep.]

71.—Amsel, H. G. Eine neue *Schützeia*-Art aus Palästina (Lepidoptera: Gelechiidae). Veröff. dtsch. kol. Mus. Bremen 1 1936 pp. 366–368, 29 figs.

72.—Amsel, H. G. Die palaearktischen *Isophrictis*-Arten (Lepidoptera: Gelechiidae). Veröff. dtsch. kol. Mus. Bremen 1 1936 pp. 369–376.

Amsel, H. G. *see* Brinkmann & Amsel.

73.—Ander, K. Neue Laubheuschrecken aus der Familie Gryllacridae. 3. Opusc. ent., Lund 1 1936 pp. 11–17, 5 figs. [Orth.]

74.—Ander, K. Några fyärlifynd jämte anknyttande djurgeografiska reflexioner. Opusc. ent., Lund 1 1936 pp. 58–64.

Anderson, J. *see* Pinchin & Anderson.

75.—Anderson, R. L. Effects of temperature on fertilisation in *Habrobracon*. *Genetics*, Menasha 21 1936 pp. 467–472. [Hym.]

76.—Anderson, W. H. A comparative study of the labium of Coleopterous larvae. *Smithson. misc. Coll.*, Washington 95 1936 no. 13, 29 pp. 8 pls.

Andre, F. *see* Drake & Andre; Moulton & Andre.

77.—Andrewartha, H. V. Thrips investigation. 8. The influence of temperature on the rate of development of the immature stages of *Thrips imaginis* Bagnall and *Haplothrips victoriensis* Bagnall. *J. Counc. sci. industr. Res. Aust.*, Melbourne 9 1936 pp. 57–64, 3 figs.

78.—Andrewes, H. E. Papers on Oriental Carabidae.—XXIX, XXX. *Ann. Mag. nat. Hist.*, London 1936 (10) 17 pp. 307–318; (10) 18 pp. 54–65. [Col.]

79.—Andrewes, H. E. Keys to some Indian genera of Carabidae (Col.) VI. The genera *Drypta* and *Desera*. *Proc. R. ent. Soc. London* (B) 5 1936 pp. 134–136.

80.—Andrewes, H. E. Descriptions of some new Carabidae from Ceylon (Part III). *Spolia zeylan.*, Colombo 19 1936 pp. 201–209. [Col.]

81.—Andrewes, H. E. On some new species of Carabidae, chiefly from Java (II). *Treubia*, Buitenzorg 15 1936 pp. 211–224. [Col.]

Angulo, L. Najera *see* Najera Angulo.

82.—Ancona, L. Contribuciones al conocimiento de la fauna de Actopan, Hgo. *An. Inst. Biol. Mexico* 7 1936 pp. 265–267.

83.—Antoine, M. Diagnoses sommaires de *Stenosis* marocains (Col. Tenebrionidae). *Bull. Soc. ent. Fr.*, Paris 41 1936 pp. 13–16.

84.—Antoine, M. Notes d'Entomologie marocaine. XXII. *Bull. Soc. ent. Fr.*, Paris 41 1936 pp. 138–141. [Col.]

85.—Antoine, M. Notes d'Entomologie marocaine. XXI, XXIII. *Bull. Soc. Sci. nat. Maroc*, Rabat 15 (1935) 1936 pp. 234–237, 2 figs., 16 1936 pp. 65–76. [Col.]

86.—Ara, M. Notes on the life history of *Dineutes orientalis* Modeer. [In Japanese.] *Kontyû*, Tokyo 10 1936 pp. 45–48, 2 pls. [Col.]

87.—d'Araujo e Silva, A. G. Alguns insectos com os seus respectivos hospedeiros. *Rio de Janeiro* 1936 30 + [10] pp.

88.—Argyropulo, A. I. Zwei neue Aphanipteren-Arten aus Transkaukasien. *Konowia*, Vienna 15 1936 pp. 145–151, 4 figs.

89.—Arnim, Frhr. v. Zur Kenntnis der Temperaturabhängigkeit der Nonne (*Lymantria monacha* L.). (Vitale zone, Aktivitätsschwellen usw. der Entwicklungstadien.) *Z. angew. Ent.*, Berlin 22 1936 pp. 533–557, 2 figs. [Lep.]

90.—Arnold, G. The Psammodontidae of the Ethiopian region. Parts v, vi. *Ann. Transv. Mus.*, Pretoria 18 1936 pp. 73–123, 42 figs., 415–460, 35 figs. [Hym.]

91.—Arnold, G. The mounting and preparation of insects for the cabinet. Bull. S. Afr. Mus. Ass., Durban 1 1936 pp. 33-35.

92.—Arnold, G. New African Hymenoptera. No. 3. Occ. Pap. Rhod. Mus., Bulawayo no. 5 1936 pp. 1-38, 1 pl. 28 figs.

93.—Arnold, G. Emergence of sexes from cocoons of the bee *Osmia aurulenta* Panz. nesting in snail-shells at Wallasey. Proc. R. ent. Soc. London (A) 11 1936 p. 45.

94.—Arrow, G. J. A few new African species of Endomychidae (Coleoptera) in the British Museum. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 373-378.

95.—Arrow, G. J. Three genera of Erotylid Coleoptera new to the African fauna. Novit. zool., Tring 39 1936 pp. 253-256.

96.—Arrow, G. J. Notes on some Lamellicorn beetles from South and East Africa, with descriptions of new species. Novit. zool., Tring 39 1936 pp. 257-260. [Col.]

97.—Arte, R. Un nouvel *Aulacostethus* (Hym.-Psammocharidae du Brésil. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 513-516, 4 figs.

98.—Arturo, P. Un nido anormale di *Polistes gallicus* Linn. Bol. Soc. venez. Stor. nat., Venice 1 1935 pp. 135-136, 1 pl. [Hym.]

99.—Astaurov, B. L. Artificial mutations in the silk-worm (*Bombyx mori* L.). Experimental production of sex-linked lethals by gamma radiation of radium. Genetica, 's-Gravenhage 17 1935 pp. 409-460, 3 figs. [Lep.]

100.—Astaurov, B. New data on artificial parthenogenesis in the silk-worm (*Bombyx mori* L.). C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 2 1936 pp. 283-286. [Lep.]

101.—[Astaurov, B. L.]. Астауров, Б. Л. Кünstliche ausgelöste Mutationen beim Seidenspinner. iv. Versuch einer Auslösung von autosomalen Rezessiven sichtbaren Mutationen. [In Russian with German summary.] J. Biol., Moscow 4 1935 pp. 659-672. [Lep.]

102.—[Astaurov, B. L. & Frolova, S. L.]. Астауров, Б. Л. и Фролова, С. Л. Кünstliche ausgelöste Mutationen beim Seidenspinner (*Bombyx mori* L.). v. Sterilität und Anomalien der Spermatogenese in der Nachkommenschaft sonst genisierter Schmetterlinge in Zusammenhang mit einigen Fragen der allgemienbiologischen und transmutierenden Wirkung der X-Strahlen. [In Russian with German summary.] J. Biol., Moscow 4 1935 pp. 861-892, 2 pls. 4 figs. [Lep.]

103.—[Atanassov, N. J.]. Атанасовъ, А. Zweiter Beitrag zum Studium der Ameisenfauna Bulgariens (Formicidae). [In Bulgarian with German summary.] Mitt. bulg. ent. Ges. Sofia 9 1936 pp. 211-236. [Hym.]

104.—Aubertin, D. Insects. In Regan, Natural History 1936 pp. 95-186, 2 col. pls. 194 figs.

105.—Audeoud, G. E. Description de six espèces ou sous-espèces nouvelles de rhopalocères africains. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 702-705, 1 pl.

106.—Audras, G. Une chasse aux insectes dans des débris d'inondation. Bull. Soc. linn. Lyon (n.s.) 4 1935 pp. 111-113.

107.—Aue, A. U. E. Deutsche Sammler und Züchter werdet Post-scheckkunden. Ent. Rdsch., Stuttgart 53 1936 pp. 210-213.

108.—Auerbach, C. The development of the legs, wings, and halteres in wild type and some mutant strains of *Drosophila melanogaster*. Trans. roy. Soc. Edinburgh 58 1936 pp. 787-816, 1 pl. 60 figs. [Dipt.]

109.—Austen, E. E. New Palaearctic Bombyliidae (Diptera). Ann. Mag. nat. Hist., London (10) 18 1936 pp. 181-204, 1 pl.

110.—Austen, E. E. A remarkable semi-apterous fly (Diptera) found in a cave in East Africa, and representing a new family, genus, and species. Proc. zool. Soc. London 1936 pp. 425-431, 5 figs.

111.—Austin, M. D. & Pitcher, R. S. A laboratory method for rearing *Sciara* and Phorid flies. Ent. mon. Mag., London 72 1936 pp. 12-15, 1 fig. [Dipt.]

- 112.—Auten, M. & Johnson, D. M. Some *Erythroneura* of the *obliqua* group from Decatur, Georgia (Homoptera, Cicadellidae). *Ann. ent. Soc. Amer.*, Columbus **29** 1936 pp. 61–65, 8 figs.
- 113.—Autrum, H. Eine Theorie der Schallwahrnehmung für Luftarthropoden. *Verh. Dtsch. zool. Ges.*, Leipzig **38** 1936 pp. 125–134, 2 figs.
- 114.—Autuori, M. Uma nova especie do genero *Anastrepha* Schin. (Dipt. Trypetidae). *Rev. Ent.*, Rio de Janeiro **6** 1936 pp. 194–196, 3 figs.
- 115.—Ayrosa Galvão, A. & Lane, J. Notas sobre mosquitos de Juquia (Estado de S. Paulo). *Rev. Biol. Hyg.*, S. Paulo **6** 1935 pp. 113–120, 8 figs. [Dipt.]
- Ayrosa Galvão *see* Pessôa & Ayrosa Galvão.
- 116.—Baden, V. Embryology of the nervous system in the grasshopper, *Melanoplus differentialis* (Acrididae; Orthoptera). J. Morph., Philadelphia **60** 1936 pp. 159–190, 4 pls.
- 117.—Badonnel, A. Sur les gonapophyses des femelles du genre *Ectopocus* (Psocopt.). Livre jubil. Bouvier, Paris 1936 pp. 101–104, 3 figs.
- 118.—Badonnel, A. Contribution à l'étude des Psocoptères à Madagascar. *Bull. Acad. malgache, Tananarive* (N.S.) **18** (1935) 1936 pp. 97–120, 4 pls.
- 119.—Badonnel, A. Notes sur les Psocoptères de la Côte d'Or. *Bull. sci. Bourgogne, Dijon* **5** (1935) 1936 pp. 75–78.
- 120.—Badonnel, A. Psocoptères de France (7^e note). *Bull. Soc. ent. Fr.*, Paris **41** 1936 pp. 24–29, 6 figs.
- 121.—Badonnel, A. Nouvelle espèce de Psocoptère d'Algérie. *Rev. franç. Ent.*, Paris **3** 1936 pp. 96–100, 6 figs.
- 122.—Badonnel, A. Psocoptères de France (viii^e note). *Neopsocopsis* nouveau genre de Psocidae à adultes ornés de poils glanduleux. *Bull. Soc. zool. Fr.*, Paris **60** 1936 pp. 418–423, 8 figs.
- 123.—Badonnel, A. Sur l'hypopharynx des Psocoptes. *Bull. Soc. zool. Fr.*, Paris **61** 1936 pp. 14–18. [Psocopt.]
- 124.—Badonnel, A. Mission scientifique de l'Omo. Psocoptères. *Mém. Mus. Hist. nat. Paris* **4** 1936 p. 155.
- 125.—Badonnel, A. Les *Caecilius* européens à ailes ocracées (Psocoptera). *Rev. franç. Ent.*, Paris **3** 1936 pp. 177–189, 20 figs.
- 126.—Bagnall, R. S. Notes on Proctura.—I. *Ann. Mag. nat. Hist.*, London (10) **17** 1936 pp. 210–213.
- 127.—Bagnall, R. S. The British Tullbergiinae. Pt. II. *Ent. mon. Mag.*, London **72** 1936 pp. 34–40, 8 figs. [Collemb.]
- 128.—Bagnall, R. S. Descriptions of some new Thysanoptera from tropical Africa and Madagascar. *Rev. franç. Ent.*, Paris **3** 1936 pp. 219–230, 3 figs.
- 129.—Bailey, S. F. A list of the Thysanoptera of California. *Pan-Pacific Ent.*, San Francisco **11** (1935) 1936 pp. 163–169.
- 130.—Bailey, S. F. Our knowledge of California Thysanoptera previous to 1900. *Pan-Pacific Ent.*, San Francisco **12** 1936 pp. 97–103.
- 131.—Baisas, F. E. Notes on Philippine mosquitoes. IV. *Philipp. J. Sci.*, Manila **59** 1936 pp. 65–84, 15 pls. 1 fig. [Dipt.]
- 132.—Baisas, F. E. Notes on Philippine mosquitoes. V. *Mon. Bull. Bur. Hlth. Philipp. I.*, Manila **15** 1935 pp. 291–339, 23 pls. 4 figs. [Dipt.]
- Baisas, F. E. *see* King & Baisas; Russell & Baisas.
- 133.—Baiss, J. L. R. & Peirson, L. G. Handlist of the Macrolepidoptera of the Marlborough district (10 miles radius). *Rep. Marlboro' Col. nat. Hist. Soc.* **84** 1936 pp. 44–76.
- 134.—Baker, F. C. A new species of *Orthopodomyia*, *O. alba* sp.n. (Diptera, Culicidae). *Proc. ent. Soc. Washington* **38** 1936 pp. 1–7, 1 pl.
- 135.—Balachowsky, A. Recherches biogéographiques sur la faune des Coccides de Corse. *Bull. Soc. philom.* Paris **117** 1934 pp. 143–150, 2 figs. [Cf., *Zool. Rec.*, **71** 1934 p. 14, no. 120.] [Hem.]
- 136.—Balachowsky, A. Les cochenilles de l'Espagne. *Rev. Path. vég. Ent. agric.*, Paris **22** 1935 pp. 255–269, 1 pl. 2 figs. [Hem.]

137.—Balachowsky, A. Contribution à l'étude des Coccides de France (20^e et 22^e notes). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 56–59, 1 pl.; pp. 122–125, 1 pl.

138.—Balachowsky, A. Note sur *Aspidiotus (Hemiberlesea) ruiiletti* Marchal (Hem. Coccidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 97–100, 3 figs.

139.—Balachowsky, A. Contribution à l'étude des Coccides du Nord Africain (15^{me} note). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 157–165, 2 figs. [Hem.]

140.—Balachowsky, A. Sur un nouveau *Ripersia* hypogé du midi de la France. Rev. franç. Ent., Paris **3** 1936 pp. 215–218, 1 pl. [Hem.]

141.—Balachowsky, A. & Mesnil, L. Les insectes nuisibles aux plantes cultivées. Leur mœurs, leur destruction. Preface by P. Marchal. Vol. II. Paris, Etab. Busson 1936 pp. 1141–1921 & xi, 368 figs.

142.—Balagny, —. La question du mimétisme. Essai de mise au point. Bull. Soc. Sci. nat. Ouest, Nantes (5) **4** (1934) 1935 pp. 179–192.

143.—Balduf, W. V. Observations on *Podalonia violaceipennis* (Lep.) (Sphecidae) and *Vespula maculata* (Linn.) (Vespidae). Canad., Ent., Orillia **68** 1936 pp. 137–139. [Hym.]

144.—Balfour-Browne, F. Systematic notes upon British aquatic Coleoptera. Ent. mon. Mag., London **72** 1936 pp. 28–31, 68–77, 97–108, 121–126.

145.—Balfour-Browne, F. A contribution towards a list of the aquatic Coleoptera of Mid-Lancashire. Ent. mon. Mag., London **72** 1936 pp. 249–251.

146.—Balfour-Browne, F. The evolution of social life in insects. J. R. micr. Soc., London **56** 1936 pp. 1–11, 1 fig.

147.—Balfour-Browne, F. The aquatic Coleoptera of North and South Somersetshire. Trans. Soc. Br. Ent., Southampton **3** 1936 pp. 129–153, 1 pl.

148.—Bali, B. Étude sur les nervures transversales dans les ailes d'*Anopheles maculipennis* de l'Asie mineure. Bull. Soc. Path. exot., Paris **29** 1936 pp. 518–521, 4 figs. [Dipt.]

149.—Baliani, A. Materiali zoologici raccolti dalla spedizione italiana al Karakoram. Coleoptera-Carabidae: *Amara*. Atti Mus. Stor. nat. Trieste **12** 1935 pp. 101–106, 1 pl. [Cf. Zool. Rec., **69** 1932, p. 14, no. 126.]

150.—Ball, A. Un Psoque qui perd une partie de ses pièces buccales en devenant adulte. Mém. Mus. Hist. nat. Belg., Brussels (2) **3** 1936 pp. 395–399, 9 figs. [Psoeopt.]

151.—Ball, E. D. New leafhoppers of the genus *Agalliopsis*. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 649–650. [Hem.]

152.—Ball, E. D. Food plants of the United States forms of the leafhoppers of the genus *Agalliopsis*. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 650–655. [Hem.]

153.—Ball, E. D. Four new Arizona leafhoppers. Bull. Brooklyn ent. Soc. **31** 1936 pp. 18–20. [Hem.]

154.—Ball, E. D. Some new genera of leafhoppers related to *Thamnotettix*. Bull. Brooklyn ent. Soc. **31** 1936 pp. 57–60. [Hem.]

155.—Ball, E. D. The food plants of the leafhoppers of the genus *Exitianus*. Bull. Brooklyn ent. Soc. **31** 1936 pp. 71–72. [Hem.]

156.—Ball, E. D. Some new leafhoppers related to *Thamnotettix*. J. Washington Acad. Sci., Menasha Wis. **26** 1936 pp. 430–434. [Hem.]

157.—Ball, E. D. Some new species of leafhoppers in groups formerly included in *Thamnotettix*. Pan-Pacific Ent., San Francisco **12** 1936 pp. 192–195. [Hem.]

158.—Ball, E. D. Some new species of Cicadellian leafhoppers with food plant notes on others. Proc. biol. Soc. Washington **49** 1936 pp. 17–34. [Hem.]

159.—Ball, E. D. Some new Issidae with notes on others (Homoptera-Fulgoridae). Proc. biol. Soc. Washington **49** 1936 pp. 155–158.

160.—Balli, A. Variazioni quantitative dei due componenti della fibra serica, sericina e fibroina, nel bozzolo di *Bombyx mori*. Atti Soc. Nat. Mat. Modena **65** 1934 pp. 3–15. [Lep.]

- 161.—Balthasar, V. Monographie der subfam. Troginae der palaearktischen Region. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 407–459, 1 pl. [Col.]
- 162.—Balthasar, V. Einige neue palaearktische Scarabaeiden. Ent. Bl., Crefeld 32 1936 pp. 94–98.
- 163.—Balthasar, V. Neue *Aphodius*-Arten aus China und Syrien. Ent. NachrBl., Troppau 10 1936 pp. 1–6. [Col.]
- 164.—Bang-Haas, O. Neubeschreibungen und Berichtigungen der palaearktischen Macrolepidopterenfauna. XXII–XXV. Ent. Z., Frankfurt a.M. 50 1936 pp. 108–109, 254–256, 287–288, 345–348.
- 165.—Banks, N. Four new Trichoptera from the United States. Arb. morph. tax. Ent. Berlin 3 1936 pp. 265–268, 9 figs.
- 166.—Banks, N. Trichoptera from the Fiji islands. Psyche, Boston 43 1936 pp. 29–36, 1 pl.
- 167.—Bänninger, M. Mission scientifique de l'Omo. Coleoptera. iii. Carabidae Scartinae. Miss. scient. Omo, Paris 2 1935 pp. 91–99, 1 pl.
- 168.—Baranoff, N. *Simulium* (*Danubiosimulium*) *columbaczense* Schönbn. en Yougoslavie. Stud. Path. paras. Ins. 4, Inst. Hyg. Schule Volksgesundh. Zagreb 1936 36 pp. figs. [Dipt.]
- 169.—Baranof, N. Weitere Beiträge zur Kenntnis der parasitären Raupenfliegen (Tachinidae = Larvaevoridae) von den Salomonen und Neubritannien. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 97–113, 2 figs. [Dipt.]
- 170.—Baranov, N. Eine neue Calliphorine-Art (Dipt.), die Termiten angreift. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 646–651, 2 figs.
- 171.—Barbarossa, R. Osservazioni sulla morfologia dell'addome e sull'armatura genitale del Grillotalpa. Arch. zool. ital., Torino 23 1936 pp. 479–492, 6 figs. [Orth.]
- 172.—Barber, G. W. *Orinus insidiosus* (Say), an important natural enemy of the corn ear worm. Tech. Bull. U.S. Dep. Agric., Washington, D.C. no. 504 1936 24 pp., 3 figs. [Hem., Lep.]
- 173.—Barnes, H. F. Insect fluctuations: Population studies in the gall midges (Cecidomyiidae). Ann. appl. Biol., Cambridge 23 1936 pp. 433–440, 1 fig.
- 174.—Barnes, H. F. Notes on Cecidomyiidae.—II. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 272–279. [Dipt.]
- 175.—Barros, R. Observaciones sobre el Coléoptero *Callideriphis laetus*, Blanchard. Riv. Univ. Santiago 21 1936 pp. 121–123, 1 fig.
- Barthe, E. see Houlbert & Barthe.
- 176.—Bartoszynski, A. Beitrag zur Kenntnis der Kellerkäferfauna. [In Polish, with German summary.] Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 118–122, 1 chart. [Col.]
- 177.—Bates, M. The Satyrid genus *Calisto*. Occ. Pap. Boston Soc. nat. Hist. 8 1935 pp. 229–248, 10 figs. [Lep.]
- 178.—Bates, M. Notes on Cuban butterflies. Mem. Soc. cubana Hist. nat., Cuba 9 1936 pp. 225–228, 1 fig. [Lep.]
- 179.—Battetta, V. & Defaïsse, H. Lépidoptères et chenilles provenant du plateau d'En-Paris (Hautes-Alpes) 2,200 metres d'altitude. Ann. Soc. linn. Lyon (N.S.) 79 1936 pp. 21–22.
- 180.—Baudyš, E. Deuxième contribution à l'extension des zoocécidies dans le Bohême. [In Czech.] Bull. Ec. sup. Agron. Brunn (C) 7 1926 105 pp., 4 figs.
- 181.—Baudyš, E. Recherches sur les zoocécidies de Moravie et de Silésie. Cinquième contribution. [In Czech.] Bull. Ec. sup. Agron. Brunn (C) 8 1926 48 pp., 2 figs.
- 182.—Baudyš, E. Contribution à la distribution des zoocécidies en Yougoslavie et dans les pays voisins. [In Czech with French summary.] Bull. Ec. sup. Agron. Brunn (C) 13 1928 99 pp., 30 figs.
- 183.—Bauer, E. Beitrag zur Ichneumoniden-Fauna von San Valentino alla muta (Val Venosta). Boll. Soc. ent. ital., Genoa 68 1936 pp. 103–111. [Hym.]

184.—Bauer, H. The structure of the salivary gland chromosomes in Chironomidae. Amer. Nat., New York 70 1936 p. 37. [Dipt.]

185.—Bauer, H. Beiträge zur vergleichenden Morphologie der Speicheldrüsenchromosomen. (Untersuchungen an den Reischenchromosomen der Dipteren. II.) Zool. Jb., Jena Allg. Zool. 56 1936 pp. 239–276, 2 pls. 11 figs.

186.—Baus, A. Die Reduktion der Flügel und Flügelsinneskuppeln bei Lepidopteren. Z. Morph. Oekol. Tiere, Berlin 32 1936 pp. 1–46, 46 figs.

Baxter, E. W. see Newell & Baxter.

187.—Bayard, A. Caractères spécifiques de l'armure génitale des *Aricia* du groupe *medon* (Lepidopt. Lycaenidae). Livre jubil. Bouvier, Paris 1936 pp. 111–116, 1 pl. 54 figs.

188. — Bayard, A. Observations élémentaires sur les écailles des Lépidoptères. Bull. Soc. franç. Micro., Paris 1 1932 pp. 61–68, 1 pl. 2 figs.

189.—Bayard, A. Etude élémentaire de l'armure génitale des papillons. Bull. Soc. franç. Micro., Paris 2 1933 pp. 83–99, 7 pls., 6 figs. [Lep.]

190.—Beadle, G. W. & Ephrussi, B. Transplantation of *Drosophila*. Amer. Nat., New York 70 1936 p. 38. [Dipt.]

191.—Beadle, G. W. & Ephrussi, B. The differentiation of eye pigments in *Drosophila* as studied by transplantation. Genetics, Menasha 21 1936 pp. 225–247, 1 fig. [Dipt.]

Beadle, G. W. see Dobzhansky & Beadle; Ephrussi & Beadle; Ephrussi, Clancy & Beadle; Sturtevant & Beadle.

192.—Beamer, R. H. New leafhoppers from the Western United States (Homoptera - Cicadellidae). Canad. Ent., Orillia 68 1936 pp. 252–257, 2 pls.

193. — Beamer, R. H. Two new species of western Leafhoppers (Homoptera, Cicadellidae). J. Kansas ent. Soc., McPherson 9 1936 pp. 31–32.

194.—Beamer, R. H. The genus *Dicyphonia* Ball (Homoptera-Cicadellidae). J. Kansas ent. Soc., McPherson 9 1936 pp. 66–70, 1 pl.

195.—Beamer, R. H. Two new *Dikraneura* from the southwest. Pan-Pacific Ent., San Francisco 12 1936 pp. 7–8. [Hem.]

196.—Beaulne, J. L. Contribution à l'étude des Coléoptères du Canada. Nat. canad., Quebec 63 1936 pp. 158–164.

197.—Beaumont, J. de. L'instinct et l'intelligence chez les insectes. Bull. Soc. vaud. Sci. nat., Lausanne 58 1935 pp. 349–358.

198.—Beaumont, J. de. Hyménoptères gynandromorphes. Bull. Soc. vaud. Sci. nat., Lausanne 59 1936 pp. 85–90, 7 figs.

199.—Beaumont, J. de. Les *Tachysphex* de la faune française (Hym. Sphecidae). Ann. Soc. ent. France, Paris 105 1936 pp. 177–212, 48 figs.

200. — Beaumont, J. de. Les *Tachytes* et les *Tachysphex* (Hymenoptera Sphecidae) de la collection du général Radoszkowski. Rev. suisse Zool., Geneva 43 1936 pp. 597–621, 45 figs.

Beaumont, J. de see Naville & Beaumont.

200A.—Bedford, G. A. H. Notes on species of Trichodectidae with descriptions of new genera and species. Onderstepoort J. vet. Sci., Pretoria 7 1936 pp. 33–58, 26 figs. [Malloph.]

200B.—Bedford, G. A. H. New species of *Linognathus* and *Polyplax* (Anoplura). Onderstepoort J. vet. Sci., Pretoria 7 1936 pp. 59–65, 7 figs.

200C.—Bedford, G. A. H. A synoptic check-list and host-list of the Ectoparasites found on South African Mammalia, Aves and Reptilia (Supplement no. 1). Onderstepoort J. vet. Sci., Pretoria 7 1936 pp. 69–110.

Beery, L. see DeLong & Beery.

201.—Behney, W. H. Demonstration apparatus for small insects. Science, New York 83 1936 p. 446, 1 fig.

202.—Behning, A. Miscellanea aralocaspica. Int. Rev. Hydrobiol., Leipzig 33 1936 pp. 241–249, 4 figs. [Dipt. pp. 244–247.]

203. — [Beĭ-Bienko, G. J.] Beĭ-Bienko, I. M. Faune de l'URSS. Insectes Dermaptères. Inst. zool. Acad. Sci. U.R.S.S., Moscow (N.S.) no. 5 1936 viii + 239 pp. 67 figs.

204. — Bei-Bienko, G. On some new or interesting Tettigoniidae and Acrididae (Orthoptera) from Central Asia. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 289-309, 4 figs.

205. — Beier, M. Mallophaga. In Schulze, Biol. Tiere Dtschl., Berlin Lief. 39 1936 Teil 28, 32 pp. 22 figs.

206. — Beier, M. Siphonaptera. In Schulze, Biol. Tiere Dtschl., Berlin Lief. 39 1936 Teil 39, 36 pp. 23 figs.

Beier, M. see Handlirsch & Beier; Hendel & Beier; Zerny & Beier.

207. — [Belanovskii, I.] Белановский, И. Ueber Gesetzmässigkeiten in der Massenvermehrung von Schädlingen in Verbindung mit meteorologischen Faktoren. [In Russian.] Zool. J., Moscow 15 1936 pp. 187-216.

208. — Bell, T. R. A description of a new species of wasp assumed to belong to the family Vespidae and named *Paravespa eva*; with remarks upon its affinities with the genus *Ischnogaster* and reasons for the creation of the new genus *Paravespa*. J. Bombay nat. Hist. Soc. 38 1936 pp. 803-806 1 pl. [Hym.]

209. — Benesh, B. Some notes on a Formosan Dorcid, with a description of one new species (Lucanidae: Coleop.). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 9-14, 5 figs.

210. — Benick, L. Die Bledien der *pallipes*-Gruppe. Ent. Bl., Crefeld 32 1936 pp. 8-9.

211. — Benick, G. Eine neue *Atheta* (Col., Staph.) aus Murmeltierbauen. Koleopt. Rdsch., Vienna 22 1936 pp. 41-43.

212. — Benjamin, F. H. Notes and new species (Lepidoptera, Phalaenidae). Bull. S. Calif. Acad. Sci., Los Angeles 34 (1935) 1936 pp. 194-210.

213. — Benjamin, F. H. Notes on the *lepusculina-leporina* series of *Apatela* (Lepid., Phalaenidae, Apatelinae). Pan-Pacific Ent., San Francisco 11 (1935) 1936 pp. 145-155.

214. — Benkert, J. M. Comparison of the chromosomes of the soldier and the

king of *Reticulitermes flavipes* Kollar. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 pp. 121-122. [Isopt.]

215. — Benkert, L. H. The chromosome map of *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 p. 120. [Hym.]

216. — Benoist, R. Descriptions d'espèces nouvelles paléarctiques du genre *Heriades* (Hym. Apidae). Bull. Soc. ent. Fr., Paris 40 (1935) 1936 pp. 277-280.

217. — Benoist, R., Berland, L. & Blüthgen, P. Voyage de MM. L. Chopard et A. Méquignon aux Açores (Août-Septembre 1930). IX. Hymenoptères. Ann. Soc. ent. Fr. Paris 105 1936 pp. 9-10.

218. — Benson, R. B. Two new European Sawfly genera of the subfamily Fenusinae (Hymenoptera, Tenthredinidae). Ann. Mag. nat. Hist., London (10) 18 1936 pp. 620-626, 9 figs.

219. — Benson, R. B. Some more new or little known British sawflies (Hymenoptera Symphyta). Ent. mon. Mag., London 72 1936 pp. 203-207.

220. — Bequaert, J. Two new color forms of *Polistes major* Palisot de Beauvois from California and Arizona (Hymenoptera: Vespidae). Ent. News, Philadelphia 47 1936 pp. 7-13.

221. — Bequaert, J. A new North American Mason-Wasp from Virginia, with notes on some allied forms. Proc. U.S. nat. Mus., Washington 84 1936 no. 3004 pp. 79-87, 1 fig. [Hym.]

222. — Bequaert, J. Notes on Hippoboscidea. 6. A preliminary account of the species known from Chile. Rev. chil. Hist. nat., Santiago 37 1933 pp. 160-165. [Dipt.]

223. — Bequaert, J. Color variation in the South American social wasp, *Polistes carnifex* (Fabricius) (Hymenoptera, Vespidae). Rev. Ent., Rio de Janeiro 6 1936 pp. 376-383.

224. — Bequaert, J. The common oriental hornets, *Vespa tropica* and *Vespa affinis*, and their color forms. Treubia, Buitenzorg, 15 1936 pp. 329-351, 2 figs. [Hym.]

225. Bequaert, J. C. & Carpenter, F. M. The Nemestrinidae of the Miocene of Florissant, Colorado, and

their relations to the recent fauna. J. Paleont., Menasha **10** 1936 pp. 395-409, 11 figs. [Fossil.] [Dipt.]

226.—[Berezchkov, R. P.] Бережков, Р. И. *Loxostege sticticalis* L. in der waldzone Westsiberiens. [In Russian. With German summary.] Trans. Inst sci. Biol. Tomsk **2** 1936 pp. 98-131, 1 map 3 figs. [Lep.]

227.—Berger, C. A. Multiple chromosome complexes in the metamorphosis of *Culex pipiens*. Anat. Rec., Philadelphia **67** 1936 suppl. 1 pp. 63-64. [Dipt.]

228.—Berger, C. A. Observations on the relation between salivary gland chromosomes and multiple chromosome complexes. Proc. nat. Acad. Sci., Washington, D.C. **22** 1936 pp. 186-187. [Dipt.]

229.—Berger, K. Ueber Blattminen und Pflanzengallen der westlichen Oberlausitz (Bezirk Kamenz). Isis Budissina, Bautzen **13** (1932-35) 1936 pp. 89-101.

230.—Berger, L. Nomenclature, simplifications ou complications? Lambillionea, Brussels **36** 1936 pp. 125-126.

231.—Bergevin, E. de. Mission au Tibesti. Hémiptères. Avec les descriptions d'un genre nouveau, de deux espèces et d'une variété nouvelle. Mém. Acad. Sci. Paris (2) **62** 1936 pp. 64-69, 2 figs.

232.—Bergmann, A. Entomologischer Jahresbericht aus einigen Thüringer Landschaftsgebieten für das Jahr 1934, 1935. Ent. Z., Frankfurt a. M. **50** 1936 pp. 61-63, 76-79, 137-140, 170-172, 195-200, 366-368, 375-378, 385-390, 2 graphs.

233.—Berio, E. Osservazioni sulla morfologia e nomenclatura del apparato copulatore dei lepidotteri. Che cosa siano realmente l'uncus e lo scaphium. Festschr. 60. Geburtst. E. Strand, Riga **2** 1936 pp. 205-211, 10 figs.

234.—Berio, E. Nuove Arctiidae d'Africa del Museo di Genova. Ann. Mus. Stor. nat. Genova **59** 1935 pp. 26-27. [Lep.]

235.—Berio, E. Contributo alla conoscenza della variazione di *Agrotis*

puta [Hb. 1802] Ochs. 1816. Ann. Mus. Stor. nat. Genova **59** 1936 pp. 69-117, 3 pls. [Lep.]

236.—Berio, E. Specie nuove di Lepidotteri della Somalia italiana (Arctiidae; Erastrinae). Boll. Soc. ent. ital., Genoa **68** 1936 pp. 27-28, 2 figs.

237.—Berland, L. Deux observations sur l'orientation chez les hyménoptères. Livre jubil. Bouvier, Paris 1936 pp. 117-120, 2 figs.

238.—Berland, L. & Mosely, M. E. Catalogue des Trichoptères de France. Ann. Soc. ent. Fr., Paris **105** 1936 pp. 111-144.

Berland, L. see Benoist, Berland & Blüthgen.

239.—Bernard, F. Observations sur quelques Coléoptères Carabiques récoltés en Moselle au printemps 1933. Bull. Soc. Hist. nat. Moselle, Metz (3) **10** 1935 pp. 267-270.

240.—Bernard, F. Changements de taille au cours de la croissance larvaire chez *Notonecta maculata* (Hemipt. Notonectidae). Livre jubil. Bouvier, Paris 1936 pp. 121-126, 1 fig. [Hem.]

241.—Bernard, F. Voyage de MM. L. Chopard et A. Méquignon aux Açores (Août-Septembre 1930). VIII. Hémiptères Hétéroptères. Ann. Soc. ent. Fr., Paris **105** 1936 pp. 7-9.

242.—Bernard, F. Le ponte et l'éclosion des *Ameles* (Orth. Mantidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 42-44, 5 figs.

243.—Bernard, F. Morphologie et comportement des *Anastatus* (Hym. Chalcididae) parasites d'oothèques de Mantides. Bull. Soc. ent. Fr., Paris **41** 1936 pp. 69-75, 1 fig.

244.—Bernard, F. Hyménoptères vespiformes peu connus en France (4^e note). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 165-168.

245.—Bernard, F. Hyménoptères nouveaux ou peu connus en France (5^e note). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 285-290.

246.—Bernard, F. Répartition de quelques insectes terricoles dans les Pyrénées centrales granitiques. Essai

- sur le peuplement du massif de Néouvielle. C.R. Soc. Biogéogr., Paris **13** 1936 pp. 15-18.
- 247.**—Bernard, F. Essai sur les insectes terricoles du haut massif de Néouvielle (Pyrénées centrales). Misc. ent., Castanet-Tolosan **37** 1936 pp. 33-39.
- 248.**—Bernhauer, M. Materiali zoologici raccolti dalla spedizione italiana al Karakoram. Beschreibungen einiger neuen Staphyliniden-Arten. Atti Mus. Stor. nat. Trieste **12** 1935 pp. 86-88. [Col.]
- 249.**—Bernhauer, M. Neuheiten der javanischen Staphylinidenfauna. Atti Mus. Stor. nat. Trieste **12** 1935 pp. 171-175.
- 250.**—Bernhauer, M. Neuheiten der ostafrikanischen Staphylinidenfauna (Coleoptera). Ann. Mag. nat. Hist., London (10) **18** 1936 pp. 321-336.
- 251.**—Bernhauer, M. Neuheiten der paläarktischen Staphylinidenfauna. III. Koleopt. Rdsch., Vienna **22** 1936 pp. 50-58.
- 252.**—Bernhauer, M. Aus der Praxis des Käfersammlers. XXX. Ueber den Fang von Staphyliniden in Ziesellöchern und im Übersand. Koleopt. Rdsch., Vienna **22** 1936 pp. 181-186, 1 fig.
- 253.**—Bernhauer, M. Neue Staphylinidae aus Angola. Novit. zool., Tring **39** 1936 pp. 261-267. [Col.]
- 254.**—Bernhauer, M. Results of the Oxford University Expedition to Borneo, 1932. Neue Staphyliniden (Coleoptera). Proc. R. ent. Soc. London (B) **5** 1936 pp. 214-216.
- 255.**—Bernhauer, M. Neuheiten der palaearktischen Staphylinidenfauna. I, II. Pubbl. Mus. ent. Pietro Rossi, Udine **1** 1936 pp. 237-254, 303-325. [Col.]
- 256.**—Bernhauer, M. Neue Staphyliniden von belgischen Kongo. Rev. Zool. Bot. afr., Brussels **29** 1936 pp. 21-28. [Col.]
- 257.**—Bernhauer, M. & Jeannel, R. Trois Staphylinides remarquables de la colonie du Kenya. Rev. franç. Ent., Paris **2** (1935) 1936 pp. 213-218, 5 figs. [Col.]
- 258.**—Berretta, L. Genesi della membrana peritrofica nell'intestino degli Ortoteri. Bull. Inst. zool. Palermo **2** 1935 pp. 117-132, 2 pls.
- 259.**—Bertrand, H. Note sur une larve inédite de Dryopini de la collection Grouvelle (Coleopt. Dryopidae). Livre jubil. Bouvier, Paris 1936 pp. 127-132, 9 figs.
- 260.**—Bertrand, H. Captures et élevages de larves de Coléoptères aquatiques (8^e note). Ann. Soc. ent. Fr., Paris **105** 1936 pp. 213-238, 1 pl. 44 figs.
- 261.**—Bertrand, H. Les larves aquatiques des Coléoptères. Terre et la Vie, Paris **5** 1936 sem. 2 pp. 114-122, 19 figs.
- 262.**—Bertrand, T. L. Généralités entomologiques sur le département de la Moselle. Bull. Soc. Hist. Moselle, Metz (3) **10** 1935 pp. 301-305. [Col.]
- 263.**—Bess, H. A. The biology of *Leschenaultia exul* Townsend, a Tachinid parasite of *Malacosoma americana* Fabricius and *Malacosoma disstria* Hübner. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 593-613, 5 pls. [Dipt., Lep.]
- 264.**—Bettinger, —. Note rectificative sur le *Nanophyes sahlbergi* Sahl. Echange, Moulins **51** 1936 p. 17. [Col.]
- 265.**—Beutler, R. Ueber den Blutzucker der Biene (*Apis mellifica*). Naturwissenschaften, Berlin **24** 1936 pp. 486-491. [Hym.]
- 266.**—Beutler, R. Ueber den Blutzucker der Bienen. Verh. dtsh. zool. Ges., Leipzig **38** 1936 pp. 140-146. [Hym.]
- Bhasin, G. D.** see Chatterjee & Bhasin.
- Bhatia, Des Raj** see Husain & Bhatia.
- Bhuya, M. A. H.** see Mukerji & Bhuya.
- 267.**—Biedermann, R. Sur trois formes d'*Agrias pericles* (Lepidopt. Nymphalidae). Livre jubil. Bouvier, Paris 1936 pp. 133-141, 2 pls.
- 268.**—Biedermann, R. Note sur trois Erycinides d'Amérique du Sud (Lep. Erycinidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 252-260, 1 pl.

269. — Biedermann, R. Formes nouvelles de Rhopalocères sud-Américains. Rev. franç. Ent., Paris 3 1936 pp. 172-176, 1 pl. [Lep.]
270. — Bierig, A. Paederinae (Col., Staph.) nuevos neotropicales con notas sobre formas ya conocidas. Mem. Soc. Cubana Hist. nat., Habana 10 1936 pp. 137-144, 1 pl.
271. — Binaghi, G. Note su alcuni Carabidi. Mem. Soc. ent. ital., Genoa 14 1935 pp. 63-64. [Col.]
272. — Binaghi, G. Studio sul genere *Scopaeus* Erich. (Coleopt.: Staphylin.). Mem. Soc. ent. ital., Genoa 14 1935 pp. 84-115, 3 pls.
273. — Binaghi, G. Forme nuovi di *Reicheia* Sauley (Col., Carabidae). Boll. Soc. ent. ital., Genoa 68 1936 pp. 50-55, 4 figs.
- 273A. — Binaghi, G. Studio critico del sottogen. *Scotodipnus* s. str. (Col. Carabidae). Boll. Soc. ent. ital., Genoa 68 1936 pp. 80-91, 2 pls. 1 map.
274. — Birchler, A. Ein Beitrag zur Kenntnis der schweiz. Schmetterlingsfauna. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 672-676.
275. — Birula, A. Studien über die Chironomidenlarven der Arktis. I. Int. Rev. Hydrobiol., Leipzig 33 1936 pp. 38-49, 3 figs. [Dipt.]
276. — [Biryukov, V. I.] Бирюков, В. И. On the Culicidae of Charkow and district. [In Ukrainian.] Trav. Soc. Nat. Charkow 53 1930 pp. 13-17. [Dipt.]
277. — [Biryukov, V. I.] Бирюков, В. И. Observations on hibernation of the Malarial mosquitos of Charkow. [In Ukrainian.] Trav. Soc. Nat. Charkow 53 1930 pp. 19-28. [Dipt.]
278. — Bischoff, H. Ueber *Trigonalys prudnicensis* Torka und *Tr. hahni* var. *enslini* Torka (Hymenoptera: Trigonalidae). Arb. morph. tax. Ent. Berlin 3 1936 pp. 223-224.
279. — Bischoff, H. Schwedisch-chinesisches wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 56. Hymenoptera. 10. Bombylinae. Ark. Zool., Stockholm 27A 1936 no. 38, 27 pp.
280. — Bischoff, H. Beiträge zur Lebensgeschichte der *Pseudogonolobus hahni* (Spin.). S.B. Ges. naturf. Fr. Berlin 1936 1936 pp. 51-63, 4 figs. [Hym.]
281. — Blackburn, N. D. Illustrations of external anatomy of *Silpha americana* Linn. (Silphidae, Coleoptera). Ohio J. Sci., Columbus 36 1936 pp. 284-299, 5 pls.
282. — Blackwelder, R. E. Revision of the North American beetles of the Staphylinid subfamily Tachyporinae. Part I. Genus *Tachyporus* Gravenhorst. Proc. U.S. nat. Mus., Washington 84 1936 no. 3001 pp. 39-54.
283. — Blackwelder, R. E. Morphology of the Coleopterous family Staphylinidae. Smithson. misc. Coll., Washington 94 1936 no. 13 102 pp. 30 figs.
284. — Blair, K. G. A new genus of Strepsiptera. Proc. R. ent. Soc. London (B) 5 1936 pp. 113-117, 7 figs. [Col.]
285. — Blair, K. G. Some Coleopterous remains from peat thrown up on the East Anglian shore. Trans. Suffolk Nat. Soc., Framlingham 3 1935 pp. 53-54.
286. — Blair, K. G. A new cave-dwelling Tenebrionid from Java (Col.). Treubia, Buitenzorg 15 1936 p. 321.
287. — Blaisdell, sr., F. E. Two new species of *Notoxus* (Coleoptera: Anthicidae). Canad. Ent., Orillia 68 1936 pp. 145-148.
288. — Blaisdell, sr., F. E. Facts concerning the rearing of Tenebrionidae (Coleoptera). Ent. News, Philadelphia 47 1936 pp. 39-42.
289. — Blaisdell, sr., F. E. Studies in the Melyridae, No. 11. (Coleoptera.) Pan-Pacific Ent., San-Francisco 12 1936 pp. 184-190, 1 pl.
290. — Blaisdell, sr., F. E. Studies in the Tenebrionid tribe Triorophini. A monographic revision of the species belonging to the genus *Stibia* (Coleoptera). Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 57-105, 3 pls.
291. — Blaisdell, sr., F. E. Two new species of *Euschides* (Coleoptera: Tenebrionidae). Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 223-236.

292.—Blake, D. H. A redispotion of *Monoxia puncticollis* and allied species. J. Washington Acad. Sci., Menasha, Wis. 26 1936 pp. 423-430, 12 figs. [Col.]

293.—Blake, D. H. *Alica bimariginata* Say, with descriptions of new species and varieties (Coleoptera). Proc. ent. Soc. Washington 38 1936 pp. 13-24, 1 fig.

294.—Blanchard, E. E. Descripcion de Iceunmonoideos Argentinos. An. Soc. cient. Argent., Buenos Aires 122 1936 pp. 398-407, 4 figs. [Hym.]

295.—Blanchard, E. E. Dos tisanópteros nuevos para la República Argentina y algunos apuntes sobre especies vecinas. Physis, Buenos Aires 12 1936 pp. 103-109, 4 figs.

296.—Blanchard, E. E. Breves indicaciones para la recolección y preservación de los Afidos. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 64-66.

297.—Blanchard, E. E. Apuntes sobre calcididos argentinos (Hym. Chalc.). Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 103-122, 8 figs.

298.—Bliss, C. I. The size factor in the action of arsenic upon silkworm larvae. J. exp. Biol., London 13 1936 pp. 95-110, 4 figs. [Lep.]

299.—Bloeker, jr., J. C. von. The status of *Phyllophaga lanceolata* (Say) (Coleoptera: Scarabaeidae). Bull. S. Calif. Acad. Sci., Los Angeles 35 1936 pp. 52-61, 2 pls.

300.—Blount, B. K. The chemistry of Insects. J. chem. Soc. London 1936 pp. 1241-1242.

301.—Blöte, H. C. Catalogue of the Coreidae in the Rijksmuseum van natuurlijke Historie. Part III. Coreinae, second part. Zool. Meded., Leyden 19 1936 pp. 23-66, 14 figs. [Hem.]

302.—Blüthgen, P. 4. Beitrag zur Kenntnis der äthiopischen Halictinae (Hym. Apid.). Dtsch. ent. Z., Berlin 1935 1936 pp. 177-190, 3 figs.

303.—Blüthgen, P. Neue paläarktische Binden-*Halictus* (Hym. Apidae). Mitt. zool. Mus. Berlin 21 1936 pp. 270-313, 20 figs.

Blüthgen, P. see Benoist, Berland & Blüthgen.

304.—Bode, H. Untersuchungen über die Symbiose von Tieren mit Pilzen und Bakterien v. Mitteilung: Die Bakteriensymbiose bei Blattiden und das Verhalten von Blattiden bei aseptischer Aufzucht. Arch. Mikrobiol., Berlin 7 1936 pp. 391-403, 4 figs. [Orth.]

305.—Bodenheimer, F. S. Les grillons en orient. Livre jubil. Bouvier, Paris 1936 pp. 143-147.

306.—Bodenstein, D. Das Determinationsgeschehen bei Insekten mit Ausschluss der frühembryonalen Determination. Ergebn. Biol., Berlin 13 1936 pp. 174-234, 28 figs.

307.—Bodine, J. H. Effect of temperature upon the "block-mechanism" (diapause) of the grasshopper egg, *M. differentialis*. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 101. [Orth.]

308.—Bodine, J. H. & Boell, E. J. Enzymes in ontogenesis (Orthoptera). I. Tyrosinase. Proc. Iowa Acad. Sci., Des Moines 42 1935 pp. 210-211.

309.—Bodine, J. H. & Boell, E. J. The effect of certain stimulating and inhibiting substances on respiration of active and blocked eggs and isolated embryos. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 42. [Orth.]

310.—Bodine, J. H. & Boell, E. J. Effect of dinitrophenols on respiration of grasshopper embryos. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 101. [Orth.]

311.—Bodine, J. H. & Boell, E. J. Effect of methylene blue on respiration of blocked and developing embryonic cells. Proc. Soc. exp. Biol. Med., New York 34 1936 pp. 629-630. [Orth.]

Bodine, J. H. see Thompson & Bodine.

Boell, E. J. see Bodine & Boell.

312.—Boese, G. Der Einfluss tierischer Parasiten auf den Organismus der Insekten. Z. Parasitenk., Berlin 8 1936 pp. 243-284, 27 figs.

313.—Boga, L. Ueber Trichopterenlarven des Balaton-Sees. [In Magyar, with German summary.] Arb. ung. biol. Forsch.-Inst., Tihany 8 1936 pp. 9-14.

314.—[Bogachenko, V. G. & Lobashov, M. E.] Богаченко В. Г. и Лобашов, М. Е. Die Entstehung der Translokationen und Alter der Keimzellen bei *Drosophila melanogaster*. [In Russian, with German summary.] Trav. Soc. Nat. Lenigrad, Sect. Zool., 65 1936 pp. 254-261. [Dipt.]

Bogatshev, A. see Semenov-Tian-Shanskii & Bogatshev.

315.—Bohart, R. M. A preliminary study of the genus *Stylops* in California (Part I) (Strepsiptera, Stylopidae). Pan-Pacific Ent., San Francisco 12 1936 pp. 9-18, 1 pl.

316.—Bohn, G. Intervention du facteur masse d'animaux dans les tropismes. Livre jubil. Bouvier, Paris 1936 pp. 149-150. [Dipt.]

317.—Boldori, L. Larve di Trechini. V. Atti Soc. ital. Sci. nat., Milan 74 1935 pp. 389-393, 1 fig. [Col.]

318.—Boldori, L. Larve di Trechini. VI. Studi trentini Sci. nat., Trento 17 1936 pp. 64-71, 5 figs. [Col.]

319.—Boldori, L. Larve di *Amara* (Nota preliminar). Boll. Soc. ent. ital., Genoa 67 1935 pp. 150-151, 6 figs. [Col.]

320.—Boldori, L. Larve di Trechini VII. Le Grotte d'Italia, Trieste (2) 1 1936 pp. 93-99, 14 figs. [Col.]

321.—Boldt, R. Die Bedrohung der deutschen Fauna. Ein Wort über Klagerufe. Ent. Z., Frankfurt a. M. 50 1936 pp. 237-242.

322.—Bolivár, I. Apuntes para la fauna entomológica de Ifni (Ortópteros). Eos, Madrid 11 1936 pp. 395-426, 5 pls. 16 figs.

323.—Bollow, H. Beiträge zur Kenntnis der palaearktischen Dryopidae. I. Ent. Bl., Crefeld 32 1936 pp. 1-7, 52-58, 152-158, 188-195, 6 figs.

324.—Bondar, G. Notas biológicas sobre Bruchídeos observados no Brazil. Arch. Inst. Biol. veg., Rio de Janeiro 3 1936 pp. 7-44, 61 figs. [Col.]

325.—Bondroit, J. Hyménoptères Sphérides récoltés en 1933 à Bruxelles et à Ostende. Ann. Soc. zool. Belg., Brussels 64 (1933) 1934 pp. 59-65, 2 figs.

326.—Bonnamour, S. Sur le *Podagrion pachymerum* Walk. Hyméno-

ptère Chalcidide parasite de l'oothèque de la mante religieuse. Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 92-94.

327.—Bonnemaison, L. Morphologie comparée du pou de San José (*Aonidiella perniciososa* Comst.) et de l'*Aspidiotus* des arbres fruitiers (*Aspidiotus ostreaeformis* Curtis). Rev. Path. vég. Ent. agric., Paris 23 1936 pp. 230-243, 1 pl. 5 figs. [Hem.]

328.—Bonneville, P. Origine ectodermique de certaines parties du tissu adipeux royal des Termites. C.R. Acad. Sci. Fr., Paris 202 1936 pp. 876-878. [Isopt.]

Bonneville, P. see Grassé & Bonneville.

329.—Bonnier, G. & Nordenskiöld, M. A semi-lethal causing exceptional sex-ratios in *Drosophila melanogaster*. Hereditas, Lund 21 1936 pp. 185-194. [Dipt.]

330.—Borchert, A. Untersuchungen über die Morphologie und Entwicklungsdauer der Larven der Kleinen Wachsmotte (*Achroea grisella* F.). Zool. Jb., Jena Anat. 61 1936 pp. 99-106, 3 figs. [Lep.]

331.—Borchmann, F. Coleoptera Heteromera. Fam. Lagriidae. Genera Insect., Brussels 204 1936 561 pp., 9 pls. 39 figs.

332.—Borgmeier, T. Sobre algumas espécies de formigas do genero *Eciton* Latreille (Hym. Formicidae). Arch. Esc. Agric. Med. vet., Rio de Janeiro 10 (1933) 1934 pp. 161-168.

333.—Borgmeier, T. Sobre o cyclo evolutivo de *Chonocephalus* Wandolleck e uma nova especie de *Melaloncha* Brues, endoparasita de Abelhas (Dipt. Phoridae). Arch. Inst. Biol. veg., Rio de Janeiro 2 1935 pp. 255-265, 14 figs.

334.—Borgmeier, T. Sobre algumas formigas dos generos *Eciton* e *Cheliomyrmex* (Hym. Formicidae). Arch. Inst. Biol. veg., Rio de Janeiro 3 1936 pp. 51-68, 2 figs.

335.—Borgmeier, T. Alguns Phorídeos myrmecófilos de Costa Rica e do Brasil (Dipt. Phoridae). Rev. Ent., Rio de Janeiro 6 1936 pp. 23-37, 6 figs.

336.—Borgmeier, T. *Ecitotropis*, um novo genero myrmecófilo da familia Staphylinidae (Col.) de Goyaz. Rev. Ent., Rio de Janeiro 6 1936 pp. 296-299, 2 figs.

337.—[Borkhsenius, N.] Борхсениус, Н. Five new species of scales (Coccidae) morphologically allied to San José scale (*Aspidiotus perniciosus* Comst.). Plant Prot., Leningrad 6 1935 pp. 127-133, 7 figs. [Hem.]

338.—[Borkhsenius, N.] Борхсениус, Н. Zur der Fauna Schildläuse (Coccidae) des Kaukasus. [In Russian, with German summary.] Trudui Krasnodarsk. sel'.khoz. Inst. 4 1936 pp. 97-138, 3 figs. [Hem.]

339.—Borror, D. J. The genus *Oligoclada* (Odonata). Misc. Pub. Mus. Zool. Univ. Mich., Ann Arbor no. 22 1931 42 pp. 7. pls.

340.—Bostian, C. H. Fecundity of triploid females in *Habrobracon juglandis*. Amer. Nat., New York 70 1936 pp. 40-41. [Hym.]

341.—Boucumont, A. Mission scientifique de l'Omo. Coleoptera. VI. Scarabaeidae Scarabaeini. Miss. scient. Omo, Paris 2 1935 pp. 279-290.

342.—Boucumont, A. Drei neue termitophile Acanthocerinen aus Costa-Rica (Scarab.). Ent. Bl., Berlin 32 1936 pp. 229-231, 1 fig.

343.—Boucumont, A. Coprophaga africana. 8^e note. Rev. Zool. Bot. afr., Brussels 28 1936 pp. 493-496. [Col.]

344.—Bounhiol, J.-J. Dans quelles limites l'écébration des larves de Lépidoptères est-elle compatible avec leur nymphose? C.R. Acad. Sci. Fr., Paris 203 1936 pp. 1182-1184.

345.—Bounhiol, J.-J. Métamorphose après ablation des *corpora allata* chez le ver à soie (*Bombyx mori*, L.). C.R. Acad. Sci. Fr., Paris 203 1936 pp. 388-389. [Lep.]

346.—Bourquin, F. Notas biológicas sobre *Cecidia exocariae* Berg (Lep. Noct. Pyralidae). Rev. Ent., Rio de Janeiro 6 1936 pp. 384-388, 1 pl. 2 figs.

347.—Bourquin, F. Metamorfosis de *Xanthopastis timais* Cr. (Lep. Noct.). Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 195-201, 2 pls.

348.—Boursin, C. Note au sujet de la collection de Macrolépidoptères de A. Constant. Bull. Soc. ent. Fr., Paris 41 1936 pp. 143-144.

349.—Boursin, C. Contributions à l'étude des Noctuidae Trifinae. XIV.

La Scotogramma stigmata se trouve-t-elle en France? Livre jubilé. Bouvier, Paris 1936 pp. 151-154, 1 pl., 3 figs.

350.—Boursin, C. Contributions à l'étude des Agrotidae Trifinae. XV, XVI. Bull. Soc. ent. Fr., Paris 41 1936 pp. 87-95, 224-226. [Lep.]

351.—Boursin, C. Beiträge zur Kenntnis der "Agrotidae-Trifinae." XVII. Eine neue *Heterographa* aus Russisch-Turkestan. Ent. Rdsch., Stuttgart 54 1936 pp. 17-21, 54-57, 8 figs. [Lep.]

352.—Bouvier, L. Trois Tabanides nouveaux du Congo Belge. Rev. Zool. Bot. afr., Brussels 28 1936 pp. 510-512. [Dipt.]

353.—Bovey, P. Sur la ponte et la larve primaire d'*Oncodes pallipes* Latreille. Bull. Soc. vaud. Sci. nat., Lausanne 59 1936 pp. 171-176, 6 figs. [Dipt.]

354.—Bovey, P. Résultats de croisements entre diverses formes de *Zygaena ephialtes* L. C.R. Soc. Biol., Paris 122 1936 pp. 598-600. [Lep.]

355.—Böving, A. G. Description of the larva of *Plectris aliena* Chapin and explanation of new terms applied to the epipharynx and raster. Proc. ent. Soc. Washington 38 1936 pp. 169-185, 2 pls. 2 figs. [Col.]

356.—Bowen, M. F. A biometrical study of two morphologically similar species of *Trichogramma*. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 119-125, 4 figs. [Hym.]

357.—Boy, H. C. Eine merkwürdige *Morpho*. Ent. Rdsch., Stuttgart 53 1936 pp. 228-230, 252-254, 265-267. [Lep.]

358.—Boyce, H. R. Laboratory breeding of *Ascogaster carpocapsae* Vier. with notes on biology and larval morphology. Canad. Ent., Orillia 68 1936 pp. 241-246, 1 pl. [Hym.]

359.—Boyer, J. Les abeilles embaumeuses. La Nature, Paris 64 1936 no. 2 pp. 193-194, 5 figs. [Hym.]

360.—Bracken, C. W. Westward drift of the comma butterfly. Rep. Devons. Ass. Adv. Sci., Torquay 68 1936 pp. 135-137, 1 map.

361.—Bracken, C. W. Devonshire oak-galls. Rep. Devons. Ass. Adv. Sci., Torquay 68 1936 pp. 381-394.

362.—Bradley, J. C. Some features of the Hymenopterous fauna of South America. Act. Soc. sci. Chili, Santiago 30 (1920) 1921 pp. 51–74.

363.—Bradley, J. C. Four new species of *Campsomeris* (Hymenoptera: Scolidae) from the Malagasy subregion. Proc. R. ent. Soc. London (B) 5 1936 pp. 12–17, 3 figs.

364.—Brandt, H. Ein einfaches Merkmal zur Feststellung des Geschlechtsverhältnisses von Kiefernspannerpuppen. Anz. Schädlingsk., Berlin 12 1936 pp. 72–73, 1 fig. [Lep.]

365.—Brandt, H. Ueber die Aenderung des Geschlechtsverhältnisses bei Insekten und ihre Ursachen. Arb. phys. angew. Ent. Berlin 3 1936 pp. 218–221.

366.—Brandt, H. Die Abhängigkeit der Bewegungsgeschwindigkeit der Nonnenraupe (*Lymantria monacha* L.) von der Temperatur. Z. vergl. Physiol., Berlin 23 1936 pp. 715–720, 1 fig. [Lep.]

367.—Brandt, H. Untersuchungen über die Morphologie der Kopulationsorgane der Nonne *Lymantria monacha* L. (Lep. Lymantriidae). Zool. Anz., Leipzig 114 1936 pp. 161–168, 9 figs.

368.—Brauer, A. Susceptibility of Bruchid (Coleoptera) eggs to KCN. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 89.

369.—Brauer, A. & Taylor, A. C. Experiments to determine the time and method of organization in Bruchid (Coleoptera) eggs. J. exp. Zool., Philadelphia 73 1936 pp. 127–152, 1 pl. 4 figs.

370.—Braun, W. Ueber das Zellteilungsmuster im Puppenflügelepithel der Mehlmotte *Ephestia kuehniella* Z. in seiner Beziehung zur Ausbildung des Zeichnungsmusters. Arch. EntwMech. Org., Berlin 135 1936 pp. 494–520, 30 figs., 13 graphs. [Lep.]

371.—Breakey, E. P. Histological studies of the digestive system of the squash bug, *Anasa tristis* DeG. (Hemiptera, Coreidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 561–577, 4 pls.

372.—Brecher, L. Die Puppenfärbungen des Kohlweisslings *Pieris brassicae* L. X. und Puppenfärbungen der Vanessiden (*Vanessa io* L., *V. urticae*

L.), IV: Nervendurchschneidungsversuche. Anz. Akad. Wiss. Wien 72 1935 pp. 46–47. [Lep.]

373.—Brecher, L. Präinduzierte Veränderungen der Lichtreaktionsschwelle für die Färbung des *Dixippus morosus* Br. et Redt. Anz. Akad. Wiss. Wien 72 1935 p. 167. [Orth.]

374.—Breddin, P. Lebens- und Gedeihräume von *Bledius*arten und ihren Begleitern im rheinischen Löss. Ent. Bl., Crefeld 32 1936 pp. 107–116.

375.—Brehm, V. Einige neue Beobachtungen an Mückenlarven unserer Süßwasserfauna. Mikrokosmos, Stuttgart 29 1936 pp. 192–197, 3 figs. [Dipt.]

376.—Breit, J. Eine neue *Zabrus*-Art vom thessalischen Olymp. Koleopt. Rdsch., Vienna 22 1936 pp. 252–253.

377.—Bretschneider, R. Ueber das Herausmenden von rezessivem Melanismus durch Inzucht. Ent. Z., Frankfurt a. M. 50 1936 pp. 207–210, 213–216, 233–236, 245–248, 256–260, 8 figs. [Lep.]

378.—Brett, G. A. An arrangement for preventing larvae from spinning their cocoons on top of the cocoons of others. Entomologist, London 38 1936 pp. 253–254, 1 fig.

379.—Brett, G. A. Some breeding experiments with *Hemerophila abruptaria*, Thunb. Proc. S. London ent. nat. Hist. Soc. 1935–36 1936 pp. 84–92, 1 pl. [Lep.]

380.—Breuning, S. Novae species Cerambycidae. V. Festschr. 60. Geburtst. Embrik Strand, Riga 1 1936 pp. 274–325. [Col.]

381.—Breuning, S. Ergänzende Bemerkung zur Gattung *Carabus* L. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 325–326. [Col.]

382.—Breuning, S. Monographie der Gattung *Carabus* L. (VI. Teil.) Bestimm.-Tab. europ. Col., Toppau Heft 109 1935 pp. 1123–1360.

383.—Breuning, [S.] E. Etudes sur les Lamiaires (Col. Ceramb.). [Contd.] Novit. ent., Paris 6 1936 pp. 161–232, 103 figs.

384.—Breyer, A. Apuntes sobre Castniidae (Lep.) argentinos. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 207–208.

385.—Bridarolli, A. Morfologia externa de la larva *Paraspiniphora signata* Schmitz. Brotéria, Lisbon 32 1936 pp. 130-139, 9 figs. [Dipt.]

386.—Brimley, C. S. The Psammodaridae or spider wasps of North Carolina. J. Elisha Mitchell Sci. Soc., Chapel Hill 52 1936 pp. 107-131, 3 figs. [Hym.]

387.—Brinkmann, A. & Amsel, H. G. Ueber Bremer und nordwestdeutsche Kleinschmetterlinge. Mitt. ent. Ver. Bremen 23 1935 pp. 8-20. [Lep.]

388.—Brittin, G. Further notes on the genus *Coelostomidia* Cockerell. Trans. Proc. roy. Soc. N.Z., Dunedin 66 1936 pp. 225-229. [Hem.]

389.—[Brodskii, K.] Бродский, К. Contribution to the knowledge of invertebrate fauna of the mountain streams of central Asia. [In Russian, with English summary.] Acta Univ. Asiae med., Tashkent (viii-a) Zool. no. 15 1935 pp. 1-112, 4 pls. 22 figs. [Insects pp. 51-55.]

390.—Bromley, S. W. Studies in South African Asilidae (Diptera). Ann. Transv. Mus., Pretoria 18 1936 pp. 125-146, 3 figs.

391.—Bromley, S. W. The genus *Diogmites* in the United States of America with descriptions of new species (Diptera, Asilidae). J. New York ent. Soc. 44 1936 pp. 225-237.

392.—Bromley, S. W. Additions to the Ohio list of robber flies. III (Diptera: Asilidae). Ohio J. Sci., Columbus 36 1936 pp. 130-131.

393.—Bromley, S. W. Asilids feeding on bumblebees in New England. Psyche, Boston 43 1936 p. 14. [Dipt.]

394.—Brossard, R. La photographie stéréoscopique en couleurs des papillons et des chenilles. Amat. Papill., Paris 8 1936 pp. 25-34.

395.—Brown, A. W. A. Miscellaneous physiological observations on the laboratory breeding of flesh flies and of *Melanophus bivittatus* Say. Canad. Ent., Orillia 68 1936 pp. 88-91.

396.—Brown, A. W. A. The excretion of ammonia and uric acid during the larval life of certain Muscoid flies. J. exp. Biol., London 13 1936 pp. 131-139, 5 graphs. [Dipt.]

397.—Brown, F. A. & Hall, B. V. The directive influence of light upon *Drosophila melanogaster* Meig. and some of its eye mutants. J. exp. Zool., Philadelphia 74 1936 pp. 205-220, 7 figs. [Dipt.]

398.—Brown, J. M. On some Collembola from Lapland. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 610-617.

399.—Brown, J. M. Collembola from West Spitsbergen. Ent. mon. Mag., London 72 1936 pp. 62-65.

400.—Brown, J. M. Yorkshire Psocoptera. Naturalist, London 1936 no. 953 pp. 135-139.

401.—Brown, W. J. American species of *Ludius*. Canad. Ent., Orillia 68 1936 pp. 11-20, 8 figs., 99-107, 1 pl., 133-136, 4 figs., 177-187, 7 figs. [Col.]

402.—Brown, W. J. Notes on some species of Elateridae (Coleoptera). Canad. Ent., Orillia 68 1936 pp. 246-252, 4 figs.

403.—Browne, F. G. Biological notes on Malayan Ambrosia beetles. Malay. For., Kuala Lumpur 6 1936 pp. 120-127, 2 pls. [Col.]

404.—Bruce, W. G. & Knipling, E. F. Seasonal appearance and relative abundance of flies attracted to baited traps. Iowa St. Coll. J. Sci., Ames 10 1936 pp. 361-365, 4 graphs. [Dipt.]

405.—Bruch, C. Breves notas sobre ectoparasitos de roedores (Coleoptera-Staphylinidae). Rev. chil. Hist. nat., Santiago 40 1936 pp. 92-95, 6 figs.

406.—Bruch, C. Notas sobre el Camuati y las avispas que lo construyen. Physis, Buenos Aires 12 1936 pp. 125-135, 2 pls. 3 figs. [Hym.]

Bruch, C. see Hustache & Bruch.

407.—Bruck, C. R. New Scolytidae (Coleoptera) of southern California with a key to the species of *Pseudothysanoes* Blackman. Bull. S. Calif. Acad. Sci., Los Angeles 35 1936 pp. 30-38.

408.—Bruck, C. R. A synoptic revision of the subfamily Hylesinae (Scolytidae-Coleoptera) of western North America North of Mexico. Bull. S. Calif. Acad. Sci., Los Angeles 35 1936 pp. 38-51, 108-126, 8 pls.

409.—Brues, C. T. A new ecitophilous North American Phorid fly. Bull. Brooklyn ent. Soc. **31** 1936 pp. 68–70. [Dipt.]

410.—Brues, C. T. Evidences of insect activity preserved in fossil wood. J. Paleont., Menasha **10** 1936 pp. 637–643, 6 figs. [Fossil.] [Col., Hym.]

411.—Brues, C. T. Philippine Phoridae from the Mount Apo region in Mindanao. Proc. Amer. Acad. Arts Sci., Boston **70** 1936 pp. 365–466, 28 figs. [Dipt.]

412.—Brues, C. T. An American species of *Solenopsia*. Psyche, Boston **43** 1936 pp. 15–18, 1 fig. [Hym.]

413.—Brues, C. T. Aberrant feeding among insects and its bearing on the development of specialized food habits. Quart. Rev. Biol. Baltimore **11** 1936 pp. 305–319.

414.—Bryant, G. E. Insects of the New Hebrides: Chrysomelidae. Ann. Mag. nat. Hist., London (10) **17** 1936 pp. 242–256.

415.—Bryant, G. E. Some new injurious Phytophaga from British East Africa (Coleopt.). Proc. R. ent. Soc. London (B) **5** 1936 pp. 217–219, 2 figs.

416.—Bryk, F. Zygaenidae II. Lepidopt. Catalogus, 's-Gravenhage **71** 1936 pp. 95–332.

417.—Bryk, F. Hönes *Parnassius*-ausbeute vom Jahre 1936. Parnassiana, Neubrandenburg **4** 1936 pp. 1–4, 1 fig.

418.—Bryk, F. & Eisner, C. Kritische Revision der Gattung *Parnassius* unter Benutzung des Materials der Kollektion Eisner [contd.]. Parnassiana, Neubrandenburg **4** 1936 pp. 9–14.

419.—Bryson, H. R. Technique for rearing subterranean insects. J. Kans. ent. Soc., McPherson **9** 1936 pp. 73–84, 1 fig.

420.—Buchanan, L. L. Synopsis of *Lepidophorus* (Coleoptera, Curculionidae). Bull. Brooklyn ent. Soc. **31** 1936 pp. 1–10.

421.—Buchanan, L. L. A new genus and four new species of West Indian Curculionidae (Coleoptera). Mem. Soc. cubana Hist. nat., Habana **10** 1936 pp. 145–152.

422.—Buchanan, L. L. The *pacificus* group of *Cossonus* (Coleoptera; Curculionidae). Pan-Pacific Ent., San Francisco **12** 1936 pp. 111–116.

423.—Buchanan, L. L. Systematic notes on the Trachodinae (Coleoptera: Curculionidae). Proc. ent. Soc. Washington **37** (1935) 1936 pp. 178–183.

424.—Buchanan, L. L. The genus *Panscopus* Schoenherr (Coleoptera: Curculionidae). Smithsonian. misc. Coll., Washington **94** 1936 no. 16 18 pp.

425.—Buchka, E. Weitere Beobachtungen über *Aegosoma scabricorne*. Ent. Z., Frankfurt a. M. **50** 1936 pp. 132–136, 1 fig. [Col.]

426.—Buchmann, W. & Timoféeff-Ressovsky, N. W. Ueber die Wirkung der Temperatur auf den Mutationsprozess bei *Drosophila melanogaster*. iii. Behandlung der Weibchen mit Temperaturschocks. Z. indukt. Abstamm.-u. Vererb. Lehre, Leipzig **71** 1936 pp. 335–340, 2 figs. (Dipt.)

427.—Buddenbrock, W. v. Bemerkungen zur Lehre von den Schutzanpassungen. Bremer Beitr. Naturwissenschaft. **2** (1934) 1935 pp. 138–168, 7 figs.

428.—Bugbee, R. Unusual nesting colony of *Polistes fuscatus* (Fabr.). Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 614–616. [Hym.]

429.—Bugbee, R. E. Phylogeny of some Eurytomid genera. Ent. Amer., Lancaster, Pa. **16** 1936 pp. 169–222, 6 pls. 1 fig. [Hym.]

430.—Bugnion, E. Les organes buccaux du *Pheropsophus bimaculatus*, carabique cingalais de la tribu des Aptini. Livre jubil. Bouvier, Paris 1936 pp. 155–158, 2 figs. [Col.]

431.—Buhl, C. Beiträge zur Kenntnis der Biologie, wirtschaftliche Bedeutung und Bekämpfung von *Kakothrips robustus* Uz. Z. angew. Ent., Berlin **23** 1936 pp. 65–113, 21 figs. [Thysanopt.]

432.—Buhr, H. Mecklenburgische Minen. Stettin. ent. Ztg. **97** 1936 pp. 303–317.

433.—Bukowski, W. & Lengersdorf, F. Neue Lycoriiden-Arten aus der Krim. Konowia, Vienna **15** 1936 pp. 106–112, 1 pl. [Dipt.]

434.—[Buldoṡskii, A. T.] Булдовскій, А. Т. Sur les formes nouvelles de la fam. Palingeniidae (Ephemeroptera) de la région de l'Extrême Orient de l'U.R.S.S. [In Russian.] Bull. Acad. Sci. U.R.S.S., Moscow 1935 1935 pp. 831-836.

435.—[Buldoṡskii, A. T.] Булдовскій, А. Т. On the biology of *Anagenesia paradoxa* mihi. [In Russian.] Bull. Far East. Br. Acad. Sci. U.S.S.R., Vladivostock no. 11 1935 pp. 124-125. [Ephemeropt.]

436.—[Buldoṡskii, A. T.] Булдовскій, А. Т. New representatives of the family Palingeniidae (Ephemeroptera) from Russian Far East. [In Russian with English summary.] Bull. Far East. Br. Acad. Sci. U.S.S.R., Vladivostock no. 14 1935 pp. 151-166, 8 figs.

437.—Buonocore, C. Ricerche sulla funzione secondaria dei scritteri nel *Bombyx mori*, L., eseguite mediante la loro asportazione. [With French summary p. 15.] Boll. Staz. sper. Gelsicolt. Bachicolt. Ascoli Piceno 15 1936 pp. 1-7. [Lep.]

438.—Buonocore, C. I pigmenti del sangue e della seta nel *Bombyx mori*, L. Boll. Staz. sper. Gelsicolt. Bachicolt. Ascoli Piceno 15 1936 pp. 79-83.

439.—Buresch, I. Beitrag zum Studium der Neuropterenfauna Bulgariens (Insecta, Neuroptera). [In Bulgarian.] Mitt. bulg. ent. Ges. Sofia 9 1936 pp. 135-150.

440.—Buresch, I. & Tuleschkow, K. Die horizontale Verbreitung der Schmetterlinge (Lepidoptera) in Bulgarien. IV. Mitt. naturw. Inst. Sofia 9 1936 pp. 167-240.

441.—Burgeon, L. Mission scientifique de l'Omo. Coleoptera. ii. Carabidae: Agonini. Miss. scient. Omo, Paris 2 1935 pp. 77-90, 1 pl.

442.—Burgeon, L. Catalogues raisonnés de la faune entomologique du Congo Belge. Coléoptères-Carabides (deuxième partie). Ann. Mus. Congo Belge, Tervueren Zool. (3) Section ii 2 1936 pp. 265-314 figs.

443.—Burgeon, L. Les *Catascopus* africains (Col. Carabidae). Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 77-81, 8 figs.

444.—Burgeon, L. Carabidae nouveaux d'Afrique. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 208-212. [Col.]

445.—Burgeon, L. Mission scientifique de l'Omo. Carabidae. ix. Panagaeini. Mém. Mus. Hist. nat. Paris 4 1936 pp. 137-140.

446.—Burgeon, L. Les *Cylas* du Congo Belge (Col. Curculionidae). Rev. Zool. Bot. afr., Brussels 28 1936 pp. 504-509.

447.—Burgeon, L. Les mœurs des Passalides. Rev. Zool. Bot. afr., Brussels 29 1936 pp. (26)-(29), 1 fig. [Col.]

Burke, H. E. see Doane, Van Dyke, Chamberlin & Burke.

448.—Burkill, H. J. British butterflies in 1935. London nat., 1935 1936 pp. 67-70.

449.—Burkill, H. J. Plant gall records for 1935. London nat. 1935 1936 pp. 72-75.

450.—Burks, B. D. The Nearctic Dirhinini and Epitranini (Hymenoptera, Chalcididae). Proc. nat. Acad. Sci. Washington, D.C. 22 1936 pp. 283-287, 7 figs.

451.—Burks, B. D. The Illinois species of *Brachymeria* (Hymenoptera, Chalcididae). Trans. Ill. Acad. Sci., Springfield 29 1936 no. 2 pp. 251-254, 14 figs.

452.—Burmeister, F. Bauten und Brutfürsorge der Mistkäfer. Ent. Bl., Crefeld 32 1936 pp. 24-30, 58-65, 12 figs.

453.—Burr, M. British grasshoppers and their allies. A stimulus to their study. London, Philip Allan 1936 xvi + 162 pp. 6 pls. 40 maps 56 figs.

454.—Burr, M. Scope for our Orthopterists. Ent. Rec., London 48 1936 pp. 44-48.

455.—Burt, E. T. A description of a new type of larval respiratory organ in *Atrichopogon trifasciatus* Kieff. (Diptera, Ceratopogoninae). Proc. R. ent. Soc. London (A) 11 1936 pp. 61-65, 5 figs.

456.—Busch, T. Ein Beitrag zur Naturgeschichte unserer deutschen

*Papilio*arten, erarbeiten durch Beobachtungen im Hocheifel- und Oberrheingebiet. Ent. Rdsch., Stuttgart 53 1936 pp. 300-301, 319-322. [Lep.]

457.—Bushnell, R. J. The development and metamorphosis of the mid-intestinal epithelium of *Acanthoscelides obtectus* (Say) (Coleoptera). J. Morph., Philadelphia 60 1936 pp. 221-241, 2 pls.

458.—Bussmann, G. Ueber die Färbung des lebenden Mehlkäfers, *Tenebrio molitor* L. Hamburg, H. Schimkus 1935 54 pp. 7 figs. [Col.]

459.—Butler, C. G. & Innes, J. M. A comparison of the rate of metabolic activity in the solitary and migratory phases of *Locusta migratoria*. Proc. roy. Soc. London (B) 119 1936 pp. 296-304, 3 figs. [Orth.]

460.—Butovitsch, V. Studier över tallskottvecklaren, *Evetria buoliana* Schiff. Del I. Medd. Skogsförskösanst. Stockholm 29 1936 pp. 471-556, 29 figs. [Lep.]

461.—Butovitsch, V. Neuere russische forstentomologische Literatur. Sammelbericht für die Jahre 1930-1934. Z. angew. Ent., Berlin 23 1936 pp. 485-529.

462.—Butt, F. H. The early embryological development of the parthenogenetic alfalfa snout beetle, *Brachyrhinus ligustici* L. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 1-13, 2 pls. 12 figs. [Col.]

463.—Buxton, P. A. Studies on soils in relation to the biology of *Glossina submorsitans* and *tachinoides* in the North of Nigeria. (With an appendix by K. Mellanby.) Bull. ent. Res., London 27 1936 pp. 281-286, 1 fig. [Dipt.]

464.—Buxton, P. A. Studies on populations of headlice (*Pediculus humanus capitis*: Anoplura). I. Parasitology, Cambridge 28 1936 pp. 92-97.

465.—Byers, C. F. The immature form of *Brachymeria grandidis*, with notes on the taxonomy of the group (Odonata: Libellulidae). Ent. News, Philadelphia 47 1936 pp. 35-37, 60-64, 3 figs.

466.—Byers, C. F. Records of Florida dragonflies II. Florida Ent., Gainesville 19 1936 pp. 40-42. [Odon.]

467.—Bytinski-Salz, H. Die Ausbildung des Chitinpanzers in der Schmetterlingspuppe. Biol. Zbl., Leipzig 56 1936 pp. 35-61, 38 figs. [Lep.]

468.—Bytinski-Salz, H. New Heterocera from Asia Minor. Ent. Rec., London 48 1936 sep. pp. 1-6.

469.—Caldwell, J. S. Seven new species of the genus *Aphalara* (Homoptera: Chermidae). Ohio J. Sci., Columbus 36 1936 pp. 220-224, 1 pl.

Caldwell, J. S. see DeLong & Caldwell.

470.—Calkins, V. F. Some unusual butterfly records taken in Scott County, Kansas. Bull. Brooklyn ent. Soc. 31 1936 pp. 66-68. [Lep.]

471.—Calmbach, V. Nachtrag zu Dr. Karl Eckstein, Die Kleinschmetterlinge Deutschlands. Weitere in Deutschland festgestellte Kleinschmetterlinge. Ent. Rdsch., Stuttgart 53 1936 pp. 104-106.

472.—Camerlengo, A. Osservazioni sulla morfologia del torace del Grillo-talpa. Arch. zool. ital., Torino 23 1936 pp. 453-478, 12 figs. [Orth.]

473.—Cameron, A. E. *Adelges cooleyi* Gillette (Hemiptera, Adelgidae) of the Douglas fir in Britain: Completion of its life cycle. Ann. appl. Biol., Cambridge 23 1936 pp. 585-605, 1 pl. 3 figs.

474.—Cameron, M. New species of Staphylinidae (Col.) from Mauritius. Ent. mon. Mag., London 72 1936 pp. 201-203.

475.—Cameron, M. New species of Staphylinidae (Col.) from the Malay Peninsula. J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 40-53.

476.—Cameron, M. New species of Staphylinidae (Col.) from Java. Proc. R. ent. Soc. London (B) 5 1936 pp. 182-184.

477.—Cameron, M. Fauna Sumatrensis. Bijdrage no. 77, Staphylinidae (Col.). Tijdschr. Ent., Amsterdam 79 1936 pp. 1-24.

478.—Cameron, M. Fauna Javanica The Staphylinidae (Col.) collected by Mr. F. C. Drescher. Tijdschr. Ent., Amsterdam 79 1936 pp. 25-54.

- 479.—Cannon, R. C. Insect fauna of the upper Walsh river, North Queensland. North Qd. Nat., Cairns **4** 1936 pp. 45-47.
- 480.—Canova, M. F. An annotated list of the Lepturini of Oregon. Pan-Pacific Ent., San Francisco **12** 1936 pp. 126-132. [Col.]
- 481.—Cappe de Baillon, P. L'oeuf des insectes, technique microscopique. Livre jubil. Bouvier, Paris 1936 pp. 159-161.
- 482.—Cappe de Baillon, P. L'organe antennaire des Phasmes. Bull. biol., Paris **70** 1936 pp. 1-35, 4 figs. [Orth.]
- 483.—Capra, F. Specie nuove o poco note di *Tettigonia* e *Decticus* d'Italia (Orthopt. Tettigoniidae). Boll. Soc. ent. ital., Genoa **68** 1936 pp. 162-171, 5 figs.
- 484.—Caradja, A. & Meyrick, E. Materialien zu einer Lepidopterenfauna des Taishanmassivs, Provinz Shantung. Iris, Dresden **50** 1936 pp. 135-144, 1 map.
- 485.—Carey, E. J. & Zeit, W. Studies in the wave mechanics of muscle. VI. The areas of Cohnheim are transverse sections of the cross striations of the striated muscle fibre. Anat. Rec., Philadelphia **64** 1936 pp. 343-350, 2 pls. 3 figs. [Dipt.]
- 486.—Carleton, M. The anatomy and histology of the alimentary canal of the adult *Nebria brevicollis* Linn. (Coleopt.). Trans. Soc. Br. Ent., Southampton **3** 1936 pp. 119-127, 5 pls.
- 487.—Carlo, J. A. de. Descripción de especies nuevas de Belostómidos (Hemiptera). Bol. Mus. nac. Rio de Janeiro **10** 1934 pp. 109-111, 2 figs.
- 488.—Carlo, J. A. de. Catalogo, con la bibliografia mas importante, de los Hemipteros acuáticos y semi-acuáticos de Chile. Rev. chil. Hist. nat., Santiago **39** 1936 pp. 105-111.
- 489.—Carlson, J. G. The intergeneric homology of an atypical euchromosome in several closely related Acridinae (order Orthoptera). J. Morph., Philadelphia **59** 1936 pp. 123-162, 3 pls. 1 fig.
- 490.—Carothers, E. E. Cytology of abnormal growths produced by x-ray irradiation of grasshopper eggs. Anat. Rec., Philadelphia **67** 1936 suppl. 1 p. 84. [Orth.]
- 491.—Carothers, E. E. Components of the mitotic spindle with especial reference to the chromosomal and interzonal fibers in the Acrididae. Biol. Bull. Woods Hole, Lancaster, Pa. **71** 1936 pp. 469-491, 3 pls. [Orth.]
- 492.—Carpenter, F. M. Revision of the Nearctic Raphidiodea (recent and fossil). Proc. Amer. Acad. Arts Sci., Boston **71** 1936 pp. 89-157, 2 pls. 13 figs. [Neur.]
- 493.—Carpenter, F. M. Descriptions and records of Nearctic Mecoptera. Psyche, Boston **43** 1936 pp. 56-64, 3 figs.
- Carpenter, F. M. *see* Bequaert & Carpenter.
- 494.—Carpenter, G. D. H. Insect coloration and natural science. Nature, London, **138** 1936 pp. 686-687.
- 495.—Carpenter, G. D. H. Notes by Commander C. M. Dammers on the life-histories of two species of American Hesperidiidae (Lepidoptera). Proc. R. ent. Soc. Lond. (A.) **11** 1936 p. 2.
- 496.—Carpenter, G. D. H. *Pseud-acraea eurytus* (L.) and its models in the Budongo forest, Bunyoro, western Uganda (Lepidoptera). Proc. R. ent. Soc. London (A) **11** 1936 pp. 22-28.
- 497.—Carpenter, G. D. H. A note on the courtship of termites. Proc. R. ent. Soc. London (A) **11** 1936 pp. 93-94. [Isopt.]
- 498.—Carpenter, G. D. H. The description of *Acraea kalinzu* sp. n. (Lepidoptera). Proc. R. ent. Soc. London (B) **5** 1936 pp. 162-164, 1 pl. 1 fig.
- 499.—Carpenter, G. D. H. The Rhopalocera of Abyssinia: corrections and comments by Monsieur H. Unge-mach. Proc. R. ent. Soc. London (B) **5** 1936 pp. 196-200. [Lep.]
- 500.—Carpenter, G. D. H. Birds do attack butterflies. Sci. Prog., London **30** 1936 pp. 628-634. [Lep.]
- 501.—Carpenter, J. R. & Ford, J. The use of sweep net samples in an ecological survey. J. Soc. Br. Ent., Southampton **1** 1936 pp. 155-161, 2 figs.

502.—Carpentier, F. Le thorax et ses appendices chez les vrais et chez les faux Gryllotalpides. Mém. Mus. Hist. nat. Belg., Brussels (2) 4 1936 86 pp. 1 pl. 41 figs. [Orth.]

503.—Carr, R. H. Preparation of transparent specimens of leaves, worms, bees, butterflies, etc. Science, New York 83 1936 pp. 355-356, 1 fig.

504.—Carrick, R. Experiments to test the efficiency of protective adaptations in insects. Trans. R. ent. Soc. London 85 1936 pp. 131-140, 3 pls.

505.—Carriker, M. A. Studies in Neotropical Mallophaga, Part I. Lice of the Tinamous. Proc. Acad. nat. Sci. Philadelphia 88 1936 pp. 45-218, 32 pls.

506.—Carter, H. J. Australian Coleoptera. Notes and new species. No. X. Proc. Linn. Soc. N.S.W., Sydney 61 1936 pp. 98-110, 5 figs.

507.—Carter, H. J. & Zeck, E. H. Five new species of Australian Dryopidae. Aust. Zool., Sydney 8 1936 pp. 156-159, 1 pl. 1 fig. [Col.]

508.—Carter, W. The symbionts of *Pseudococcus brevipes* in relation to a phytotoxic secretion of the insect. Phytotoxicology, Lancaster, Pa. 26 1936 pp. 176-183, 2 figs. [Hem.]

509.—Caspari, E. Zur Analyse der Matroklinie der Vererbung in der a-Serie der Augenfarbenmutationen bei der Mehlmotte *Ephestia kühniella* Z. Z. induct. Abstamm.- u. Vererb.-Lehre, Leipzig 71 1936 pp. 546-555, 12 figs. [Lep.]

Caspari, E. see Kühn, Caspari & Plagge.

510.—Cassab, A. Notes sur l'accouplement des Courtilières (Orthoptera-Gryllotalpidae). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 24-25.

511.—Castellani, O. Contributo alla conoscenza della fauna entomologica del Lazio. Odonata. Boll. Soc. ent. ital., Genoa 68 1936 pp. 34-40.

512.—Catherine, G. Les Coléoptères aquatiques. Bull. Soc. inn. Seine marit., Le Havre 21 1936 pp. 16-20.

513.—Cazalet, M. Recherches biologiques sur l'estuaire du Frémur (Limite des Côtes-du-Nord et de l'Ille-

et-Vilaine). Bull. Soc. sci. Bretagne, Rennes 12 (1935) 1936 pp. 205-237, 1 map.

514.—Cazier, M. A. Notes on *Cicindela plutonica* Casey with description of a new subspecies. Pan-Pacific Ent., San Francisco 12 1936 pp. 123-124. [Col.]

515.—Čepelák, J. Nové odrůdy *Rosalia alpina* L. Acta Soc. ent. Čech., Prague 33 1936 pp. 145-147, 8 figs. [Col.]

516.—Ceton, J. C. Onze zandoogen. Levende Natuur, Amsterdam 41 1936 pp. 10-16, 47-51, 18 figs.

517.—Chadwick, L. E. On the occurrence of a costal vein in the genus *Archonias* Hbn. (Lepidoptera: Pieridae). Canad. Ent., Orillia 68 1936 pp. 143-144.

518.—Chagnon, G. A preliminary list of the Coleoptera found on *Polyporus betulinus*. Canad. Ent., Orillia 67 (1935) 1936 p. 278.

519.—Chagnon, G. Coléoptères de la province de Québec. Nat. canad., Quebec 63 1936 pp. 104-112, 201-210, 241-251, 37 figs.

520.—Chagnon, G. Insectes nouveaux ou peu connus capturés dans la tourbière de Lanoraie (Berthier), Québec. Nat. canad., Quebec 63 1936 pp. 164-166.

521.—Chaloux, J. Transformations morphologiques du jeune imago de *Cerambyx cerdo* L. en insecte parfait. Bull. Soc. sci. Bretagne, Rennes 10 (1933) 1934 pp. 145-148. [Col.]

522.—Chaloux, J. Quelques observations sur les dégâts causés par *Sitodrepa panicea* L. (Coléoptère Anobiide) sur les biscuits d'Intendance. Bull. Soc. sci. Bretagne, Rennes 13 1936 pp. 90-96 6 figs.

Chamberlin, W. J. see Doane, Van Dyke, Chamberlin & Burke.

523.—Chang, T. L. & Cheu, S. P. Comparative notes on the larval characters of *Culex pipiens* var. *pallens* Coquillett and *Culex fatigans* Wiedemann. Lingnan Sci. J., Canton 15 1936 pp. 613-626, 11 figs. [Dipt.]

524.—Chappuis, U. von. Die Mimese der *Calocampa solidaginis* Hb. (Lept. Noct.). Mitt. dtsch. ent. Ges., Berlin 7 1936 pp. 40-41.

Chatterjee, K. C. *see* Glover & Chatterjee.

525.—Chatterjee, N. C. Entomological investigations on the spike disease of sandal (28): Cicadidae (Homopt.). *Ind. For. Rec.*, New Delhi 2 1936 pp. 115–124.

526.—Chatterjee, N. C. Entomological investigations on the spike disease of sandal (29): Coreidae and Berytidae (Hemipt.). *Ind. For. Rec.*, Calcutta (N.S.) 2 1936 pp. 157–175.

527.—Chatterjee, N. C. & Bhasin, G. D. Entomological investigations on the spike disease of sandal (27): Chrysomelidae (Col.). *Ind. For. Rec.*, Delhi (N.S.) 1 1936 pp. 243–318, 3 figs.

528.—Chatterjee, N. C. & Ramakrishna Ayyar, T. V. Entomological investigations on the spike disease of sandal (26): Coccidae (Homopt.). *Ind. For. Rec.*, Delhi 1 1936 pp. 233–242.

Chaves Velando *see* Escomel & Chaves Velando.

529.—Cheesman, E. Islands near the sun. London, H. F. & G. Witherby 1927, 236 pp., 9 figs.

530.—Cheesman, E. The Mesosternini of New Guinea. Nova Guinea, Leiden 17 1936 Zool. pp. 353–388, 3 pls. [Hym.]

531.—Cheesman, L. E. Hymenoptera of the New Hebrides and Banks Islands. *Trans. R. ent. Soc. London* 85 1936 pp. 169–196, 15 figs.

532.—Chen, Fong-ge. Notes on the scale insects of *Citrus* in several districts of East Chekiang, with description of one new species. *Ent. & Phytopath.*, Hangchow 4 1936 pp. 208–228, 5 figs. [Hem.]

533.—Chen, Fong-ge. Life-history of *Rodolia rufopilosa* Muls. [In Chinese, with English summary.] *Yearb. Bur. Ent. Hangchow* 1934 1935 pp. 59–77, 13 figs. [Col.]

534.—Chen, Fong-ge, Loh, Nie-tsin & Wang, Fei-peng. Life histories of *Cacoccia asiatica* Wals. and *Adoxophyes fasciata* Wals. (Lep. Tortricidae) in Hangchow. [In Chinese with English summary.] *Yearb. Bur. Ent. Hangchow* 1934 1935 pp. 226–240, 9 figs.

535.—Chen, S. H. Classification of Asiatic *Phytodecta* (Col. Chrysomelinae). [In English, with Chinese summary.] *Chinese J. Zool.*, Nanking 1 1935 pp. 125–133.

536.—Chen, S. H. Recherches sur les Chrysomelinae de la Chine et du Tonkin. *Ann. Soc. ent. Fr.*, Paris 105 1936 pp. 145–176, 11 figs.

537.—Chen, S. H. Catalogue des Chrysomelinae de la Chine, de l'Indochine et du Japon. *Notes Ent. chin.*, Mus. Heude, Shanghai 3 1936 pp. 63–102, 3 pls.

538.—Chen, T. T. Preparation of tyrosinase from silk worm. *Proc. Chinese physiol. Soc. Tsingtao* 9 1936 pp. 11–12. [Lep.]

539.—[Chernova, O.] Чернова, O. Die Eintagsfliegen (Ephemeroptera) des Kreises von Moskau. [In Russian.] *Trav. Inst. zool. Acad. Sci. U.R.S.S.*, Leningrad 3 1936 pp. 89–95.

Cheu, S. P. *see* Chang & Cheu.

540.—Child, G. The effect of starvation on the mean bristle numbers of sc-1 in *Drosophila melanogaster*. *Amer. Nat.*, New York 70 1936 pp. 43–44. [Dipt.]

541.—Child, G. The effect of temperature on the mean bristle numbers of sc-1, sc-5 and their compound in *Drosophila melanogaster*. *Amer. Nat.*, New York 70 1936 p. 44. [Dipt.]

542.—Child, G. Phenogenetic studies in scute of *D. melanogaster*. III. The effect of temperature on scute 5. *Genetics*, Menasha 21 1936 pp. 808–816, 3 figs. [Dipt.]

Child, G. *see* Plough & Child.

543.—Chin, Y. T. On some mosquitoes collected from Manchuria. *Peking nat. Hist. Bull.* 11 1936 pp. 23–25. [Dipt.]

544.—China, W. E. A new species of *Mecidea* (Heteroptera, Pentatomidae) from Arabia. *Ann. Mag. nat. Hist.*, London (10) 17 1936 pp. 95–97, 1 fig.

545.—China, W. E. A new genus and species of Capsidae (Heteroptera) infesting coffee in Kenya. *Ann. Mag. nat. Hist.*, London (10) 17 1936 pp. 326–328, 1 fig.

546.—China, W. E. The first genus and species of Holotrefhidae (Hemiptera) from the New World. *Ann. Mag. nat. Hist.*, London (10) **17** 1936 pp. 527–538, 5 figs.

547.—China, W. E. A remarkable new ant-like Lygaeid from Egypt (Hemiptera Heteroptera). *Proc. R. ent. Soc. London* (B) **5** 1936 pp. 164–167, 1 fig.

Chiranji Lal see Smith, Mukerji & Chiranji Lal.

548.—Cho, F. On some malformed beetles from Korea. [In Japanese.] *Kontyû*, Tokyo **10** 1936 pp. 25–27, 4 figs.

548A.—Cho, F. A list of unrecorded carrion-beetles from Korea. *Kontyû*, Tokyo **10** 1936 pp. 155–158. [Col.]

549.—Chopard, L. Contributions à l'étude de la faune du Mozambique Voyage de M. P. Lesne (1928–1929). 19^e note.—Orthoptères ensifères. *Mem. Mus. zool. Univ. Coimbra* (I) no. **85** 1935 43 pp. 18 figs.

550.—Chopard, L. Un remarquable genre d'Orthoptères de l'ambre de la Baltique. *Livre jubil. Bouvier*, Paris 1936 pp. 163–168, 1 pl., 11 figs.

551.—Chopard, L. On a small collection of Tridactylidae and Gryllidae from Anglo-Egyptian Sudan made by Mr. H. B. Johnston. *Ann. Mag. nat. Hist.*, London (10) **17** 1936 pp. 539–546, 1 fig.

552.—Chopard, L. Orthoptères fossiles et subfossiles de l'ambre et du copal. *Ann. Soc. ent. Fr.*, Paris **105** 1936 pp. 375–386, 13 figs.

553.—Chopard, L. La larve de l'*Anthia sexmaculata* F. (Col. Carabidae). *Bull. Soc. ent. Fr.*, Paris **41** 1936 pp. 168–173, 2 figs.

554.—Chopard, L. Les Blattides (Orth.) du groupe des *Hololampra* habitant l'Algérie. *Bull. Soc. Hist. nat. Afr. N.*, Algiers **27** 1936 pp. 55–65, 11 figs.

555.—Chopard, L. Mission au Tibesti. Orthoptères. *Mém. Acad. Sci. Paris* (2) **62** 1936 pp. 70–72.

556.—Chopard, L. Note sur les Gryllides de Chine. Notes Ent. chinoise, *Mus. Heude*, Shanghai **3** 1936 pp. 1–14, 1 pl. [Orth.]

557.—Chopard, L. Quelques Gryllides asiatiques de la collection du Muséum d'Entomologie de Lund. *Opusc. ent.*, Lund **1** 1936 pp. 42–44, 3 figs. [Orth.]

558.—Chopard, L. Mission de M. A. Chevalier aux îles du Cap Vert (1934). II.—Orthoptères. *Rev. franç. Ent.*, Paris **3** 1936 pp. 88–96, 2 figs.

559.—Chopard, L. The Tridactylidae and Gryllidae of Ceylon. *Spolia zeyl.*, Colombo **20** 1936 pp. 9–87, 22 figs. [Orth.]

560.—Chu, Joo-tso. Biological investigation of the indigenous mulberry silkworm (*Theophila mandarina* Moore). [In Chinese, with English summary.] *Yearb. Bur. Ent. Hangchow*, Chekiang **1934** 1935 pp. 126–138, 2 pls.

561.—Chu, Joo-tso. Notes on Cheloninae of China, with description of a new species (Hymen., Braconidae). *Ent. & Phytopath.*, Hangchow **4** 1936 pp. 682–685, 1 fig.

562.—Chûjô, M. Descriptions of three new Mordellid species from Formosa. *Sylvia*, Taihoku **6** 1935 pp. 72–74, 1 pl.

563.—Chûjô, M. A systematic catalogue of Formosan Mordellidae (Coleoptera). *Sylvia*, Taihoku **6** 1935 pp. 75–86. [Col.]

564.—Chûjô, M. A systematic catalogue of Formosan Rhipiphoridae (Coleoptera). *Sylvia*, Taihoku **6** 1935 pp. 129–135, 1 fig. [Col.]

565.—Chûjô, M. Studies on the Chrysomelidae in the Japanese Empire (VIII). Subfamily Halticinae. *Trans. nat. Hist. Soc. Formosa* **25** 1935 pp. 354–369, 392–400, 459–476; **26** 1936 pp. 15–30, 84–92, 108–114.

566.—Chûjô, M. Descriptions of five new species of Erotylidae from Formosa. *Trans. nat. Hist. Soc. Formosa* **26** 1936 pp. 211–214.

567.—Chûjô, M. Description of a new species of Bostrychidae (Coleoptera) and notices of some others. *Trans. nat. Hist. Soc. Formosa* **26** 1936 pp. 407–410.

568.—Cislik, W. & Kaweck, Z. Das spontane Auftreten der Blutlauszehr-
wespe *Aphelinus mali* Hald. in Polen. *Bull. int. Acad. Cracovie* **1935** 1935 B II pp. 343–345, 1 pl. [Hym.]

569.—Ciszakiewicz, H. Koleopterologische Notizen. III. Polsk. Pismo ent., Lwow 13 (1934) 1936 p. 196, 1 fig.

570.—Claassen, P. W. New names for stoneflies (Plecoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 622-623.

Clancy, C. W. *see* Ephrussi, Clancy & Beadle.

571.—Clark, A. F. The needle-tying moth (*Tortrix excessana* Walk.). N.Z. J. Sci. Tech., Wellington 17 1936 pp. 679-685, 4 figs. [Lep.]

572.—Clark, A. H. Notes on the butterflies of the genus *Enodia* and description of a new fritillary from Peru. Proc. U.S. nat. Mus., Washington 83 1936 no. 2983 pp. 251-259.

573.—Clark, A. H. The gold-banded skipper (*Rhabdoides cellus*). Smithson. misc. Coll., Washington 95 1936 no. 7 50 pp. 8 pls. 8 figs. [Lep.]

574.—Clark, A. H. The swallow-tail butterflies. Rep. Smithson. Instn., Washington 1935 1936 pp. 383-408, 14 pls. [Lep.]

575.—Clark, A. H. & L. F. Some butterflies from eastern Virginia. J. Washington Acad. Sci., Menasha, Wis. 26 1936 pp. 66-70, 14 figs. [Lep.]

576.—Clark, A. H. & Sandhouse, G. A. The nest of *Odynerus tempiferus* var. *macio* Bequaert, with notes on the habits of the Wasps. Proc. U.S. nat. Mus. Washington 84 1936 no. 3005 pp. 89-95. [Hym.]

577.—Clark, B. P. Descriptions of twenty-four new Sphingidae and notes concerning two others. Proc. New Engl. zool. Cl., Cambridge, Mass. 15 1936 pp. 71-91. [Lep.]

578.—Clark, J. A revision of Australian species of *Rhytidoponera* Mayr (Formicidae). Mem. nat. Mus., Melbourne 9 1936 pp. 14-89, 6 pls. 4 figs. [Hym.]

579.—Clark, L. B. & Hersh, A. H. A study of relative growth in *Notonecta undulata*. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 78. [Hem.]

580.—Clausen, C. P. Insect parasitism and biological control. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 201-223, 6 figs.

581.—Clay, T. New species of Mallophaga recorded from Asiatic birds. Proc. zool. Soc. London 1935 1936 pp. 905-914, 2 pls. 7 figs.

582.—Clemente, L. S. The lethal effect of homozygous purple and eyeless genes in *Drosophila*. Philipp. J. Sci., Manila 59 1936 pp. 177-187. [Dipt.]

583.—Cochrane, F. Observations on eye-colour development in *Drosophila pseudo-obscura*. J. Genet., London 32 1936 pp. 183-187, 1 fig. [Dipt.]

584.—Cockayne, E. A. The life-history of *Lampropteryx otregiata*, Metcalfe. Entomologist, London 69 1936 pp. 245-252, 1 pl. [Lep.]

585.—Cockayne, E. A. Hints on breeding moths from the egg. Rep. Eton Coll. nat. Hist. Soc. 7 (1935-36) 1936 pp. 30-33. [Lep.]

586.—Cockerell, T. D. A. Records of western bees. Amer. Mus. Novit., New York no. 831 1936 6 pp. [Hym.]

587.—Cockerell, T. D. A. African bees of the genus *Allodapula*. Amer. Mus. Nov., New York no. 840 1936 28 pp. 36 figs. [Hym.]

588.—Cockerell, T. D. A. African Hylaeine bees. Amer. Mus. Novit., New York no. 847 1936 14 pp.

589.—Cockerell, T. D. A. Some African Anthidiine bees. Amer. Mus. Novit., New York no. 855 1936 12 pp. [Hym.]

590.—Cockerell, T. D. A. African bees of the genus *Colletes*. Amer. Mus. Novit., New York no. 856 1936 10 pp. [Hym.]

591.—Cockerell, T. D. A. African bees of the genus *Nomioides*. Amer. Mus. Novit., New York no. 857 1936 3 pp. [Hym.]

592.—Cockerell, T. D. A. Some African bees. Amer. Mus. Novit., New York no. 864 1936 9 pp. 6 figs.

593.—Cockerell, T. D. A. The fauna of the Sunchal (or Margas Verdes) formation, Northern Argentina. Amer. Mus. Novit., New York no. 886 1936 9 pp. 19 figs.

594.—Cockerell, T. D. A. Descriptions and records of bees. CLII-CLVIII. Ann. Mag. nat. Hist., London 1936 (10) 17 pp. 24-31, 346-360, 477-483; (10) 18 pp. 446-456, 515-524, 553-560, 631-638.

- 595.—Cockerell, T. D. A. The entomology of Prince Albert National Park, Saskatchewan. *Canad. Ent., Orillia* **68** 1936 pp. 85-88.
- 596.—Cockerell, T. D. A. The bees of Alberta.—I. *Canad. Ent., Orillia* **68** 1936 pp. 274-277. [Hym.]
- 597.—Cockerell, T. D. A. Two new bees from Hay River. *Canad. Ent., Orillia* **68** 1936 pp. 282-283. [Hym.]
- 598.—Cockerell, T. D. A. Some African Osmine bees. *Entomologist, London* **69** 1936 pp. 37-38. [Hym.]
- 599.—Cockerell, T. D. A. Bees from British Guiana. *J. New York ent. Soc.* **44** 1936 pp. 249-252. [Hym.]
- 600.—Cockerell, T. D. A. African Honey bees. *Nature, London* **138** 1936 p. 249.
- 601.—Cockerell, T. D. A. Bees from northern California. *Pan-Pacific Ent., San Francisco* **12** 1936 pp. 133-164. [Hym.]
- 602.—Cockerell, T. D. A. African bees of the genus *Crocisa* (Hym.). *Proc. R. ent. Soc. London (B)* **5** 1936 pp. 44-48.
- 603.—Cockerell, T. D. A. African bees of the genus *Anthophora* (Hym.). *Proc. R. ent. Soc. London (B)* **5** 1936 pp. 71-78.
- 604.—Cockerell, T. D. A. Bees from the Solomon Islands. *Proc. R. ent. Soc. London (B)* **5** 1936 pp. 225-226. [Hym.]
- 605.—Cockerell, T. D. A. African bees of the genus *Anthophora*. *Rev. Zool. Bot. afr., Brussels* **28** 1936 pp. 205-212. [Hym.]
- 606.—Cockerham, K. L. & Deen, O. T. Notes on life history, habits and distribution of *Heteroderes laurenti* Guér. *J. econ. Ent., Geneva, N.Y.* **29** 1936 pp. 288-296, 10 figs. [Col.]
- 607.—Cohen, M. The biology of the chrysanthemum leafminer, *Phytomyza atricornis* Mg. (Diptera : Agromyzidae). *Ann. appl. Biol., Cambridge* **23** 1936 pp. 612-632 2 pls. 8 figs.
- 608.—Coker, R. E., Millsaps, V. & Rice, R. Swimming plume and claws of the broad-shouldered water-strider *Rhagovelia flavicincta* Bueno (Hemiptera). *Bull. Brooklyn ent. Soc.* **31** 1936 pp. 81-84, 1 pl.
- 609.—Colas, G. L'extraction des organes copulateurs de Coléoptères. *Rev. franç. Ent., Paris* **3** 1936 pp. 106-107.
- 610.—Colas, G. & Reymond, A. Note sur la forêt d'Iraty et sur l'extension d'espèces espagnoles sur le versant français des Pyrénées. *Livre jubil. Bouvier, Paris* 1936 pp. 169-171.
- 611.—Colas, G. & Reymond, A. Note sur la faune des Coléoptères de la Forêt d'Iraty (Basses-Pyrénées). *C.R. Soc. Biogéogr., Paris* **12** 1935 pp. 49-52.
- 612.—Cole, jr., A. C. An annotated list of the ants of Idaho (Hymenoptera : Formicidae). *Canad. Ent., Orillia* **68** 1936 pp. 34-39.
- 613.—Cole, jr., A. C. Descriptions of seven new western ants (Hymenop. : Formicidae). *Ent. News, Boston* **47** 1936 pp. 118-121.
- 614.—Cole, K. S. & Jahn, T. L. Resistance and capacitance measurements on grasshopper egg membranes over a wide frequency range. *Anat. Rec., Philadelphia* **67** 1936 suppl. 1 p. 99. [Orth.]
- 615.—Colette, J. R. F. Note sur la présence de fragments de nids fossiles d'insectes dans le Pléistocène supérieur du Stanley-Pool (Congo belge). *Bull. Soc. belge Géol., Brussels* **45** 1936 pp. 309-348, 22 figs. [Isopt.]
- 616.—Collart, A. Les Diptères de Belgique dans l'oeuvre de Meigen : "Systematische Beschreibung der bekannten Europäischen Zweiflügeligen Insekten." *Bull. Ann. Soc. ent. Belg., Brussels* **76** 1936 pp. 273-294.
- 617.—Collart, A. Diptères élevés des nids de guêpe (2 note). *Bull. Mus. Hist. nat. Belg., Brussels* **12** 1936 no. 1, 12 pp. 1 fig.
- 618.—Collart, A. Le genre *Microsanía* au Congo Belge : *M. ghesquierei* n. sp. (Dipt. : Clythiidae). *Mém. Mus. Hist. nat. Belg., Brussels* (2) **3** 1936 pp. 553-557, 2 figs.
- 619.—Collenette, C. L. On a collection of Lymantriidae (Heterocera) from North Yunnan. *Ann. Mag. nat. Hist., London* (10) **17** 1936 pp. 329-346, 1 pl.
- 620.—Collenette, C. L. New African Lymantriidae (Lep.). *Entomologist, London* **69** 1936 pp. 178-181, 1 fig.

621.—Collenette, C. L. Lymantriidae from North Yunnan. *Ent. mon. Mag.*, London **72** 1936 pp. 90–91. [Lep.]

622.—Collenette, C. L. Dr. Karl Jordan's expedition to South West Africa and Angola: New Lymantriidae from Angola. *Novit. zool.*, Tring **40** 1936 pp. 147–152, 1 pl. [Lep.]

623.—Collenette, C. L. New Lymantriidae from Madagascar. *Novit. zool.*, Tring **40** 1936 pp. 153–169, 1 pl. [Lep.]

624.—Collenette, C. L. Some new Lymantriidae from the Belgian Congo. *Rev. Zool. Bot. afr.*, Brussels **28** 1936 pp. 249–252, 4 figs. [Lep.]

625.—Collenette, C. L. New Lymantriidae from the Belgian Congo. *Rev. Zool. Bot. afr.*, Brussels **28** 1936 pp. 404–405, 2 figs. [Lep.]

626.—Collin, J. E. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 53. Diptera. 17. Anthomyidae. *Ark. Zool.*, Stockholm **27A** 1936 no. 35, 3 pp.

627.—Collins, B. J. A new species of *Anomiopsyllus* from Montana (Siphonaptera). *Ent. News*, Boston **47** 1936 pp. 128–130, 4 figs.

628.—Colombini, N. Osservazioni sulla struttura delle ghiandole pigdiali di *Cybister roeselii* Fabr. *Mem. Soc. tosc. Sci. nat.*, Pisa **45** 1935 pp. 153–162. 1 pl. [Col.]

629.—Colombini, N. Osservazioni sulla morfologia delle ghiandole pigdiali dei Carabidi. *Mem. Soc. tosc. Sci. nat.*, Pisa **45** 1935 pp. 271–281, 9 figs. [Col.]

630.—Comon, R. Etude sur la répartition des insectes: Causes d'apparition ou disparition. *Bull. Soc. Sci. Hist. nat. Yonne, Auxerre* **88** (1934) 1935 pp. 47–52.

631.—Compere, H. A new species of *Habrolepis* parasitic in *Chrysomphalus aurantii*, Mask. *Bull. ent. Res.*, London **27** 1936 pp. 493–496, 1 fig. [Hym., Hem.]

632.—Compere, H. A new genus and species of Encyrtidae parasitic in the pineapple mealybug, *Pseudococcus brevipes* (Ckl.). *Proc. Hawaii. ent. Soc.*, Honolulu **9** 1936 pp. 171–174, 1 fig. [Hym., Hem.]

633.—Compere, H. Notes on the classification of the Aphelinidae with descriptions of new species. *Univ. California Publ. Ent.*, Berkeley **6** 1936 pp. 277–322, 19 figs. [Hym.]

634.—Comstock, J. A. Notes on the early stages of *Erebus odora* L. (Lepidopt.). *Bull. S. Calif. Acad. Sci.*, Los Angeles **35** 1936 pp. 95–98, 3 figs.

635.—Comstock, J. A. & Dammers, C. M. Notes on the life histories of three butterflies and three moths from California. *Bull. S. Calif. Acad. Sci.*, Los Angeles **34** (1935) 1936 pp. 211–225, 15 figs.

636.—Comstock, J. A. & Dammers, C. M. Notes on the early stages of five moths from southern California. *Bull. S. Calif. Acad. Sci.*, Los Angeles **35** 1936 pp. 99–107, 10 figs.

637.—Conde, O. Ostbaltische Tenthrédinoidea, II. Teil. *KorrespBl. naturf. Ver. Riga* **61** 1934 pp. 168–198. [Hym.]

638.—Conde, O. Addenda et corrigenda in genere *Allantus* Jur. *Bull. Inst. catal. Hist. nat.*, Barcelona **35** 1935 pp. 231–232, 5 figs. [Hym.]

639.—Conde, O. Revision der Gattung *Haplostegus* Konow (Hym. Tenth.). *Rev. Ent.*, Rio de Janeiro **6** 1936 pp. 120–124, 3 figs.

640.—Constantineanu, M. I. Contributions à la faune ichneumonologique de la Roumanie. Subfamilia Ophioninae Cresson (suite). *Ann. sci. Univ. Jassy* **22** 1936 pp. 177–193. [Hym.]

641.—Cook, J. H. A contribution towards a study of *Calosoma inquisitor* L. (Coleopt., Carabidae). *Trans. Soc. Br. Ent.*, Southampton **3** 1936 pp. 79–114, 6 pls.

642.—Cooman, A. de. Remarques sur le genre *Bacanius* (Col. Histeridae) avec description d'un s.g. nouveau *Mullerister* et d'une n.sp. *tonkinensis*. *Mus. Heude, Notes Ent. chin.*, Shanghai **3** 1936 pp. 135–140.

643.—Cooman, A. de. Sur quelques Histerides orientaux. *Rev. franç. Ent.*, Paris **2** (1935) 1936 pp. 219–224, 5 figs. [Col.]

644.—Corbet, A. S. Biological processes in tropical soils with special reference to Malaysia. Cambridge, W. Heffer & Sons 1935 xiv + 156 pp. 16 pls. 10 figs. [Insects pp. 36–45.]

- 645.—Corbet, A. S. The genera of *Lycaenopsini* (Lepidoptera: *Lycaenidae*). Proc. R. ent. Soc. London (B) 5 1936 pp. 185–186.
- 646.—Corbet, A. S. & Pendlebury, H. M. Revision of the genus *Amathusia* with special reference to the Malayan species. J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 141–153, 2 pls.
- 647.—Corbett, G. H. New Aleurodidae (Hem.). Proc. R. ent. Soc. London (B) 5 1936 pp. 18–22, 6 figs.
- 648.—Corcuff, C. Etude sur les diverses variétés de puces recueillies a Salé au cours d'une année. Bull. Inst. Hyg. Maroc, Rabat 4 1933 pp. 5–30, 1 pl. [Siphonapt.]
- 649.—Corella, L. B. Contribución al catálogo de los Coleópteros de Valencia. Butll. Inst. catal. Hist. nat., Barcelona 35 1935 pp. 82–91.
- 650.—Corporaal, J. B. Deux nouveaux genres de Clérides et remarques sur un autre genre (Col.). Rev. franç. Ent., Paris 3 1936 pp. 205–211, 5 figs.
- 651.—Costa Lima, A. da. Sur un nouveau Chryside: *Duckeia cyanea*, parasite des oeufs de phasmide. Livre jubil. Bouvier, Paris 1936 pp. 173–175, 1 pl. [Hym.]
- 652.—Costa Lima, A. M. da. Terceiro catalogo dos insectos que vivem nas plantas do Brasil. Rio de Janeiro, Minis. Agric. 1936 460 & iv pp.
- 653.—Costa Lima, A. da. Dois novos insectos de *Xanthium*. Ann. Acad. bras. Sci., Rio de Janeiro 8 1936 pp. 157–161, 3 pls. 2 figs. [Dipt. Hym.]
- 654.—Costa Lima, A. da. Sobre os generos *Amplyopinus* e *Edrabius* (Coleoptera: Staphylinidea). Mem. Inst. Oswaldo Cruz, Rio de Janeiro 31 1936 pp. 55–68, 1 pl. 2 figs.
- 655.—Costa Lima, A. da. Insetos do Brasil [contd.]. O Campo Brazil 1936 no. 1 pp. 14–19; no. 3, pp. 17–23; no. 4, pp. 12–16; no. 5, pp. 17–21; no. 6 pp. 18–25; no. 7 pp. 33–41; no. 9 pp. 15–25; no. 10 pp. 11–14, 53; no. 11 pp. 8–17; no. 12 pp. 10–17, 76 figs.
- 656.—Cottam, C. Food of Arctic birds and mammals collected by the Bartlett expeditions of 1931, 1932 and 1933. J. Washington Acad. Sci., Menasha 26 1936 pp. 165–177.
- 657.—Cotte, J. *Deilephila livornica* et la loi de Riley (Lepidopt. Sphingidae). Livre jubil. Bouvier, Paris 1936 pp. 177–178.
- 658.—Cottier, W. A re-description of *Pseudococcus cocolis* Maskell, including a description of the male (Hem.). Proc. R. ent. Soc. London, (B) Taxon. 5 1936 pp. 25–31, 5 figs.
- 659.—Coulson, F. J. A few remarks upon British Rhynchophora. Proc. S. London ent. nat. Hist. Soc. 1935–36 1936 pp. 100–107. [Col.]
- 660.—Cowley, J. The Disparoneura-complex: Generic characters and list of species (Odonata). Ann. Mag. nat. Hist., London (10) 17 1936 pp. 509–526, 6 figs.
- 661.—Cowley, J. A new species of *Bayadera* (Odonata). Ann. Mag. nat. Hist., London (10) 18 1936 pp. 477–482, 8 figs.
- 662.—Cowley, J. Notes on British Odonata in 1934 and 1935. Entomologist, London 69 1936 pp. 149–153.
- 663.—Cowley, J. Descriptions of three new species of *Drepanosticta* (Odonata) from the Philippine Islands. Trans. R. ent. Soc. London 85 1936 pp. 157–168, 22 figs.
- 664.—Crampton, G. C. Suggestions for a new interpretation of the post-abdomen in male Cyclorrhaphous Diptera. Bull. Brooklyn ent. Soc. 31 1936 pp. 141–148, 1 pl.
- 665.—Cremer, E. Methodisches zur anatomischen Präparation von Insekten. Mikrococosmos, Stuttgart 29 1936 pp. 115–116, 1 fig.
- 666.—Cresson, E. T. *see* Curran, Alexander & Cresson; Pate, Mackey & Cresson.
- 667.—Crèvecoeur, A. & Maréchal, P. Matériaux pour servir à l'établissement d'un nouveau catalogue des Hyménoptères de Belgique, VI. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 237–257.
- 667.—Cristobal, U. L. *Laspeyresia molesta* Busck y sus parasitas argentinos. Rev. Fac. Agron. La Plata 20 1935 no. 2 32 pp., 21 figs. [Lep.]

668.—Cristobal, U. L. *Tetrastichus lopezi*—Blanchard. Bol. inform. Lab. Zool. Ent. agric. La Plata July 1936 3 pp. multigr. 4 figs. [Hym.]

669.—Cros, A. Le *Meloe erythronemus* Pallas, sa biologie. Bull. Soc. Hist. nat. Afr. N., Algiers 26 bis (Vol. jubil.) 1935 pp. 18–22. [Col.]

670.—Cros, A. Le *Julodis onopordi* var. *algerica* (Coleopt. Buprestidae). Etude biologique. Livre jubil. Bouvier, Paris 1936 pp. 179–182.

671.—Cros, A. Sur une Anthophore qui surmonte son nid d'une cheminée, l'*Anthophora romandii* Lep. Etude biologique. Festschr. 60. Geburtst. E. Strand, Riga 2 1936 pp. 65–75. [Hym.]

672.—Cros, A. Etude biologique sur un Hyménoptère chasseur de mantes *Tachysphex fluctuatus*. Ann. Soc. ent. Fr., Paris 105 1936 pp. 355–368.

673.—Cros, A. Le *Meloe affinis* Lucas var. *setosus* Escherich. Etude biologique. Bull. Soc. Hist. nat. Afr. N., Algiers 27 1936 pp. 185–196, 1 pl. [Col.]

Crowell, M. F. *see* Griswold & Crowell.

674.—Croy, —. A dragonfly emerges. Nat. Hist., New York 37 1936 pp. 231–235, 8 photos. [Odon.]

675.—Croy, —. Emergence of the butterfly. Nat. Hist., New York 38 1936 pp. 12–20, 9 photos. [Lep.]

676.—Crozier, W. J., Pincus, G. & Zahl, P. A. The resistance of *Drosophila* to alcohol. J. gen. Physiol., Baltimore 19 1936 pp. 523–557, 18 figs. [Dipt.]

677.—Csik, L. Einfluss der Temperatur auf die Genwirkung an *Drosophila*-Flügel. [In Magyar, with German summary.] Arb. ung. biol. Forsch.-Inst., Tihany 8 1936 pp. 371–391, 5 figs. [Dipt.]

678.—Csik, L. Gen- und Temperaturwirkung auf die Zellengrösse der *Drosophila*-Flügel. [In Magyar, with German summary.] Arb. ung. biol. Forsch.-Inst., Tihany 8 1936 pp. 392–404, 1 fig. [Dipt.]

679.—Csik, L. Die Zusammenarbeit einiger Gene bei der Determination der Borsenlänge von *Drosophila melanogaster*, nebst einigen Bemerkungen über Epistasie. Biol. Zbl., Leipzig 56 1936 pp. 338–355, 1 fig. [Dipt.]

680.—Csiki, E. Curculionidae: Rhynchophorinae, Cossoninae. Coleopt. Catalogus, 's-Gravenhage 149 1936 212 pp.

681.—Cuénot, L. Sur le mode de fixation de l'oeuf de *Paniscus*, Ichneumonide ectoparasite d'une chenille. Livre jubil. Bouvier, Paris 1936 pp. 183–186, 2 figs.

682.—Cuénot, L. La coaptation des pattes antérieures et de la tête chez les Phasmes. C.R. Acad. Sci. Fr., Paris 202 1936 pp. 712–713. [Orth.]

Culver, W. R. *see* Murayama & Culver.

Cunningham, B. *see* Hester & Cunningham.

683.—Curran, C. H. A new *Diopsis* from India, with notes on others (Diptera). Amer. Mus. Novit., New York no. 833 1936 2 pp.

684.—Curran, C. H. Three new species of *Meromacrus* (Diptera, Syrphidae). Amer. Mus. Novit., New York no. 834 1936 5 pp.

685.—Curran, C. H. New African Diptera. Amer. Mus. Novit., New York no. 836 1936 17 pp.

686.—Curran, C. H. New neotropical Syrphidae (Diptera). Amer. Mus. Novit., New York 1936 no. 882 17 pp.

687.—Curran, C. H. How insects protect their eggs. Nat. Hist., New York 37 1936 pp. 441–456, 24 figs.

688.—Curran, C. H., Alexander, C. P. & Cresson, E. T. The Templeton Crocker expedition to western Polynesian and Melanesian islands, 1933. No. 30. Diptera. Proc. Calif. Acad. Sci. (4) 22 1936 pp. 1–66, 2 pls. 8 figs.

689.—Cürten, W. Vom Hirschkäfer. Natur u. Volk, Frankfurt a. M. 66 1936 pp. 635–643, 15 figs. [Col.]

Cushing, E. C. *see* Laake, Cushing & Parish.

690.—Cushman, R. A. *Poecilocryptus* and *Poecilopimpla* (Hymenoptera: Ichneumonidae). J. Washington Acad. Sci., Menasha 26 1936 pp. 464–466.

691.—Cushman, R. A. The Ichneumon-flies of the genus *Brachycyrtus* Kriechbaumer. Proc. U.S. nat. Mus., Washington D.C. 84 1936 no. 2999 pp. 17–24, 4 figs. [Hym.]

692. — Cuthbertson, A. Biological notes on some Diptera of Southern Rhodesia. Occ. Pap. Rhod. Mus., Bulawayo no. 5 1936 pp. 46-63.

694. — Czerny, L. Chamaemyiidae (Ochthophilidae). In Lindner, Flieg. Palaearkt. Reg. 103 1936 24 pp. 23 figs.

695. — Dahm, C. & Jung, H. Arbeitsgemeinschaft rheinischwestfälischer Lepidopterologen. Die Grossschmetterlinge des linken Niederrheins. I. Nachtrag. Iris, Dresden 50 1936 pp. 3-16.

696. — Dallas, E. D. Nuevas formas de Coleopteros chilenos. Rev. chil. Hist. nat., Santiago 37 1933 pp. 74-75, 1 fig.

697. — Dallas, E. D. Interesante monstruosidad en un Carabido chileno. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 55-57, 1 fig. [Col.]

698. — Dalla Torre, K. W. von & Emden, M. & F. van. Curculionidae: Brachyderinae I. Coleopt. Catalogus, 's-Gravenhage 147 1936 132 pp.

699. — d'Almeida, R. F. Une nouvelle espèce d'*Iphichides* (*Papilio*) du Brésil (Fam. Papilionidae). Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 510-513, 4 figs.

Dammers, C. M. see Comstock & Dammers.

700. — [Danilova, M. I.] Данилова, М. И. Sur l'écologie des *Anopheles* ailés *maculipennis messeae* Fall. et *atroparvus* v. Thiel dans la région de Starominsk dans le Gouvernement Azov-Mer noire. [In Russian, with French summary.] Med. Parasit. parasit. Dis., Moscow 5 1936 pp. 927-936, 5 figs. [Dipt.]

701. — Dannreuther, T. Migration records, 1935, 1936. Entomologist, London 69 1936 pp. 1-6, 154-156, 182-186, 225-230, 255-259.

702. — Dantchakoff, V. Sur le mécanisme de la réalisation sexuelle chez la *Drosophila*. C.R. Soc. Biol., Paris 123 1936 pp. 752-754. [Dipt.]

703. — Dantchakoff, V. & Vachkovitch, A. Sur l'immunité de la *Drosophila* envers les hormones sexuelles hétérologues. C.R. Soc. Biol., Paris 121 1936 pp. 755-757. [Dipt.]

704. — Darling, R. C. M. The desert locust. Sudan Notes, Khartoum 19 1936 pp. 168-175. [Orth.]

705. — Darlington, C. D. The sex-determining mechanism of *Drosophila miranda*. Amer. Nat., New York 70 1936 pp. 74-75. [Dipt.]

706. — Darlington, C. D. Crossing-over and its mechanical relationships in *Chorthippus* and *Stauroderus*. J. Genet., London 33 1936 pp. 465-500, 1 pl., 37 figs. [Orth.]

707. — Darlington, jr., P. J. Variation and atrophy of flying wings of some Carabid beetles (Coleoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 136-179, 3 pls.

708. — Darlington, jr., P. J. An interesting *Pterostichus* and a new *Colpodes* from Arizona (Coleoptera: Carabidae). Bull. Brooklyn ent. Soc. 31 1936 pp. 150-153, 1 fig.

709. — Darlington, jr., P. J. The species of *Stenomorphus* (Coleoptera: Carabidae), with data on heterogony in *S. californicus* (Mén.). Pan-Pacific Ent., San Francisco 12 1936 pp. 33-44, 2 pls.

710. — Darlington, jr., P. J. West Indian Carabidae II.: Itinerary of 1934; Forests of Haiti; new species; and a new key to *Colpodes*. Psyche, Boston 42 1935 pp. 167-215. [Col.]

711. — Darlington, jr., P. J. A list of the West Indian Dryopidae (Coleoptera) with a new genus and eight new species, including one from Colombia. Psyche, Boston 43 1936 pp. 65-83, 1 pl.

712. — Darlington, P. J. Aquatic Coleoptera from Yucatan. Pub. Carnegie Instn. Washington 457 1936 pp. 153-155.

713. — Daviault, L. Contribution à l'étude des insectes du bouleau. Nat. canad., Quebec 62 1935 pp. 201-214, 237-256, 282-297, 315-330, 39 figs.; 63 1936 pp. 5-17, 49-60, 78-91, 147-157, 194-199, 12 figs.

714. — David, K. Beiträge zur Anatomie und Lebensgeschichte von *Osmylus chrysops* L. Z. Morph. Oekol. Tiere, Berlin 31 1936 pp. 151-206, 32 figs. [Neur.]

Davidson, R. H. *see* DeLong & Davidson.

715.—Davies, W. M. Collembola from Grimsey Island, North Iceland. *Ent. mon. Mag.*, London **72** 1936 pp. 86–89.

716.—Davies, W. M. Physiological races of *Lucilia sericata* Mg. *Nature*, London **137** 1936 p. 320. [Dipt.]

717.—Davis, C. Studies in Australian Embioptera. Part II. Systematics. *Proc. Linn. Soc. N.S. Wales*, Sydney **61** 1936 pp. 229–253, 43 figs., pp. 254–258, 7 figs.

718.—Davis, R. & Harris, H. M. The biology of *Pseudosinella violenta* (Folsom), with some effects of temperature and humidity on its life stages (Collembola: Entomobryidae). *Iowa St. Coll. J. Sci.*, Ames **10** 1936 pp. 421–428, 1 pl. 6 figs.

719.—Davis, W. T. A remarkable *Cicada* from Mexico and other North American species. *J. New York ent. Soc.* **44** 1936 pp. 101–119, 2 pls. 16 figs. [Hem.]

720.—Deane, C. Notes on Micro-Hydrophilidae. *Vict. Nat.*, Melbourne **52** 1936 pp. 206–207, 4 figs. [Col.]

721.—Deay, H. O. & Gould, G. E. The Hemiptera of Indiana. I. Family Gerridae. *Amer. Midl. Nat.*, Notre Dame, Ind. **17** 1936 pp. 753–769, 18 figs.

722.—Deay, H. O. & Gould, G. E. Hemiptera unrecorded from Indiana. *Proc. Ind. Acad. Sci.*, Indianapolis **45** (1935) 1936 pp. 305–309.

723.—Debaisieux, P. Organes scolopidiaux des pattes de Lépidoptères. *Ann. Soc. sci. Bruxelles, Louvain (B)* **55** 1935 pp. 66–69.

724.—Debaisieux, P. Organes pulsatiles des tibias de Notonectes. *Ann. Soc. sci. Bruxelles, Louvain (B)* **56** 1936 pp. 77–86, 1 fig. [Hem.]

725.—Debauche, H. Revision des espèces éthiopiennes du genre *Euchromia* Hübner (Lep. Het. Amatidae). *Bull. Mus. Hist. nat. Belg.*, Brussels **12** 1936 no. 25, 21 pp. 26 figs.

726.—De Carlo, J. A. Familia Belostomidae. Descripción de una nueva especies y algunas sinonimias.

Rev. Soc. ent. argent., Buenos Aires **7** 1935 pp. 203–205, 1 pl. [Hem.]

727.—Decary, R. Contribution à l'étude de l'*Argema mittrei* Guérin (Lep. Attacidae). *Bull. Soc. ent. Fr.*, Paris **41** 1936 pp. 226–228.

728.—Decary, R. Un nouveau procédé de chasse aux petits insectes. *Bull. Soc. linn. Lyon (n.s.)* **5** 1936 pp. 40–41, 1 fig.

729.—Decker, G. C. & Andre, F. Studies on temperature and moisture as factors influencing winter mortality in adult chinch bugs. *Iowa St. Coll. J. Sci.*, Ames **10** 1936 pp. 403–420, 8 graphs [Hem.]

730.—Decksbach, N. K. Chironomiden-und Daphnia-Gewinnung in der Umgebung einer Grossstadt. (Materialien zur organischen Produktivität der Gewässer.) *Arch. Hydrobiol.* Stuttgart **30** 1936 pp. 582–588. [Dipt.]

Deen, O. T. *see* Cockerham & Deen.

Defaisse, H. *see* Batteta & Defaisse.

Delbrück, M. *see* Timoféeff-Ressovsky & Delbrück.

731.—Delkeskamp, K. Flugunfähige Erotyliden aus Africa (Col.). *Rev. Zool. Bot. afr.*, Brussels **29** 1936 pp. 105–125, 5 figs.

732.—Della Beffa, G. Le formiche del Piemonte con osservazioni biologiche e cenni sui danni e le utilità per le specie più comuni. *Boll. Lab. sper. Oss. Fitopat.*, Torino **12** 1935 pp. 149–161. [Hym.]

733.—Della Beffa, G. I Tortricidi del Piemonte. *Mem. Soc. ent. ital.*, Genoa **14** 1935 pp. 17–40. [Lep.]

734.—DeLong, D. M. The genus *Elymana* in North America (Homoptera—Cicadellidae). *Ann. ent. Soc. Amer.*, Columbus **29** 1936 pp. 636–639, 1 pl.

735.—DeLong, D. M. Some new genera of leafhoppers related to *Thamnotettix*. *Ohio J. Sci.*, Columbus **36** 1936 pp. 217–219. [Hem.]

736.—DeLong, D. M. & Beery, L. Studies of the genus *Scaphoideus* (Homoptera, Cicadellidae). Part II. *Ohio J. Sci.*, Columbus **36** 1936 pp. 334–342, 1 fig.

737.—DeLong, D. M. & Caldwell, J. S. A new genus *Forcipata*—and nine new species of Typhlocybinae leafhoppers closely allied to *Dikraneura* (Cicadellidae: Homoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 70–77, 2 pls.

738.—DeLong, D. M. & Davidson, R. H. Further studies on the genus *Empoasca* (Homoptera, Cicadellidae). Part IV. Ohio J. Sci., Columbus 36 1936 pp. 225–230, 1 pl.

739.—DeLong, D. M. & Johnson, D. M. Six new species of *Typhlocyba* from the United States (Homoptera: Cicadellidae). Ent. News, Philadelphia 47 1936 pp. 101–104, 6 figs.

740.—DeLong, D. M. & Mohr, C. O. Studies of the genus *Scaphoideus* (Homoptera-Cicadellidae). Part I. Seventeen new North American species. Amer. Midl. Nat., Notre Dame, Ind. 17 1936 pp. 965–977, 18 figs.

del Rosario see Rosario.

741.—Demaïson, L. *Rhyparioides metellkana* en France (Lepidopt. Arctiidae). Livre jubil. Bouvier, Paris 1936 pp. 187–189.

742.—De Meillon, B. Entomological Studies. Studies on insects of medical importance in South Africa (Part III). Pub. S. Afr. Inst. med. Res., Johannesburg no. 38 1936 pp. 129–215, 32 pls. 2 figs. 1 map. [Dipt.]

743.—De Meillon, B., Evans, A. M. & Leeson, H. S. The characters of *Anopheles marshalli* Theobald and *A. marshalli* var. *pitchfordi* Giles in the adult, larval and pupal stages. Ann. Trop. Med. Parasit., Liverpool 30 1936 pp. 45–55, 5 figs. [Dipt.]

744.—[Demyanovskii, S., Gal'tzova, R. & Rozhdestrenskaya, V.] Демьяновский, С., Гальцова, Р., и Рождественская, В. On the active acidity of the hemolymph of *Bombyx mori* L. and its dependence on food. [In Russian.] J. Biol. exp., Moscow 7 1931 pp. 570–591, 4 graphs. [Lep.]

745.—[Demyanovskii, S., Gal'tzova, R. & Rozhdestrenskaya, V.] Демьяновский, С., Гальцова, Р., и Рождественская, В. On the alteration of the active acidity in the eggs of *Bombyx*

mori L. in the course of its development. [In Russian.] J. Biol. exp., Moscow 7 1931 pp. 592–600, 5 graphs. [Lep.]

746.—Denier, P. C. L. Contribución al estudio de los Meloidos americanos. Rev. chil. Hist. nat., Santiago 37 1933 pp. 237–246, 1 pl. [Col.]

747.—Denier, P. C. L. Coleopterorum americanorum familiae Meloidarum. Enumeratio synonymica. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 139–176.

748.—Denis, J. R. Collemboles récoltés en Yougoslavie et en Macédoine grecque par M. Paul Remy en 1930. Ann. Soc. ent. Fr., Paris 105 1936 pp. 263–277, 13 figs.

749.—Denis, J. R. Sur la faune française des Aptérygotes (XIX). Bull. Soc. Hist. nat. Toulouse 67 1935 pp. 353–358.

750.—Denis, J. R. Sur la faune française des Aptérygotes. Bull. sci. Bourgogne, Dijon 5 (1935) 1936 pp. 30–40, 81–87, 18 figs. [Collem.]

751.—Denis, J. R. Sur la faune française des Aptérygotes. XXI. Bull. Soc. ent. Fr., Paris 41 1936 pp. 127–128.

752.—Denis, J. R. Yale North India expedition. Report on Collembola. Mem. Conn. Acad. Arts Sci., New Haven 10 1936 pp. 261–282, 60 figs.

753.—Denis, J. R. Contributions à l'étude de la faune de Mozambique. Voyage de M. P. Lesne (1928) 1929. 20^e note.—Collemboles. Mem. Mus. zool. Univ. Coimbra (I) no. 86 1935 6 pp. 7 figs.

754.—Denis, J. R. Sur la faune française des Aptérygotes. XX. Rev. franç. ent., Paris 3 1936 pp. 142–144.

755.—Depoli, G. Materiali per la fauna coleotterologica del Gran Sasso d'Italia. Boll. Soc. ent. ital., Genoa 68 1936 pp. 133–141.

756.—Derenne, E. & Fagel, G. Additions au catalogue des Coléoptères de Belgique. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 65–66.

757.—Deshpande, V. G. Miscellaneous observations on the biology of Aleurodidae (*Aleurodes brassicae*). J. Bombay Soc. nat. Hist. 39 1936 pp. 190–193. [Hem.]

758.—Despax, R. A propos de quelques Plécoptères de la faune française. Bull. Soc. Hist. nat. Toulouse 68 1935 pp. 202–204.

758A.—Despax, R. Contribution à l'étude du genre *Chloroperla* (Pictet) (*Isoperla*) Banks (Plecoptera). Bull. Soc. Hist. nat. Toulouse 69 1936 pp. 337–398, 12 pls. 41 figs.

759.—Deurs, W. van. Nye og sjældne Pyralider (Lepidoptera). Ent. Medd., Copenhagen 19 1936 pp. 411–414, 1 fig.

760.—De Vos-De Wilde, B. Contribution à l'étude des larves de Diptères Cyclorrhaphes, plus spécialement des larves d'Anthomyides. Proefschr. Univ. Amsterdam 1935 125 pp. 23 pls. 4 figs.

761.—Diakonoff, A. Contributions to the knowledge of the fly reflexes and the static sense in *Periplaneta americana* L. Arch. néerl. Sci., Haarlem 21 1936 pp. 104–129, 6 figs. [Orth.]

762.—Diakonoff, A. De fauna van *Lipara*-gallen. Ent. Ber., Amsterdam 9 1936 pp. 241–242. [Lep.]

763.—Dibb, J. R. A new species of Passalidae (Col.) from Mexico. Proc. R. ent. Soc. London (B) 5 1936 pp. 129–130, 1 fig.

764.—Dichtl, A. Das Problem der von *Deporaus betulae* (L.) konstruierten Kurven. [In Czech, with German summary.] Acta Soc. Sci. nat. morav., Brno 9 1934 no. 4 19 pp. 12 figs. [Col.]

765.—Dickens, G. R. The scent glands of certain Phycitidae (Lepidoptera). Trans. R. ent. Soc. London 85 1936 pp. 331–362, 27 figs.

766.—Didier, R. Description d'un *Cladognathus* nouveau (Coleopt. Lucanidae). Livre jubil. Bouvier, Paris 1936 pp. 191–194, 4 figs.

767.—Diemer, J. H. & Van Thiel, P. H. Remarks with regard to the "Courte instruction pour la détermination des variétés d'*Anopheles maculipennis*" by the Malaria Committee of the League of Nations. Proc. Acad. Sci. Amst. 39 1936 pp. 109–117, 3 maps.

768.—Dimitriu, F. L. Contributuni la biologia Cetonidului *Epicomotis* (*Tropinota*) *hirta* Poda. [In Rumanian, with German summary.] Ann. Inst.

Rech. agron. Roumanie, Bucharest 7 (1935) 1936 reprint 26 pp. 19 figs. [Col.]

769.—Dingley, M. Ueber die Einrichtung einer angewandtzologischen Lehrsammlung. Ent. Rdsch., Stuttgart 53 1936 pp. 113–120, 7 figs.

770.—Djakonov, A. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 57. Lepidoptera. 5. Geometridae. Ark. Zool., Stockholm 27A 1936 no. 39 67 pp., 20 figs.

771.—[D'akonov, A. M.] Дьяконов, А. М. Die Geometriden des Amur-Ussuri-Gebietes, II. Tribus Caberini, nebst Revision einiger Gattungen dieser Gruppe. [In Russian with German descriptions.] Trav. Inst. zool. Acad. Sci. U.S.S.R., Leningrad 3 1936 pp. 475–531, 11 pls.

772.—[Dmitriev, G. V.] Дмитриев, Г. В. Beitrag zur Insektenfauna der Zhiguli-Berge. (Mit einem Vorwort von A. P. Semenov-Tian-Shanskii). [In Russian with German summary.] Rev. Ent. U.R.S.S., Leningrad 25 1935 pp. 254–264.

773.—Doane, R. W., Van Dyke, E. C., Chamberlin, W. J. & Burke, H. E. Forest insects. A textbook for the use of students in forest schools, colleges, and Universities, and for forest workers. London, McGraw-Hill Pub. Co. Ltd. 1936 xii + 463 pp. 234 figs.

774.—Dobreanu, E. Contributuni la cunoasterea insectelor miniere din România. [In Rumanian with German summary.] Bul. Soc. Nat. Roman., Bucharest 9 1936 pp. 11–20, 4 figs.

775.—Dobzhansky, T. Studies on hybrid sterility. II. Localization of sterility factors in *Drosophila pseudoobscura* hybrids. Genetics, Menasha 21 1936 pp. 113–135, 2 figs. [Dipt.]

776.—Dobzhansky, T. & Beadle, G. W. Studies on hybrid sterility IV. Transplanted testes in *Drosophila pseudoobscura*. Genetics, Menasha 21 1936 pp. 832–840, 1 fig. [Dipt.]

777.—Dobzhansky, T. & Tan, C. C. A comparative study of the chromosome structure in two related species, *Drosophila pseudoobscura* and *D. miranda*. Amer. Nat., New York 70 1936 pp. 47–48. [Dipt.]

778.—Dobzhansky, T. & Tan, C. C. Studies on hybrid sterility III. A comparison of the gene arrangement in two species, *Drosophila pseudoobscura* and *Drosophila miranda*. Z. indukt. Abstamm. u. Vererb. Lehre, Leipzig **72** 1936 pp. 88–114, 1 pl. 6 figs. [Dipt.]

Dobzhansky, T. see Sturtevant & Dobzhansky.

779.—Doeksen, J. Lijst van nederlandsche Thysanoptera met korte aantekeningen over nieuwe soorten voor de fauna. Zool. Meded., Leyden **19** 1936 pp. 79–86.

780.—Dolley, W. L. The relative sensitivity to light of ommatidia in various parts of the compound eye of the drone-fly, *Eristalis tenax*. Anat. Rec., Philadelphia **67** 1936 suppl. 1 p. 53. [Dipt.]

781.—[Dobrovskaya, E.] Домбровская, Е. On the Cecidomyiid fauna of the Kamennaja Steppe, USSR. [In Russian with English summary.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad **3** 1936 pp. 409–428, 5 figs. [Dipt.]

782.—Doner, M. H. Hymenopterous parasites of *Coleophora prunella* Cl., and parasites recorded from other species of *Coleophora*. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 224–244.

783.—Donisthorpe, H. Five new species of ant (Formicidae) from various localities. Ann. Mag. nat. Hist., London (10) **18** 1936 pp. 524–530.

784.—Donisthorpe, H. *Strongylognathus diveri* sp. n. (Hym. Formicidae), a genus and species new to the British list, with notes on the genus. Ent. mon. Mag., London **72** 1936 pp. 111–116, 1 pl.

785.—Donisthorpe, H. The ants of the Azores. Ent. mon. Mag., London **72** 1936 pp. 130–133.

786.—Donisthorpe, H. St. J. K. A preliminary list of the Coleoptera of Windsor Forest. Ent. mon. Mag., London **72** 1936 pp. 210–219, 260–267.

787.—Donisthorpe, H. A new study of *Mesoxena mistura* Smith. Proc. ent. Soc. London (B) **5** 1936 pp. 119–120, 2 figs. [Hym.]

788.—Donovan, C. A catalogue of the Macrolepidoptera of Ireland. Chel-

tenham & London, E. J. Burrow & Co. 1936 100 pp.

789.—Döring, E. Beiträge zur Kenntnis der Noctuideneier. Ent. Z., Frankfurt a. M. 1936 **49** pp. 445–448, 457–458, 474–476, 487–488, 532–533, 551–552, 570–572; **50** pp. 47–48, 110–112, 123–124, 149–152, 306–308, 330–332, 403–404, 1 col. pl. 8 figs. [Lep.]

790.—Dorn, K. *Pleganophorus bispinosus* Hampe (Coleopt.). Ent. Bl. Crefeld **32** 1936 pp. 137–139.

Dornesco, G. T. see Steopoe & Dornesco.

791.—Dos Passos, C. F. Further notes on the butterflies of southern Newfoundland. Canad. Ent., Orillia **68** 1936 p. 99.

792.—Dos Passos, C. F. The life history of *Calephelis borealis* (Lepidoptera). Canad. Ent., Orillia **68** 1936 pp. 167–170, 1 pl.

793.—Dos Passos, C. F. Some early stages of *Brenthis montinus* Scudder (Lepidoptera-Nymphalidae). Canad. Ent., Orillia **68** 1936 pp. 239–241, 1 pl.

Doudoroff, M. see Ferris & Doudoroff.

794.—Dover, C. A synopsis of the tiger beetles (Cicindelidae) of Singapore island. Malayan Nat., Singapore **2** 1928 pp. 39–42, 1 pl. [Col.]

795.—Dowdeswell, W. H. The Lepidoptera of Cara Island. Entomologist, London **69** 1936 pp. 49–53.

796.—Dozier, H. L. A new genus and species of Fulgorid from Haiti (Homoptera: Fulgoridae). Amer. Mus. Novit., New York no. **845** 1936 2 pp. 1 fig.

797.—Dozier, H. L. Descriptions of two new Encyrtid parasites of non-Diaspine scales. Proc. ent. Soc. Washington **37** (1935) 1936 pp. 183–185. [Hem., Hym.]

798.—Dozier, H. L. Several undescribed Mymarid egg-parasites of the genus *Anagrus* Haliday. Proc. Hawaii. ent. Soc., Honolulu **9** 1936 pp. 175–178. [Hym.]

799.—Dozorzeva, R. L. Sex-linked heredity in *Pteromalus puparum*. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) **3** 1936 pp. 335–338. [Hym.]

800.—Dozorčeva, R. L. The morphology of chromosomes in the Ichneumon *Pteromalus puparum*. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 3 1936 pp. 339-342, 3 figs. [Hym.]

801.—Draeseke, J. Lycaenidae I. Lepidopt. Catalogus, 's-Gravenhage 72 1936 pp. 1-48.

802.—Drake, C. J. Some Tingitoidea from Argentina (Hemiptera). Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad 3 1936 pp. 699-701, 1 fig.

803.—Drake, C. J. & Hambleton, E. J. New Brazilian Tingitidae (Hemiptera) (Part II). Arch. Inst. Biol. São Paulo 6 1935 pp. 141-154, 6 figs.

804.—Drake, C. J. & Harris, H. M. Notes on some American Gerrids (Hemiptera). Ark. Zool., Stockholm 28B 1935 no. 2, 4 pp. 1 fig.

805.—Drake, C. J. & Harris, H. M. Notes on American water-striders. Proc. biol. Soc. Washington 49 1936 pp. 105-108. [Hem.]

806.—Drake, C. J. & Poor, M. E. New Indian Tingitidae (Hemiptera). Ind. For. Rec., New Delhi 2 1936 pp. 141-149, 1 pl.

807.—Drake, C. J. & Poor, M. E. The genera and genotypes of Tingitoides of the Western Hemisphere. Iowa State Coll. J. Sci. 10 1936 pp. 381-390. [Hem.]

808.—Drake, C. J. & Poor, M. E. Tingitidae from Hainan Island (Hemiptera). Lingnan Sci. J., Canton 15 1936 pp. 439-443. [Hem.]

Drake, C. J. see Harris, Drake & Tate.

809.—Draudt, M. Noctuidae. Fauna Americana 7 pp. 381-396, 6 pls.; Agrotinae (Euxoinae) Suppl. 3 pp. 217-240. In Seitz Macrolep. Wld. (Engl. Edn.) 1936.

810.—Draudt, M. Neue Arten und Formen von Noctuiden. Ent. Rdsch., Stuttgart 53 1936 pp. 457-462, 465-471, 490-493, 1 col. pl. [Lep.]

811.—Dreher, K. Bau und Entwicklung des Atmungssystems der Honigbiene (*Apis mellifica* L.). Z. Morph. Oekol. Tiere, Berlin 31 1936 pp. 608-672, 38 figs. [Hym.]

812.—Dreher, K. Die Funktion der Mandibeldrüsen bei der Honigbiene (*Apis mellifica* L.). Zool. Anz., Leipzig 113 1936 pp. 26-28. [Hym.]

813.—Drenovski, K. Beitrag zur Insektenfauna Bulgariens u. Mazedoniens. II. (Lepidoptera, Hymenoptera, Diptera und Orthoptera). [In Bulgarian with German summary.] Mitt. bulg. ent.-Ges. Sofia 9 1936 pp. 237-256, 1 pl.

814.—Dreyer, W. A. Seasonal weight and total water content of the mound-building ant, *Formica exsectoides*, Forel. Anat. Rec., Philadelphia 67 1936 suppl. 1 pp. 97-98. [Hym.]

815.—Drogoszewski, K. Neue für Zentralpolens Fauna Akuleaten. [In Polish with German summary.] Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 125-131. [Hym.]

816.—Drummond, M. The germinal layers concerned in the formation of the alimentary canal and Malpighian tubules of *Ephestia kuehniella* (Lepidoptera). Quart. J. micr. Sci., London (N.S.) 78 1936 pp. 533-542, 2 pls.

817.—[Dubinin, N. P.] Дубинин, Н. И. Continuity and discontinuity in the structure of the hereditary substance. [In Russian.] Proc. zool.-biol. Inst. scient. Res., Kharkov 3 1936 pp. 108-113, 15 figs. [Dipt.]

818.—Du Bois, A. M. Recherches expérimentales sur la détermination de l'embryon dans l'oeuf de *Sialis lutaria*, Neuroptera. Rev. suisse Zool., Geneva 43 1936 pp. 519-523.

819.—Duda, O. Weitere neue afrikanische und orientalische akalyptrate Musciden (Dipt.) des British Museum. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 337-351, 1 fig.

820.—Duda, O. Ergebnisse einer zoologischen Sammelreise nach Brasilien, insbesondere in das Amazonasgebiet, ausgeführt von Dr. H. Zerny. XI. Teil. Diptera: Chloropidae. Ann. naturh. Mus. Wien 47 1936 pp. 107-113.

821.—Dufour, G. Arctiidae de la faune d'Auvergne et description d'une nouvelle aberration d'*Arctia villica* L. Bull. Soc. Hist. nat. Auvergne, Clermont-Ferrand 1 (1921) 1922 pp. 25-33, 1 fig. [Lep.]

822.—Dufrane, A. Hétérocères. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 121-130. [Lep.]

823.—Dufrane, A. Sur quelques espèces du genre *Papilio*. Lambillionea, Brussels 36 1936 pp. 40-42. [Lep.]

824.—Dulac, A. Sur quelques Sphérides des environs du Creusot. Bull. Soc. Hist. nat. Creusot 1 1932-33 pp. 39-41. [Hym.]

Dunn, E. see MacLagan & Dunn.

825.—Dupont, F. De rupsen en poppen van *Troides amphrysus amphrysus* Cr. en *Papilio doson evemonides* Honr. (Lep., Papilionidae). Ent. Medd. Ned.-Ind., Buitenzorg 2 1936 pp. 28-30, 5 figs.

826.—Dupont, F. Aanteekeningen over de op Java voorkomende soorten van het genus *Panacra* (Lep., Sphingidae). Ent. Medd. Ned.-Ind., Buitenzorg 2 1936 pp. 21-28, 2 pls. 4 figs.

827.—Duprez, R. Quelques Coléoptères nouveaux pour la Normandie. Première note. Genre *Atheta* Thoms. (Staphyl.). Bull. Soc. Sci. nat. Rouen (7) 68-69 (1932-33) 1934 pp. 70-72.

828.—Duprez, R. Coléoptères nouveaux pour la région de la Seine maritime. Bull. Soc. Sci. nat. Rouen (7) 68-69 (1932-33) 1934 pp. 85-87, 96-97, 105-107, 118-119, 129-131.

829.—Durand, G. Sur la date d'apparition de *Polyommatus (Lysandra) coridon* Poda dans ses localités de la France occidentale et en particulier à Dompierre-sur-Mer. (Charente-Inférieure.) Lambillionea, Brussels 36 1936 pp. 159-166. [Lep.]

830.—Durand, G. Sur deux exemplaires, présumés hybrides, du genre *Catocala*. Lambillionea, Brussels 36 1936 pp. 201-205. [Lep.]

831.—Dyson, J. E. B. & Lloyd, L. The distribution of the early stages of *Metriocnemus longitarsus*, Goet. (Chironomidae), in sewage bacteria beds. Proc. Leeds phil. lit. Soc. 3 1936 pp. 174-176. [Dipt.]

832.—Eastham, L. E. S. The rhythmical movements of the gills of nymphal *Leptophlebia marginata*

(Ephemeroptera) and the currents produced by them in water. J. exp. Biol., London 13 1936 pp. 443-449, 3 figs.

833.—Eastham, L. E. S. The sensillae and related structures on the gills of nymphs of the genus *Caenis* (Ephemeroptera). Trans. R. Ent. Soc. London 85 1936 pp. 401-414, 1 pl. 8 figs.

834.—Eberle, G. Schnee-Insekten. Natur u. Volk, Frankfurt-a-M. 66 1936 pp. 94-98, 6 figs.

835.—Ebner, R. Grylliden und Tettigoniiden aus dem anglo-ägyptischen Sudan (Zoologische Expedition F. Werner 1914). Anz. Akad. Wiss. Wien 72 1935 pp. 149-151. [Orth.]

836.—Ebner, R. Die Larve von *Paracycloptera* (Orthoptera, Tettigoniidae). Rev. Ent., Rio de Janeiro 6 1936 pp. 191-194, 4 figs.

837.—Eckstein, F. Beiträge zur Kenntnis exotischer Chaoborinae (Corethrinae auct.) nebst Bemerkungen über einige einheimische Formen. Arch. Hydrobiol., Stuttgart Suppl. 14 1936 pp. 484-504, 15 figs. [Dipt.]

Edney, E. B. see Key & Edney.

838.—Edwards, F. W. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 49. Diptera. 15. Fam. Mycetophilidae, Bibionidae and Culicidae. Ark. Zool., Stockholm 27A (Sep. dated 1935) 1936 no. 30, 3 pp.

839.—Edwards, F. W. New African Culicine mosquitoes (Diptera, Culicidae). Proc. R. ent. Soc. London (B) 5 1936 pp. 49-55.

840.—Edwards, F. W. Pupae and living adults of *Chionea lutescens* Lundström from Denmark. Proc. R. ent. Soc. London 10 1936 pp. 89-91. [Dipt.]

841.—Edwards, F. W. Occurrence of *Liponeura vogesiaca* Hüb. in the Pyrenees, with remarks on the synonymy of some other European species of *Liponeura* (Diptera, Blepharoceridae). Proc. R. ent. Soc. London 10 1936 pp. 91-92.

842.—Edwards, W. N. A Pleistocene Chironomid-tufa from Crémieu (Isère). Proc. Geol. Ass., London 47 1936 pp. 197-198, 1 pl. [Fossil.] [Dipt.]

- 843.—[Efroimson, V. P. & Ruilova, K. N.] Эфроимсон, В. П. и Руилова, К. Н. Die Ausspaltung rezessiver embryonaler Letalfaktoren bei Inzucht einer bivoltinen Selektionslinie des Seidenspinners (*Bombyx mori* L.). [In Russian, with German summary.] Biol. J., Moscow 5 1936 pp. 625–632, 2 figs.
- 844.—Eggers, F. Kritische Bemerkungen zur Halterenfrage. Zool. Anz., Leipzig 115 1936 pp. 186–190, 2 figs. [Dipt.]
- 845.—Eggers, F. Das Trommelfellschutzgitter bei *Calocampa* Stph. Zool. Anz., Leipzig 115 1936 pp. 212–217, 6 figs. [Lep.]
- 846.—Eggers, H. Neue Borkenkäfer (Scolytidae, Col.) aus Indien. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 626–636.
- 847.—Eggers, H. Entomological expedition to Abyssinia, 1926–7: Coleoptera, Scolytidae. With a supplement on Platypodidae by H. Scott. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 28–33.
- 848.—Eggers, H. Neue Borkenkäfer (Coleoptera, Scolytidae) aus Africa.—Nachtrag VII. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 33–40.
- 849.—Eggers, H. Borkenkäfer aus Südamerika (Ipidae, Col.). VIII. Rev. Ent., Rio de Janeiro 6 1936 pp. 388–394, 1 fig.
- 850.—Eggers, H. Neue indomalayische Borkenkäfer (Ipidae). III. Nachtrag. Tijdschr. Ent., Amsterdam 79 1936 pp. 77–91.
- 851.—Ehnbom, K. Notiser till svenska fjärlfaunan. I. Lepidopterologiskt nytt från Lunds Universitets Entomologiska museum. Opusc. ent., Lund 1 1936 pp. 31–35.
- 852.—Eichler, W. Arbeitung zum Bestimmen der Federlinge. Beitr. allg. prakt. Gefiederk., Leipzig 1 1936 pp. 53–57. [Malloph.]
- 853.—Eichler, W. Die Biologie der Federlinge. J. Orn. Berlin 84 1936 pp. 471–505, 7 figs. [Malloph.]
- 854.—Eichler, W. Die Verbreitung der Gefiederfliege *Carnus hemapterus* Nitzsch. Orn. Mber. Berlin 44 1936 pp. 107–110. [Dipt.]
- 855.—Eidmann, H. Zur Kenntnis der Eiparasiten der Forleule, insbesondere über die Entwicklung und Oekologie von *Trichogramma minutum* Riley. Mitt. Forstwirt. Forstwiss., Hanover 1934 1934 no. 1 pp. 56–77, 15 figs. [Hym.]
- 856.—Eidmann, H. Oekologisch-faunistische Studien an südbrasilianischen Ameisen. Arb. physiol. angew. Ent. Berlin 3 1936 pp. 26–48, 81–114, 1 pl. 5 figs. [Hym.]
- 857.—Eidmann, H. Das *Atta*-Problem. Untersuchungen über die Biologie und wirtschaftliche Bedeutung der Blattschneiderameise *Atta sexdens* L. Naturwissenschaften, Berlin 24 1936 pp. 257–266, 5 figs. [Hym.]
- Eisner, C. see Bryk & Eisner.
- 858.—Elgueta, N. Notas preliminares sobre larvas chilenas. Rev. chil. Hist. nat., Santiago 37 1933 pp. 260–262.
- 859.—Elkins, W. A. The immature stages of some Minnesota Trichoptera. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 656–681, 6 pls.
- 860.—Eller, K. Die Rassen von *Papilio machaon* L. Leiden, E. J. Brill 1936 ix + 96 pp. 22 pls. [Lep.]; also in Abh. bayer. Akad. Wiss., Munich (N.F.) 36 1936 ix + 96 pp. 22 pls.
- 861.—Elliott, E. A. Critical notes on our beetles. Trans. Suffolk Nat. Soc., Framlingham 3 1936 pp. 121–128. [Col.]
- 862.—Ellisor, L. O. A toxicological investigation of nicotine on the goldfish and the cockroach. Iowa St. Coll. J. Sci., Ames 11 1936 pp. 51–53. [Orth.]
- 863.—Eloff, G. A case of 50 per cent. crossing over in the male *Drosophila*. Nature, London 137 1936 p. 151. [Dipt.]
- 864.—Eloff, G. Behaviour of local *Drosophila melanogaster* during late larval stage. Nature, London 138 1936 pp. 402–403. [Dipt.]
- 865.—Elser, H. Ein neues Verfahren zur Herstellung von Schmetterlingsschuppen-Präparaten. Mikrokosmos, Stuttgart 29 1936 pp. 151–152, 2 figs. [Lep.]

866.—Eltringham, H. On the eyes of tsetse flies. Trans. R. ent. Soc. London **85** 1936 pp. 281–286, 1 pl. [Dipt.]

867.—Emden, F. van. Neue und bekannte Carabidae aus Java (Coleoptera). Arb. morph. taxon. Ent. Berlin **3** 1936 pp. 268–280.

868.—Emden, F. van. Eine interessante, zwischen Carabidae und Paussidae vermittelnde Käferlarve. Arb. phys. angew. Ent. Berlin **3** 1936 pp. 250–256, 5 figs. [Col.]

869.—Emden, F. van. Description préliminaire d'une larve de Pogonostome. Bull. Acad. Malgache, Tananarive (N.S.) **13** (1935) 1936 pp. 150–151. [Col.]

870.—Emden, F. van. Käferlarven aus belgischen Höhlen (1). Bull. Mus. Hist. nat. Belg., Brussels **12** 1936 no. 11, 7 pp., 3 figs. [Col.]

871.—Emden, F. van. Bemerkungen zur Klassifikation der Carabidae: Carabini und Harpalinae piliferae. Ent. Bl., Crefeld **32** 1936 pp. 12–17, 41–52, 11 figs.

872.—Emden, F. van. Zwei neue *Callirhipis* mit ihren Larven (Sandalidae, Col.). Ind. For. Rec., New Delhi **2** 1936 pp. 151–156.

873.—Emden, F. van. Die Anordnung der Brachyderinae-Gattungen im Coleopterorum Catalogus. Stettin. ent. Ztg. **97** 1936 pp. 66–99, 211–239 4 figs.

Emden, M. & F. van *see* Dalla Torre & van Emden.

874.—Emel'anov, N. A., Pravdin, F. N., Kuzina, O. S. & Lisitzuina, L. I. Biologie und Oekologie von *Sphenoptera foveola* Gebl., im Zusammenhang mit der Frage nach der Saftergussbildung auf *Chondrilla* betrachtet. [In Russian with German summary.] Trans. Rubber & Guttapercha Inst. no. 6 (Articles on rubber plants 2) Moscow 1932 pp. 10–27, 20 figs. [Col.]

875.—Emerson, A. E. Distribution of termites. Science, New York **83** 1936 pp. 410–411. [Isopt.]

876.—Enderlein, G. Zweiflügler, Diptera. Tierwelt Mitteleur., Leipzig **6** 1936 iii Teil, 2 Lief., xvi, 259 pp. 317 figs.

877.—Enderlein, G. Zur Kenntnis der Phytalmiden (Diptera: Phytal-

miidae). Arb. morph. taxon. Ent. Berlin **3** 1936 pp. 225–230.

878.—Enderlein, G. Zwei neue Phytalmiden (Diptera). Arb. morph. taxon. Ent. Berlin **3** 1936 pp. 241–243.

879.—Enderlein, G. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 30. Copeognatha. Ark. Zool., Stockholm **27A** (sep. dated 1934) 1936 no. 16, 7 pp. 5 figs.

880.—Enderlein, G. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 31. Psyllidae. Ark. Zool., Stockholm **27B** (sep. dated 1933) 1936 no. 1, 4 pp. 4 figs.

881.—Enderlein, G. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 34. Diptera. 9. Ark. Zool., Stockholm **27B** (sep. dated 1933) 1936 no. 3, 3 pp. 1 fig.

882.—Enderlein, G. Klassifikation der Tanypeziden. Dtsch. ent. Z. **1936** 1936 pp. 39–47. [Dipt.]

883.—Enderlein, G. Notizen zur Klassifikation der Agromyziden (Dipt.). Mitt. dtsh. ent. Ges., Berlin **7** 1936 p. 42.

884.—Enderlein, G. Notizen zur Klassifikation der Blepharoceriden (Dipt.). Mitt. dtsh. ent. Ges., Berlin **7** 1936 pp. 42–43.

885.—Enderlein, G. Einige neue von Herrn D. Jacentkovsky im Balkan gesammelten Sarcophagiden (Diptera). Mitt. naturw. Inst. Sofia **9** 1936 pp. 98–100, 1 fig.

886.—Enderlein, G. Simuliologica I. S.B. Ges. naturf. Fr. Berlin **1936** 1936 pp. 113–130. [Dipt.]

887.—Enderlein, G. Klassifikation der Rutiliinen (Dipt.). Veröff. dtsh. kol. Mus. Bremen **1** 1936 pp. 397–446.

888.—Engel, E. O. Bombyliidae. In LINDNER Flieg. palaearkt. Reg., Stuttgart **25** 1936 pp. 401–560, 1 pl. 64 figs.

889.—Engel, E. O. A new genus and new species of Bombyliidae (Dipt.) from Southern Africa. Occ. Pap. Rhod. Mus., Bulawayo no. **5** 1936 pp. 39–41, 2 figs.

890.—Engel, H. & Hedicke, H. Die Fauna der Binnendüne bei Bellinchen (Oder). IV. Die Tierwelt. Heteroptera. Märk. Tierw., Berlin 1 1936 pp. 240–245.

Engelhardt, M. v. *see* Kühn & Englehardt.

Enzmann, E. V. *see* Haskins & Enzmann.

891.—Ephrussi, B. & Beadle, G. W. Development of eye colours in *Drosophila*: studies of the mutant claret. J. Genet., London 33 1936 pp. 407–410. [Dipt.]

892.—Ephrussi, B., Clancy, C. W. & Beadle, G. W. Influence de la lympe sur la couleur des yeux vermillon chez la *Drosophila melanogaster*. C.R. Acad. Sci. Fr., Paris 203 1936 pp. 545–546. [Dipt.]

893.—Ephrussi, B. & Harnly, M. H. Sur la présence, chez différents insectes, des substances intervenant dans la pigmentation des yeux de *Drosophila melanogaster*. C.R. Acad. Sci. Fr., Paris 203 1936 pp. 1028–1030. [Dipt.]

Ephrussi, B. *see* Beadle & Ephrussi; Khouvine, Ephrussi & Harnly.

894.—Ermisch, K. & Langer, W. Die Käfer des sächsischen Vogtlandes in oekologischer und systematischer Darstellung. Mitt. Vogtländ. Ges. Naturf., Plauen 2 1936 no. 3 pp. 1–196. [Col.]

895.—[Ermolaev, V.] Ермолаев, B. H. Beitrag zur Kenntnis der Morphologie und Biologie des Lärchen-spanners (*Semiothisa pumila* Kusn.). [In Russian with German summary.] Rev. Ent. U.R.S.S., Leningrad 25 1935 pp. 238–253, 6 figs. [Lep.]

896.—Esaki, T. A new *Urochela* species from Formosa (Hemiptera: Pentatomidae—Urostylinae). Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 492–494, 1 fig.

897.—Esaki, T. A new butterfly of the genus *Oeneis* from the Azores. Annot. zool. Jap., Tokyo 15 1936 pp. 483–485, 1 fig.

898.—Esaki, T. Die Cicadiden-fauna der Karolinen. Tentredo, Kyoto 1 1936 pp. 1–8, 2 pls. 2 figs. [Hem.]

899.—Esaki, T. Einige biologischen Beobachtungen über die Bienen und Wespen Mikronesiens. Mushi, Fukuoka 9 1936 pp. 44–47, 2 pls.

900.—Esaki, T. The genus *Zephyrus* of Japan, Corea and Formosa. [In Japanese.] *Zephyrus*, Fukuoka 6 1936 pp. 195–204, 1 col. pl. [Lep.]

Esaki, T. *see* Tokunaga & Esaki.

901.—Esben-Petersen, P. Missioni scientifiche del Prof. Edoardo Zavattari nel Sahara italiano (1933–1934). Neuroptera. Boll. Soc. ent. ital., Genoa 68 1936 pp. 71–74.

902.—Esben-Petersen, P. Neuroptera from the Canary Islands. Comment. biol., Helsingfors 6 1936 no. 6, 5 pp. 3 figs.

903.—Esben-Petersen, P. Bidrag til en Fortegnelse over Bornholms Insektfauna. 3 die—4 die suppl. Flora og Fauna, Copenhagen 42 1936 pp. 15–16, 150–155. [Orth., Neur.]

904.—Esben-Petersen, P. Neuroptera from Belgian Congo. Rev. suisse Zool., Geneva 43 1936 pp. 199–206, 6 figs.

905.—Esben-Petersen, P. & Findal, J. K. Bidrag til Fortegnelser over Sønderjyllands Insektfauna. Flora og Fauna, Copenhagen 42 1936 pp. 17–25. [Odon.]

906.—Escomel, E. & Chaves Velando, L. A. Un nuevo *Pthyrius* parásita de las pestañas del hombre. Cronica Med., Lima 52 1935 pp. 335–339, 2 figs. [Anoplura.]

907.—Español, F. Sobre les espècies catalanes del gènere *Dicerca* (Col. Buprestides). Butll. Inst. catal. Hist. nat., Barcelona 35 1935 pp. 33–34.

908.—Español, F. De re entomològica. Butll. Inst. catal. Hist. nat. Barcelona 35 1935 pp. 102–104, 251–257.

909.—Espérandieu, L.-M. Etude comparative de l'appareil venimeux chez les Vespidae et les Apidae (Hyménoptères Aculéates). Arch. Zool. exp. gén., Paris Notes et Rev. 78 1936 pp. 155–164, 5 figs.

910.—Essig, E. O. A sketch history of Entomology. Osiris, Bruges 2 1936 pp. 80–123.

911.—Essig, E. O. California Aphididae. New cloudy-veined species. Pan-Pacific Ent., San Francisco **11** (1935) 1936 pp. 156-162, 3 figs. [Hem.]

912.—Essig, E. O. New California Aphididae. Pan-Pacific Ent., San Francisco **12** 1936 pp. 65-72, 4 figs. [Hem.]

913.—Essig, E. O. Reconditioning Aphids for study. Science, New York **84** 1936 pp. 47-48. [Hem.]

914.—[Esterberg, L.] Шестопёр, И. Zur Kenntnis der Schnellkäferfauna (Coleoptera, Elateridae) des Gebiets von Gor'kij (früher Nizhnij-Novgorod). [In Russian with German summary.] Rev. Ent. U.R.S.S., Leningrad **25** 1935 pp. 223-228.

915.—Eusébio, A. Les Libellulides. Faune d'Auvergne. Bull. Soc. Hist. nat. Auvergne, Clermont-Ferrand **10** 1926 pp. 29-48, 2 pls. 1 graph. [Odon.]

916.—Evans, A. C. Studies on the influence of the environment on the sheep blow-fly *Lucilia sericata* Meig. IV. The indirect effect of temperature and humidity acting through certain competing species of blow-flies. Parasitology, Cambridge **23** 1936 pp. 431-439, 2 figs. [Dipt.]

917.—Evans, A. C. Histolysis of muscle in the pupa of the blow-fly *Lucilia sericata* Meig. Proc. R. ent. Soc. London (A) **11** 1936 pp. 52-54, 2 figs. [Dipt.]

918.—Evans, A. C. A note on the hibernation of *Micraspis sedecimpunctata* L. (var. *12-punctata* L.) (Col. Cocc.) at Rothamsted Experimental Station. Proc. R. ent. Soc. London (A) **11** 1936 pp. 116-119, 1 pl. 1 fig.

919.—Evans, A. C. The physiology of the sheep blow-fly *Lucilia sericata* Meig. (Diptera). Trans. R. ent. Soc. London **85** 1936 pp. 363-378.

920.—Evans, A. M. Two new Anopheline mosquitoes from Kenya. Ann. trop. Med. parasit., Liverpool **30** 1936 pp. 533-540, 3 figs. [Dipt.]

921.—Evans, A. M. & Garnham, P. C. C. The *funestus* series of *Anopheles* at Kisumu and a coastal locality in Kenya. Ann. trop. Med. parasit., Liverpool **30** 1936 pp. 511-518, 1 pl. 1 fig. (Dipt.)

Evans, A. M. see De Meillon, Evans & Leeson.

922.—Evans, J. W. A new species of *Nysius* (Hem. Lygaeidae) from Tasmania, and notes on the economic importance of the genus. Bull. ent. Res., London **27** 1936 pp. 673-676, 1 fig.

923.—Evans, J. W. The Bythoscopidae of Australia (Homoptera, Jassoidea). Pap. Proc. roy. Soc. Tasmania **1935** 1936 pp. 61-83, 2 pls.

924.—Evans, T. C. Use of Roentgen radiation in analysis of metabolism in eggs of *Melanoplus differentialis*. Anat. Rec., Philadelphia **67** 1936 suppl. 1 p. 60. [Orth.]

925.—Evans, T. C. Qualitative and quantitative changes in radiosensitivity of grasshopper eggs during early development. Physiol. Zool., Chicago **9** 1936 pp. 443-454, 1 pl. 3 figs. [Orth.]

926.—Evans, T. C. Some embryonic abnormalities caused by X-rays. Proc. Iowa Acad. Sci., Des Moines **42** 1935 pp. 207-208. [Orth.]

927.—Evans, T. C. Effects of Roentgen radiation on embryonic organization and regulation in *Melanoplus differentialis* (Orthoptera). Anat. Rec., Philadelphia **67** 1936 suppl. 1 pp. 59-60.

Evans, T. C. see Kerr H. D. & Evans.

928.—Everly, L. W. & R. T. Notes on the Carabidae of Ohio. I. Ohio J. Sci., Columbus **36** 1936 pp. 277-283. [Col.]

929.—Everly, R. T. The alimentary tract of the margin blister beetle, *Epicauta cinerea marginata* Fab. (Coleoptera-Meloidae). Ohio J. Sci., Columbus **36** 1936 pp. 204-216, 4 pls.

930.—Ewing, H. E. The taxonomy of the Mallophagan family Trichodectidae, with special reference to the New World fauna. J. Parasit., Urbana **22** 1936 pp. 233-246, 2 figs.

931.—Ewing, H. E. Synonymy and synopsis of the genera of the order Protura. Proc. biol. Soc. Washington **49** 1936 pp. 159-166.

932.—Ewing, H. E. The identity and variation of *Pediculus humanus americanus*. Proc. helminth. Soc. Washington **3** 1936 pp. 36-37. [Anoplura.]

- 933.—Faber, A. Die Laut- und Bewegungsausserungen der Oedipodinen. Biologisch, tierpsychologisch und vergleichend-funktionell beschrieben; mit einem Erstnachweis von tonhaften Lauten bei Acrididen und mehrfachen Lautformen bei Weibchen. Allgemeines zur Biologie der Paarungseileitung und Paarung. Z. wiss. Zool., Leipzig **149** 1936 pp. 1-85, 4 figs. [Orth.]
- 934.—[Fabri, I. A.] Фабри, И. А. Beobachtungen und Versuche über das Geschlechtsleben von *Saturnia pyri* Schiff. (Lepidoptera). [In Russian with German summary.] Rev. Ent. U.R.S.S. Leningrad **25** 1935 pp. 314-319.
- 935.—Fagel, G. Contribution à la connaissance des Coléoptères de Belgique (2^{me}, 3^{me} notes). Bull. Ann. Soc. ent. Belg., Brussels **76** 1936 pp. 67-68, 131-141, 2 pls.
- 936.—Fagel, G. & Guillaume, F. Additions au catalogue des Coléoptères de Belgique. Bull. Ann. Soc. ent. Belg., Brussels **76** 1936 pp. 199-201, 265-269.
- Fagel, G. see Derenne & Fagel.
- 937.—Fagniez, C. Observations biologiques sur quelques Tychiini de France (Col. Curculionidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 77-79.
- 938.—Fagniez, C. Contribution à l'étude biologique du *Sitaris solieri* Pecchioli (Col. Meloidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 181-185.
- 939.—Fagniez, C. Les Longicornes de la région du Queyras. Rev. franç. Ent., Paris **2** (1935) 1936 pp. 189-191.
- 940.—Fahrenholz, H. Die Nomenklatur der Läuse des Menschen. Arch. Naturgesch., Leipzig (N.F.) **5** 1936 pp. 663-667. [Anoplura.]
- 941.—Fahrenholz, H. Zur Systematik der Anopluren. Z. Parasitenk., Berlin **9** 1936 pp. 50-56.
- 942.—Fahringer, J. Ueber einige merkwürdige und seltene Hymenopteren-Gattungen aus Afrika. Festschr. 60. Geburtst. E. Strand, Riga **1** 1936 pp. 568-590, 2 figs.
- 943.—Falkenström, G. Halipliden, Dytisciden und Gyriniden aus West- und Zentral-China (Coleoptera). Lingnan Sci. J., Canton **15** 1936 pp. 79-99, 225-248, 647, 40 figs.
- 944.—Fall, H. C. On certain species of *Cantharis* (*Telephorus*) (Coleoptera). Pan-Pacific Ent., San Francisco **12** 1936 pp. 179-183.
- Fan, Ping-fa see Liu & Fan.
- 945.—Faris, R. C. Records of some bees, wasps and ants from County Cavan, in 1933. Irish Nat. J., Belfast **6** 1936 pp. 143-145. [Hym.]
- 946.—Fattig, P. W. Nest building of *Trypoxylon politiforme* Roh. Canad. Ent., Orillia **68** 1936 pp. 44-45. [Hym.]
- 947.—Fattig, P. W. The Coleoptera or beetles of Georgia, II, III. Ent. News, Philadelphia **47** 1936 pp. 15-20, 233-238.
- 948.—Faure, Jacobus C. The life history of the red locust (*Nomadacris septemfasciata* (Serville)). Bull. Dep. Agric. For. Un. S. Afr., Pretoria no. 144 1935 32 pp. 5 pls. 1 map. [Orth.]
- 949.—Favarel, G. Souvenirs de chasses à travers le continent noir et à Madagascar. Misc. ent., Castanet-Tolosan **37** 1936 sep. pp. 1-48, 3 pls.
- 950.—Favrelle, M. Note sur l'habitat et la biologie de l'*Eugaster nigripes* (Orthopt. Tettigoniidae). Ann. Soc. ent. Fr., Paris **105** 1936 pp. 369-374, 3 figs.
- 951.—Favrelle, M. Contribution à l'étude de la garniture chromosomique des Orthoptères (Gryllidae et Tettigoniidae). Mém. Mus. Hist. nat. Belg., Brussels (2) **3** 1936 pp. 53-60, 6 figs.
- 952.—Federley, H. Sex-limited hereditary cancer in Lepidopterous larvae. Hereditas, Lund **22** 1936 pp. 193-216, 13 figs.
- 953.—Fedotov, D. M. Ueber die späte postembryonale Entwicklung des Frostspanners (*Operophtera brumata* L.). C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) **4** 1936 pp. 237-240. [Lep.]
- 954.—Felt, E. P. The relations of insects and plants in gall production. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 694-700.
- 955.—Felt, E. P. Two new cockle burr midges (Diptera: Cecidomyiidae). Ent. News, Philadelphia **47** 1936 pp. 231-233.
- 956.—Felt, E. P. New midges on pine and grass. J. New York ent. Soc. **44** 1936 pp. 7-9. [Dipt.]

957.—Feng, H. T. Notes on some Dytiscidae from Musée Hoang Ho Pai Ho, Tientsin, with descriptions of eleven new species. Peking Nat. Hist. Bull. 11 1936 pp. 1-15, 25 figs. [Col.]

958.—Feng, L. C. The hibernation mechanism of mosquitoes. Proc. Chinese physiol. Soc., Tsingtao 9 1936 p. 14. [Dipt.]

Ferreira d'Almeida see d'Almeida.

959.—Ferrière, C. Note sur un nouvel Eupelmide de Madagascar (Hymenopt. Chalcididae). Livre jubil. Bouvier, Paris 1936 pp. 195-198, 2 figs.

960.—Ferrière, C. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 42. Hymenoptera. 7. Chalcididae et Pteromalidae. Ark. Zool., Stockholm 27A (sep. dated 1934) 1936 no. 22, 4 pp. 1 fig.

961.—Ferrière, C. Two new egg-parasites of *Batocera* (Col. Lamiid.) in Malaya. Bull. ent. Res., London 27 1936 pp. 331-333, 3 figs.

962.—Ferrière, C. The parasites of the coffee leaf-miners (*Leucoptera* spp.) in Africa. Bull. ent. Res., London 27 1936 pp. 477-491, 5 figs. [Lep., Hym.]

963.—Ferrière, C. Un nouveau parasite de *Thrips* de la Suisse. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 637-639, 1 fig. [Hym.]

964.—Ferris, G. F. Contributions to the knowledge of the Coccoidea (Homoptera), I, II. Microentomology, Stanford Univ. 1 1936 pp. 2-16, 17-92, 74 figs.

965.—Ferris, G. F. & Doudoroff, M. Taxonomic problems in Lepidoptera. Ent. News, Boston 47 1936 pp. 124-128.

966.—Ferris, G. F. & Murdock, G. E. Contributions to the knowledge of the Coccoidea (Homoptera). III. On certain dermal structures of the Pseudococcidae. Microentomology, Stanford Univ. 1 1936 pp. 115-122, 3 pls.

967.—Fidler, J. H. Some notes on the morphology of the immature stages of some British chafer beetles. Ann. appl. Biol., Cambridge 23 1936 pp. 114-132, 7 figs. [Col.]

968.—Fidler, J. H. On the first instar larvae of some species of *Otiorynchus* found on strawberries, with notes on their biology. Bull. ent. Res., London 27 1936 pp. 369-376, 4 figs. [Col.]

969.—Fiebig, W. Verzeichnis der Grossschmetterlinge, die für Nordwestdeutschland bisher nicht nachgewiesen wurden oder dort nur selten vorkommen. Mitt. ent. Ver. Bremen 23 1935 pp. 4-5. [Lep.]

970.—Fiedler, C. Bestimmungstabelle der südamerikanischen Arten der Gattung *Chalcodermus* Schönh. (Coleoptera: Curculionidae: Cryptorhynchinae). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 280-292.

971.—Fiedler, C. Die amerikanische Rüsslergattung *Cryptacrus* Kirsch (Col. Curc. Cryptorhynch.). Ent. Bl., Crefeld 32 1936 pp. 117-125.

972.—Fiedler, C. Bestimmungstabelle der Gattung *Piazurus* Schönh. (Col. Curc. Zygopidae). Ent. NachrBl., Troppau 10 1936 pp. 7-36.

973.—Fiedler, C. Neue Arten der Gattung *Piazurus* Schönh. (Col. Curc. Zygopidae). Ent. NachrBl., Troppau 10 1936 pp. 113-147.

974.—Fiedler, C. Die amerikanische Rüsslergattung *Collabismus* Schönh. (Col. Curcul. Cryptorhynch.). Stettin. ent. Ztg. 97 1936 pp. 239-259.

975.—Field, W. D. Three new butterfly races (Lepid.: Nymphalidae, Lycaenidae). Ent. News, Boston 47 1936 pp. 121-124.

976.—Field, W. D. New North American Rhopalocera. J. Ent. Zool., Claremont 28 1936 pp. 17-26.

977.—Fiessinger, N. & Gajdos, A. Le ferment lipolytique de *Galleria mellonella*. C.R. Soc. Biol., Paris 121 1936 pp. 1152-1154. [Lep.]

978.—Filip'ev, M. Notices lépidoptérologiques. Lambilliona, Brussels 36 1936 pp. 263-267.

979.—Findal, J. K. Laesø. Flora og Fauna, København 1934 1934 pp. 137-152, 8 figs.; 1935 1935 pp. 17-32, 129-152, 9 figs. [Insects 1935 pp. 30-32, 129-144.]

980.—Findal, J. K. Ny løvgraes-hoppe for Danmark. (*Tettigonia cantans* L.) Flora og Fauna, Kjøbenhavn 42 1936 pp. 121–123, 2 figs. [Orth.]

Findal, J. K. *see* Esben-Petersen & Findal.

981.—Finke, C. Licht und Schattenspiele von *Arg. paphia* L. ♂♂. Ent. Z., Frankfurt a. M. 50 1936 pp. 225–229 1 fig. [Lep.]

982.—Finzi, B. Risultati scientifici della spedizione di S.A.S. il Principe Alessandro della Torre e Tasso nell'Egitto e penisola del Sinai. XI. Formiche. Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 155–210, 12 figs.

983.—Fischer, E. Der Baseldorn der Schmetterlinge und seine phylogenetische Bedeutung. Ent. Z., Frankfurt a. M. 50 1936 pp. 277–284, 290–295, 297–299, 317–319, 338–340, 353–356, 361–366, 1 map, 29 figs.

984.—Fischer, F. C. J. Aanteekeningen over enkele Nederlandsche Trichoptera. Ent. Ber., Amsterdam 9 1936 pp. 195–197.

985.—Fischer, H. Die Lebensgemeinschaft des Donauriedes bei Mertingen (Schwaben). Abh. naturw. Ver. Schwaben, Augsburg 1 1936 pp. 1–98, 1 map, 20 figs. [Insects pp. 33–63.]

Fisher, E. *see* Needham & Fisher.

986.—Fisher, W. S. New Malayan Buprestidae III. J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 173–177. [Col.]

987.—Fisher, W. S. New Cerambycid and Buprestid beetles from Cuba. Mem. Soc. cubana Hist. nat. 1936 9 pp. 271–273; 10 pp. 343–348. [Col.]

988.—Fisher, W. S. A new Sphindid beetle from Cuba. Mem. Soc. cubana Hist. nat., Habana 10 1936 pp. 201–202. [Col.]

989.—Fisher, W. S. New cactus beetle from Argentine Republic (Cerambycidae). Proc. ent. Soc. Washington 33 1936 pp. 7–8. [Col.]

990.—Fisher, W. S. Fauna javanica. New Cerambycidae from Java. Tijdschr. Ent., Amsterdam 79 1936 pp. 169–198. [Col.]

991.—Fitzgerald, D. V. Nesting habits of *Trypoxylon* (Hym. Sphec.) from Trinidad. Proc. R. ent. Soc. London (A) 11 1936 pp. 111–115, 3 pls.

992.—Flanders, S. E. Host influence on the prolificacy and size of *Trichogramma*. Pan-Pacific Ent., San Francisco 11 (1935) 1936 pp. 175–177. [Hym.]

993.—Flanders, S. E. A reproduction phenomenon. Science, New York 83 1936 p. 499. [Hym.]

994.—Flanders, S. E. Sexual dimorphism of Hymenopterous eggs and larvae. Science, New York 84 1936 p. 85.

995.—Flemion, F. & Hartzell, A. Effect of low temperature in shortening the hibernation period of insects in the egg stage. Contrib. Boyce Thompson Inst., Menasha 8 1936 pp. 167–173.

996.—Fletcher, T. B. A new name for *Chrysoclista bimaculella* Haworth 1828 (Lepidoptera: Cosmopterygidae). Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 504–506.

997.—Fletcher, T. B. Some migrant insects. Proc. Cotteswold Nat. Fld. Cl., Gloucester 25 (1935) [1936] pp. 257–274.

998.—Fleutiaux, E. Mission scientifique de l'Omo. Coleoptera. V. Elateridae. Miss. scient. Omo, Paris 2 1935 pp. 193–218, 1 pl. 10 figs.

999.—Fleutiaux, E. Mes souvenirs d'entomologiste. Livre jubil. Bouvier, Paris 1936 pp. 199–201.

1000.—Fleutiaux, E. Les Elateridae de l'Indochine française. Ann. Soc. ent. Fr., Paris 105 1936 pp. 279–300, 1 pl. [Col.]

1001.—Fleutiaux, E. Descriptions de deux Eucnemididae nouveaux et note sur le genre *Echthrogaster* Blackburn. Proc. R. ent. Soc. London (B) 5 1936 pp. 187–188. [Col.]

1002.—Flint, W. P. The effect of winter temperatures of 1935–1936 on some of the common Illinois insects. Trans. Ill. Acad. Sci., Springfield 29 1936 no. 2 pp. 256–258.

1003.—Florkin, M. Nouvelles données sur la teneur en protéines du plasma sanguin des insectes. C.R. Soc. Biol., Paris 123 1936 pp. 1024–1026.

1004.—Florkin, M. Sur le taux de l'uricémie chez les insectes. C.R. Soc. Biol., Paris **123** 1936 pp. 1247-1249. [Lep.]

1005.—Fluke, C. L. New Syrphidae (Diptera) from Brazil and Cuba. J. Kans. ent. Soc., McPherson **9** 1936 pp. 59-64, 1 pl.

1006.—Fonseca, F. da. *Flebotomus* das cercanias da cidade de S. Paulo, com a descrição de *Flebotomus arthuri* n. sp. e *alphabeticus* n. sp. (Dipt. Psychodidae). Rev. Ent., Rio de Janeiro **6** 1936 pp. 323-327, 9 figs.

1007.—Fonseca, F. da. Sobre o macho de *Tunga travassosi* Pinto et Dreyfuss, 1927, e o parasitismo de *Euphrastes sexcinctus* L. por *Tunga penetrans* (L., 1758) (Siph. Tungidae). Rev. Ent., Rio de Janeiro **6** 1936 pp. 421-424, 6 figs. [Siphonapt.]

1008.—Forbes, W. T. M. The classification of the Thyatiridae (Lepidoptera). Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 779-803, 3 pls. 3 figs.

1009.—Forbes, W. T. M. The *Cirphis pseudargyria* complex (Lepidoptera: Noctuidae). J. New York ent. Soc. **44** 1936 pp. 239-246, 1 pl.

Forbes, W. T. M. see Hambleton & Forbes.

1010.—Ford, E. B. The genetics of *Papilio dardanus* Brown (Lep.). Trans. R. ent. Soc. London **85** 1936 pp. 435-466, 4 pls.

Ford, J. see Carpenter & Ford.

1011.—Ford, N. Further observations on the behaviour of *Wohlfahrtia vigil* (Walk.) with notes on the collecting and rearing of the flies. J. Parasit., Lancaster **22** 1936 pp. 309-328, 1 map. [Dipt.]

1012.—Forrest, J. E. et al. The natural history of Barra, Outer Hebrides. The results of a scientific expedition organised by the Biological Society of the University of Edinburgh, 1st to 14th July 1935. Proc. R. phys. Soc. Edinburgh **22** 1936 pp. 241-298, 1 map. [Insects pp. 271-286.]

1013.—Forsius, R. On some new Tenthredinidae from Burma and Sumatra (Hym.). Ann. Mus. Stor. nat. Genova **59** 1935 pp. 28-36, 1 fig.

1014.—Forsius, R. Kleinere Mitteilungen über Tenthrediniden. Notul. ent., Helsingfors **16** 1936 pp. 1-3. [Hym.]

1015.—Forsslund, K. H. Zur Kenntnis der Trichopteren des nördlichen Norwegens. Tromsø Mus. Årsheft. **52** (1929) 1932 no. 2, 19 pp. 1 map.

1016.—Forsslund, K. H. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 50. Trichoptera. Ark. Zool., Stockholm **27A** (sep. dated 1935) 1936 no. 31, 21 pp. 18 figs.

1017.—Forsslund, K. H. Eine neue Fichten-Blattwespe (*Lygaonematus subarcticus* n. sp.) aus Schwedisch-Lappland. Ent. Tidskr., Stockholm **57** 1936 pp. 14-22, 6 figs. [Hym.]

1018.—Forsslund, K. H. Nordliga gransågstekeln (*Lygaonematus subarcticus* Forssl.) en nyupptäckt skadeinsekt i Lappland. [With German summary.] Meddel. Statens Skogs-försöksanst., Stockholm **29** 1936 pp. 171-186, 5 figs. [Hym.]

1019.—Forster, W. Beitrag zur Systematik des Tribus Lycaenini unter besonderer Berücksichtigung der *argyrognomon*- und der *argus*-Gruppe. Mitt. münchn. ent. Ges., Munich **26** 1936 pp. 41-149, 15 pls., 7 figs. [Lep.]

Fouché, F. A. see Munro & Fouché.

1020.—Fouts, R. Check list of the Serphoidea, Bethyridae and Anteoniidae of Oceania. Occ. Pap. Bishop Mus., Honolulu **11** 1936 no. 18, 15 pp. [Hym.]

1021.—Foxon, G. E. H. Some functional considerations in the origin and evolution of the Arthropoda. Biol. gen. Vienna **11** 1935 no. 2 pp. 107-121.

1022.—Fraenkel, G. Utilisation of sugars and polyhydric alcohols by the adult blowfly. Nature, London **137** 1936 pp. 237-238. [Dipt.]

1023.—Fraenkel, G. Observations and experiments on the blow-fly (*Calliphora erythrocephala*) during the first day after emergence. Proc. zool. Soc. London **1935** 1936 pp. 893-904, 2 figs. [Dipt.]

1024.—Fraga, A. Introducción al conocimiento de la familia Tabanidae de Chile y su sistemática actual. Com. Mus. Concepción 1 1936 pp. 19–27, 30–37, 56–58. [Dipt.]

1025.—Fraga, A. El género *Heterostomus*, Bigot. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 278–281, 1 fig. [Dipt.]

1026.—Franck, P. Ueber die Lebensweise einiger *Ceuthorrhynchus*-arten. Ent. Bl., Crefeld 32 1936 pp. 101–102.

1027.—Franck, P. Ueber einige Käfer der deutschen Küsten. Ent. Bl., Berlin 32 1936 pp. 261–266.

1028.—Frankenberg, G. v. Das Puppenstadium der Florfliege (*Chrysopa vulgaris* Schneid.). Biol. Zbl., Leipzig 56 1936 pp. 94–100, 9 figs. [Neur.]

1029.—Frankenberg, G. v. Der Haftapparat der *Dytiscus* und *Acilius*-Männchen. Mikrokosmos, Stuttgart 29 1936 pp. 143–148, 14 figs. [Col.]

1030.—Frankenberg, G. v. Der "Blattlauslöwe" als gelegentlicher Parasit des Menschen. Mikrokosmos, Stuttgart 29 1936 pp. 169–170, 5 figs. [Neur.]

1031.—Franssen, C. J. H. Aanteekeningen over de ontwikkelingscyclus der Termitoxeniidae (Dipt.). Ent. Med. Ned.-Ind., Buitenzorg 2 1936 pp. 62–65.

1032.—Franssen, C. J. H. & Tigge-lovend, L. M. J. De vijanden en ziekten van de Orchideeën op Java en hunne bestrijding. Batavia, G. Kolff & Co. [1935] 84 pp. figs.

1033.—Franz, E. Eckerts Beobachtungen über die Flugweite der Honigbiene. Ent. Rdsch., Stuttgart 53 1936 pp. 317–318. [Hym.]

1034.—Franz, H. Die hochalpine Koleopterenfauna der Karnischen und Venetianer Alpen. Koleopt. Rdsch., Vienna 22 1936 pp. 230–251.

1035.—Franz, H. Die thermophilen Elemente der mitteleuropäischen Fauna und ihre Beeinflussung durch die Klimaschwankungen der Quartärzeit. Zoogeographica, Jena 3 1936 pp. 159–320, 3 maps, 6 figs.

1036.—Franz, H. Die ostalpinen Arten der Gattung *Dichotrachelus* (Coleopt., Curc.). Zool. Jb., Jena Syst. 68 1936 pp. 35–52, 6 figs.

1037.—Frappa, C. Observations nouvelles sur la biologie de *Nomadacris septemfasciata* à Madagascar. Bull. Soc. Hist. nat. Afr. N., Algiers 27 1936 pp. 326–338, 1 map. [Orth.]

1038.—Fraser, F. C. The Fauna of British India, including Ceylon and Burma. Odonata III. London, Taylor & Francis, Ltd., 1936 xi & 461 pp. 1 map 2 pls. 125 figs.

1039.—Fraser, F. C. New Oriental dragonflies. J. Bombay nat. Hist. Soc. 38 1936 pp. 700–701, 1 fig. [Odon.]

1040.—Fraser, F. C. The dragonflies of the Darjeeling and Jalpaiguri districts. Part V. J. Darjeeling nat. Hist. Soc. 10 1936 pp. 92–100, 18 figs. [Odon.]

1041.—Fraser, F. C. Notes on a collection of dragonflies from Bhutan. (Order—Odonata.) J. Darjeeling nat. Hist. Soc. 10 1936 pp. 183–184.

1042.—Fraser, F. C. A new species of dragonfly from Sikkim (Order Odonata). Proc. R. ent. Soc. London (B) 5 1936 pp. 22–24, 1 fig.

1043.—Fraser, F. C. A note on the identifications of some obscure genera and species of the family Gomphidae (Odonata). Proc. R. ent. Soc. London (B) 5 1936 pp. 137–143, 2 figs.

1044.—Fraser, F. C. Odonata collected in Japan, with the descriptions of three new species. Trans. R. ent. Soc. London 85 1936 pp. 141–156, 6 figs.

1045.—Freeman, T. N. Notes on the specific grouping of the genus *Lycaena* (Lepidoptera). Canad. Ent., Orillia 68 1936 pp. 277–279, 1 pl.

1046.—Frémont, F. A. L'année lépidoptérologique 1934 en Gironde et dans les départements de l'Ouest et du Sud-Ouest. Proc.-verb. Soc. linn. Bordeaux 86 (1934) 1935 pp. 151–157.

1047.—Frey, R. Entomologische Ergebnisse der schwedischen Kamtschatka-Expedition 1920–1922. 36. Diptera Brachycera. 5. Empididae, Micropezidae, Lauxaniidae, Chloropidae. Ark. Zool., Stockholm 28A 1935 no. 10, 8 pp.

1048.—Frey, R. et al. Die Dipterenfauna der Kanarischen Inseln und ihre Probleme. Comment. Biol., Helsingfors 6 1936 no. 1, 237 pp. 12 pls. 4 graphs.

- 1049.—Frey, W. Untersuchungen über die Entstehung der Strukturfarben der Chrysididen nebst Beiträgen zur Kenntnis der Hymenopteren cuticula. Z. Morph. Oekol. Tiere, Berlin **31** 1936 pp. 443–489, 33 figs.
- 1050.—Friederichs, K. Zur Phänologie einiger Parasiten der Forleule (*Panolis flammea*). Ent. Z., Frankfurt a. M. **50** 1936 pp. 89–91, 1 graph. [Hym.]
- 1051.—Friese, H. Apiden aus Nordost-Grönland. Skr. Svalb. Ishavet, Oslo **65** 1935 pp. 1–10, 1 map, 2 figs. [Hym.]
- 1052.—Friesen, H. Röntgenmorphosen bei *Drosophila*. Arch. Entw.-Mech. Org., Berlin **134** 1936 pp. 147–165. [Dipt.]
- 1053.—Friesen, H. Auslösung von crossing-over bei *Drosophila*-Männchen durch Röntgenisierung der Imago. Genetica, s'Gravenhage **18** 1936 pp. 187–192. [Dipt.]
- 1054.—[Friesen, H.] Фризен, Г. Рöntgenmorphosen bei *Drosophila*. [In Russian with German summary.] J. Biol., Moscow **4** 1935 pp. 687–706. [Dipt.]
- 1055.—[Friesen, H.] Фризен, Г. Auslösung von crossing-over bei *Drosophila*-Männchen durch Röntgenisierung der Imago. [In Russian with German summary.] J. Biol., Moscow **4** 1936 pp. 977–982.
- 1056.—Friesen, H. Spermatogoniales crossing-over bei *Drosophila*. Z. indukt. Abstamm.- u. Vererb. Lehre, Leipzig **71** 1936 pp. 501–526. [Dipt.]
- Friesen, H. see Malov & Friesen.
- 1057.—Frison, T. H. Some new species of stoneflies from Oregon (Plecoptera). Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 256–265, 2 pls. 1 fig.
- 1058.—[Frolova, S. L.] Фролова, С. Л. Struktur der Kerne in den Speicheldrüsen einiger *Drosophila*-Arten. [In Russian with German summary.] Biol. J., Moscow **5** 1936 pp. 271–292, 25 figs. [Dipt.]
- 1059.—Frolova, S. L. Structure of the nuclei in the salivary gland cells of *Drosophila*. Nature, London **137** 1936 p. 319, 1 fig. [Dipt.]
- Frolova, S. L. see Astaurov & Frolova.
- 1060.—Frost, F. M., Herms, W. B. & Hoskins, W. M. The nutritional requirements of the larva of the mosquito, *Theobaldia incidens* (Thom.). J. exp. Zool., Philadelphia **73** 1936 pp. 461–479. [Dipt.]
- 1061.—Frost, S. W. New central American Agromyzidae. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 298–318. [Dipt.]
- 1062.—Fuchsowna, J. & Sauczyńska, J. Preservation of heterochromosomes during spermatogenesis in Odonata. [In Polish.] Arch. Tow. nauk. Lwów (3) **4** 1928 pp. 177–197, 3 pls., 8 figs.
- 1063.—Fuente y Morales, J. M. de la. Catálogo sistemático geográfico de los Coleópteros observados en la península ibérica, Pirineos propiamente dichos y Baleares (continuación). Bol. Soc. ent. Esp., Madrid **18** (1935) 1936 pp. 53–68, 101–116.
- 1064.—Fujimatsu, K. Studies on *Rhabdophaga rosaria* (H. Loew). [In Japanese.] Trans. nat. Hist. Soc. Formosa **25** 1935 pp. 344–351, 3 figs. [Dipt.]
- 1065.—Fukuda, J. Notes on the oxygen consumption of the developing silkworm eggs treated with various methods of artificial hatching. Proc. imp. Acad. Japan, Tokyo **12** 1936 pp. 269–271, 1 graph. [Lep.]
- 1066.—Fullaway, D. T. Description of a new fruit fly parasite from Fiji (Hym.). Proc. Hawaii. ent. Soc., Honolulu **9** 1936 pp. 179–180.
- 1067.—Fuller, M. E. Notes on the biology of *Scaptia auriflua* Don. (Diptera, Tabanidae). Proc. Linn. Soc. N.S.W., Sydney **61** 1936 pp. 1–9, 1 pl. 11 figs.
- 1068.—Funkhouser, W. D. Five new Indian Membracidae. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 245–250, 5 figs. [Hem.]
- 1069.—Funkhouser, W. D. Two new Malayan Membracidae. J. F.M.S. Mus., Kuala Lumpur **13** 1936 pp. 187–189, 2 figs. [Hem.]
- 1070.—Funkhouser, W. D. New Membracidae in the Handschin collection. Rev. suisse Zool., Geneva **43** 1936 pp. 189–198, 8 figs. [Hem.]

- 1071.—[Fursov, N. I.] Фурсов, Н. И. Observations systematiques sur les genres de la tribu Calandrinii qui habitent l'URSS avec description d'un nouveau genre et espèce de cette tribu—*Calandrella pashini*. [In Russian with French description.] Bull. Soc. Nat. Moscou (N.S.) 44 1935 Sect. Biol. pp. 439-440, 3 figs. [Col.]
- 1072.—Fyg, W. Eine Methode zur subkutanen Impfung von Bienen-Königinnen als Hilfsmittel beim Studium der Melanose. Landw. Jahrb. Schweiz, Berne 8 1936 pp. 867-880, 5 figs. [Hym.]
- 1073.—Gäbler, H. Beitrag zur Kenntnis von Stigmenbau und-Funktion der Lepidopteren-Puppen. Biol. Zbl., Leipzig 56 1936 pp. 584-590, 6 figs.
- 1074.—Gäbler, H. Beitrag zur Kenntnis des Tracheensystems der Raupen von *Achroea grisella* F. und *Galleria melonella* L. Zool. Anz., Leipzig 116 1936 pp. 176-185, 7 figs. [Lep.]
- 1075.—Gabriel, A. G. New forms of *Papilio* from the Indo-Australian region. Entomologist, London 69 1936 pp. 281-282. [Lep.]
- 1076.—Gadeau de Kerville, H. Description et figuration de deux entomocécidies nouvelles des Pyrénées (2^e note). Bull. Soc. ent. Fr., Paris 41 1936 pp. 278-280, 7 figs. [Hym.]
- 1077.—Gaede, M. Fauna Americana 6 Epiplemidæ (pp. 1141-1170, 5 pls.), Cymatophoridae (pp. 1171-1175, 1 pl.); Psychidae case bearers (pp. 1177-1186, 1 pl.); Thyrididae (pp. 1187-1213, 2 pls.); Fauna Africana 15 pp. 159-254, 15 pls. In Seitz, Macrolep. Wld. (Engl. edn.) 1936.
- 1078.—Gagarin, P. Novos Lepidópteros Brasileiros. Rev. Syniátrica Rio de Janeiro 1936 nos. 1-2 reprint 9 pp. 3 figs.
- 1079.—Gagliardi, A. Variazioni cromatiche dell'*Agonum sexpunctatum* Lin. Boll. Soc. ent. ital., Genoa 67 1935 pp. 138-140. [Col.]
- 1080.—Gahan, A. B. *Brachymeria carinatifrons*, new species (Hymenoptera: Chalcididae). Proc. ent. Soc. Washington 37 (1935) 1936 pp. 165-167.
- 1081.—Gahan, A. B. Four new species of Chalcidoidea parasitic on Cactus insects. Proc. U.S. nat. Mus., Washington 83 no. 2995 1936 pp. 481-486. [Hym.]
- Gajdos, A. see Fiessinger & Gajdos.
- 1082.—Gallard, L. The life history of a Tipulid fly. Aust. Mus. Mag., Sydney 6 1936 pp. 55-56, 6 figs. [Dipt.]
- 1083.—Galliard, H. La ponte de *Triatoma protracta* (Hemipt. Reduviidae). Livre jubilé. Bouvier, Paris 1936 pp. 203-205.
- 1084.—Galliard, H. Recherches sur les Réduvidés hématophages *Rhodnius* et *Triatoma* [contd.]. Ann. Parasit. hum. comp., Paris 14 1936 pp. 1-34, 97-112, 193-205, 20 figs. [Hem.]
- Gal'tzova, R. see Demyanovskii, Gal'tzova & Rozhdestvenskaya.
- 1085.—Galvagni, E. Ergänzung zur Kenntnis der Schmetterlingsfauna von Hvar (Lesina). Verh. zool.-bot. Ges. Wien 85 1936 pp. 118-121. [Lep.]
- Galvão, A. see Ayroza Galvão.
- 1086.—Garbowski, T. Zur Ethologie und Psychologie der Asopiden (Hemiptera Heteroptera). Bull. int. Acad. Cracovie 1935 1935 B II pp. 363-383, 5 figs.
- 1087.—Gardner, J. C. M. Immature stages of Indian Coleoptera (19) Anthribidae. Ind. For. Rec., New Delhi 2 1936 pp. 99-113, 2 pls.
- 1088.—Gardner, J. C. M. New Indian Cerambycidae. Ind. For. Rec., New Delhi 2 1936 pp. 127-140. [Col.]
- 1089.—Gardner, J. C. M. A larva of the subfamily Balginae (Col., Elateridae). Proc. R. ent. Soc. London (B) 5 1936 pp. 3-5, 7 figs.
- 1090.—Gardner, J. C. M. A new Indian species of *Atractocerus* (Col. Lymexylonidae). Proc. R. Ent. Soc. London (B) 5 1936 pp. 181-182.
- Garnham, P. C. C. see Evans & Garnham.
- 1091.—Garrett, F. C. Migrant Lepidoptera in 1936. Vasculum, Newcastle-upon-Tyne 22 1936 pp. 97-98.
- 1092.—Gaschen, H. Les indices maxillaires des Anophèles. Bull. Soc. méd.-chir. Indochine, Hanoi 14 1936 pp. 631-636, 6 figs. 1 chart. [Dipt.]

1093.—Gaunitz, S. Om tre Syrphidarter (mit einer deutschen Beschreibung). Ent. Tidskr., Stockholm 57 1936 pp. 6–9, 1 fig. [Dipt.]

1094.—[Gavalov, I.] Гавалов, И. Die vorläufige Uebersicht der Garten- und Waldschildläuse (Coccidae) des Azow-Schwarz Meergebietes, Nordkaukasiens und Daghestan. [In Russian with German summary.] Proc. agric. Inst. Krasnodar 7 1935 40 pp. [Hem.]

1095.—Gehlen, B. Sphingiden aus Venezuela. Veröff. dtsch. kol. Mus. Bremen 1 1936 pp. 305–306. [Lep.]

1096.—Geijskes, D. C. Zur Kenntnis javanischer Helodiden-Larven (Coleoptera). Ent. Med. Ned.-Ind., Buitenzorg 2 1936 pp. 36–42, 2 figs.

1096A.—Geijskes, D. C. Zwei neue Trichopteren-Metamorphosen aus dem Schweizer Jura. Tijdschr. Ent., Amsterdam 79 1936 pp. 230–234, 4 figs.

1097.—Geissel, H. Entwicklungsdauer, Flügellänge und Vitalität ingezuchteter Mehlmottenstämme und ihrer Kreuzungen. Z. induct. Amstamm- u. VererbLehre, Leipzig 71 1936 pp. 382–419, 16 graphs.

1098.—Gejvall, N.-G. Untersuchungen über die relative und absolute Grösse der verschiedenen Gehirnzentren von *Apis mellifera*. Förh. K. fysiogr. Sällsk. Lund 5 (1935) 1936 pp. 22–32, 3 figs. [Hym.]

1099.—Gemignani, E. V. Una nueva especie del género *Tolmerolestes* E. Lynch Arribalzaga (Diptera: Asilidae). Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 42–47, 1 pl.

1100.—Gentil, K. Die Entstehung der Schillerfarben bei *Chrysopa perla*. Ent. Rdsch., Stuttgart 53 1936 pp. 173–175, 5 figs. [Neur.]

1101.—Gentil, K. Die Entstehung der Schillerfarben bei Ichneumoniden. Ent. Rdsch., Stuttgart 53 1936 pp. 361–364, 4 figs. [Hym.]

1102.—Gentil, K. Die Entstehung der Schillerfarben bei *Opisicoetus personatus*. Ent. Rdsch., Stuttgart 53 1936 pp. 594–596, 5 figs. [Hem.]

1103.—George, C. J. A new genus and species of Zoraptera. J. Univ. Bombay 4 1936 no. 5 pp. 86–88, 6 figs.

George, C. J. see Menon & George; Presswalla & George.

1104.—Getzel, D. Il simbiante d'*Icerya purchasi* Mask. *Geotrichoides pierantonii* n. sp. Arch. zool. ital., Torino 23 1936 pp. 363–375, 3 figs. [Hem.]

1106.—Ghidini, G. Tabanidi d'Italia. Arch. zool. (ital.), Torino 22 1936 pp. 371–493, 72 figs. [Dipt.]

1107.—Gibbins, E. G. Congo Simuliidae. Ann. trop. Med. Parasit., Liverpool 30 1936 pp. 133–150, 10 figs. [Dipt.]

1108.—Gibbins, E. G. On a melanic inland race of *Anopheles costalis* Giles (*gambiae*) in Uganda. Ann. trop. Med. Parasit., Liverpool 30 1936 pp. 275–282, 1 fig. [Dipt.]

1109.—Gibbins, E. G. Uganda Simuliidae. Trans. R. ent. Soc. London 85 1936 pp. 217–242, 24 figs. [Dipt.]

1110.—Gicklhorn, J. Eine polarisationsmikroskopische Beobachtung an Muskeln während der Kontraktion. Protoplasma, Leipzig 26 1936 pp. 181–182. [Dipt.]

1111.—Gil Collado, J. Las razas del *Anopheles maculipennis* y el anofelismo sin paludismo. An. Asoc. esp. Progr. Cien., Madrid 1 1934 pp. 101–103. [Dipt.]

1112.—Gil Collado, J. Distribución de los insectos hematófagos en España. Primer Congr. nac. Sanidad Madrid 1934, Madrid 1935 pp. 96–106. [Dipt.]

1113.—Gil Collado, J. Una nueva especie del género *Ariasella* Gil, con breves consideraciones sobre la reducción del tórax en los Taquidrominos ápteros (Dipt. Emp.). Eos, Madrid 11 1936 pp. 191–200, 1 pl. 2 figs.

1114.—Gil Collado, J. Culicidos de la Isla de Fernando Poo recogidos por la expedición J. Gil-F. Bonet. Eos, Madrid 11 1936 pp. 311–329, 8 figs. [Dipt.]

Gillett, J. D. see Wigglesworth & Gillett.

1115.—Giordani Soika, A. Contributions à l'étude de la faune du Mozambique. Voyage de M. P. Lesne (1928–1929). 18^e note—Hymenoptera, Vespidae. Mem. Mus. zool. Univ. Coimbra (I) no. 82 1935 18 pp. 3 figs.

- 1116.—Giordani Soika, A. Sul genere *Pseudochilus* e descrizioni di una nuova specie di questo genere (Hym. Vespidae). Ann. Mus. Stor. nat. Genova **59** 1936 pp. 63-68, 8 figs.
- 1117.—Giordani Soika, A. Caratteri del gen. *Nortonia* Sauss. e descrizione di due nuove specie (Hymen. Vespidae). Ann. Mus. Stor. nat. Genova **59** 1936 pp. 267-271, 2 figs.
- 1118.—Giordani Soika, A. Quinto contributo alla conoscenza degli Imenotteri del Lido di Venezia. Boll. Soc. ent. ital., Genoa **67** 1935 pp. 141-143.
- 1119.—Giordani Soika, A. Etologia e larva primaria di *Melecta luctuosa* Scop. (Hym. Apidae). Boll. Soc. ent. ital., Genoa **68** 1936 pp. 47-48, 1 fig.
- 1120.—Giordani Soika, A. Descrizione di un nuovo genere e di una nuova specie di Eumenini della fauna etiopica. Boll. Soc. ent. ital., Genoa **68** 1936 pp. 77-79, 1 fig. [Hym.]
- 1121.—Giordani Soika, A. Gli *Ancistrocerus* della regione etiopica (Hym. Vespidae). Rev. franç. Ent., Paris **3** 1936 pp. 32-45, 14 figs.
- 1122.—Giordani Soika, A. Supplemento alla mia revisione degli *Ancistrocerus* etiopici (Hym. Vespidae). Rev. franç. Ent., Paris **3** 1936 pp. 234-236, 1 fig.
- 1125.—Glasgow, J. P. The bionomics of *Hydropsyche colonica* McL. and *H. philpotti* Till. (Trichoptera). Proc. R. ent. Soc. London (A) **11** 1936 pp. 122-128, 2 figs.
- 1126.—Glasgow, J. P. Internal anatomy of a caddis (*Hydropsyche colonica*). Quart. J. micr. Sci., London (N.S.) **79** 1936 pp. 151-179, 3 pls. 8 figs. [Trichopt.]
- 1127.—Glass, H. B. A study of factors influencing chromosomal segregation in translocations of *Drosophila melanogaster*. Res. Bull. Missouri agric. Exp. Sta., Columbia no. **231** 1935 28 pp., 2 figs. [Dipt.]
- 1128.—Gleichauf, R. Anatomie und Variabilität des Geschlechtsapparates von *Drosophila melanogaster* (Meigen). Z. wiss. Zool., Leipzig **148** 1936 pp. 1-66, 42 figs. [Dipt.]
- 1129.—Gloyd, L. K. Three new North American species of Gomphinae (Odonata). Occ. Pap. Mus. Zool. Michigan **326** 1936 18 pp. 3 pls.
- 1130.—Glover, P. M. & Chatterjee, K. C. A preliminary note on the bionomics and economic importance of *Microbracon hebetor* Say, a Braconid new to North India. Proc. Indian Acad. Sci., Indianapolis (B) **3** 1936 pp. 195-211, 1 pl. 2 figs. [Hym.]
- 1131.—Gobeil, A. R. The biology of *Ips perturbatus* Eichhoff. Canad. J. Res., Ottawa (Zool. Sci.) **14** 1936 pp. 181-204, 1 pl. 4 figs. [Col.]
- 1132.—Goecke, H. Bemerkungen zu Germar: Nachträge zu Ahrens Monographie der Rohrkäfer, 1811. Ent. Bl., Crefeld **32** 1936 pp. 103-105.
- 1133.—Goecke, H. Revision asiatischer Donaciinen (Col. Chrys.) II. Ent. Bl., Crefeld **32** 1936 pp. 220-228.
- 1134.—Goetghebuer, M. Tendipedidae (Chironomidae). In Lindner Flieg. palaearkt. Reg. **13b** 1936 81 pp. 6 pls. 100 figs.
- 1135.—Goetghebuer, M. Note sur quelques Chironomides décrits par J. J. Kieffer. Arch. Hydrobiol., Stuttgart **30** 1936 pp. 669-692, 17 figs. [Dipt.]
- 1136.—Goetghebuer, M. Les Cératopogonides et les Chironomides de Belgique au point de vue hydrobiologique. Bull. Ann. Soc. ent. Belg. Brussels **76** 1936 pp. 69-76. [Dipt.]
- 1137.—Goetghebuer, M. Nouvelle contribution à la connaissance des Cératopogonides et des Chironomides de Belgique. Bull. Ann. Soc. ent. Belgique, Brussels **76** 1936 pp. 319-326, 6 figs. [Dipt.]
- 1138.—Goetghebuer, M. Chironomides du Congo Belge. Rev. Zool. Bot. afr., Brussels **28** 1936 pp. 453-492, 51 figs.
- Goetghebuer, M. see Gouin, F.
- 1139.—Goetsch, W. Zusammenarbeit im Ameisen-Staat. Bremer Beitr. Naturwissensch. **3** 1936 pp. 137-152, 10 figs. [Hym.]
- 1140.—Goetsch, W. Zusammenarbeit im Ameisen- und Termiten-Staat. Jber. schles. Ges. vaterl. Cult., Breslau **108** (1935) 1936 pp. 51-61, 6 figs. [Hym. Isopt.]

1141. — Goetsch, W. Formicidae Mediterraneae. Beitrag zur Biologie und Verbreitung der Ameisen am Golfe von Neapel. Pabb. Staz. zool. Napoli 15 1936 pp. 392-422, 16 figs. [Hym.]

1142. — Goetsch, W. Untersuchungen über den Termiten-Staat. Naturwissenschaften, Berlin 24 1936 pp. 371-376, 1 fig. [Isopt.]

1143. — Goetsch, W. Beiträge zur Biologie des Termitenstaates. Z. Morph. Oekol. Tiere, Berlin 31 1936 pp. 490-560, 36 figs. [Isopt.]

1144. — Goetze, H. *Hemerocampa leucostigma* Sm. und Abbot. Eine Aufzucht aus dem Ei. Ent. Z., Frankfurt a. M. 49 1936 pp. 515-518. [Lep.]

1145. — Goidanich, A. Materiali per lo studio degli Imenotteri Braconidi. IV. Boll. Ist. Ent. Univ. Bologna 8 1936 pp. 197-221, 10 figs.

1146. — [Gol'dat, S. Yu.] Гольдат, С. Ю. Direct and reverse mutations in the loci of yellow, achaete and scute. [In Russian with English summary.] Biol. J., Moscow 5 1936 pp. 803-812, 3 figs. [Dipt.],

1147. — [Golovyanko, Z. S.] Головянко, З. С. Les larves plus communes des Coléoptères lamellicornes de la partie européenne de l'URSS. [In Russian.] Tabl. anal. Fn. URSS, Leningrad 20 1936 38 pp. 13 pls. 1 chart.

1148. — Goltz, H. Frhr. v. d. Das Werk von B. C. S. Warren über das Genus *Erebia*. Ent. Rdsch., Stuttgart 53 1936 pp. 425-430. [Lep.]

Goltz, H. Frhr. v. d. see Warnecke & Goltz.

1149. — Gönner, P. Ueber einige nigristische Tagfalter aus der Wetterau. Ent. Z., Frankfurt a. M. 50 1936 pp. 86-88, 6 figs. [Lep.]

1150. — Gontarski, H. Die Wachserzeugung der Arbeiterinnen von *Apis mellifica* während der Winterruhe. Z. wiss. Zool., Leipzig 147 1936 pp. 526-536, 3 figs. [Hym.]

1151. — Good, N. E. The flour beetles of the genus *Tribolium*. Tech. Bull. U.S. Dep. Agric., Washington, D.C. no. 498 1936 57 pp. 22 figs. [Col.]

1152. — Goodrich, A. L. The thoracic sclerites of a Trichopterous pupa, *Dicosmoecus atripes* Hagen (Limno-

philidae). Trans. Amer. micr. Soc., Menasha 54 1935 pp. 57-64, 1 pl.

1153. — Gordon, A. Paths of flight. Science, New York 84 1936 pp. 40-41. [Orth.]

1154. — Gordon, C. The frequency of heterozygosis in free-living populations of *Drosophila melanogaster* and *Drosophila subobscura*. J. Genet., London 33 1936 pp. 25-60. [Dipt.]

1155. — Górski, W. Beitrag zur Kenntnis der Morphologie und Biologie von *Acentropus niveus* Oliv. (Lep.). [In Polish with German summary.] Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. 9 (1934) 1935 pp. 315-333, 1 pl. 3 figs.

1156. — Gösswald, K. Zur Frage nach der Abhängigkeit der Entwicklung des Kiefernswärmers *Sphinx pinastri* L. von Temperatur und Luftfeuchtigkeit. Z. angew. Ent., Berlin 22 1936 pp. 521-532, 1 chart. [Lep.]

1157. — Gottfried, I. Note on the song of the periodical cicada. Proc. ent. Soc. Washington 38 1936 p. 166. [Hem.]

1158. — Gotthardt, —. Unterscheidungsmerkmale einiger schwer trennbarer Lycaeniden an Hand der Form des männlichen Kopulationsapparates. Ent. Rdsch., Stuttgart 54 1936 pp. 53-54, 2 figs. [Lep.]

1159. — Gotthardt, —. Tabelle zum Bestimmen mitteleuropäischer Arten der Gattung *Hesperia* an Hand der Form des männlichen Kopulationsapparates. Ent. Rdsch., Stuttgart 53 1936 p. 183. [Lep.]

1160. — Gotthardt, —. Eine aberrative Form des männlichen Kopulationsapparates von *Chrysophanus virgaureae* L. Ent. Rdsch., Stuttgart 53 1936 pp. 462-463, 2 figs. [Lep.]

1161. — Gottschewski, G. Quantitative und qualitative Unterschiede innerhalb einer Allelenreihe bei *Drosophila melanogaster*. Verh. dtsh. zool. Ges., Leipzig 38 1936 pp. 104-112, 3 figs. [Dipt.]

1162. — Gouin, F. Métamorphoses de quelques Chironomides d'Alsace et de Lorraine avec la description de trois espèces nouvelles par M. Goetghebuer. Rev. franç. Ent., Paris 3 1936 pp. 151-173, 26 figs. [Dipt.]

Gould, G. E. see Deay & Gould.

1163.—Gounelle, H. & Raoul, Y. Action stérilisante de la chloropicrine sur les oeufs de la punaise des lits (*Cimex lectularius* Mer.). C.R. Acad. Sci. Fr., Paris 203 1936 pp. 689-691. [Hem.]

1164.—Goux, L. Notes sur les Coccides (Hem.) de la France (13^e note). Bull. Soc. ent. Fr., Paris 41 1936 pp. 35-40, 11 figs.

1165.—Goux, L. Notes sur les Coccides (Hem. Coccidae) de la France (14^e note). Deux *Eriococcus* nouveaux des environs de Marseille. Bull. Soc. zool. Fr., Paris 61 1936 pp. 344-356, 26 figs.

1166.—Graaf Bentinck, G. A. Aanteekeningen omtrent Nederlandsche Microlepidoptera. Tijdschr. Ent., Amsterdam 79 1936 pp. 199-216.

1167.—Grabe, A. Zusammenstellung der von 1923 bis 1934 im Ruhrgebiet neu aufgefundenen Gross-Schmetterlingsarten. Ent. Z., Frankfurt a. M. 1936 49 pp. 508-509, 520-521, 533-535, 538-541, 549-550, 566-568; 50 pp. 16-17, 27, 44-46, 178-183, 194-195, 249-252, 264-269. [Lep.]

1168.—Graham, J. A. The life-history from egg to pupa of *Brahmaea wallichii* Gray. J. Bombay nat. Hist. Soc. 38 1936 pp. 593-597, 1 pl. 3 figs. [Lep.]

1169.—Graichen, E. Das Zentralnervensystem von *Nepa cinerea* mit Einschluss des sympathischen Nervensystems. Zool. Jb., Jena Anat. 61 1936 pp. 195-238, 4 pls. 25 figs. [Hem.]

1170.—Grandi, G. Contributi alla conoscenza degli Immenotteri Aculeati. XV. Boll. Ist. Ent. Univ. Bologna 8 1936 pp. 27-140, 4 pls. 25 figs.

1171.—Grandi, G. Morfologia ed etologia comparata di Insetti a regime specializzato. VII. La morfologia comparata delle larve di alcuni Imenotteri Tentredinidi. Boll. Ist. Ent. Univ. Bologna 8 1936 pp. 222-254, 24 figs.

1172.—Grant, K. J. Studies of migrant insects. Biology, London 2 1936 no. 2, 8 pp.

1173.—Grant, K. J. The collection and analysis of records of migrating insects, British Isles, 1931-1935. Entomologist, London 69 1936 pp. 125-131, 2 figs.

1174.—Grassé, P. P. Sur un double rassemblement de *Torymus* (*Callimome*) *auratus* Fonsc. (Hym. Chalcididae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 262-265.

1175.—Grassé, P. P. & Bonneville, P. La spermatogénèse abortive ou atypique chez le termite du Natal (*Bellicositermes natalensis*, Smeath). C.R. Soc. Biol., Paris 122 1936 pp. 1009-1010. [Isopt.]

Graubard, M. A. *see* Kaliss & Graubard.

1176.—Greb, R. J. Production of gynandromorphs in *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 pp. 117-118. [Hym.]

1177.—Gressitt, J. L. Notes on collecting in Formosa. Ent. World, Tokyo 4 1936 pp. 711-727, 1 map, 1 pl., 5 figs.

1178.—Gridelli, E. Materiali zoologici raccolti dalla spedizione italiana al Karakoram. Coleoptera—Tenebrionidae. Atti Mus. Stor. nat. Trieste 12 1935 pp. 37-68, 2 pls. 1 fig.

1179.—Gridelli, E. Materiali zoologici raccolti dalla spedizione italiana al Karakoram. Coleoptera—Staphylinidae. Atti Mus. Stor. nat. Trieste 12 1935 pp. 69-85, 4 figs.

1180.—Gridelli, E. Osservazioni su alcune specie di *Bledius* della fauna italiana. Boll. Soc. ent. ital., Genoa 68 1936 pp. 55-62, 2 figs. [Col.]

1181.—Gridelli, E. Tredicesimo contributo alla conoscenza degli Staphylini. Boll. Soc. ent. ital., Genoa 68 1936 pp. 146-156, 6 figs. [Col.]

1182.—Griep, E. Die Käferfauna eines Potsdamer Getreidespeichers. Märk. Tierw., Berlin 2 1936 pp. 19-23.

1183.—Griepenburg, W. Klutertöhle, Bismarck- und Rentropshöhle bei Milspe und ihre Tierwelt. Abh. Westf. prov. Mus. Naturk., Münster i. W. 6 1935 no. 5 pp. 1-46, 2 maps, 3 figs.

1184.—Griffin, F. J. On the dates of publication of Motschulsky (V. de), Etudes entomologiques, I-XI, 1853-1862. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 256-257.

1185.—Griffin, F. J. The contents of the parts and the dates of appearance of Seitz' "Gross-Schmetterling eder Erde (the Macrolepidoptera of the World)" Lieferungen 1 to 130 Palaearctic and 1 to 575 Exotic. Vols. 1 to 16, 1907-1935. Trans. R. ent. Soc. London **85** 1936 pp. 243-280.

1186.—Grimes, M. Phenological report for 1935. Irish Nat. J., Belfast **6** 1936 pp. 50-52, 77-78. [Insects pp. 52, 77-78.]

1187.—Griswold, G. H. & Crowell, M. F. The effect of humidity on the development of the webbing clothes moth (*Tineola biselliella* Hum.). Ecology Lancaster, Pa. **17** 1936 pp. 241-250, 2 graphs 1 fig. [Lep.]

1188.—Grochowska, S. Die Geradflügler (Orthoptera) der Umgegend von Troki mit einer Angabe einer neuen Varietät von *Chorthippus longicornis* (Latr.). [In Polish with German summary.] Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. **9** (1934) 1935 pp. 277-282.

1189.—Grochowska, S. Die Wasserpflanzen in der Umgebung von Troki. [In Polish with German summary.] Trav. Soc. Sci. Wilno, Cl. Sci. math. nat. **9** (1934) 1935 pp. 283-286.

1190.—[Gromov, V. V.] Громов, В. В. Chironomidae of small flood-basins of the left side of the River Kama at Okhansk. [In Russian with English summary.] Bull. Inst. Rech. biol. Perm **10** 1936 pp. 239-249. [Dipt.]

1191.—Grosse, G. Kritische Analyse der Gruppe *Acronicta psi* L., *tridens* Schiff. und *cuspidata* Hb. (Lep.). (Ein Beitrag zur Lösung dieser schwierigen Frage). Ent. Z., Frankfurt a. M. **50** 1936 pp. 219-224, 229-233, 2 figs.

1192.—Grozđanić, S. Die Bienenbuckelfliege (*Phora incrassata*). [In Serbian with German summary.] Glasnik hrv. prirodosl. Dr., Zagreb **41-48** (1929-36) 1936 pp. 156-160, 3 figs. [Dipt.]

1193.—Gschwendtner, L. Monographie der paläarktischen Dytisciden. VII. Colymbetinae. Koleopt. Rdsch., Vienna **22** 1936 pp. 61-80.

1194.—Gschwendtner, L. Weitere neue Schwimmkäfer aus Belgisch-Kongo. Rev. Zool. Bot. afr., Brussels **29** 1936 pp. 17-20. [Col.]

Gschwendtner, L. see Zimmermann & Gschwendtner.

1195.—Guareschi, C. Ricerche sperimentali sulla ninfosi degli insetti. Arch. zool. (ital.), Torini **22** 1936 pp. 197-221, 2 pls. [Col. Lep. Dipt.]

1196.—Guareschi, C. Esperienze coi raggi X e col radio sulla ninfosi degli Insetti. Atti Accad. Lincei, Rome Rend. **23** 1936 219-221, 1 fig. [Dipt.]

1197.—Gubin, A. The determination of the working length of the bee tongue by means of microglossometers. Bee Wld., Camberley, Surrey **17** 1936 pp. 54-55, 2 figs.

1198.—Guder, G. Eine erfolgreiche Zucht von *Lemonia taraxaci* Esp. Ent. Z., Frankfurt a. M. **49** 1936 pp. 496-498. [Lep.]

1199.—Guibé, J. Etude de l'aile chez *Apterina pedestris* Meigen (Diptère, Sphaeroceridae). Bull. Soc. zool. Fr., Paris **61** 1936 pp. 266-273, 10 figs.

1200.—Guiglia, D. Un nuovo Orysside del Congo Belga (Hymen. Phytophaga). Ann. Mus. Stor. nat. Genova **59** 1935 pp. 6-11, 1 pl. 2 figs.

1201.—Guiglia, D. Intorno ad un'errata sinonimia di una specie di Orysside (Hymen. Phytophaga). Ann. Mus. Stor. nat. Genova **59** 1935 pp. 37-41, 2 figs.

1202.—Guiglia, D. Un nuovo Oriside dell'Africa meridionale (Hymen. Phytophaga). Ann. Mus. Stor. nat. Genova **59** 1936 pp. 136-141, 1 pl. 1 fig

1203.—Guiglia, D. Una nuova specie del gen. *Chalinus* (Hymen. Phytophaga). Ann. Mus. Stor. nat. Genova **59** 1936 pp. 260-266, 1 pl. 1 fig.

1204.—Guiglia, D. Missione scientifica del Prof. Edoardo Zavattari nel Sahara italiano (1933-34). Imenotteri aculeati. Boll. Soc. ent. ital., Genoa **68** 1936 pp. 3-16, 2 figs.

Guiglia, D. see Popov & Guiglia.

1205.—Guignon, G. Etude de la circulation sanguine des ailes chez les Coléoptères et les Orthoptères au moyen de la nicotine. C.R. Acad. Sci. Fr., Paris **202** 1936 pp. 2105-2106.

1206.—Guignon, G. Influence de la lumière solaire sur le vol des Lépidoptères diurnes. C.R. Acad. Sci. Fr., Paris **203** 1936 pp. 1186-1188.

1207. — Guignot, F. Remarques systématiques sur les *Hydrocanthus* avec description d'un genre nouveau et de trois espèces nouvelles (Col. Dytiscidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 10-12, 3 figs.

1208. — Guignot, F. Description d'*Halipilus* nouveaux (Col. Haliplidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 115-118.

1209. — Guignot, F. Contributions à la systématique des *Agabus* (Col. Dytiscidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 186-191.

1210. — Guignot, F. Sur les types en entomologie. Misc. ent., Castanet-Tolosan **37** 1936 pp. 28-30.

1211. — Guignot, F. Deux *Clypeodytes* nouveaux du Mexique (Col. Dytiscidae). Rev. franç. Ent., Paris **3** 1936 pp. 144-146, 2 figs.

1212. — Guillaume, F. Additions au catalogue des Coléoptères de Belgique d'après les chasses de MM. Derenne, Fagel, Guillaume et Roelofs. Bull. Ann. Soc. ent. Belgique, Brussels **76** 1936 pp. 313-318.

Guillaume, F. *see* Fagel & Guillaume.

1213. — Guimarães, L. R. Contribuição para o conhecimento das Mallophagas das aves do Brasil. V. Folia Clin. Biol., S. Paulo **8** 1936 no. 2 pp. 48-50, 1 fig.

1214. — Guimarães, L. R. Contribuições para o conhecimento das Mallophagas das aves do Brasil. Rev. Mus. paul., São Paulo **20** 1936 pp. 221-228, 4 pls.

Guimarães, L. R. *see* Pessoa & Guimarães.

1215. — Gulde, J. Die Wanzen Mitteleuropas. Hemiptera Heteroptera Mitteleuropas, Frankfurt a. M. Teil **5** 1936 pp. 1-104, 39 figs.

1216. — Gulde, J. Allgemeines über die Pentatomiden. Aus "Die Wanzen Mitteleuropas." Ent. Z., Frankfurt a. M. **49** 1936 pp. 467-470, 6 figs. [Hem.]

1217. — Gunn, D. L. & Kennedy, J. S. Apparatus for investigating the reactions of land Arthropods to humidity. J. exp. Biol., London **13** 1936 pp. 450-459, 5 figs.

1218. — Gunn, D. L. & Notley, F. B. The temperature and humidity relations of the cockroach. IV. Thermal death-point. J. exp. Biol., Cambridge **13** 1936 pp. 28-34, 4 figs. [Orth.]

1219. — Günther, K. Neue Curculioniden von Borneo (Coleoptera). Arb. morph. taxon. Ent. Berlin **3** 1936 pp. 125-130, 3 figs.

1220. — Günther, K. Phasmoiden aus Centralborneo gesammelt von Dr. Mjöberg 1925-1926. Ark. Zool., Stockholm **28A** 1935, no. 9, 29 pp. 9 figs. [Orth.]

1221. — Günther, K. Notizen über Rüsselkäfer aus Costa Rica. Ent. Rdsch., Stuttgart **53** 1936 pp. 190-192, 3 figs. [Col.]

1222. — Günther, K. Ueber Käfer der von S. und J. Waehner am oberen Amazonas gesammelten Insektenausbeute. Ent. Rdsch., Stuttgart **53** 1936 pp. 271-276, 2 figs. [Col.]

1223. — Günther, K. Die von Gerd Heinrich 1930-1932 auf Celebes gesammelten Phasmoiden. Mitt. zool. Mus. Berlin **21** (1935) 1936 pp. 1-29, 2 pls. [Orth.]

1224. — Günther, K. Neue Calandriden (Col. Curcul.) aus dem Zoolog. Museum Berlin, mit einer Uebersicht über die Gattung *Omotemnus* Chev. Mitt. zool. Mus. Berlin **21** (1935) 1936 pp. 65-78, 5 figs.

1225. — Günther, K. Phasmoiden und Acrydiinen (Orthoptera) von Holländisch Neu Guinea hauptsächlich aus den Ausbeuten der Herren Docters van Leeuwen (1926), Van Heurn (1920), P. N. Van Kampen und K. Gjellerup (1910). Nova Guinea, Leide **17** 1936 Zool. pp. 323-352, 38 figs.

1226. — Günther, K. Bestimmungstabelle der Gattung *Sphenocorynus* Schönh. (Col., Curcul., Calandr.). Stettin. ent. Ztg. **97** 1936 pp. 99-108, 2 figs.

Günther, K. *see* Heller & Günther.

1227. — Gurney, A. B. The external morphology and phylogenetic position of the woodland cave cricket (*Ceuthophilus brevipes* Scudder; Orthoptera, Tettigoniidae). J. N. York ent. Soc. **44** 1936 pp. 281-314, 3 pls.

1228.—Gussakovskii, V. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 41. Hymenoptera. 6. Sphegidae. Ark. Zool., Stockholm 27A (sep. dated 1934) 1936 no. 21, 13 pp. 6 figs.

1229.—[Gussakovskii, V. V.] Гуссаковский, В. В. Eine neue Art der Gattung *Cephalonomia* Westw. (Hymenoptera, Bethyridae). Parasit von *Silvanus surinamensis* L. [In Russian with Latin description.] Rev. Ent. U.R.S.S., Leningrad 25 1935 pp. 229-231, 5 figs.

1230.—[Gussakovskii, V. V.] Гуссаковский, В. В. Sphecoidea und Vespoidea von Tadjikistan. [In Russian with Latin descriptions.] Trud. Tadzhih Sect. Acad. Sci. S.S.R., Moscow 5 (Zool. & Parasit.) 1935 pp. 409-467, 23 figs. [Hym.]

1231.—[Gussakovskii, V. V.] Гуссаковский, В. В. Apidologische Miszellen. [Latin descriptions.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Moscow 2 1936 pp. 735-757, 7 figs. [Hym.]

1232.—[Gussakovskii, V.] Гуссаковский, В. Les espèces paléarctiques du genre *Trypoxylon* Latr. (Hymenoptera, Sphecidae). [In Russian with Latin descriptions.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad 3 1936 pp. 639-667, 1 pl.

1233.—Guthörl, P. Neue Beiträge zur Insekten-Fauna des Saar-Carbons. Senckenbergiana, Frankfurt a. M. 18 1936 pp. 82-112, 4 pls. 18 figs. [Fossil.]

1234.—Gwin, C. M. Further developments concerning wax production by the honeybee colony. I. A study of the production of wax scales and comb building. J. econ. Ent., Geneva, N.Y. 29 1936 pp. 318-321, 3 figs. [Hym.]

1235.—Hackett, L. W. Les races d'*Anopheles maculipennis*. Riv. Malar., Rome 14 1935 Suppl. (Conf. Malar.) pp. 48-57. [Dipt.]

Hadyinicolaou, J. see Shannon & Hadyinicolaou.

Hager, A. see Janes & Hager.

1236.—Haig, E. F. G. The butterflies of Nigeria. Nigerian Field, London 5 1936 pp. 12-28, 114-128, 21 figs. [Lep.]

1237.—Haig-Thomas, P. Bulgarian Rhopalocera, June and July, 1933. Entomologist, London 69 1936 pp. 101-103, 136-139.

Halder, K. C. see Smith, Mukerjee, Halder & Lal.

1238.—Hale, H. M. Some aquatic Hemiptera from Western Australia. Trans. Proc. R. Soc. S. Aust., Adelaide 59 1935 pp. 249-251, 1 fig.

1239.—Hall, A. The butterflies of St. Kitts. Entomologist, London 69 1936 pp. 274-278.

Hall, B. V. see Brown & Hall.

1240.—Hall, F. T. The occurrence of unusual Rhopalocera in Indiana. Proc. Ind. Acad. Sci., Indianapolis 45 (1935) 1936 pp. 273-274.

1241.—Hallett, H. M. Insects of Glamorgan. Glamorgan County History, Cardiff 1 1936 pp. 312-375.

1242.—Hambleton, E. J. Notas sobre Pseudococcinae de importancia economica no Brasil com a descripção de quatro especies novas. Arch. Inst. Biol. São Paulo 6 1935 pp. 105-120, 3 pls. 15 figs. [Hem.]

1243.—Hambleton, E. J. & Forbes, W. T. M. Uma lista de Lepidoptera (Heterocera) do Estado de Minas Geraes. Arch. Inst. Biol. São Paulo 6 1935 pp. 213-256.

Hambleton, E. J. see Drake & Hambleton.

1244.—Hamilton, A. G. Miscellaneous observations on the biology of *Apanteles glomeratus* L. (Braconidae) [contd.]. Ent. mon. Mag., London 72 1936 pp. 24-27, 1 pl.

1245.—Hamilton, A. G. The relation of humidity and temperature to the development of three species of African locusts—*Locusta migratoria migratorioides* (R. & F.), *Schistocerca gregaria* (Forsk.), *Nomadacris septemfasciata* (Serv.). Trans. R. ent. Soc. London 85 1936 pp. 1-60, 2 pls. 26 figs. [Orth.]

1246.—Hamilton, A. G. & Milnthorpe, W. M. On an abnormality of the eighth abdominal segment in females of *Locusta migratoria* L. (Orthoptera). Proc. R. ent. Soc. London (A) 11 1936 pp. 29-32, 6 figs.

1247. — **Hammer, K.** Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 43. Hymenoptera. 8. Scolitiden, Mutilliden u. Chrysididen. Ark. Zool., Stockholm **27A** (sep. dated 1934) 1936 no. 23, 3 pp.

1248. — **Hammer, O. H.** The biology of the apple curculio (*Tachypterellus quadrigibbus* Say). Tech. Bull. N. York agric. Exp. Sta., Geneva, N.Y. no. **240** 1936 50 pp. 17 figs. [Col.]

1249. — **Hamner, A. L.** The gross anatomy of the alimentary canal of *Solubea pugnax* (Fab.) (Heteroptera, Pentatomidae). Ohio J. Sci., Columbus **36** 1936 pp. 157–160, 1 fig.

1250. — **Handlirsch, A. & Beier, M.** Neunte Ueberordnung der Pterygoenea: Neuropteroidea oder Planipennia. In Kükenthal Handb. Zool., Berlin **4** 1936 Hfte 2 Lief. 6 pp. 1437–1466, 45 figs.

1251. — **Handlirsch, A. & Beier, M.** Zehnte Ueberordnung der Pterygoenea: Panorpoidea. In Kükenthal. Handb. Zool., Berlin **4** 1936 Hfte 2 Lief. 6 pp. 1467–1553, 108 figs. [Mecopt. Trichopt.]

Hänel, K. see Minckwitz & Hänel.

1252. — **Hanitsch, R.** Fauna Buruana. Blattidae. Treubia, Buitenzorg **7** Suppl. 1936 pp. 389–400, 10 figs. [Orth.]

1253. — **Hansen, V.** Tillaeg til Danmarks Fauna, 26. Bind. Biller V. Aadselbiller, Stumpbiller m.m. Ent. Medd., Copenhagen **19** 1936 pp. 423–442, 5 figs. [Col.]

1254. — **Hanson, A. J. & Webster, R. L.** The pea moth *Laspeyresia nigricana* Steph. Bull. Washington Agric. Exp. Sta., Pullman no. **327** 1936 22 pp. 5 pls. 5 figs. [Lep.]

1255. — **Hanström, B.** Ueber eine Substanz im Insektenkopf, die zusammenballend auf das Pigment der Garneelenkromatophoren wirkt. K. fysiogr. Sallsk. Lund Forh. **6** no. 8 1936 5 pp.

1256. — **Hanström, B.** Ein eigenartiges Rhynchotengehirn. Opusc. ent., Lund **1** 1936 pp. 20–26 3 figs.

1257. — **Hardouin, R.** Deuxième note sur les Cynipides. Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) **4** 1936 pp. 42–43. [Hym.]

1258. — **Hardy, G. A.** Notes on Vancouver Island Cerambycidae. Rep. prov. Mus. nat. Hist. Victoria, B.C. **1935** 1936 pp. 34–35. [Col.]

1259. — **Hardy, G. H.** Notes on Sarcophaginae in India and Australia. Proc. Linn. Soc. N.S.W., Sydney **61** 1936 pp. 89–97. [Dipt.]

1260. — **Harland, S. C.** Genetic behaviour of a mutant in a Trinidad cotton stainer (*Dysdercus virichi*). Trop. Agriculture, Trinidad **12** 1936 p. 256. [Hem.]

1261. — **Harnisch, O.** Primäre und sekundäre Oxybiose der Larve von *Chironomus thummi* (nebst ergänzenden Messungen an *Tubifex tubifex*). Z. vergl. Physiol., Berlin **23** 1936 pp. 391–419, 5 figs. [Dipt.]

1262. — **Harnly, M. H.** The temperature-effective periods and the growth curves for length and area of the vestigial wings of *Drosophila melanogaster*. Genetics, Menasha **21** 1936 pp. 84–103, 7 figs. [Dipt.]

Harnly, M. H. see Ephrussi & Harnly; Khouvine, Ephrussi & Harnly.

Harris, H. H. see Searls & Harris.

1263. — **Harris, H. M., Drake, C. J. & Tate, H. D.** Observations on the onion thrips. Iowa St. Coll. J. Sci., Ames **10** 1936 pp. 155–172, 3 pls. 4 figs. [Thysanopt.]

1264. — **Harris, H. M. & Johnston, H. G.** A new genus and species of Podopidae and a new *Coenus* (Hemiptera: Scutelleroideae). Iowa State Coll. J. Sci. **10** 1936 pp. 377–380, 1 map.

Harris, H. M. see Drake & Harris.

Harris, N. H. Vicars- see Vicars-Harris.

1265. — **Harris, W. V.** A list of the termites of Tanganyika Territory, with descriptions of two new species. Bull. ent. Res., London **27** 1936 pp. 361–368, 3 figs. [Isopt.]

1266. — **Hartig, F.** Descrizione di tre nuove specie, e revisione del gen. *Lepidoscioptera* D. Torre (*Scioptera* Rmb.) (Lep. Psychidae). Mem. Soc. ent. ital., Genoa **15** 1936 pp. 35–41, 4 figs. 10 pls.

1267. — Hartig, F. Neue Westpalaearktische Lepidopteren. Z. öst. EntVer., Vienna 21 1936 pp. 41-46.

1268. — Hartzell, A. Histopathology of nerve lesions of *Cicada* after paralysis by the killer-wasp. Contr. Boyce Thompson Inst., Wisconsin 7 1935 pp. 421-425, 1 pl. [Hem.]

Hartzell, A. see Flemion & Hartzell.

1269. — Hase, A. Ueber das Leben der staatenbildenden Wespe *Polybia atra* Sauss. Ein Beitrag zur Kenntnis der Tierwelt Venezuelas. S.B. Ges. naturf. Fr. Berlin 1936 1936 pp. 1-51, 17 figs. [Hym.]

1270. — Hashimoto, G. Studies on the Saúva, leaf-carrying ant, in Brazil. [In Japanese.] Ent. World, Tokyo 4 1936 pp. 358-374, 1 pl. 15 figs. [Hym.]

1271. — Haskins, C. P. & Enzmann, E. V. X-ray studies in the genetics and morphogenesis of *Drosophila melanogaster*. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 59. [Dipt.]

1272. — Hatch, M. H. Studies on *Pterostichus* (Carabidae; Coleoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 701-706.

1273. — Hatch, M. H. Studies on Leioididae. J. New York ent. Soc. 44 1936 pp. 33-41. [Col.]

1274. — Haupt, H. Zur Kenntnis der Psammochariden-Fauna Italiens. IV. Boll. Ist. Ent. Univ. Bologna 8 1936 pp. 150-168, 9 figs. [Hym.]

1275. — Havas, L. Action d'une boue radioactive sur l'orientation des larves du *Tenebrio molitor* L. [In French with Magyar summary.] Arb. ung. biol. Forsch.-Inst., Tihany 8 1936 pp. 74-81, 3 figs. [Col.]

1276. — Haverhorst, P. De nestbouw van *Megachile centuncularis* L. Ent. Ber., Amsterdam 9 1936 pp. 288-290. [Hym.]

1277. — Haydak, M. H. Is wax a necessary constituent of the diet of wax moth larvae? Ann. ent. Soc. Amer., Columbus 29 1936 pp. 581-588.

1278. — Hayes, W. P. Structural differences between greater and lesser wax moth. J. econ. Ent., Menasha, Wisc. 29 1936 pp. 1055-1058, 10 figs. [Lep.]

1279. — Hayes, W. P. Two new species of *Cosmobaris* (Curculionidae, (Coleop.)). J. Kans. ent. Soc., McPherson 9 1936 pp. 26-29.

Hayes, W. P. see Wormser & Hayes.

1280. — Hayward, K. J. Notes on Egyptian Lepidoptera observed at Reservoir, Aswan, between October, 1919, and April, 1922. — V. Pyralidae. Ent. Rec., London 48 1936 sep. pp. 1-4.

1281. — Hayward, K. J. *Phyciodes liriope* (Cramer) (Lep. Nymph.) synonymia y distribución, especialmente de formas argentinas. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 219-223.

1282. — Hayward, K. J. Revision de las especies argentinas del género *Actinote* (Lep. Nymphal.). Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 93-97, 1 pl.

1283. — Hayward, K. J. Hesperidae (Lep.) argentinos. Notas y adiciones, con descripción de una nueva especie. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 131-137.

1284. — Hayward, K. J. Revision de especies argentinas de Pyrrhopyginae (Lep. Hesp.). Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 123-129, 1 pl.

1285. — Hayward, K. J. Notas sobre Lepidopteros (Rhop.) argentinos con descripción de nuevas especies y formas. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 183-193, 1 pl. 1 fig.

1286. — Hayward, K. J. Random notes on Argentine collecting. Ent. Rec., London 48 1936 pp. 111-113, 117-119.

1287. — Hayward, K. J. Six months collecting along the Alto Parana, Argentina. Proc. S. London Ent. nat. Hist. Soc. 1935-36 1936 pp. 55-83, 3 pls. 2 maps.

1288. — Hebard, M. Notes on North American Orthoptera of the Arctic-Alpine zone. Ent. News, Philadelphia 47 1936 pp. 13-15.

1289. — Hebard, M. Orthoptera of North Dakota. Tech. Bull. N. Dakota Agric. exp. Sta., Fargo, N.D. no. 284 1936 66 pp.

1290.—Hebard, M. New genera and species of the Melanopli found within the United States and Canada (Orthoptera: Acrididae). Parts VII, VIII and IX. Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 167–222, 6 pls.

1291.—Hebard, M. Studies in Orthoptera which occur in North America north of the Mexican boundary. VI. A revision of the genus *Arethaea*. (Tettigoniidae, Phaneropterinae). Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 231–256, 2 pls.

1292.—Heberdey, R. F. Revision der *Tomoderus*-Arten von Indien, dem malayischen Archipel und von Australien (Col., Anthicidae). Festschr. 60. Geburtst. E. Strand, Riga 2 1936 pp. 246–256.

1293.—Heberdey, R. F. Revision der paläarktischen Arten der Gattung *Notoxus* Geoffr. I. Die Verwandten des *Notoxus monoceros* L. Koleopt. Rdsch., Vienna 22 1936 pp. 125–180 7 figs. 3 maps.

1294.—Heberdey, R. F. A new genus of Anthicidae with three species from South India (Col.). Proc. R. ent. Soc. London (B) 5 1936 pp. 5–8.

1295.—Heberdey, R. F. Eine Hylophiliden-Ausbeute von Sumatra (Col.). Treubia, Buitenzorg 15 1936 pp. 363–366.

1296.—Hecht, O. Studies on the biology of *Chilocorus bipustulatus* (Coleoptera—Coccinellidae) an enemy of the red scale *Chrysomphalus aurantii*. Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 299–326, 2 figs. 2 graphs 9 tables.

1297.—Hedicke, H. Tiphiidae. Hymenopt. Catalogus, 's-Gravenhage 1 1936 32 pp.

1298.—Hedicke, H. Neue Arten der Gattung *Anthophora* Latr. aus Palästina (3. Beitrag zur Kenntnis der Gattung *Anthophora*) (Hym. Apid.). S.B. Ges. naturf. Fr. Berlin 1935 1936 pp. 397–402, 1 fig.

Hedicke, H. see Engel & Hedicke.

Heerden, P. W. van see Ripley, Petty & van Heerden.

1299.—Heese, A. Ueberwinterung von *Pyrameis atalanta* L. Ent. Z., Frankfurt a. M. 50 1936 pp. 91–97. [Lep.]

1300.—Heese, A. Melanismus? Ent. Z., Frankfurt a. M. 50 1936 pp. 112–120.

1301.—Hegh, E. Les termites. Brussels, Minist. Colon. 1935 36 pp. 31 figs. [Isopt.]

1302.—Heidt, K. Ueber das Leuchten der Collembolen *Onychiurus armatus* Tbg. und *Achorutes muscorum* Templ. Biol. Zbl., Leipzig 56 1936 pp. 100–109.

1303.—Heikertinger, F. Die Mimikrymodelle der Tagfalter Afrikas und ihr "Ekelgeschmack." (Kritik der Schmetterlingsmimikry. IV.) Biol. Zbl., Leipzig 56 1936 pp. 151–166. [Lep.]

1304.—Heikertinger, F. Werden die Tagfalter von Vögeln gejagt? (Kritik der Schmetterlingsmimikry, V.) Biol. Zbl., Leipzig 56 1936 pp. 463–494. [Lep.]

1305.—Heikertinger, F. Noch ein Wort über Wespenmimikry. Z. Morph. Oekol. Tiere, Berlin 31 1936 pp. 268–293. [Hym.]

1306.—Hein, S. Einiges über die ersten Stände von *Erebia stygna* O. (Lepidoptera). Z. öst. EntVer., Vienna 21 1936 pp. 5–6. [Lep.]

1307.—Heinänen, V. L. Einige Beobachtungen zur Biologie der Psychidae (Lep.). [In Finnish with German summary.] Ann. ent. fenn., Helsingfors 2 1936 pp. 169–172.

1308.—Heinrich, G. Zur Systematik der Ichneumonidae stenopneusticae VII. (Hym.) Dtsch. ent. Z., Berlin 1935 1936 pp. 191–200.

1309.—Heinrich, G. Mission scientifique de l'Omo. Hymenoptera. III. Ichneumonidae: Ichneumoninae. Mém. Mus. Hist. nat. Paris 4 1936 pp. 227–244.

1310.—Heinrich, G. Die von mir in Bulgarien gesammelten Ichneumoninae und Cryptinae (Insecta, Hymenoptera). Mitt. naturw. Inst. Sofia 9 1936 pp. 81–88, 2 figs.

1311.—Heinrich, G. Ichneumoninae Podoliens. Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 21–42, 1 fig. [Hym.]

1312.—Heinze, E. Die Cricocerinen Afrikas. Ent. Bl., Crefeld 43 1936 pp. 252–261, 7 figs.

1313.—Heinze, K. Der Rassenkreis *Brachyplatys translineatus* Walk. (Hem. Platasp.). Dtsch. ent. Z., Berlin 1935 1936 pp. 201–206, 8 figs.

1314.—Heiss, E. M. A short-tailed larva of the genus *Drosophila*. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 617–619, 9 figs. [Dipt.]

1315.—Heldmann, G. Ueber die Entwicklung der polygynen Wabe von *Polistes gallica* L. Arb. phys. angew. Ent. Berlin 3 1936 pp. 257–259. [Hym.]

1316.—Heldmann, G. Ueber einige Hymenopteren in den Sandgebieten an der hessischen Bergstrasse. Ent. Rdsch., Stuttgart 53 1936 pp. 102–104, 1 pl.

1317.—Heldmann, G. Schutz der Natur vor unberufenen Schreibern. Ent. Rdsch., Stuttgart 53 1936 pp. 129–132.

1318.—Heldmann, G. Ueber das Leben auf Waben mit mehreren überwinterten Weibchen von *Polistes gallica* L. Biol. Zbl., Leipzig 56 1936 pp. 389–401. [Hym.]

1319.—Hellén, W. Koleopterologische Mitteilungen aus Finnland. xiv. Notul. ent., Helsingfors 16 1936 pp. 33–38.

1320.—Hellén, W. Verzeichnis der in Jahren 1931–1933 für die Fauna Finnlands neu hinzugekommenen Insektenarten. Notul. ent., Helsingfors 16 1936 pp. 43–63.

1321.—Hellén, W. Für die Fauna Finnlands neue Ichneumoniden (Hym.). I. Ichneumoninae. Notul. ent., Helsingfors 16 1936 pp. 101–109.

1322.—Heller, J. Les composés phosphoriques chez la nymphe et le papillon de *Deilephila euphorbiae*. C.R. Soc. Biol., Paris 121 1936 pp. 414–416. [Lep.]

1323.—Heller, K. M. Ein neuer schädlicher Rüsselkäfer aus der Frucht von *Phoebe elongata* aus Costa Rica (Coleoptera: Curculionidae). Arb. morph. tax. Ent. Berlin 3 1936 pp. 140–142, 3 figs.

1324.—Heller, K. M. Ergänzende Bemerkung über kartoffelschädigende Rüsselkäfer (Coleoptera: Curculionidae). Arb. physiol. angew. Ent. Berlin 3 1936 pp. 284–285, 1 fig.

1325.—Heller, K. M. & Günther, K. Ueber einige von H. Overbeck 1933–34 auf Java gesammelte Insekten. Tijdschr. Ent., Amsterdam 79 1936 pp. 64–76, 1 pl.

1326.—Hemming, F. The type of the genus *Actinote* Hübner [1819] (Lep. Nymphalidae)—a case for consideration by the International Commission on Zoological Nomenclature. Proc. R. ent. Soc. London (B) 5 1936 pp. 56–57.

1327.—Hemming, F. On the identity and systematic position of eight species of Rhopalocera described by Jacob Hübner in his *Der Schmetterlinge Lepidoptera* Linnei [1790]–[1793]. Proc. R. ent. Soc. London (B) 5 1936 pp. 121–125.

1328.—Hendel, F. Agromyzidae [end]. In Lindner Flieg. palaearkt. Reg. 59 1936 pp. 513–570, 2 pls., 2 figs.

1329.—Hendel, F. & Beier, M. Ordnung der Pterygonea: Diptera = Fliegen. In Kükenthal, Handb. Zool., Berlin 4 1936 Hfte 2 Lief. 8, 9, 10 pp. 1729–1980, 304 figs.

1330.—Hendel, F. Ergebnisse einer zoologischen Sammelreise nach Brasilien, insbesondere in das Amazonasgebiet, ausgeführt von Dr. H. Zerny. X. Teil. Diptera: Muscidae acalyptratae (excl. Chloropidae). Ann. naturh. Mus. Wien 47 1936 pp. 61–106, 5 figs.

1331.—Henke, K. Versuch einer vergleichenden Morphologie des Flügel-musters der Saturniden auf entwicklungsphysiologischer Grundlage. Nova Acta Leop. Carol., Halle (N.F.) 4 1936 no. 18 137 pp. 55 pls. [Lep.]

Henke, K. see Kühn & Henke.

1332.—Henneberg, B. Ueber Schutz-trachten bei Insekten. Ber. oberhess. Ges. Giessen (N.F.) 16 (1933–35) 1935 pp. 190–195.

1333.—Hennig, W. Beiträge zur Systematik und Tiergeographie der Pyrgotiden (Diptera). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 243–256, 2 figs.

1334.—Hennig, W. Beiträge zur Kenntnis des Kopulations-apparates und der Systematik der Tanypeziden (Dipt., Acalypt.). Dtsch. ent. Z., Berlin 1936 pp. 27–38, 3 figs.

1335.—Hennig, W. Systematisch-tiergeographische Beiträge zur Kenntnis der Tethiniden (Dipt., Acalypt.). Ent. Rdsch., Stuttgart 54 1936 pp. 136–140, 1 map, 2 figs.

1336.—Hennig, W. Revision der Tyliden (Dipt., Acalypt.). II. Teil. Konowia, Vienna 15 1936 pp. 129–144, 201–239, 15 figs. 2 maps.

1337.—Hennig, W. Beziehungen zwischen geographischer Verbreitung und systematischer Gliederung bei einigen Dipterenfamilien: ein Beitrag zum Problem der Gliederung systematischer Kategorien höherer Ordnung. Zool. Anz., Leipzig 116 1936 pp. 161–175, 3 figs.

1338.—Hennig, W. Der männliche Kopulationsapparat der Diptera. III, Psychodidae und Asilidae. Zool. Anz., Leipzig 114 1936 pp. 177–186, 5 figs.

1339.—Hennig, W. Beiträge zur Kenntnis des Kopulationsapparates der Cyclorrhaphen Dipteren. Z. Morph. Oekol. Tiere, Berlin 31 1936 pp. 328–370, 20 figs.

1340.—Henriksen, K. L. Oversigt over Dansk Entomologis Histoire. [Contd.] Ent. Medd., Copenhagen 15 1936 pp. 289–480, 69 figs.

1341.—Henseler, K. Die rheinischen Arten und Rassen der Gattung *Carabus* Lin. (Coleoptera). Decheniana, Bonn 92 1935 pp. 171–176.

1342.—Hepp, A. Parthenogenesis bei *Orygia antiqua*. Ent. Rdsch., Stuttgart 53 1936 pp. 294–295. [Lep.]

1343.—Hepp, A. Kommt *Onthophagus gibbosus* Scriba in Deutschland vor? (Col. Scarabaeidae). Ent. Rdsch., Stuttgart 53 1936 pp. 276–278.

1344.—Hepp, A. Ueber Farbenformen von Schmetterlingspuppen. Ent. Rdsch., Stuttgart 53 1936 pp. 350–351. [Lep.]

1345.—Hepp, A. Die Tagfalter, Diurna der Umgebung von Frankfurt (Main). Ent. Rdsch., Stuttgart 53 1936 pp. 400–405, 412–414, 430–432. [Lep.]

1346.—Hepp, A. Bibliographische und andere Bemerkungen zum Coleopterum Catalogus Pars 46: A. Boucomont Scarabaeidae: Taurocerastinae, Geotrupinae—Zutrag II—und eine

Form von *Thorectes intermedius*, f. *montenegrina*. Ent. Rdsch., Stuttgart 54 1936 pp. 25–27.

1347.—Herfs, A. Oekologisch-physiologische Studien an *Anthrenus fasciatus* Herbst. Zoologica, Stuttgart 34 1936 pp. 1–96, 3 pls. [Col.]

1348.—Hering, M. Die Blatt-Minen Mittel- und Nord-Europas. Bestimmungstabellen aller von Insekten-Larven der verschiedenen Ordnungen erzeugten Minen. Neubrandenburg, G. Feller; 's-Gravenhage, W. Junk 1936 Lief. 2 pp. 113–336, 4 pls. 174 figs.

1349.—Hering, M. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 40. Lepidoptera. 4. Bombyces. Ark. Zool., Stockholm 27A 1936 no. 32, 7 pp.

1350.—Hering, M. Dualspecies und Unterart-Entstehung *Ceriocera ceratocera* (Hend.) u. subsp. *microceras* nov. (Dipt.). Dtsch. ent. Z., Berlin 1935 1936 pp. 207–211, 2 figs.

1351.—Hering, M. Agromyziden-Nachlese (Dipt.). Neue *Liriomyza*- und *Phytomyza*-Arten. Dtsch. ent. Z., Berlin 1936 1936 pp. 73–86.

1352.—Hering, M. Blattminen von Spanien. Eos, Madrid 11 1936 pp. 331–384, 1 pl. 15 figs.

1353.—Hering, M. Zur Systematik und Biologie palaearktischer Bohrfliegen. Konowia, Vienna 15 1936 pp. 54–64, 6 figs. [Dipt.]

1354.—Hering, M. Bohrfliegen aus der Mandschurei. Konowia, Vienna 15 1936 pp. 180–189, 8 figs. [Dipt.]

1355.—Hering, M. Acraeiden Studien I. (Lep.). Die geographischen Unterarten von *Planema poggei* Dew. Mitt. dtsch. ent. Ges., Berlin 7 1936 pp. 21–22.

1356.—Hering, M. Neue sudamerikanische *Trypanea*-Arten (Dipt. Trypetidae). Rev. Ent., Rio de Janeiro 6 1936 pp. 327–332, 4 figs.

1357.—Hering, M. Subspecies in statu nascendi. 12. Beitrag zur Kenntnis der Trypetidae (Dipt.). Zool. Anz., Leipzig 114 1936 pp. 266–271.

1358.—Heriot, A. D. Notes on the moulting of mites and insects. Proc. ent. Soc. Br. Columbia, Victoria no. 32 1936 pp. 8–10.

1359.—L'Héritier & Teissier, G. Contribution à l'étude de la concurrence larvaire chez les Drosophiles. C.R. Soc. Biol., Paris **122** 1936 pp. 264-267. [Dipt.]

1360.—Herman, M. Considérations sur la structure de l'aile des papillons. Bull. Nat. Mons **15-16** 1932-34 pp. 219-220. [Lep.]

Herms, W. B. *see* Frost, Herms & Hoskins.

Hersh, A. H. *see* Clark & Hersh.

1362.—Herzig, E. Zu *Colias croceus* Fourc. Seine Flugzeiten und Generationen. Ent. Z., Frankfurt a. M. **50** 1936 pp. 79-81. [Lep.]

1363.—Heslop-Harrison, G. A contribution to our knowledge of the Psyllidae of the Hebrides. Ent. mon. Mag., London **72** 1936 pp. 48-51. [Hem.]

1364.—Heslop-Harrison, G. Coleoptera of the Outer Hebrides, with an account of a new British species, *Deronectes canariensis* Bedel. Ent. mon. Mag., London **72** 1936 pp. 52-53.

1365.—Heslop-Harrison, G. Observations on the biology of certain British Psyllidae. Entomologist, London **69** 1936 pp. 175-177. [Hem.]

1366.—Heslop-Harrison, G. Psyllidae in certain Highland counties. Scot. Nat., Edinburgh no. **220** 1936 pp. 120-122. [Hem.]

1367.—Hesse, A. J. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930. Bombyliidae (Diptera). Ann. Transv. Mus., Pretoria **17** 1936 pp. 161-184, 5 figs.

1368.—Hesse, A. J. The sound-producing or stridulating organs of a few Peninsula insects. Cape Nat., Cape Town **1** 1936 pp. 70-76, 7 figs.

1369.—Hester, E. C. & Cunningham, B. The effects of endocrines on the developmental rates of flesh flies. J. Elisha Mitchell sci. Soc., Chapel Hill **52** 1936 pp. 38-50. [Dipt.]

1370.—Hetrick, L. A. The morphology of the head of the scorpion-fly (*Panorpa nuptialis* Gerst. (Mecoptera)). Proc. Louisiana Acad. Sci., Baton Rouge **2** 1935 pp. 113-120, 4 figs.

1371.—Hewes, L. I. Butterflies—try and get them. Nat. geogr. Mag., Washington **69** 1936 pp. 667-672, 674-675, 678, 10 figs. [Lep.]

1372.—Heydemann, F. Beitrag zur Kenntnis von *Lythria purpuraria* L. und *L. purpurata* L. (Lep. Geom.). Ent. Z., Frankfurt a. M. **50** 1935 pp. 159-164, 173-176, 185-188, 3 pls.

1373.—Heydemann, F. Beitrag zur Kenntnis einiger nordischer und ostsibirischer Geometriden. Iris, Dresden **50** 1936 pp. 23-40, 2 pls. [Lep.]

1374.—Heyrovský, L. Dritter Beitrag zur Kenntnis der Gruppe Lepturini (Col. Ceramb.). Acta Soc. ent. Čsl., Prague **33** 1936 pp. 52-57, 1 fig.

1375.—Heyward, F. & Tissot, A. N. Some changes in the soil fauna associated with forest fires in the longleaf pine region. Ecology, Brooklyn, N.Y. **17** 1936 pp. 659-660, 2 figs.

1376.—Hicks, C. H. Nesting habits of certain western bees. Canad. Ent., Orillia **68** 1936 pp. 47-52. [Hym.]

1377.—Hicks, C. H. *Tracheloides hicksi* Sandhouse hunting ants (Hymen.: Sphecidae). Ent. News, Philadelphia **47** 1936 pp. 4-7.

1378.—Hill, R. E. A new bee of the genus *Coelioxys* from Nebraska (Hymenopt.: Megachilidae). Ent. News, Philadelphia **47** 1936 pp. 205-208.

1379.—Hiller, R. Zu dem Aufsatz: "Die Bedrohung der deutschen Fauna." Ein Wort über Klagerufe. Ent. Z., Frankfurt a. M. **50** 1936 pp. 315-316.

1380.—Hilton, W. A. Campodea from the United States. J. Ent. Zool., Claremont **28** 1936 pp. 5-10, 3 figs. [Thysanura.]

1381.—Hilton, W. A. Nervous System and Sense Organs. LVII-LX. J. Ent. Zool., Claremont **28** 1936 pp. 11-12, 1 fig., pp. 28-38, 4 figs.; pp. 47-53, 2 figs. pp. 65-73.

1382.—Hincks, W. D. Results of the Oxford University expedition to Borneo, 1932 (Passalidae, Coleoptera). Ent. mon. Mag., London **72** 1936 pp. 155-159.

1383.—Hincks, W. D. Chironomidae (Diptera) from Grisedale Tarn, Westmorland. *J. Soc. Br. Ent.*, Southampton 1 1936 pp. 151-153, 1 fig.

1384.—Hincks, W. D. A new *Diplatys* (Dermaptera) from the Belgian Congo. *Proc. R. ent. Soc. London (B)* 5 1936 pp. 126-128, 2 figs.

1385.—Hinman, E. H. Studies upon the problem of races of *Anopheles quadrimaculatus* Say in the United States. *Amer. J. trop. Med.*, Baltimore 16 1936 pp. 303-309. [Dipt.]

1386.—Hinton, H. E. New species of *Atenius* allied to *A. cribrithorax* Bates (Coleoptera, Scarabaeidae). *Ann. Mag. nat. Hist.*, London (10) 17 1936 pp. 413-428, 13 figs.

1387.—Hinton, H. E. Lepiceridae—a new name for the Cyathoceridae. *Lepicerinus*—a new name for the Scolytid genus *Lepicerus* Eichh. (Coleoptera). *Ann. Mag. nat. Hist.*, London (10) 17 1936 pp. 472-473.

1388.—Hinton, H. E. Results of the Oxford University Expedition to Borneo, 1932. Dryopidae (Coleoptera).—Part I. *Ann. Mag. nat. Hist.*, London (10) 18 1936 pp. 89-109, 204-224, 12 figs.

1389.—Hinton, H. E. A new genus and a new species of Elminae (Coleoptera, Dryopidae). *Ent. mon. Mag.*, London 72 1936 pp. 1-5, 7 figs.

1390.—Hinton, H. E. Synonymical and other notes on the Dryopidae (Coleoptera). *Ent. mon. Mag.*, London 72 1936 pp. 54-58, 2 figs.

1391.—Hinton, H. E. Notes on the genus *Lobogestoria* Reitt. (Coleoptera, Colydiidae). *Ent. mon. Mag.*, London 72 1936 pp. 128-129, 2 figs.

1392.—Hinton, H. E. New Dryopidae from the Japan Empire (Coleoptera). *Entomologist*, London 69 1936 pp. 164-168, 2 figs.

1393.—Hinton, H. E. Descriptions and figures of new Brazilian Dryopidae (Coleoptera). *Entomologist*, London 69 1936 pp. 283-289, 6 figs.

1394.—Hinton, H. E. Notes on some American Colydiidae (Coleoptera). *Ent. News*, Philadelphia 47 1936 pp. 185-189.

1395.—Hinton, H. E. Miscellaneous studies in the Neotropical Colydiidae (Col.). *Rev. Ent.*, Rio de Janeiro 6 1936 pp. 47-97, 10 figs.

1396.—Hinton, H. E. Notes on the biology of *Dryops luridus* Erichson (Coleoptera, Dryopidae). *Trans. Soc. Br. Ent.*, Southampton 3 1936 pp. 67-78, 20 figs.

1397.—Hinton, H. E. Descriptions of new genera and species of Dryopidae (Coleoptera). *Trans. R. ent. Soc. London* 85 1936 pp. 415-434, 1 pl. 43 figs.

1398.—Hinton, H. E. Studies in the Mexican and central American Eupariini (Coleoptera—Scarabaeidae). *Univ. Calif. Pub. Ent.*, Berkeley 6 1936 pp. 273-276, 1 fig.

1399.—Hirschler, J. Ueber die Beziehung des Fusomproblems zur Vererbungslehre. *Zool. polon.*, Lwów 1 1935 pp. 31-51, 3 pls.

1400.—Ho, C. On the blood-sucking Muscidae of Peiping. *Bull. Fan mem. Inst. Biol.*, Peiping 6 1936 pp., 185-206 15 figs.

1401.—Ho, C. On the genus *Sarcophaga* from Hainan. *Bull. Fan mem. Inst. Biol.*, Peiping 6 1936 pp. 207-215, 2 figs. [Dipt.]

1402.—Ho, Kwo-Mo. Studies on the rose-borer, *Neosyrista similis* (Mocsáry) (Hymenoptera: Cephidae). [In Japanese with English summary.] *Bult. sci. Fak. terk. Kjušu Univ.*, Fukuoka 7 1936 pp. 185-210, 1 pl. 7 figs.

1403.—Hobby, B. M. The Ethiopian species of the *fasciata* group of the genus *Bactria* (= *Promachus*) (Diptera, Asilidae). *Ent. mon. Mag.*, London 72 1936 pp. 182-199, 132-249, 274-278, 52 figs.

1404.—Hobby, B. M. Dragonflies and their prey. *Proc. R. ent. Soc. London (A)* 11 1936 pp. 101-103. [Odon.]

1405.—Hobson, R. P. Sheep blow-fly investigations. III, IV. *Ann. appl. Biol.*, Cambridge 23 1936 pp. 845-851, 852-861. [Dipt.]

1406.—Hodge, C. The anatomy and histology of the alimentary tract of the grasshopper, *Melanoplus differentialis* Thomas. *J. Morph.*, Philadelphia 59 1936 pp. 423-434, 2 pls. [Orth.]

1407.—Hoffer, A. Nouvelle Bethylide (Hym.-Vespoid.) de France. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 459-461, 1 fig.

1408.—Hoffer, A. Genus *Mesitius* Thoms. in der Cechoslovakei (Bethylidae, Hym.—Vespoid.). Acta Soc. ent. Csl., Prague 33 1936 pp. 119-124, 1 pl. 4 figs.

1409.—Hoffer, A. Diagnoses novae Mutillidarum Cechosloveniae. Acta Soc. ent. Cech., Prague 33 1936 pp. 157-163, 7 figs. [Hym.]

1410.—Hoffer, A. Oekologische Bemerkungen ueber die Goldwespen. (Hymenopt. Chrysididae). Acta Soc. ent. Cech., Prague 33 1936 pp. 170-171.

1411.—Hoffer, A. Eine neue Art de Familie Dryinidae (Trib. Lestodryinini) aus der Cechoslovakei. Sborn. ent. odd. nár. Mus. Praze 14 1936 pp. 164-166, 1 pl. 1 fig. [Hym.]

1412.—Hoffer, A. Ueber einige interessante Cechoslovakische Mutillidenarten. (Hymenopt.—Vespoidea.) [In Czech with German summary.] Sborn. Kl. přír. Brně 18 1936 pp. 63-65.

1413.—Hoffer, A. Beitrag zur Kenntnis der Goldwespen (Hym.—Chrysididae) der Cechoslovakischen Republik. [In Czech with German summary.] Sborn. přír. Společ. mor. Ostravě 8 (1933-35) 1936 pp. 41-47.

1414.—Hoffmann, A. Description d'un *Bagous* nouveau de la Corse (Col. Curculionidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 61-63.

1415.—Hoffmann, A. Description de deux *Tychius* nouveaux de France (Col. Curculionidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 101-105, 6 figs.

1416.—Hoffmann, A. Catalogue raisonné des Bruchidae du département de Seine-et-Oise. Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) 4 1936 pp. 1-9.

1417.—Hoffmann, A. Sur l'organe génital et la systématique en entomologie. Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) 4 1936 pp. 31-34.

1418.—Hoffmann, A. A propos de quelques espèces de Scolytidae de notre faune et description d'une espèce nouvelle de la Tribu des Ipini (Col.). Misc. ent., Castanet-Tolosan 37 1936 pp. 41-45, 4 figs. [Col.]

1419.—Hoffmann, A. Curculionides nouveaux ou peu connus de la Sierra Nevada. Rev. franç. Ent., Paris 3 1936 pp. 147-151, 8 figs. [Col.]

1420.—Hoffmann, C. A. Additional data on the biology and ecology of *Strigoderma arboricola* Fab. (Scarabaeidae—Coleoptera). Bull. Brooklyn ent. Soc. 31 1936 pp. 108-110.

1421.—Hoffmann, C. C. Relaciones zoogeográficas de los lepidopteros mexicanos. An. Inst. Biol. Mexico 7 1936 pp. 47-58.

1422.—Hoffmann, C. C. Lepidopteros nuevos de Mexico. III. An. Inst. Biol. Mexico 7 1936 pp. 59-64, 3 figs.

1423.—Hoffmann, C. C. Contribuciones al conocimiento de la fauna de Actopan, Hgo. An. Inst. Biol. Mexico 7 1936 pp. 259-263. [Lep.]

1424.—Hoffmann, C. C. Algunas palabras acerca de las razas americanas del *Anopheles maculipennis* Meigen. Rev. Parasit. Clin. Lab., La Habana 2 1936 pp. 403-411. [Dipt.]

1425.—Hoffmann, C. H. A population study of *Cacoecia cerasivorana* Fitch with special reference to its insect parasites (Tortricidae—Lepidoptera). Bull. Brooklyn ent. Soc. 31 1936 pp. 209-211.

1426.—Hoffmann, C. H. The life history of *Serica sericea* (Ill.) (Scarabaeidae—Coleoptera). J. New York ent. Soc. 44 1936 pp. 11-15.

1427.—Hoffmann, F. Beiträge zur Lepidopterenfauna von Sta. Catherina. Ent. Rdsch., Stuttgart 1936 53 pp. 206-207, 221-224, 240, 243, 278-279, 287-288, 435-439, 446-452; 54 pp. 13-16, 23-24, 27-28.

1428.—Hoffmann, F. Bemerkungen zum Aufsatz "Einige interessante Saturnidenzuchten im Spätsommer." Ent. Rdsch., Stuttgart 53 1936 pp. 247-248. [Lep.]

1429.—Hoffmann, F. Die brasilianischen Bärenspinner. I, Ia. Betrachtungen und Vergleiche über die brasilianische Arctiidenfauna. Ent. Rdsch., Stuttgart 53 1936 pp. 493-496, 540-544, 571-572. [Lep.]

1430.—Hoffmann, F. Sta. Catharina und seine Lepidopterenfauna. Ent. Z., Frankfurt a. M. 50 1936 pp. 301-304.

1431.—Hoffmann, R. W. Ueber den Einfluss von natürlichen und künstlichen Druck- und Berührungsreizen auf Haltung und Verhalten der Insekten. Z. vergl. Physiol., Berlin **23** 1936 pp. 504–542, 39 figs.

1432.—Hoffmann, W. E. The bionomics of the rose sawfly, *Arge victorina* Kirby (Hymenoptera: Argidae), with notes on other injurious Tenthredinoid larvae in Kwangtung. Lingnan Sci. J., Canton **15** 1936 pp. 101–112, 1 pl.

1433.—Hoffmann, W. E. The life history of *Limnognonus fossarum* (Fabr.) in Canton (Hemiptera: Gerridae). Lingnan Sci. J., Canton **15** 1936 pp. 289–299, 2 pls.

1434.—Hoffmann, W. E. Life history notes on *Rhagadotarsus kraepelini* Breddin (Hemiptera: Gerridae) in Canton. Lingnan Sci. J., Canton **15** 1936 pp. 477–483, 2 pls.

1435.—Hoffmann, W. H. Die Brutpflege bei den Wanzen. Arb. phys. angew. Ent. Berlin **3** 1936 pp. 286–288, 1 fig. [Hem.]

1436.—Hoffmeyer, S. & Knudsen, S. Sommerfuglenotitser fra Jylland 1926–1935. 6. Supplement til "Jyllands Storsommerfugle." Flora og Fauna, Kjøbenhavn **42** 1936 pp. 49–58. [Lep.]

1437.—Hoffmeyer, S. En aften i Frøslev mose. Flora og Fauna, Kjøbenhavn **1935** 1935 pp. 123–128.

1438.—Holdhaus, K. Zur Kenntnis der Subgenus *Oreorrhynchus* (Col. Curculionidae). Rev. franç. Ent., Paris **3** 1936 pp. 46–53.

1439.—Holik, O. Unstimmigkeiten in der Nomenklatur der Rassen von *Zygaena cynarae* Esp. Ent. Rdsch., Stuttgart **53** 1936 pp. 405–408. [Lep.]

1440.—Holik, O. Observations sur quelques races françaises du genre *Zygaena*. Lambillionea, Brussels **36** 1936 pp. 43–51. [Lep.]

1441.—Holik, O. Le chaos de noms dans le genre *Zygaena* Fabr. Lambillionea, Brussels **36** 1936 pp. 108–117, 127–126.

1442.—Holik, O. A propos de l'emploi des désignations "minor," "nana," "minuscule." Lambillionea, Brussels **36** 1936 pp. 148–149.

1443.—Holik, O. Au sujet de quelques formes et aberrations du genre *Zygaena* F. Lambillionea, Brussels **36** 1936 pp. 167–169. [Lep.]

1444.—Holik, O. A quelle race de *Zygaena carniolica* Scop. la population volant dans la région de Torgny appartient-elle? Lambillionea, Brussels **36** 1936 pp. 174–182. [Lep.]

1445.—Holik, O. *Zygaena occitanica* De Villers. Lambillionea, Brussels **36** 1936 pp. 190–196. [Lep.]

1446.—Hölldobler, K. Beiträge zur Kenntnis der Kolonienegründung der Ameisen. Biol. Zbl., Leipzig **56** 1936 pp. 230–248. [Hym.]

1447.—Hollick, F. S. J. A contribution to the study of insect flight. Abstr. Diss. Univ. Cambridge **1935–36** 1936 p. 35. [Dipt.]

1448.—Hollik, O. Nomenklatur-Sorgen. Ent. Z., Frankfurt a. M. **50** 1936 pp. 321–324, 334–337, 348–352.

1449.—Holmquist, A. M. Studies in Arthropod hibernation. III. Temperatures in forest hibernacula. Ecology, Brooklyn, N.Y. **12** 1931 pp. 387–422, 7 figs.

1450.—Holzapfel, M. Zur Kenntnis der schweizerischen Copeognathenfauna. Rev. suisse Zool., Geneva **43** 1936 pp. 335–357. [Psocopt.]

1451.—Hood, J. D. Nine new Thysanoptera from the United States. J. New York ent. Soc. **44** 1936 pp. 81–100, 1 fig.

1452.—Hood, J. D. Two new *Anactinotrips* from South America (Thysanoptera). Proc. R. ent. Soc. London (B) **5** 1936 pp. 143–147, 1 fig.

1453.—Hood, J. D. Two new Thysanoptera from the United States. Psyche, Boston **43** 1936 pp. 1–9, 2 figs.

1454.—Hood, J. D. Studies in Neotropical Thysanoptera. I, II. Rev. Ent., Rio de Janeiro **6** 1936 pp. 248–279, 4 figs., 424–460 5 figs.

1455.—Hopkins, G. H. E. Mosquitoes of the Ethiopian Region. I. Larval bionomics of mosquitoes and taxonomy of Culicine larvae. London, Br. Mus. (Nat. Hist.), Quaritch etc. 1936 250 pp. 158 figs. [Dipt.]

1456.—Hopping, G. F. Entomological illustrating. Proc. ent. Soc. Br. Columbia, Victoria no. 32 1936 pp. 20–22.

1457.—Hopping, G. R. & Leech, H. B. Sawfly biologies. I. *Neodiprion tsugae* Middleton. Canad. Ent., Orillia 68 1936 pp. 71–79, 2 pls.

1458.—Hopping, R. A revision of the genus *Macropogon* Motsch. Pan-Pacific Ent., San Francisco 12 1936 pp. 45–48. [Col.]

1459.—Hörberg, T. Fynd av *Notonecta* i nordvästra Skåne. Opusc. ent. Lund 1 1936 pp. 41–42. [Hem.]

1460.—Hörhammer, C. Einige Bemerkenswerte und neue Funde für Südbayern. Ent. Z., Frankfurt a. M. 50 1936 pp. 357–360. [Lep.]

1461.—Hori, H. Studies on the Japanese Pterophoridae. (III.) On the genus *Trichoptilus*, and notes on *Platytilia rhododactyla* and *Oidaemotophorus lithodactylus*. [In Japanese with English summary.] Bult. sci. Fak. terk. Kjušu Univ., Fukuoka 7 1936 pp. 73–91, 2 pls.

1462.—Horion, A. Die Salzkäfer der Rheinprovinz. Decheniana, Bonn 91 1935 pp. 178–186. [Col.]

1463.—Horion, A. Studien zur deutschen Käfer-Fauna. I. Ent. Bl., Crefeld 32 1936 pp. 199–206, 4 figs.

1464.—Horion, A. et al. Zur Käferfauna der Rheinprovinz. Nachtrag XVII. Ent. Bl., Crefeld 32 1936 pp. 233–252.

1465.—Horion, A. Eine koleoptologische Exkursion nach Rees am Niederrhein vom 11–13 Juni 1935. Natur am Niederrhein, Krefeld 12 1936 pp. 17–20, 44–49. [Col.]

1466.—Hormuzaki, C. Betrachtungen über Besonderheiten der Lokalfauna der Bukovina im Anschlusse an die Wiederauffindung von zoogeographisch wichtigen Käferarten in der Umgebung von Cernăuți (Czernowitz). Ent. Rdsch., Stuttgart 53 1936 pp. 501–506. [Col.]

1467.—Horn, C. A. Mitochondria of insect intestinal tract. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 pp. 75–78, 3 figs.

1468.—Horn, W. Les Cicindélides de Madagascar. Première partie. Catalogue bibliographique et synonymique. Mém. Acad. malgache, Tananarive 20 1934 pp. 1–30, 23 figs. [Col.]

1469.—Horn, W. Ueber "vergesenes," biologisches Wissen. Arb. phys. angew. Ent. Berlin 3 1936 pp. 238–243.

1470.—Horn, W. Spedizione del Prof. Nello Beccari nella Guiana inglese 1931–32. Cicindelidae. Boll. Soc. ent. ital., Genoa 68 1936 p. 143, 1 fig. [Col.]

1471.—Horn, W. Viaggio del Prof. Lidio Cipriani in Rodesia (1929). Cicindelidae. Boll. Soc. ent. ital., Genoa 68 1936 p. 144.

1472.—Horn, W. Ueber die erste australische *Prothyma*-Art sowie über die Fauna von Haïti. Ent. Bl., Crefeld 32 1936 pp. 22–24, 1 fig.

1473.—Horn, W. Mission scientifique de l'Omo. Coleoptera. VIII. Cicindelidae. Mém. Mus. Hist. nat. Paris 4 1936 pp. 133–135.

1474.—Horn, W. Two new neotropical Odontochilini (Cicind.). Rev. chil. Hist. nat., Santiago 37 1933 pp. 76–77, 3 figs. [Col.]

1475.—Horn, W. & Kahle, I. Ueber entomologische Sammlungen (ein Beitrag zur Geschichte der Entomomuseologie). Teil II. Ent. Beih. Berlin 3 1936 pp. 161–196, 10 pls.

1476.—Horváth, G. Monographia Pentatomidarum generis *Bagrada*. Ann. Mus. nat. hungar., Budapest 30 1936 pp. 22–47. [Hem.]

1477.—Horváth, G. Las especies españolas del género *Bursinia* Costa, con descripción de cinco especies nuevas (Hem., Fulg.). Eos, Madrid 11 1936 pp. 385–387.

1478.—Horváth, G. Ueber die Homopteren-Gattung *Bobacella* Kusn. Konowia, Vienna 15 1936 pp. 196–200 6 figs.

Hoskins, W. M. see Frost, Herms & Hoskins.

1479.—Hottes, F. C. A primer for the Aphid hunter. Proc. biol. Soc. Washington 49 1936 pp. 27–36. [Hem.]

1480.—Houard, C. Vue d'ensemble sur la collection cécidologique du muséum national d'histoire naturelle de Paris. Livre jubil. Bouvier, Paris 1936 pp. 207-211.

1481.—Houlbert, C. Faune entomologique armoricaine. Coléoptères. Hydrocarabiques (hydaticeiformes). Bull. Soc. sci. Bretagne, Rennes 11 1934 hors sér. 147 pp. 115 figs.

1482.—Houlbert, C. & Barthe, E. Tableaux analytiques des Coléoptères de la faune franco-rhénane. Famille LXXIII. Scarabaeidae. Misc. ent., Castanet-Tolosan 37 1936 sep. pp. 161-208, 7 figs.

1483.—Houwalt, B. Neue und seltsame Schmetterlingsarten der Umgebung von Wilno. [In Polish with German summary.] Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. 9 1934 1935 pp. 307-313.

1484.—Hovanitz, W. Notes on some California Butterflies. Pan-Pacific Ent., San Francisco 11 (1935) 1936 pp. 190-192. [Lep.]

1485.—Howland, R. B. & Sonnenblick, B. P. Experimental studies on development in *Drosophila melanogaster*. II. Regulation in the early egg. J. exp. Zool., Philadelphia 73 1936 pp. 109-126, 1 pl. 1 fig. [Dipt.]

1486.—Hsu, Yin-Chi. Mayflies of Hong Kong with descriptions of two new species (Ephemeroptera). Hong Kong Nat. 7 1936 pp. 233-238, 13 figs.

1487.—Hsu, Yin-Ch'i. Nycteribiidae of Soochow (Diptera). Peking nat. Hist. Bull., Peiping 10 1936 pp. 275-279, 1 pl.

1488.—Hsu, Yin-Chi. New Chinese Mayflies from Kiangsi Province (Ephemeroptera). Peking nat. Hist. Bull. 10 1936 pp. 319-326, 12 figs.

1489.—Hsu, Yin-Chi. The mayflies of China (Order Ephemeroptera). Peking nat. Hist. Bull., Peiping 11 1936 pp. 129-148, 11 figs.

Hsu, Yin-Chi see Needham, Traver & Hsu.

1490.—Hubault, E. Une variété géante de *Physokermes abietis* Geoffr. (Hemipt. Coccidae) peu commune en France. C.R. Soc. Biol., Paris 122 1936 pp. 677-678.

1491.—Hubault, E. Extension en France de *Dreyfusia nüsslini* Börner (Hemipt., Chermesidae), *D. nüsslini* et *D. piceae* exemple de séparation d'espèces. C.R. Soc. Biol., Paris 122 1936 pp. 1092-1094.

1492.—Hubbell, T. H. A monographic revision of the genus *Ceuthophilus* (Orthoptera, Gryllacrididae, Rhaphidophorinae). Univ. Florida Pub., Gainesville Biol. Sci. Ser. 2 1936 no. 1, 551 pp. 38 pls. 3 figs.

1493.—Huckett, H. C. A revision of connectant forms between Coenosian and Limnophorine genera occurring in North America (Diptera, Muscidae). J. New York ent. Soc. 44 1936 pp. 187-222, 5 pls.

1494.—Hudson, G. V. Description of a new species of New Zealand Cicada. Trans. roy. Soc. N.Z., Dunedin 66 1936 p. 230. [Hem.]

1495.—Hukkinen, Y. Verzeichnis der Thysanopteren Finnlands. Ann. Ent. Fenn., Helsingfors 1 1935 pp. 84-88; 2 1936 pp. 24-33, 124-140.

1496.—Hull, F. M. A check list of the described species of Syrphidae from Australia and the regional islands. J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 190-212. [Dipt.]

1497.—Hull, F. M. A curious new Syrphid fly from Peru. Proc. ent. Soc. Washington 38 1936 pp. 167-168. [Dipt.]

1498.—Hundertmark, A. Die Orientierung der Eirauen der Nonne, *Lymantria monacha* L. Arb. phys. angew. Ent. Berlin 3 1936 pp. 221-226, 2 figs. [Lep.]

1499.—Hungerford, H. B. A new *Potamobates* from Peru, S.A. (Hemiptera, Gerridae). Bull. Brooklyn ent. Soc. 31 1936 pp. 178-186.

1500.—Hungerford, H. B. The Mantispidae of the Douglas Lake, Michigan Region, with some biological observations (Neurop.). Ent. News, Philadelphia 47 1936 pp. 69-72, 85-88, 1 pl.

1501.—Hungerford, H. B. Aquatic and semiaquatic Hemiptera collected in Yucatan and Campeche. Pub. Carnegie Inst. Washington 457 1936 pp. 145-150, 2 figs.

- 1502.—**Hunter, R. L.** Life history of *Hypolimnas misippus*. N. Qd. Nat., Cairns 4 1936 pp. 29–31, 4 figs. [Lep.]
- 1503.—**Husain, M. A. & Ahmad, T.** Studies on *Schistocerca gregaria* Forsk. II. The biology of the desert locust with special relation to temperature. Ind. J. agric. Sci., Delhi 6 1936 pp. 188–262, 6 figs. [Orth.]
- 1504.—**Husain, M. A. & Ahmad, T.** Studies on *Schistocerca gregaria* Forsk. VI. Ind. J. agric. Sci., New Delhi 6 1936 pp. 624–664, 5 pls. [Orth.]
- 1505.—**Husain, M. A. & Bhatia, Des Raj.** Studies on *Schistocerca gregaria* Forsk. VII. Ind. J. agric. Sci., New Delhi 6 1936 pp. 665–671, 4 figs. [Orth.]
- 1506.—**Husain, M. A. & Kesho Das Baweja.** Studies on *Schistocerca gregaria* Forsk. IV. Ind. J. agric. Sci., New Delhi 6 1936 pp. 586–590, 1 pl. [Orth.]
- 1507.—**Husain, M. A. & Mathur, C. B.** Studies on *Schistocerca gregaria* Forsk. III. Why locusts eat wool. Ind. J. agric. Sci., Delhi 6 1936 pp. 263–267. [Orth.]
- 1508.—**Husain, M. A. & Mathur, C. B.** Studies on *Schistocerca gregaria* Forsk. V. Ind. J. agric. Sci., New Delhi 6 1936 pp. 591–623, 2 pls. [Orth.]
- 1509.—**Husain, M. A., Trehan, K. N. & Verma, P. M.** Studies on *Bemisia gossypiperda*, M. & L. No. 3. Ind. J. agric. Sci., New Delhi 6 1936 pp. 893–903. [Hem.]
- 1510.—**Husson, R.** Sur la faune des cavités souterraines artificielles. C.R. Acad. Sci. Fr., Paris 203 1936 pp. 823–825.
- 1511.—**Hustache, A.** Entomological expedition to Abyssinia, 1926–7: Coleoptera, Curculionidae. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 353–373, 419–446, 483–505, 563–587, 24 figs.
- 1512.—**Hustache, A.** Nouveaux Sphénophorides Sud-Américains (Curculionidae). Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 87–114. [Col.]
- 1513.—**Hustache, A.** *Piazurus* nouveaux (Col. Curculionidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 21–24.
- 1514.—**Hustache, A.** *Piazurus* nouveaux (Col. Curculionidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 106–112.
- 1515.—**Hustache, A.** Voyage de MM. L. Chopard et A. Méquignon aux Açores (11^e note). Un nouveau Curculionide des Açores. Bull. Soc. ent. Fr., Paris 41 1936 pp. 229–231.
- 1516.—**Hustache, A.** Curculionides rapportés de l'Angola par la mission scientifique suisse. Bull. Soc. neuchâtel. Sci. nat. 60 (1935) 1936 pp. 165–207. [Col.]
- 1517.—**Hustache, A.** Cinq Curculionides nouveaux du Maroc. Bull. soc. Sci. nat. Maroc, Rabat 16 1936 pp. 77–80. [Col.]
- 1518.—**Hustache, A.** Sur le genre *Prionomerus* Schoenh. et ses synonymes (*Plectrodontus* Voss, *Prionopus* Voss, *Scymnoplastophilus* Voss). Misc. ent., Castanet-Tolosan 37 1936 pp. 46–50. [Col.]
- 1519.—**Hustache, A.** Nouveaux Curculionides d'Afrique. Sborn. ent. odd. Nár. Mus. Praze 14 1936 pp. 13–43. [Col.]
- 1520.—**Hustache, A. & Bruch, C.** Descripción y notas biológicas acerca de un curculiónido mirmecófilo (Col. Curcul.). Rev. Ent., Rio de Janeiro 6 1936 pp. 332–338, 1 pl. 5 figs.
- 1521.—**Huttrer, K.** Wege zur Analyse der Entstehung der Schmetterlingszeichnung. Biol. gen., Vienna 12 1936 no. 1 pp. 105–125, 2 pls.
- 1522.—**Huxley, J. & Wolsky, A.** Zur Frage der entwicklungsphysiologischen Determination des Arthropodenauges. Biol. Zbl., Leipzig 56 1936 pp. 571–572. [Dipt., Lep.]
- 1523.—**Hwang, N.** A preliminary list of Chinese Tabanidae. Ent. & Phytopath., Hangchow 4 1936 pp. 612–615. [Dipt.]
- 1524.—**Ichijô, F.** Studies on the intestinal flora of normal larvae of cabbage moth (*Barathra brassicae* L.). [In Japanese with English summary.] Bull. Utsunomiya agric. Coll. (A) 2 1936 pp. 127–142.
- 1525.—**Ide, F. P.** The significance of the outgrowths of the prothorax of *Ecdyonurus venosus* Fabr. (Ephemeroptera). Canad. Ent., Orillia 68 1936 pp. 234–238, 1 pl.

- 1526.—Ieniște, M. A. Contribution à la connaissance des Coléoptères du massif Godeanu (monts Sibișelului, Carpathes méridionales). *Ann. sci. Univ. Jassy* 22 1936 pp. 379–392, 1 map.
- 1526A.—Ii, N. Notes on a new Chalcidoid-fly infesting the egg of *Arge similis* Vollenhoven. *Kontyû, Tokyo* 10 1936 pp. 221–225, 3 figs. [Hym., Lep.]
- Ikushima, Y. *see* Katayama & Ikushima.
- 1527.—Imanishi, K. Mayflies from Japanese torrents. V, VI. *Annot. zool. jap., Tokyo* 15 pp. 213–223 (1935), 1 pl., pp. 538–549 (1936), 1 pl. [Ephem.]
- 1528.—Imms, A. D. On a new species of *Halobates*, a genus of Pelagic Hemiptera. *Sci. Repts. John Murray Exped.* 1933–34, London 4 1936 pp. 71–78, 7 figs.
- 1529.—Imms, A. D. The ancestry of insects. *Trans. Soc. Br. Ent., Southampton* 3 1936 pp. 1–32, 11 figs.
- 1530.—Inglis, C. M. A missing link. *J. Darjeeling nat. Hist. Soc.* 11 1936 pp. 82–83, 1 pl. [Odon.]
- Innes, J. M. *see* Butler & Innes.
- 1531.—Inouye, M. Two new species of Aphididae from Hokkaido. *Insecta matsum., Sapporo* 10 1936 pp. 128–134, 2 figs. [Hem.]
- 1532.—Inouye, M. Eine neue Chermes-Art (Adelgiden) auf Hokkaido. *Insecta matsum., Sapporo* 11 1936 pp. 75–80, 3 figs. [Hem.]
- 1533.—Invrea, F. Crisidi raccolta nell'isola di Cipro dal Sig. Mauromoustakis (Hymen. Chrysidae). *Boll. Soc. ent. ital., Genoa* 67 1935 pp. 102–106.
- 1534.—Invrea, F. Missioni scientifiche del Prof. Edoardo Zavattari nel Sahara italiano (1933–34). Mutillidi e Crisididi. *Boll. Soc. ent. ital., Genoa* 67 1935 pp. 118–120. [Hym.]
- 1535.—Ioff, I. Zur Systematik der Flöhe aus der Unterfamilie Ceratophylinae. *Z. Parasitenk., Berlin* 9 1936 pp. 73–124, 73 figs. [Siphonapt.]
- 1536.—Ionescu, M. A. Coleoptere din frunzarul de fag dela Sinaia. [In Rumanian.] *Bul. Soc. Nat. Roman., Bucharest* 7 1935 pp. 4–6.
- 1537.—Ionescu, M. A. Nevertebrate rare din fauna României. *Bul. Soc. Nat. Roman., Bucharest* 9 1936 pp. 33–34.
- 1538.—Ionescu, M. A. Sur la taxonomie des Protoires (Insecta Apterygota). *C.R. Acad. Sci. Roumanie* 1 1936 reprint 5 pp.
- Ionescu, M. A. *see* Knechtel & Ionescu.
- 1539.—Iseby, I. B. Flight-stridulation in American Acridians (Orthop.: Acrididae). *Ent. News, Philadelphia* 47 1936 pp. 199–205.
- 1540.—Ishida, M. Fauna of the Thysanoptera in Japan. *Insecta matsum., Sapporo* 10 1936 pp. 154–159, 2 figs.
- 1541.—Ishida, M. Fauna of the Thysanoptera in Japan (Part VII). *Insecta matsum., Sapporo* 11 1936 pp. 67–74, 2 figs.
- 1542.—Iwata, K. Biology of two Japanese species of *Methoca* with the description of a new species (Hymenoptera, Thynnidae). *Kontyû, Tokyo* 10 1936 pp. 57–89, 5 figs.
- 1543.—Iwata, K. Biological notes on *Anoplius marginipennis* Yasumatsu (Hymenoptera, Psammodontidae). *Mushi, Fukuoka* 9 1936 pp. 30–32, 1 fig.
- 1544.—Izuka, A. On some butterflies from Philippine islands. [In Japanese with English summary.] *Zool. Mag., Tokyo* 48 1936 pp. 653–664, 1 pl. 3 figs. [Lep.]
- 1545.—Izzard, R. J. The Hemiptera of Christmas Island. *Ann. Mag. nat. Hist., London* (10) 17 1936 pp. 577–600, 4 figs.
- 1546.—Jacentkovský, D. Contribution to the Tachinid fauna of Č.S.R. [In Czech.] *Bull. Inst. nat. agron. Brunn (D)* 20 1933 7 pp. [Dipt.]
- 1547.—Jacentkovský, D. Tachinidae of "Masarykuv Les." [In Czech with French summary.] *Bull. Inst. nat. agron. Brunn (D)* 22 1934 38 pp., 1 map 5 figs. [Dipt.]
- 1548.—Jacentkovský, D. Beitrag zur Kenntnis der Raupenfliegen (Tachinariae, Diptera) Bulgariens. *Mitt. naturw. Inst. Sofia* 9 1936 pp. 109–134, 3 tables 1 fig.

1549.—Jacentkovský, D. Kuklice (Tachinidae) polesi "Rafajny" na Podkarpatske rusi. Acta Soc. ent. Čsl., Prague 33 1936 pp. 76–90. [Dipt.]

1550.—Jacentkovský, D. Contribution to the knowledge of Tachinidae (Diptera) in the district of Brno. [In Czech.] Sborn. Kl. přír. Brně 18 1936 pp. 84–90.

1551.—Jacobson, H. Die Ameisenfauna der Kanjerseemoore. Beitrag zur Fauna Ost-Baltischer Hochmoore. Folia zool. hydrobiol., Riga 9 1936 pp. 143–165. [Hym.]

1552.—Jacoby, M. Ueber das Wachsen des *Atta*-Nestes im ersten Jahre nach der Gruendung (Hymen. Formic.). Rev. Ent., Rio de Janeiro 6 1936 pp. 100–106, 6 figs.

1554.—Jacot, A. P. Soil structure and soil biology. Ecology, Brooklyn, N.Y. 17 1936 pp. 359–379, 3 figs.

1555.—Jaczewski, T. Feldbeobachtungen über das Auftreten von Wasser-Hemipteren in Gewässern der polnischen Ostseeküste, nebst allgemeinen Bemerkungen über oekologische Assoziationen von Corixiden. [In Polish with German summary.] Arch. Hydrobiol. Ichthyol., Suwalki 9 1935 pp. 31–78, 2 maps, 15 figs.

1556.—Jaczewski, T. Contributions to the knowledge of aquatic Heteroptera of Egypt. Ann. Mus. zool. polon., Warsaw 11 1936 pp. 171–211, 2 pls. 5 diagr.

1557.—Jaczewski, T. Notes on Corixidae (Hem.). Proc. R. ent. Soc. London (B) 5 1936 pp. 34–43, 12 figs.

1558.—Jaffuel, F. Notas sobre mis colectas entomologicas en las Termas de Chillan. Rev. chil. Hist. nat., Santiago 37 1933 pp. 148–152. [Dipt.]

1559.—Jahandiez, E. et al. Note sur l'histoire naturelle de l'Île Verte. Baie de la Ciotat (Bouches-du-Rhône). Ann. Soc. Hist. nat. Toulon 19 1935 pp. 26–36, 1 pl. [Insects pp. 33–36.]

1560.—Jahn, T. L. Electrical variations in the heart of the adult grasshopper (*Melanoplus differentialis*). Anat. Rec., Philadelphia 67 1936 suppl. 1 pp. 98–99. [Orth.]

Jahn, T. L. see Cole & Jahn.

1561.—James, H. C. New mealybugs from E. Africa. Trans. R. ent. Soc. London 85 1936 pp. 197–215, 16 figs. [Hem.]

1562.—James, M. T. Some new western Bibionidae (Diptera). Amer. Mus. Novit., New York no. 332 1936 6 pp. 1 fig.

1563.—James, M. T. The genus *Odontomyia* in America north of Mexico (Diptera, Stratiomyidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 517–550, 1 pl.

1564.—James, M. T. Some evolutionary trends in the Stratiomyidae. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 624–626. [Dipt.]

1565.—James, M. T. Note on *Nemotelus* (Dipt., Stratiomyidae). Bull. Brooklyn ent. Soc. 31 1936 pp. 86–91.

1566.—James, M. T. A review of the Nearctic Geosarginae (Diptera, Stratiomyidae). Canad. Ent., Orillia 67 (1935) 1936 pp. 267–275.

1567.—James, M. T. The Stratiomyidae of Colorado and Utah. J. Kans. ent. Soc., McPherson 9 1935 pp. 33–48. [Dipt.]

1568.—James, M. T. New species and records of Colorado Diptera. J. N. York ent. Soc. 44 1936 pp. 341–344.

1569.—James, M. T. New Stratiomyidae in the Collection of the California Academy of Sciences. Pan-Pacific Ent., San Francisco 12 1936 pp. 86–90. [Dipt.]

1570.—James, M. T. New and little-known neotropical Stratiomyiidae (Diptera) in the Museum of Comparative Zoology. Psyche, Boston 43 1936 pp. 49–55, 2 figs.

1571.—James, M. T. A proposed classification of the Nearctic Stratiomyinae (Diptera: Stratiomyidae). Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 31–36, 2 figs.

1572.—Janda, V. Ueber den Farbwechsel transplanterter Hautstücke und künstlich verbundener Körperfragmente bei *Dixippus morosus* (Br. et Redt.). Zool. Anz., Leipzig 115 1936 pp. 177–185, 3 figs. [Orth.]

1573.—James, M. J. & Hager, A. Studies on the incubation of the chinch bug egg. Iowa State Coll. J. Sci. 10 1936 pp. 395–402, 3 figs. [Hem.]

1574.—Jannone, G. Nuovi contributi alla conoscenza della fauna delle isole italiane dell' Egeo. V. Boll. Lab. Zool. Portici **29** 1936 pp. 47-248, 1 pl. 48 figs. [Orth.]

1575.—Jannone, G. Su alcuni Ortotteri della Palestina con descrizione di una specie nuova del gen. *Homorocoryphus* Karny. Mem. Soc. ent. ital., Genoa **15** 1936 pp. 78-92, 5 figs.

1576.—Janssens, A. Notes sur quelques *Onitis* africains. Bull. Mus. Hist. nat. Belg., Brussels **12** 1936 no. 8, 6 pp. 11 figs. [Col.]

1577.—Jansson, A. Bemerkungen eines schwedischen Koleopterologen zu dem Buche Horion's "Nachtrag zu Reitter, Fauna Germanica." Ent. Bl., Crefeld **32** 1936 pp. 211-220, 1 fig.

1578.—Jansson, A. Coleopterologiska bidrag 23-24. Notul. ent., Helsingfors **16** 1936 pp. 39-42, 6 figs.

1579.—Jansson, A. & Palm, T. Resultat av en coleopterologisk studieresa till nordvästra Jämtlands fjälltrakter. (Mit Auszug in deutscher Sprache.) Ent. Tidskr., Stockholm **57** 1936 pp. 180-192.

1580.—Jaques, H. E. A preliminary list of the Neuroptera of Iowa. Proc. Iowa Acad. Sci., Des Moines **42** 1935 pp. 185-187, 3 figs.

1581.—Jaques, H. E. Some methods of labelling and housing large insect collections. Canad. Ent., Orillia **68** 1936 pp. 1-7, 1 fig.

Jaques, H. E. *see* Knutson & Jaques.

1582.—Jarrige, J. Sur l'élargissement de répartition de quelques Coléoptères de la région parisienne. Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) **4** 1936 pp. 10-12.

1583.—Jarrige, J. Sur quelques Mélandryides de France. Misc. ent., Castanet-Tolosan **37** 1936 pp. 74-75. [Col.]

1584.—Jawłowski, H. Ueber den Gehirnbau der Käfer. Z. Morph. Oekol. Tiere, Berlin **32** 1936 pp. 67-91, 29 figs. [Col.]

1585.—Jeannel, R. Mission scientifique de l'Omo. Coleoptera. I. Carabidae: Trechinae et Perigoninae. Miss. scient. Omo, Paris **2** 1935 pp. 23-75, 69 figs.

1586.—Jeannel, R. Sur le *Feronia spinicollis* de Dejean (Coleopt. Carabidae). Livre jubil. Bouvier, Paris 1936 pp. 213-217, 3 figs.

1587.—Jeannel, R. Les caractères larvaires des *Anthia* Weber (Col. Carabidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 174-176.

1588.—Jeannel, R. Homochromie et mimétisme (fin). Rev. franç. Ent., Paris **2** (1935) 1936 pp. 181-186.

1589.—Jeannel, R. Une curieuse aberration de l'instinct chez un Chalicodome. Rev. franç. Ent., Paris **2** (1935) 1936 pp. 191-193, 1 pl. [Hym.]

1590.—Jeannel, R. Sur des Trechinae recueillies par M. H. Scott en Abyssinie. Rev. franç. Ent., Paris **2** (1935) 1936 pp. 205-212, 11 fig. [Col.]

1591.—Jeannel, R. Les Trechinae des îles Canaries. Rev. franç. Ent., Paris **3** 1936 pp. 1-18, 19 figs.

1592.—Jeannel, R. Deux nouveaux *Diaprysius* de l'Ardèche et remarques sur l'isolement génital des Bathyscinae cavernicoles. Rev. franç. Ent., Paris **3** 1936 pp. 62-66, 3 figs.

1593.—Jeannel, R. Ancienneté des insectes. Rev. franç. Ent., Paris **3** 1936 pp. 101-106.

1594.—Jeannel, R. Nouveaux Trechini des Egéides. Rev. franç. Ent., Paris **3** 1936 pp. 230-233, 4 figs. [Col.]

Jeannel, R. *see* Bernhauer & Jeannel.

1595.—Jedlička, A. Eine neue *Amara* aus der Umgebung von Praha. Acta Soc. ent. Čsl., Prague **33** 1936 pp. 4-5. [Col.]

1596.—Jedlička, A. Ueber palae-arctische *Dolichus*-Arten. Acta Soc. ent. Čsl., Prague **33** 1936 pp. 31-32. [Col.]

1597.—Jedlička, A. Neue *Colpodes*-Arten aus Japan. Acta Soc. ent. Čsl., Prague **33** 1936 pp. 48-51. [Col.]

1598.—Jedlička, A. Beitrag zur Kenntnis der Carabiden Balkans. Acta Soc. ent. Cech., Prague **33** 1936 pp. 166-170. [Col.]

1599.—Jedlička, A. Neue Carabiden aus Ostasien. Ent. NachrBl., Troppau **10** 1936 pp. 51-55. [Col.]

1600.—Jeffrey, E. C. On the occurrence of gigantic sperms in certain Orthoptera. Amer. Nat. New York **70** 1936 pp. 53-54.

1601.—Jeffery, H. G. Coleoptera. A fourth supplementary list of the Coleoptera of the Isle of Wight, with notes and emendations to former lists. Proc. I. of Wight nat. Hist. Soc., Newport 2 1936 pp. 483–493.

1602.—Jentsch, S. Ovoviviparie bei einer einheimischen Copeognathenart (*Hyperetes guestphalicus*). Zool. Anz., Leipzig 116 1936 pp. 287–289, 2 figs. [Psocopt.]

1603.—Jeschikov, J. Metamorphose, Cryptometabolie und direkte Entwicklung. Zool. Anz., Leipzig 114 1936 pp. 141–152.

1604.—Jobling, B. A revision of the subfamilies of the Streblidae and the genera of the subfamily Streblinae (Diptera Acalypterae) including a re-description of *Metelasmus pseudopterus* Coquillet and a description of two new species from Africa. Parasitology, Cambridge 28 1936 pp. 355–380, 5 figs.

1605.—Jobling, B. On the stridulation of the females of *Parnassius mnemosyne* L. Proc. R. ent. Soc. London (A) 11 1936 pp. 66–68, 1 fig. [Lep.]

1606.—Jobling, B. A new species of the genus *Nycteribosca*, with notes on *Nycteribosca minuta* Jobling (1934) (Diptera, Acalypterae, Streblidae). Proc. R. ent. Soc. London (B) 5 1936 pp. 177–178, 1 fig.

1607.—Johansson, E. Studrer och försök rörande vetemäggarna *Conartaria tritici* Kirby och *Clinodiplosis mosellana* Géh. Samt deras Bekämpande. IV. Medd. Stat. Växtskyddsanst., Stockholm no. 15 1936 19 pp. 8 figs. 2 diagr.

1608.—Johnson, C. G. The biology of *Leptobyrsa rhododendri* Horváth (Hemiptera, Tingitidae), the rhododendron lacebug. Ann. appl. Biol., Cambridge 23 1936 pp. 342–368, 3 pls. 4 figs.

Johnson, D. M. see Auten & Johnson; DeLong & Johnson.

Johnston, H. G. see Harris & Johnston.

1609.—Jøker, A. Fund af Hymenopterer paa Anholt. Flora og Fauna, Kjøbenhavn 42 1936 pp. 88–91.

1610.—Jones, D. F. Tumors in *Drosophila melanogaster* resulting from somatic segregation. Science, New York 84 1936 p. 135. [Dipt.]

1611.—Jones, S. On an interesting new genus of Gryllids from India. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 234–238, 5 figs. [Orth.]

1612.—Jong, C. de. Some new Cerambycidae. Zool. Meded., Leyden 19 1936 pp. 75–78, 3 figs. [Col.]

1613.—Jordan, K. The Anthribidae of Mauritius. Novit. zool., Tring 39 1936 pp. 275–291, 13 figs. [Col.]

1614.—Jordan, K. Two new African Syntomidae. Novit. zool., Tring 39 1936 pp. 292–293, 2 figs. [Lep.]

1615.—Jordan, K. Siphonaptera from Congo Belge. Novit. zool., Tring 39 1936 pp. 294–299, 7 figs.

1616.—Jordan, K. Siphonaptera from East Africa. Novit. zool., Tring 39 1936 pp. 300–304, 8 figs.

1617.—Jordan, K. Some Siphonaptera from South America. Novit. zool., Tring 39 1936 pp. 305–310, 9 figs.

1618.—Jordan, K. Descriptions and records of oriental Anthribidae. Novit. zool., Tring 39 1936 pp. 311–325. [Col.]

1619.—Jordan, K. Anthribidae from South America and Africa. Novit. zool., Tring 39 1936 pp. 326–329. [Col.]

1620.—Jordan, K. On two new South African *Charaxes* (Lepid., Nymphalidae). Novit. zool., Tring 39 1936 pp. 330–333.

1621.—Jordan, K. Dr. Karl Jordan's expedition to South-West Africa and Angola. Novit. zool., Tring 40 1936 pp. 17–62, 6 pls. 3 maps.

1622.—Jordan, K. Dr. Karl Jordan's expedition to South-West Africa and Angola: Siphonaptera. Novit. zool., Tring 40 1936 pp. 82–94, 6 figs.

1623.—Jordan, K. Two new Australian fleas. Proc. Linn. Soc. N.S.W., Sydney 61 1936 pp. 184–185, 2 figs. [Siphonapt.]

1624.—Jordan, K. On some females of *Troides* (Lepidoptera) with male colouration. Proc. R. ent. Soc. London (A) 11 1936 pp. 81–82.

1625. — Jordan, K. H. C. Die Orthopterenfauna der Oberlausitz. Isis Budissina, Bautzen 13 (1932–35) 1936 pp. 142–152.

1626. — Jordan, K. H. C. Das Massenaufreten und das Geschlechterverhältnis bei einigen Corixiden (Hem. Het.). Mitt. naturw. Ges. Isis Bautzen 22 (1934–35) 1935 pp. 11–12.

1627. — Jorg, M. E. Las terminaciones nerviosas musculares de *Elaeochlora viridicata* (Orthoptera Acrididae). Rev. chil. Hist. nat., Santiago 37 1933 pp. 174–179, 5 figs.

1628. — Joseph, H. C. Observaciones entomológicas. Los esfexos de Chile (Hymenoptera). An. Univ. Chile, Santiago (2) 4 1926 pp. 5–69, 15 figs. [Hym.]

1629. — Jourdan, M. L. *Eurygaster austriaca*, parasite des blés au Maroc. Rev. franç. Ent., Paris 2 (1935) 1936 pp. 196–204. [Hym.]

1630. — Jucci, C. Nuove ricerche sulla colorazione dei bozzoli nel baco da seta in rapporto ai pigmenti della foglia ingerita. Arch. zool. (ital.), Torino 22 1936 pp. 259–268. [Lep.]

1631. — Jucci, C. Bianco dominante e bianco recessivo. La discendenza dell' incrocio tra due razze bianche di bachi da seta, la Awojiku e la Bagdad. Arch. zool. (ital.), Torino 22 1936 pp. 269–278. [Lep.]

1632. — Jucci, C. L'allevamento del *Reticulitermes lucifugus* in tubi da saggio. Rend. Acc. Lincei, Rome (6) 24 1936 pp. 302–306. [Isopt.]

Jung, H. see Dahm & Jung.

1633. — Junk, W. S. & Schenkling, S. Coleopterorum Catalogus, Berlin. See Csiki, E., Dalla Torre, K. W. & Emden, M. & F., Klima, A., Lona, C., Schenkling, S. & Marshall, G. A. K.

1634. — Just, G. Weitere Untersuchungen zur Phylogenese spezialisierter Anpassungen. Verh. dtsch. zool. Ges., Leipzig 33 1936 pp. 336–343.

1635. — Kabos, W. J. Zweeffliegen. Levende Natuur, Amsterdam 41 1936 pp. 78–81, 13 figs. [Dipt.]

Kahle, I. see Horn & Kahle.

1636. — Kaliss, N. & Graubard, M. A. The effect of temperature on oviposition in *Drosophila melanogaster*. Biol. Bull. Wood's Hole, Lancaster 70 1936 pp. 385–391, 3 figs. [Dipt.]

1637. — Kalmus, H. Untersuchungen über Sauerstoffzug und Narkose bei Insekten, insbesondere *Drosophila*. Biol. gen., Vienna 11 1935 no. 2 pp. 43–70, 4 figs.

1638. — Kalmus, H. Ueber die dynamische Erhaltung der Höhenlage durch die Sprungbewegungen der Larven und Puppen von *Corethra*. Z. vergl. Physiol., Berlin 23 1936 pp. 651–662, 4 figs. [Dipt.]

1639. — Kalshoven, L. G. E. On *Monohammus* (*Dihammus*) species of the Netherlands Indies (Col., Lamiidae). Ent. Meded. Ned.-Ind., Buitenzorg 2 1936 pp. 5–8.

Kamensky, S. A. see Steinberg & Kamensky.

1640. — Kamiya, K. Insects of Jehol (vi). Order Coleoptera. [In Japanese and English.] Rep. First sci. Exped. Manchoukuo, Tokyo (5) 1 pt. x 1936 art. 40, 11 pp. 1 pl. (Dytiscidae); art. 41, 6 pp. 1 pl. (Staphylinidae); art. 44, 5 pp. 1 pl. (Dermestidae); art. 45, 5 pp. 1 pl. (Hydrophilidae).

1641. — Kanerva, N. Bemerkungen ueber einige *Lithosia*-Arten (Lep.). Ann. Ent. Fenn., Helsingfors 1 1935 pp. 32–38, 1 pl.

1642. — Kanerva, N. Eine neue *Nothris*-Art (Lep., Gelechiidae) aus Finnland. Ann. Ent. Fenn., Helsingfors 2 1936 pp. 16–24, 1 map. 11 figs.

1643. — Kangas, E. Die Braunfleckigkeit des Birkenholzes und ihr Urheber *Dendromyza* (*Dizygomyza*) *betulae* n. sp. Vorläufige Mitteilung. Commun. Inst. for Fenn., Helsingfors no. 22 1935 31 pp., 14 figs. [Dipt.]

1644. — Kangas, E. *Henoticus germanicus* Reitt. als Vertreter einer neuen Cryptophagidengattung, *Coniophthalma* n. gen. (Col.). Ann. Ent. Fenn., Helsingfors 2 1936 pp. 67–73, 4 figs.

1645. — Kangas, E. Ueber *Hymenorus doublieri* Muls. und *H. awajewi* Sem. (Col., Alleculidae). Ann. ent. fenn., Helsingfors 2 1936 pp. 173–178, 1 fig.

1646.—**Kanô, T.** Insects of Jehol (vi). Order Coleoptera. [In Japanese and English.] Rep. First scient. Exped. Manchoukuo, Tokyo (5) 1 pt. x (1935) 1936 art. 38, 6 pp. 3 pls. (Cicindelidae); art. 39, 7 pp. 1 pl. (Carabidae); art. 52, 10 pp. 1 pl. (Cerambycidae).

1647.—[**Kantardzhiva-Minkova, S.**] Кантарджива-Минкова, С. Bestimmungen-Tabellen der Arten von Fam. Cerambycidae (Coleopt.) in Bulgarien. III. Prioninae und Cerambycinae. [In Bulgarian.] Mitt. bulg. ent. Ges. Sofia 9 1936 pp. 171–204, 31 figs.

1648.—**Karavajev, V.** Die Fauna der Familie Formicidae (Ameisen) der Ukraine. [In Russian and German.] Trav. Inst. Zool. Biol. Acad. Sci. Ukraine, Kiev (1) pp. 1–162 (1934), pp. 163–316 (1936), 68 figs. [Hym.]

1649.—**Karavajev, W. A.** Beitrag zur Ameisenfauna der Mariupolschen Provinz. [In Russian with German summary.] Trav. Mus. zool. Kiev no. 16 1936 pp. 107–111. [Hym.]

1650.—**Karl, O.** Ergänzungen und Berichtigungen zu meiner Arbeit über die Musciden. Teil. V. Stettin. ent. Ztg. 97 1936 pp. 137–140. [Dipt.]

1651.—**Karl, O.** Die Fliegenfauna Pommerns. Diptera Brachycera. Stettin. ent. Ztg. 97 1936 pp. 108–136, 318–330.

1652.—**Karny, H. H.** Revision der Gryllacriden des Zoologischen Institutes in Halle a.S., sowie einiger Tettigoniiden-Typen von Burmeister und Giebel. Z. Naturw., Halle a.S. 88 1927 pp. 1–14, 1 pl. [Orth.]

1653.—**Karsakoff, M.** Le rôle du coloris des ailes de *Iris deserti* dans le rapprochement des sexes. Bull. Soc. linn. Lyon (n.s.) 4 1935 p. 144. [Orth.]

1654.—**Kaston, B. J.** The morphology of the elm bark beetle *Hylurgopinus rufipes* (Eichhoff). Bull. Connecticut agric. Exp. Sta., New Haven no. 387 1936 pp. 613–650, 14 figs. [Col.]

1655.—**Katayama, H. & Ikushima, Y.** Some notes on the biology of *Sceliphron tubifex* Latreille (Hym. Sphecidae). [In Japanese.] Trans. Kansai ent. Soc., Osaka no. 6 1935 pp. 41–54, 1 pl. 1 fig.

1656.—[**Katerinich, O. O.**] Катеринич, О. О. Material for the

Lepidopterous fauna of Volhyn. [In Ukrainian.] Trav. Soc. Nat. Charkow 53 1930 pp. 65–74.

1657.—**Kato, M.** Notes on Cicadidae. [In Japanese.] Ent. World, Tokyo 4 1936 pp. 758–765, 1 pl., 2 figs., pp. 840–843, 2 figs. [Hem.]

1658.—**Katô, M.** On the activity of oviposition of the strawberry weevil, *Anthonomus bisignatus* Roelofs. Sci. Rep. Tôhoku Univ., Sendai (4) 10 1936 pp. 697–708, 7 figs. [Col.]

1659.—**Kato, S.** A new and four unrecorded species of Phaoniinae (Dipt., Muscidae) from Japan. Insecta matsum., Sapporo 11 1936 pp. 24–27, 3 figs.

1660.—**Kautz, H.** Zweibrütige *Pieris bryoniae* O.-Rassen: Generationsfolgen, Zuchtbeobachtungen usw. Z. öst. EntVer., Vienna 21 1936 pp. 29–35, 37–41, 6 figs.

1661.—**Kawaguchi, E.** Der Einfluss der Eierbehandlung mit Zentrifugierung auf die Vererbung bei dem Seidenspinner. I. Ueber experimentelle Auslösung der polyploiden Mutation. J. Fac. Agric. Hokkaido Imp. Univ., Sapporo 38 1936 pp. 111–133, 4 figs. [Lep.]

1662.—**Kavan, O.** Zur Variabilität der *Ptosima undecimmaculata* Hrbst. (Coleopt. Buprest.). Ent. NachrBl., Troppau 10 1936 pp. 70–72, 5 figs.

1663.—**Kawecki, Z.** Teratologisches Exemplar von *Aromia moschata* L. [In Polish with German summary.] Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 188–189, 2 figs. [Col.]

Kawecki, Z. see Cislik & Kawecki.

1664.—**Keifer, H. H.** Insect taxonomy. Proc. 17th Ann. Conf. W. Plant Quarant. Bd., Spec. Pub. no. 137 1935 pp. 50–56.

1665.—**Keifer, H. H.** California Microlepidoptera VIII. Bull. S. Calif. Acad. Sci. 35 1936 pp. 9–29, 4 pls.; IX–X. Bull. Dep. Agric. Calif., Sacramento 25 1936 pp. 235–259, 7 pls., 349–359, 3 pls.

1666.—**Keil, I.** Ergebnisse aus der Kreuzung parthenogenetischer und zweigeschlechtlicher Schmetterlinge. II. Die äussere Morphologie der F₁-Puppen aus den *Solenobia triquetrella*-Kreuzungen. Z. induct. Abstamm.- u. VererbLehre, Leipzig 72 1936 pp. 313–360, 23 figs. [Lep.]

1667.—Keir, W. The mechanism and manner of action of the saw-fly terebrae. *Entomologist*, London **69** 1936 pp. 25-31, 2 pls. [Hym.]

Keith-Roach, E. *see* Luke & Keith-Roach.

1668.—Kéler, S. Ueber *Menacanthus exilis* Nitz. (neotype) (Mallophaga: Liotheidae). *Arb. morph. taxon. Ent.* Berlin **3** 1936 pp. 49-51, 3 figs.

1669.—Kéler, S. Ueber einige Mallophagen aus Rossitten. *Arb. morph. taxon. Ent.* Berlin **3** 1936 pp. 256-264, 2 figs.

1670.—Kéler, S. Ueber die neue Mallophagengattung *Dahlehornia* nov. gen. *Bull. int. Acad. polon. Sci. Cracovie Cl. Sci. Math. Nat. (B)* **1936** pp. 163-166, 1 pl.

1671.—Kéler, S. A catalogue of the Polish Thysanoptera. [In Polish with English summary.] *Prace Wydz. Chor. Rośl. państw. Inst. Nauk Gosp. wiejsk. Bydgoszczy.* no. **15** 1936 pp. 81-149, 5 pls.

1772.—Kéler, S. Some remarks concerning the genus *Thrips* Linné. *Prace Wydz. Chor. Rośl. państw. Inst. Nauk Gosp. wiejsk. Bydgoszczy.* no. **15** 1936 pp. 151-154. [Thysanoptera.]

Kelly, E. G. *see* Smith & Kelly.

1673.—[Kel'shtein, B. V.] Кельштейн, Б. В. Note sur les Collemboles du bassin du Donetz septentrional. [In Ukrainian.] *Trav. Soc. Nat. Charkow* **52** 1929 pp. 243-248.

1674.—[Kel'shtein, B. V.] Кельштейн, Б. В. Contribution to the knowledge of the Apterygote fauna of Charkow and region. [In Ukrainian.] *Trav. Soc. Nat. Charkow* **53** 1930 pp. 75-79. [Thysanura, Collemb.]

1675.—Kemner, N. A. Zur näheren Kenntnis der *Termitoxenia jägerskiöldi* Wasm. als Typus eines neuen Genus der Termitoxenien. *Opusc. ent. Lund* **1** 1936 pp. 35-39, 2 figs. [Dipt.]

1676.—Kemner, N. A. Det femte Nordiska Entomologmötet i Lund 3-6 augusti 1936. *En redogörelse.* *Opusc. ent., Lund* **1** 1936 pp. 65-96, 97-101 (1937), 1 pl. 1 fig.

1677.—Kennedy, C. H. *Epigomphus crepidus* a new dragonfly (Odonata: Gomphidae) from Nayarit, Mexico with

notes on the genus. *Ann. ent. Soc. Amer., Columbus* **29** 1936 pp. 126-135, 28 figs.

1678.—Kennedy, C. H. *Telebasis flammeola*, *T. carota* and *T. livida*, new dragonflies from Ecuador (Odonata: Coenagrionidae). *Ann. ent. Soc. Amer., Columbus* **29** 1936 pp. 804-815, 35 figs. [Odon.]

1679.—Kennedy, C. H. The habits and early stages of the dragonfly, *Gomphaeschna furcillata* (Say). *Proc. Ind. Acad. Sci., Indianapolis* **45** (1935) 1936 pp. 315-322, 33 figs. [Odon.]

Kennedy, J. S. *see* Gunn & Kennedy.

1680.—Kerkis, J. Chromosome conjugation in hybrids between *Drosophila melanogaster* and *Drosophila simulans*. *Amer. Nat. New York* **70** 1936 pp. 81-86. [Dipt.]

1681.—Kerr, H. D. & Evans, T. C. A biological test of the inverse square law of radiant energy as applied to Roentgen radiation. *Anat. Rec., Philadelphia* **67** 1936 suppl. 1 pp. 99-100. [Orth.]

1682.—Kerrich, G. J. Systematic notes on two species of *Collyria* Schiedte (Hym., Ichneumonidae). *J. Soc. Br. Ent., Southampton* **1** 1936 pp. 124-125.

1683.—Kerrich, G. J. Preliminary note on some European species of *Bassus* Fallén (Hym., Ichneumonidae). *Opusc. ent., Lund* **1** 1936 pp. 53-55, 1 fig.

1684.—Kerrich, G. J. Notes on larviposition in *Polyblastus* (Hym. Ichn. Tryphoninae). *Proc. R. ent. Soc. London (A)* **11** 1936 pp. 108-110, 1 fig.

1685.—Kerrich, G. J. Ichneumonidae collected at Logie (Elgin) by F. J. H. Jenkinson. *Scot. Nat., Edinburgh no.* **218** 1936 pp. 57-58. [Hym.]

1686.—Kerrich, G. J. The Ichneumonidae of Wicken Fen: Corrigenda and addenda. *Trans. Soc. Br. Ent., Southampton* **3** 1936 pp. 61-66. [Hym.]

Kesho Das Baweja *see* Husain & Kesho Das Baweja.

1687.—Kettisch, J. Zur Kenntnis der Morphologie und Oekologie der Larve von *Cricotopus trifasciatus*. *Konowia, Vienna* **15** 1936 pp. 248-263. [Dipt.]

1688.—Kevan, D. K. New and rare beetles in Scotland. Scot. Nat., Edinburgh no. 218 1936 p. 59. [Col.]

1689.—Key, K. H. L. Observations on rate of growth, coloration and the abnormal six-instar life-cycle in *Locusta migratoria migratorioides*, R. & F. Bull. ent. Res., London 27 1936 pp. 77-85, 4 figs. [Orth.]

1690.—Key, K. H. L. Experimental studies on locomotor activity in *Locusta migratoria migratorioides*, R. & F. Bull. ent. Res., London 27 1936 pp. 399-422, 6 figs. [Orth.]

1691.—Key, K. H. L. Rate of locomotion in relation to starvation in *Locusta migratoria migratorioides* (R. & F.) (Orthoptera). Proc. R. ent. Soc. London (A) 11 1936 pp. 3-6, 2 figs.

1692.—Key, K. H. L. A revision of the genus *Paracinema* Fisch. (Orthoptera). Trans. R. ent. Soc. London 85 1936 pp. 379-400, 3 figs. 1 map.

1693.—Key, K. H. L. & Edney, E. B. Precocious adults resulting from the omission of the fifth instar in *Locusta migratoria migratorioides* (R. & F.). Proc. R. ent. Soc. London (A) 11 1936 pp. 55-58, 2 figs. [Orth.]

1694.—Keys, J. H. Notes on variations in the tarsal segmentation of two Staphylinid beetles. Ent. mon. Mag., London 72 1936 pp. 151-153, 8 figs. [Col.]

1695.—Khouvine, Y., Ephrussi, B. & Hanly, M. H. Extraction et solubilité des substances intervenant dans la pigmentation des yeux de *Drosophila melanogaster*. C.R. Acad. Sci. Fr., Paris 203 1936 pp. 1542-1544. [Dipt.]

1696.—Kiefer, O. Beitrag zur wahren Ursache des Rückgangs der Schmetterlingsfauna. Ent. Z., Frankfurt a. M. 50 1936 pp. 321-322. [Lep.]

1697.—Killington, F. J. A monograph of the British Neuroptera. London, The Ray Soc., 1936 xix + 269 pp. 15 pls. 68 figs.

Kim, H. K. see Sugihara & Kim.

1698.—Kimmins, D. E. New species of *Nusalata* (Neuroptera, Hemerobiidae). Ann. Mag. nat. Hist., London (10) 17 1936 pp. 568-576, 4 figs.

1699.—Kimmins, D. E. Odonata, Ephemeroptera and Neuroptera of the

New Hebrides and Banks Island. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 68-88, 1 pl. 11 figs.

1700.—Kimmins, D. E. *Rhithrogena semicolorata* Curtis and *R. semitincta* Pictet (Ephemeroptera). Entomologist, London 69 1936 pp. 279-280, 2 figs.

1701.—Kimmins, D. E. The Odonata of the Oxford University Sarawak Expedition. J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 65-108, 17 figs.

1702.—Kimmins, D. E. Synonymic notes on the genera *Chloroperla*, *Isopteryx* and *Isoperla* (Plecoptera), with a list of the British species of *Chloroperla*. J. Soc. Br. Ent., Southampton 1 1936 pp. 121-124, 1 pl.

1703.—Kimmins, D. E. British Ephemeroptera, Plecoptera and Trichoptera in 1935. J. Soc. Br. Ent., Southampton 1 1936 pp. 147-151.

1704.—Kincl, J. A few notes on Haliplidae (Col.) of Poland. [In Polish.] Arch. Tow. nauk. Lwów (3) 2 1922 pp. 23-44 3 pls.

1705.—Kincl, J. Hydradephaga von Polen. III. *Deronectes* Sharp-Zimmermann. [In Polish with German summary.] Polsk. Pismo ent., Lwów 13 (1934) 1936 pp. 198-214, 1 pl. 1 fig. [Col.]

King, R. L. see Slifer & King.

1706.—King, W. V. & Baisas, F. E. A new species and a new variety of Philippine *Anopheles* related to *Anopheles leucosphyrus* Dönitz. Proc. ent. Soc. Washington 38 1936 pp. 79-89, 2 pls. 1 fig. [Dipt.]

1707.—Kinsey, A. C. The origin of higher categories in *Cynips*. Sci. Ser. Indiana Univ. Pub., Bloomington no. 4 1936 334 pp. 172 figs. [Hym.]

1708.—[Kiritchenko, A. N.] Кириченко, А. Н. The distribution of scale insects (Homoptera Coccoidea) in U.S.S.R. from zoogeographical and ecological points of view. [In Russian.] Plant Prot., Leningrad 9 1936 pp. 68-75.

1709.—Kirschenblatt, J. D. Staphyliniden aus den Bauen der Nagetiere des Sud-Ostens von RSFSR. [In Russian with German summary.] Rev. Microbiol. Epidemiol. Parasit., Saratov 15 1936 pp. 249-253. [Col.]

1710. — [Kirschenblat, Ya. D.] Киршенблат, Я. Д. Revision der paläarktischen Arten der Gattung *Ontholestes* Ganglb. (Coleoptera, Staphylinidae). [In Russian with German descriptions.] Trav. Inst. zool. Acad. Sci. U.S.S.R., Leningrad 3 1936 pp. 551–566.

1711. — [Kiseleva, E. F.] Киселева, Е. Ф. Zur Mückenfauna des westlichen Teils der Taimyrhalbinsel. [In Russian with German summary.] Trav. Inst. sci. Biol. Tomsk 2 1936 pp. 132–135. [Dipt.]

1712. — Kishida, K. Synopsis of Nemeobiid butterflies. [In Japanese.] Kontyû, Tokyo 10 1936 pp. 1–24, 1 pl. 2 figs.

1713. — Kishida, K. Insects of Jehol (VI). Order Coleoptera. Family Cantharidae. [In Japanese and English.] Rep. First scient. Exped. Manchoukuo, Tokyo (5) 1 pt. × 1936 art. 46, 21 pp. 2 col. pls.

1714. — Kishida, K. & Nakamura, Y. A catalogue of Japanese insects. Fasc. 9. Lepidoptera. Ent. World, Tokyo 4 1936 pp. 433–673.

1715. — [Kissileva, E.] Киселева, Е. Sur la faune des Culicidae de la Sibérie. [In Russian with French summary.] Med. Parasit. parasit. Dis., Moscow 5 1936 pp. 220–240. [Dipt.]

1716. — Kittelmann, E. Zwei neue *Celerio*kreuzungen. Ent. Z., Frankfurt a. M. 49 1936 pp. 481–486. [Lep.]

1717. — Kittelmann, E. Bemerkenswerte Geschlechtsverirrung eines Männchens von *Dendrolimus pini*. Ent. Z., Frankfurt a. M. 50 1936 p. 44. [Lep.]

1718. — Kittelmann, E. Eigenartig gehörnte Raupe von *Sph. ligustri* L. Ent. Z. Frankfurt a. M. 50 1936 pp. 143–144, 1 fig. [Lep.]

1719. — Kivirikko, E. Beobachtungen über die Tagfalterfauna (Lep., Diurna) des Territoriums Misiones (Rep. Argentina) in der Zeit 5. V.—20. VI. 1928. Ann. Ent. Fenn., Helsingfors 2 1936 pp. 49–63, 6 figs.

1720. — [Kizeritzki, B. & Reikhardt, A.] Кизеритский, В. и Рейхардт, А. Zur Frage über die Selbständigkeit der Familie Catopochrotidae, im Zusammenhang mit der Entdeckung einer neuen Gattung. [In Russian with Latin

descriptions.] Trav. Inst. zool. Acad. Sci. U.S.S.R., Leningrad 3 1936 pp. 693–697, 5 figs. [Col.]

1721. — Klein-Krauthelm, F. Beitrag zur Kenntnis der Eristalinen-Larven und -Puppen (Syrphidae, Diptera). Stettin. ent. Ztg. 97 1936 pp. 259–270, 1 pl. 2 figs.

1722. — Kleine, A. Catalogues raisonnées de la faune entomologique du Congo Belge. Coléoptères—Brenthides. Ann. Mus. Congo Belge, Tervueren Zool. (3) Sect. ii 5 1936 pp. 1–48, 1 pl. 21 figs.

1723. — Kleine, R. Mission scientifique de l'Omo. Coleoptera. IV. Lycidae et Brenthidae. Miss. scient. Omo, Paris 2 1935 pp. 101–115, 21 figs.

1724. — Kleine, R. Ueber die von Miss Cheesman auf den Neu-Hebriden gesammelten Brenthiden (Coleoptera). Ann. Mag. nat. Hist., London (10) 17 1936 pp. 93–95.

1725. — Kleine, R. Neue Lycidae aus Java (Coleoptera). Arb. morph. tax. Ent. Berlin 3 1936 pp. 132–140, 33 figs.

1726. — Kleine, R. Brenthidae und Lycidae von den "Cameron Highlands," Malaiische Halbinsel. J. F.M.S. Mus. Kuala Lumpur 13 1936 pp. 117–132, 14 figs. [Col.]

1727. — Kleine, R. Vier neue Brenthiden aus die malaiische Halbinsel, nebst biologischen Bemerkungen. J. F. M. S. Mus., Kuala Lumpur 13 1936 pp. 133–140, 3 figs. [Col.]

1728. — Kleine, R. Zwei neue *Lycostomus* aus China (Lycidae). Lingnan Sci. J., Canton 15 1936 pp. 13–15, 4 figs. [Col.]

1729. — Kleine, R. Zwei neue *Plateros* aus China nebst synonymischen Bemerkungen (Coleoptera: Lycidae). Lingnan Sci. J., Canton 15 1936 pp. 263–264, 6 figs.

1730. — Kleine, R. Zwei neue Lyciden aus dem Congo-Museum. Rev. Zool. Bot. afr., Brussels 28 1936 pp. 227–228, 5 figs. [Col.]

1731. — Klein-Krauthelm, F. Ueber Massenaufreten und Bekämpfung der gemeinen Rasenhalmfliege (*Thaumatomyia notata* Meig.). Ber. oberhess. Ges. Giessen (N.F.) 16 (1933–35) 1935 pp. 137–169, 5 figs. [Dipt.]

1732.—Klein-Krautheim, F. Ueber das Chorion der Eier einiger Syrphiden (Diptera). Biol. Zbl., Leipzig **56** 1936 pp. 323–329, 10 figs.

1733.—Kligler, I. J. & Mer, G. *Anopheles* in Syria and their distribution. Riv. Malariol., Rome **15** 1936 pp. 217–221. [Dipt.]

1734.—Klima, A. Curculionidae: Cholinae (32 pp.), Tachygoninae (4 pp.), Antliarrhininae (2 pp.), Ulomascinae (1 p.), Epipedinae (1 p.), Pyropinae (1 p.). Coleopt. Catalogus, 's-Gravenhage **146** 1936.

1735.—Klimesch, J. Ein kleiner Beitrag zur Kenntnis der Nepticulidenfauna (Lep.) des Vintschgaues (Prov. Bozen). Stettin. ent. Ztg. **97** 1936 pp. 194–211, 13 figs.

1736.—Klingstedt, H. Die Coniopterygiden der Kanarischen Inseln. Comment. biol., Helsingfors **6** 1936 no. 8, 4 pp., 1 pl. [Neur.]

1737.—Kloiber, J. Abnormales Flügelgeäder von Tenthrediniden (Hym.). Konowia, Vienna **15** 1936 pp. 152–154.

1738.—Klots, A. B. New North American Microlepidoptera. Amer. Mus. Novit., New York no. **867** 1936 6 pp. 8 figs.

1739.—Klots, A. B. The interrelationships of the species of the genus *Lycaena* Fabricius (Lepidoptera, Lycaenidae). Bull. Brooklyn ent. Soc. **31** 1936 pp. 154–170, 1 pl.

1740.—Knechtel, W. K. & Ionescu, M. A. Contributiuni novi la studiul faunei de pe Insula Șerpilor. [In Rumanian.] Bul. Soc. Nat. Roman., Bucharest **9** 1936 pp. 1–7. [Insects pp. 4–7.]

1741.—Knechtel, W. K. & Manolache, C. I. Observatiuni biologice asupra gandacului ovazului *Lema melanopus* L. in România. [In Rumanian with German summary.] Ann. Inst. Rech. agron. Roumaine, Bucharest **7** (1935) 1936 reprint 25 pp. 13 figs. [Col.]

1742.—Knight, H. H. Records of southern insect species moving northward during the drouth years of 1930 and 1934. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 578–580.

1743.—Knipling, E. F. Some specific taxonomic characters of common

Lucilia larvae—Calliphoridae—Diptera. Iowa St. Coll. J. Sci., Ames **10** 1936 pp. 275–294, 2 pls.

1744.—Knipling, E. F. A comparative study of the first-instar larvae of the genus *Sarcophaga* (Calliphoridae, Diptera) with notes on the biology. J. Parasit., Lancaster, Pa., **22** 1936 pp. 417–454, 5 pls.

Knipling, E. F. see Bruce & Knipling.

1745.—Knowlton, G. F. Lizard digestion studies. Herpetologica, Chicago **1** 1936 pp. 9–10.

1746.—Knowlton, G. F. Distributional notes on Utah Coleoptera: Part II. J. Kans. ent. Soc. McPherson **9** 1936 pp. 107–111.

1747.—Knowlton, G. F. & Smith, C. F. The Aphid genus *Epameibaphis* in Utah. Proc. ent. Soc. Washington **38** 1936 pp. 89–92, 1 fig. [Hem.]

1748.—Knowlton, G. F. Some Utah flesh flies. Proc. Utah Acad. Sci. Arts Lett., Provo **13** 1936 pp. 237–239. [Dipt.]

1749.—Knowlton, G. F. Utah Tachinidae—Notes. Proc. Utah Acad. Sci. Arts Lett., Provo **13** 1936 pp. 241–244. [Dipt.]

1750.—Knowlton, G. F. & Smith, C. F. Descriptions of some rabbit brush and willow Aphids. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 776–778, 2 figs. [Hem.]

1751.—Knowlton, G. F. & Smith, C. F. *Capitophorus* Aphids infesting *Chrysothamnus*. Canad. Ent., Orillia **68** 1936 pp. 107–113, 2 figs. [Hem.]

1752.—Knowlton, G. F. & Smith, C. F. *Capitophorus* Aphids infesting *Artemisia*. Canad. Ent., Orillia **68** 1936 pp. 229–234, 1 pl. [Hem.]

1753.—Knowlton, G. F. & Smith, C. F. Notes on intermountain Aphids. Ent. News, Philadelphia **47** 1936 pp. 210–213, 1 figs.

1754.—Knowlton, G. F. & Smith, C. F. Aphid studies. Festschr. 60. Geburtst. E. Strand, Riga **1** 1936 pp. 487–492, 1 pl. [Hem.]

Knowlton, G. F. see Rowe & Knowlton.

Knudsen, S. see Hoffmeyer & Knudsen.

1755.—Knull, J. N. Five new southwestern Coleoptera (Buprestidae and Cerambycidae). *Ent. News*, Philadelphia 47 1936 pp. 73-75, 105-108.

1756.—Knutson, H. & Jaques, H. E. A revised list of the Orthoptera of Iowa. *Proc. Iowa Acad. Sci.*, Des Moines 42 1935 pp. 179-184.

1757.—Kobayashi, K. Studies on the chemotropism of *Dysdercus megalopygus* Breddin. [In Japanese.] *Oyo-Dobuts. Zasshi*, Tokyo 8 1936 pp. 177-196. [Hem.]

1758.—Koch, A. Bau und Entwicklungsgeschichte der Mycetome von *Lyctus linearis* Goetze. *Verh. dtsh. zool. Ges.*, Leipzig 38 1936 pp. 252-261, 7 figs. [Col.]

1759.—Koch, A. Symbiosestudien. I, II. *Z. Morph. Oekol. Tiere*, Berlin 32 1936 pp. 92-136, 22 figs., pp. 137-180, 5 figs. [Col.]

1760.—Koch, C. Appunti sugli Stafilinidi italiani. *Boll. Soc. ent. ital.* Genoa 68 1936 pp. 17-21, 131-133, 1 fig. [Col.]

1761.—Koch, C. Stafilinidi della Tripolitania. *Boll. Soc. ent. ital.*, Genoa 68 1936 pp. 74-76. [Col.]

1762.—Koch, C. Wissenschaftliche Ergebnisse der entomologischen Expeditionen Seiner Durchlaucht des Fürsten Alessandro C. della Torre e Tasso nach Aegypten und auf die Halbinsel Sinai. XIII. Staphylinidae. *Pubb. Mus. ent. Pietro Rossi*, Udine 1 1936 pp. 115-232, 12 figs. [Col.]

1763.—Koch, C. Neue Tenebrioniden aus dem östlichen Mediterrangebiet. *Pubb. Mus. ent. Pietro Rossi*, Udine 1 1936 pp. 291-301, 2 figs. [Col.]

1764.—Koch, H. & Krogh, A. La fonction des papilles anales des larves de Diptères. *Ann. Soc. sci. Bruxelles (B)* 56 1936 pp. 459-461.

1765.—Koch, M. Die armenischen und transkaukasischen Rassen von *Zygaena achilleae* Esp. *Ent. Z.*, Frankfurt a. M. 50 1936 pp. 17-20. [Lep.]

1766.—Koch, M. Neues über asiatische Zygaenen. *Ent. Z.*, Frankfurt a. M. 50 1936 pp. 398-401. [Lep.]

1767.—Koch, M. Neue Zygaenenformen aus Asien. *Iris*, Dresden 50 1936 pp. 40-43, 1 pl. [Lep.]

1768.—Kocian, V. Ueber den Einfluss des Elektrizitätsstromes mit einer hohen Frequenz und Spannung auf die Metamorphose und Sauerstoffverbrauch der Insektenpuppen und Larven. *Zool. Jb.*, Jena Allg. *Zool.* 56 1936 pp. 1-6, 4 figs.

1769.—KoeHN, H. Schmetterlingsfang auf den Färöer im Jahre 1934. *Ent. Z.*, Frankfurt a. M. 50 1936 pp. 417-420, 3 figs. [Lep.]

1770.—Kogure, M. Genetical studies on the S-mottled silkworm obtained by exposure to X-rays. [In Japanese with English summary.] *Res. Bull. Tokyo seric. Coll.*, Tokyo 1 1936 pp. 83-114, 1 pl.

1771.—Kohler, P. Notas sobre Automerinae (Lep. Saturn.) argentinos. *Rev. Soc. ent. argent.*, Buenos Aires 7 1935 pp. 79-91, 3 pls.

1772.—Kohler, P. Prodromus Satyridae (Lep.) argentinos. *Rev. Soc. ent. argent.*, Buenos Aires 7 1935 pp. 209-217, 3 pls.

1773.—Köhler, P. Nuevos Agaristidae argentinos (Lep. Het.). *Physis*, Buenos Aires 12 1936 pp. 71-73, 1 pl.

Köhler, W. *see* Strohl & Köhler.

1774.—Kohn, F. G. Einige Merkmale im Bau von Zeckmückenlarven. *Mikrokosmos*, Stuttgart 29 1936 pp. 139-142, 21 figs. [Dipt.]

1775.—Kohno, M. Description of the nymph of *Peltoperla* sp., and a record of a new locality of *Scopura longa* Uéno. [In Japanese.] *Kontyû*, Tokyo 10 1936 pp. 103-108, 5 figs. [Plecopt.]

1776.—Koidzumi, K. Experimental studies on the influence of low temperatures upon the development of fruit flies. 7th report. On the fatal action of low temperatures upon the eggs and larvae of *Chaetodacus ferrugineus* var. *dorsalis* Hendel. [In Japanese.] *J. Soc. trop. Agric. Formosa* 8 1936 pp. 221-236. [Dipt.]

1777.—Kojima, T. To the knowledge of *Dicamptus nigropictus* Mats., a parasite of *Dendrolimus spectabilis* Butl. [In Japanese.] *Bot. & Zool.*, Tokyo 4 1936 pp. 136-138, 3 figs. [Hym., Lep.]

1778.—Koller, P. C. Structural hybridity in *Drosophila pseudoobscura*. J. Genet., London 32 1936 pp. 79–102, 1 pl. 13 figs. [Dipt.]

1779.—Kolossow, J. Neue und wenig bekannte Formen der Spannen (Lepidoptera, Geometridae). Ent. NachrBl., Troppau 10 1936 pp. 149–150.

1780.—Komarek, J. Die Vardar-Linie in der Verbreitung der Blepharoceriden. Verh. int. Ver. Limnologie, Beograd 7 1935 pp. 106–112. [Dipt.]

1781.—Komp, W. H. W. Description of nine new species of *Culex*, seven from Panama and two from Venezuela (Diptera, Culicidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 319–334, 27 figs.

1782.—Komp, W. H. W. The male and larva of *Aedes dominicii* Rangel & Romero Sierra and the male of *Aedes pseudodominicii* sp. nov., representatives of a new subgenus (*Soperia*) of the genus *Aedes* from Colombia. Proc. ent. Soc. Washington 38 1936 pp. 71–75, 2 figs. [Dipt.]

1783.—Komp, W. H. W. & Osorno, M. E. The male and larva of *Anopheles (Kerteszia) boliviensis* Theobald (Diptera, Culicidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 415–419, 2 figs.

1784.—[Konakov, N. N. & Onisimova, Z. G.] Конаков, Н. Н. и Онисимова, З. Г. Ein Versuch der bei einer Exkursion gewonnenen Charakteristik der Stationen der südlichen Hälfte des Bogutscharer Kreises vom Gouvernement Woronesch d. U.S.S.R. [In Russian with German summary.] Ber. Ges. Wiss. Arb. Erforsch. Woronesch 1 (2) 1931 54 & [6] pp.

1785.—König, W. Biologische Studien über *Ptinus tectus* Boield. Z. wiss. Zool., Leipzig 148 1936 pp. 556–599, 35 figs. [Col.]

1786.—Kôno, H. H. Sauter's Formosa-Ausbeute: Georyssidae (Coleoptera). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 53–54.

1787.—Kôno, H. H. Sauter's Formosa-Ausbeute: Dryopidae (Coleoptera). Arb. morph. tax. Ent. Berlin 3 1936 pp. 121–122.

1788.—Kôno, H. Zwei neue *Xanthochroa*-Arten (Coleoptera, Oedemeridae).

Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 516–518.

1789.—Kôno, H. Neue und wenig bekannte Käfer Japans, I. Insecta matsum., Sapporo 10 1936 pp. 87–98, 6 figs. [Col.]

1790.—Kôno, H. Die Heteromeren aus den Kurilen, II. Insecta matsum., Sapporo 10 1936 pp. 104–106. [Col.]

1791.—Kôno, H. Die Clavicornien aus den Kurilen. Insecta matsum., Sapporo 10 1936 pp. 148–153. [Col.]

1792.—Kôno, H. Die Cerambyciden aus den Kurilen (Col.). Insecta matsum., Sapporo 11 1936 pp. 28–35.

1793.—Kôno, H. Beitrag zu den *Pytho*-Arten Japans (Col.). Insecta matsum., Sapporo 11 1936 pp. 35–37.

1794.—Kôno, H. Insects of Jehol (VI). Order Coleoptera. [In Japanese and English.] Rep. First scient. Exped. Manchoukuo, Tokyo (5) 1 pt. x (1935) 1936 art. 42 3 pp. 1 pl. (Silphidae); art. 47, 3 pp. 1 fig. (Cleridae); art. 50, 5 pp. 2 pls. (Meloidae).

1795.—Kontkanen, P. On the biology of *Phalacrus substriatus* Gyll. (Col., Phalacridae). Ann. Ent. Fenn., Helsingfors 2 1936 pp. 64–67.

1796.—Korsakoff, N. Contribution à l'étude du *Blepharopsis mendica* Fabr. Terre et le Vie, Paris 5 1936 sem. 2 pp. 164–168, 2 figs. [Orth.]

1797.—Korschefsky, R. Zwei neue *Novius*-Arten von den Canaren. (9. Beitrag zur Kenntnis der Coccinellidae.) Comment. biol., Helsingfors 6 1935 no. 3, 3 pp. 2 figs. [Col.]

1798.—Korschefsky, R. Zum funfzigjährigen Bestehen des Deutschen Entomologischen Institutes der Kaiser-Wilhelm-Gesellschaft, Berlin-Dahlem. Ent. Bl., Crefeld 32 1936 pp. 89–92, 1 pl.

1799.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. Jena, G. Fischer 1936 1 pp. xx + 1–536, 560 figs.; 2 pp. 537–1314, 752 figs. [Insects pp. 738–839.]

1800.—Kosaroff, G. Ueber das *Solifugus*-Problem nebst einigen Notizen über die Taxonomie der in Bulgarien vorkommenden *Japyx*-Arten. Zool. Anz., Leipzig 113 1936 pp. 14–26 1 fig. [Thysanura.]

1801.—[Kosminskii, P. A.] Косминский, П. А. Untersuchungen über Intersexualität bei *Lymantria dispar* L. [In Russian with German summary.] Zool. J., Moscow 14 1935 pp. 621–636, 3 figs. [Lep.]

1802.—Kosminsky, P. Zum Problem der Intersexualität beim Schwammspinner (*Lymantria dispar* L.). Z. indukt. Abstamm- u. VererbLehre, Leipzig 71 1936 pp. 420–428.

1803.—Kotzsch, H. Ein Sommer unter den Kurden. Ent. Rdsch., Stuttgart 53 1936 pp. 313–317, 352–359, 372–376, 393–396, 414–418, 9 figs.

1804.—Kotzsch, H. Neue *Colias*-formen meiner Hindukusch-Expedition 1936. Ent. Rdsch., Stuttgart 54 1936 pp. 44–45. [Lep.]

1805.—Kotzsch, H. Die Parnassier meiner Hindukusch-Expedition 1936. Parnassiana, Neubrandenburg 4 1936 pp. 4–9, 2 pls.

1806.—[Kozhanchikov] Kozancikov, I. V. Insect metabolism at temperatures below zero. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 3 1935 pp. 373–378, 6 figs.

1807.—[Kozhanchikov, V.] Kozhantschikov, W. Lepidopterologisches aus Zentral-Sibirien. Folia zool. hydrobiol., Riga 9 1936 pp. 22–29.

1808.—Kozhanchikov, I. V. Geographical distribution and variability of *Euxoa aquilina* Schiff. and *Euxoa distinguenda* Ld. [In Russian with English summary.] Rev. Ent. U.R.S.S., Leningrad 25 1935 pp. 288–297, 8 figs. [Lep.]

1809.—[Kozhanchikov V.] Kozhantschikov, W. To the problem of the vital thermal optimum. III. The loss of energy during the pupal development in *Agrotis* and *Ephestia* as a function of temperature. [In Russian with English summary.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad 4 1936 pp. 313–388, 4 figs. [Lep.]

1810.—[Kozhanchikov] Kozhantschikov, I. W. Zur Frage nach dem Temperaturoptimum des Lebens. VI. Ueber die physiologische Bedeutung der Wärmesumme bei Insekten. Zool. Anz., Leipzig 113 1936 pp. 7–13.

1812.—[Kozhanchikov, I. V.] Козжанчиков, И. В. Zur Frage über das Temperaturoptimum des Lebens.

VII. Physiologisches Kriterium der Steno- und Eurythermie der Insekten. [In Russian with German summary.] Zool. J., Moscow 15 1936 pp. 217–244, 7 graphs.

1813.—Kozulina, O. V. & Rudakova, K. V. *Bradyrrhoa gilveola* Tr. [In Russian with German summary.] Trans. Rubber & Guttapercha Inst. no. 8 (Articles on rubber plants 2), Moscow 1932 pp. 28–46, 22 figs. [Lep.]

1814.—Kraczewicz, Z. De la différence entre les premiers stades de maturation des oocytes parthénogénétiques et des oocytes sexués de *Miastor meltraloas* Meinert (Diptera). C.R. Soc. Biol., Paris 123 1936 pp. 879–883, 4 figs.

1815.—Kratovich, J. Renseignements sur les espèces du genre *Chionea* Dalm. de Tchécoslovaquie (Dipt. Tipulidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 243–250, 7 figs.

1816.—Kratovich, J. Deuxième notice à la connaissance de la faune du sol tchécoslovaque. Diptères. Sborn. ent. odd. Nár. Mus. Praze 14 1936 pp. 157–163, 11 figs.

1817.—Kremky, J. Contribution à la faune des Tortricoides de Pologne. Fragm. Fn. Mus. zool. polon., Warsaw 2 1936 pp. 327–393. [Lep.]

1818.—Kreuzer, W. Auf den Falterjagd in Mittel- und Süd-Italien. Ent. Rdsch., Stuttgart 53 1936 pp. 477–480, 487–490, 497–500, 516–520. [Lep.]

1819.—Kriesche, R. Neue indo-australische Lamiinen (Col. Longic.). Ent. Bl., Crefeld 32 1936 pp. 66–69.

1820.—Kröber, O. Einige griechische Tabaniden. Acta Inst. Mus. zool. Univ. Athen., Athens 1 1936 pp. 33–40, 1 pl. [Dipt.]

1821.—Kröber, O. Bestimmungstabellen der Palaarktischen *Chrysozona*-Arten (*Haematopota*). Acta Inst. Mus. zool. Univ. Athen., Athens 1 1936 pp. 43–52. [Dipt.]

1822.—Kröber, O. Katalog und Bestimmungstabellen palaarktischen Conopiden. Acta Inst. Mus. zool. Univ. Athen. 1 1936 pp. 121–159. [Dipt.]

1823.—Kröber, O. Drei neue *Poeciloderas*-Arten aus Paraguay (Diptera: Tabanidae). Arb. morph. tax. Ent. Berlin 3 1936 pp. 221–223.

1824.—**Kröber, O.** Omphraliden, Thereviden und Conopiden vom Belgischen Kongo und den Nachbargebieten. Rev. Zool. Bot. afr., Brussels **23** 1936 pp. 253–286, 26 figs. [Dipt.]

1825.—**Krogerus, R.** Ueber *Nivellia extensa* Gebl. und *Nivellia sanguinosa* Gyll. Notul. ent., Helsingfors **16** 1936 pp. 21–23, 6 figs. [Col.]

1826.—**Krombein, K. V.** Biological notes on some solitary wasps (Hymenoptera: Sphecidae). Ent. News, Philadelphia **47** 1936 pp. 93–99.

Krogh, A. see Koch & Krogh.

Krüger, G. see Turati & Krüger.

1827. — **Krumbiegel, I.** Morphologische Untersuchungen über Rassenbildung, ein Beitrag zum Problem der Artbildung und der geographischen Variation. Zool. Jb., Jena Syst. **68** 1936 pp. 105–178, 1 pl. 23 figs.

1828.—**Krumbiegel, I.** Sinnesphysiologische Untersuchungen an geographischen Rassen. Zool. Jb., Jena Syst. **68** 1936 pp. 179–204, 7 figs. [Col.]

1829.—**Krumbiegel, I.** Untersuchungen über gleichsinnige geographische Variation. Zool. Jb., Jena Syst. **68** 1936 pp. 481–516, 6 figs. [Col.]

1830. — **Kseneman, M.** Sur les espèces du genre *Pseudanurophorus* Stack 1922 et la description d'une espèce nouvelle du même genre de l'Europe centrale. [In Czech with French summary.] Acta Soc. Sci. nat. morav., Brno **9** 1934 no. 8 12 pp. 7 figs. [Collemb.]

1831.—**Kugler, H.** Hummeln als Blütenbesucher. Ein Beitrag zur experimentellen Blütenökologie. Naturwissenschaften, Berlin **24** 1936 pp. 356–360, 4 figs. [Hym.]

1832.—**Kühn, A.** Zur Genetik und Entwicklungsphysiologie des Zeichnungsmusters der Schmetterlinge. Nachr. Ges. Wiss. Göttingen, Berlin Biol. (6) **1** 1932 pp. 312–335, 17 figs. [Lep.]

1833. — **Kühn, A.** Genetik und Entomologie. Arb. phys. angew. Ent. Berlin **3** 1936 pp. 234–238.

1834.—**Kühn, A., Caspari, E. & Plagge, E.** Ueber hormonale Genwirkungen bei *Ephestia kühniella* Z.

Nachr. Ges. Wiss. Göttingen Biol. (N.F.) **2** 1935 pp. 1–30, 2 col. pls. 24 figs. [Lep.]

1835.—**Kühn, A. & Engelhardt, M. v.** Ueber die Determination des Flügel-musters bei *Abraxas grossulariata* L. Nachr. Ges. Wiss. Göttingen Biol. (N.F.) **2** 1936 pp. 171–199, 9 figs. [Lep.]

1836.—**Kühn, A. & Henke, K.** Ueber einen Fall von geschlechtsgekoppelter Vererbung mit wechselnder Merkmalsausprägung bei der Mehlmotte *Ephestia kühniella* Zeller. Nachr. Ges. Wiss. Göttingen, Berlin Biol. (N.F.) **1** 1935 pp. 247–259, 5 figs. [Lep.]

1837.—**Kühn, A. & Henke, K.** Genetische und entwicklungsphysiologische Untersuchungen an der Mehlmotte *Ephestia kühniella* Zeller. XIII & XIV. Abh. Ges. Wiss. Göttingen, Berlin (N.F.) **15** 1936 pp. 221–272, 17 figs. [Lep.]

1838.—**Kühn, A. & Piepho, H.** Ueber hormonale Wirkungen bei der Verpuppung der Schmetterlinge. Nachr. Ges. Wiss. Göttingen Biol. (N.F.) **2** 1936 pp. 141–154, 11 figs. [Lep.]

1839.—**Kujime, M.** A catalogue of Coleoptera from Shibuya and Setagaya, Tokyo (Part I). [In Japanese.] Ent. World, Tokyo **4** 1936 pp. 868–874.

1840.—**Kumm, H. W.** The Jamaican species of *Hippelates* and *Oscinella* (Diptera, Chloropidae). Bull. ent. Res., London **27** 1936 pp. 307–329, 1 pl. 6 figs.

1841.—**Kunike, G.** Beiträge zur Lebensweise und Bekämpfung des Kornkäfers, *Calandra granaria* L. (Curculionidae). Z. angew. Ent., Berlin **23** 1936 pp. 303–326, 16 figs.

1842.—**Kuntze, R.** Genetic analysis of *Melasoma aenea* L. [In Polish.] Arch. Tow. nauk. Lowow **1923** (3) **2** pp. 411–423; (3) **3** pp. 245–264. [Col.]

1843.—**Kuntze, R.** Studya porównawcze nad fauną kserotermiczną na Podolu, w Brandenburgii, Austrii i Szwajcaryi. [In Polish.] Arch. Tow. nauk. Lowow (3) **5** 1931 no. 6 89 pp. 1 map.

1844.—**Kuntze, R.** Entomologische Excursionsnotizen aus den Pieniny. Polsk. Pismo ent., Lwow **13** (1934) 1936 pp. 190–193.

1845.—[Kurenzov] Kurencov, A. I. Zoogeographical conclusions from an expedition to the middle Sikhote-Alin range. C.R. Acad. Sci. U.R.S.S., Leningrad (N.S.) 4 1935 pp. 377-379.

1846.—Kurenzov, A. Une espèce nouvelle du genre *Neptis* F. de la région Ussuriennne. Lambillionia, Brussels 36 1936 pp. 185-190, 3 figs. [Lep.]

1847.—[Kurenzov, A.] Куренцов, А. The zoogeography of the bark-beetles (Ipidae-Coleoptera) of the Ussuri-land. [In Russian with English summary.] Zool. J., Moscow 15 1936 pp. 349-354.

1848.—Kurisaki, M. The structure of the silk gland and the production of the silk substance in *Dendrolimus spectabilis* Butler. [In Japanese with English summary.] Zool. Mag., Tokyo 48 1936 pp. 965-973, 14 figs. [Lep.]

Kuroda, M. see Tokunaga and Kuroda.

1849. — Kusanagi, T. A list of Coleoptera from Shikoku. [In Japanese.] Ent. World, Tokyo 4 1936 pp. 297-329.

Kusnezov see Kuznetsov.

1850.—Kuster, K. C. Distributional variation of the ganglionic tracheae in the larvae of *Odontomyia cincta* (Diptera). Pap. Mich. Acad. Sci., Ann Arbor, 21 1936 pp. 639-650, 2 figs.

1851.—Kutter, H. Ueben einen neuen Endoparasiten (*Thripoctenus*, Chalcididae) des Erbsenblasenfusses (*Kakothrips robustus* Uzel), seine Lebensweise und Entwicklung. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 640-652, 7 figs.

1852.—Kuwana, Z. The innervation of the alimentary canal of the silkworm larva. Annot. zool. jap., Tokyo 15 1935 pp. 247-260, 18 figs. [Lep.]

1853.—Kuwana, Z. Degeneration of muscles in the silk-worm moth. [In Japanese with English summary.] Zool. Mag., Tokyo 48 1936 pp. 881-884, 4 figs. [Lep.]

1854.—Kuwayama, S. Materials for the study of the Neuropteroid fauna of the Kurile Islands, I, II. Insecta matsum., Sapporo 10 1936 pp. 107-110, 160-163, 1 fig.

1855.—Kuwayama, S. The Chrysopidae of the Northern Nippon. [In

Japanese with English summary.] Zool. Mag., Tokyo 48 1936 pp. 811-820, 4 figs. [Neur.]

Kuzina, O. S. see Emel'anov, Pravdin, Kuzina & Lisitzuina.

1856.—[Kuznetsov] Kusnezov, V. Uebersicht der asiatischen Orgeriidae (Homopt. Fulgoroidea-Orgeriidae). Kownowia, Vienna 15 1936 pp. 65-84, 2 pls.

1857.—[Kuznetzova, E. A.] Кызнецова, Е. А. Zwei neue zentral-asiatische Oedemeriden (Coleoptera). [In Russian and Latin.] Rev. Ent. U.R.S.S., Leningrad 25 1935 pp. 298-303, 6 figs.

1858.—Laake, E. W., Cushing, E. C. & Parish, H. E. Biology of the primary screw worm fly, *Cochliomyia americana*, and a comparison of its stages with those of *C. macellaria*. Tech. Bull. U.S. Dep. Agric., Washington, D.C. no. 500 1936 24 pp. 1 pl. 14 figs. [Dipt.]

1859.—Laboissière, V. Coup d'oeil sur les Galerucinae aptères. Livre jubil. Bouvier, Paris 1936 pp. 219-222, 2 figs.

1860.—Laboissière, V. Observations sur les Galerucini asiatiques principalement du Tonkin et du Yunnan et descriptions de nouveaux genres et espèces (5^e partie). Ann. Soc. ent. Fr., Paris 105 1936 pp. 239-262, 16 figs. [Col.]

1861.—Lackschewitz, P. Ueber die Sciariden (Dipt.) des Ostbaltikum. KorrespBl. naturf. Ver. Riga 61 1934 pp. 151-155.

1862. — Lackschewitz, P. Ueber einige hochnordische Trichocera-Arten (Dipt. Nematocera). Tromsø Mus. Årsheft 54 (1931) 1934 no. 1, 8 pp. 10 figs.

1863.—Lackschewitz, P. Zur Kenntnis der polyneuren Nematoceren (Dipt.) des nördlichen Norwegen. Tromsø Mus. Årsheft 54 (1930) 1935 no. 4 27 pp. 1 map, 5 figs.

1864. — Lackschewitz, P. Ueber *Ilisia obscuripes* Zett. und zwei neue Eriopterinen (Dipt. Nemat.) aus Lappland. Norsk ent. Tidsskr., Oslo 4 1936 pp. 110-116, 4 figs.

1865.—Lackschewitz, P. New species of *Tipula* from the Pyrenees and Madeira (Diptera, Tipulidae). Proc. R. ent. Soc. London (B) 5 1936 pp. 109-112, 3 figs.

1866.—Lackschewitz, P. Das Genus *Tipula* (Diptera Nematocera) in der Arktis und dem borealen Waldgebiet Eurasiens. Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad 4 1936 pp. 245-312, 34 figs.

1867.—Ladell, W. R. S. A new apparatus for separating insects and other Arthropods from the soil. Ann. appl. Biol., Cambridge 23 1936 pp. 862-879, 1 pl. 2 figs.

1869.—La Hue, D. W. An annotated list of the Bythoscopinae of Indiana (Cicadellidae, Homoptera). Proc. Ind. Acad. Sci., Indianapolis 45 (1935) 1936 pp. 310-314.

1870.—Laidlaw, F. F. Note on some species of *Rhinocypha* with description of a new species. J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 60-64, 1 pl. [Odon.]

1871.—Laidlaw, F. F. On some examples of the genus *Leptogomphus* (Odon., Gomphidae). Treubia, Buitenzorg 15 1936 pp. 267-270, 2 figs.

1872.—Laidlaw, W. B. R. The brown lacewing flies (Hemerobiidae): Their importance as controls of *Adelges cooleyi* Gillette. Ent. mon. Mag., London 72 1936 pp. 164-174, 1 pl. 3 graphs.

1873.—Laki, K. Ueber das Augenpigment der *Drosophila melanogaster*. [In Magyar with German summary.] Arb. ung. biol. Forsch.-Inst., Tihany 8 1936 pp. 356-357. [Dipt.]

Lal, C. see Smith, Mukerjee, Halder & Lal.

1874.—Lallemand, V. Description de trois genres et de deux espèces nouvelles de Homoptera de l'Insulinde et du l'Océanie. Festschr. 60. Geburtst. Embrik Strand, Riga 1 1936 pp. 264-266, 1 fig.

1875.—Lameere, A. La classification des insectes. C.R. Congr. Sci. nat. Bruxelles 1930 1930 pp. 793-795.

1876.—Lameere, A. Evolution des Orthoptères. Livre jubil. Bouvier, Paris 1936 pp. 223-227.

1877.—Lameere, A. Evolution des Lépidoptères. Bull. Ann. Soc. ent. Belgique, Brussels 76 1936 pp. 407-413.

1878.—Lameere, A. Précis de Zoologie. Rec. Inst. zool. Torley-Rousseau, Brussels 5 1936 pp. 1-160, 196 figs.

Lamy, R. see Crew & Lamy.

1879.—Landis, B. J. Alimentary canal and Malpighian tubules of *Ceratomegilla fuscilabris* (Muls.) (Coccinellidae, Coleoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 15-27, 4 pls.

1880.—Lane, J. Notas sobre Culicídeos de Rifaina. Rev. Biol. Hig., S. Paulo 6 1935 pp. 74-78, 1 fig. [Dipt.]

1881.—Lane, J. Notas sobre Tabanídeos. Folia Clin. Biol., S. Paulo 8 1936 pp. 70-71. [Dipt.]

1882.—Lane, J. Notas sobre mosquitos de São Paulo. Bol. Inst. Hyg. São Paulo no. 60 1936 15 pp. 14 figs. [Dipt.]

1883.—Lane, J. Notas sobre Culicídeos de Matto Grosso. Rev. Mus. paul., São Paulo 20 1936 pp. 173-206, 4 pls. [Dipt.]

1884.—Lane, F. Algumas notas sobre o género *Rhathymoscelis* Thoms. e descrição de uma especie nova (Col. Cerambycidae). Rev. Mus. paul., São Paulo 20 1936 pp. 765-775, 2 pls.

1885.—Lange, jr., W. H. The biology of the orange tortrix, *Eulia* (*Argyrotaenia*) *citrana* Fern. Bull. Dep. Agric. Calif., Sacramento 25 1936 pp. 283-285, 1 fig. [Lep.]

Langer, W. see Ermisch & Langer.

1886.—Larsen, E. B. Studier over de tunnel gravende biller med saerligt henblik på deres forhold overfor salt-og vandindhold i jordbunden. Forh. skand. naturf. Møte, Helsingfors 19 1936 pp. 493-494. [Col.]

1887.—Larsén, O. Die Kopulationsstellung bei *Coranus subapterus* De G. Opusc. ent. Lund 1 1936 pp. 39-41, 1 fig. [Hem.]

1888.—Lassmann, G. W. P. The early embryological development of *Melophagus ovinus* L., with special reference to the development of the germ cells. Ann. Soc. ent. Amer., Columbus **29** 1936 pp. 397–408, 3 pls. [Dipt.]

1889.—Lathy, P. I. *Thecla* nouveaux d'Amérique du Sud (Lepidopt. Lycaenidae). Livre jubil. Bouvier, Paris 1936 pp. 229–232, 1 pl.

1890.—Latter, O. H. *Aglais urticae* (L.) attracted by lamplight after hibernation. Proc. R. ent. Soc. London (A) **11** 1936 pp. 96–97.

1891.—[Lavrekhin, F. A.] Лаврекин, Ф. А. Contribution to the study of variation in honey bees. II. [In Russian with English summary.] Zool. J., Moscow **14** 1935 pp. 655–663, 7 figs. [Hym.]

1892.—[Lavrov, P. A.] Лавров, П. А. Einfluss erhöhter Temperatur auf den Mutationsprozess von *Drosophila melanogaster*. [In Russian with German summary.] J. Biol., Moscow **4** 1936 pp. 983–992. [Dipt.]

1893.—Lawson, C. A. A chromosome study of the Aphid *Macrosiphum solanifolii*. Biol. Bull., Woods Hole, Lancaster, Pa. **70** 1936 pp. 288–307, 3 pls. [Hem.]

1894.—Lea, A. M. Descriptions of Australian Curculionidae, with notes on previously described species. Part VIII. Trans. R. Soc. S. Aust., Adelaide **34** 1910 pp. 13–58. [Col.]

1895.—Lecamp, M. Sur le déterminisme de la courbure coaptive du fémur des membres antérieurs des Phasmes. C.R. Acad. Sci. Fr., Paris **202** 1936 pp. 694–696. [Orth.]

1896.—Le Cerf, F. Sur la nymphe des Eriocraniidae (Lepidopt. Micropterygidae). Livre jubil. Bouvier, Paris 1936 pp. 233–239, 1 pl. 3 figs.

1897.—Le Cerf, F. Un type remarquable d'androconie chez certaines *Gazera* Bodr. (Lep. Castniadae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 191–195, 2 figs.

1898.—Le Cerf, F. Une Hepiale nouvelle de France (Lep. Hepialidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 290–292, 1 pl.

1899.—Le Cerf, F. "Aberrationen" und die Nomenklatur. Ent. Z., Frankfurt a. M. **49** 1936 pp. 491–495, 503–506.

1900.—Le Cerf, F. Mission au Tibesti. Lépidoptères. Mém. Acad. Sci. Paris (2) **62** (1935) 1936 pp. 82–87. 1 fig.

1901.—Le Charles, L. Descriptions de formes de Zygènes (Lep.) d'Algérie. Bull. Soc. ent. Fr., Paris **41** 1936 p. 48, 1 pl.

1902.—Lederer, G. Tagfalterzuchtversuche in der Insektenabteilung des Tiergarten-Aquariums Frankfurt am Main. Ent. Z., Frankfurt a. M. **50** 1936 pp. 395–397, 406–410, 423–427. [Lep.]

Leech, H. B. see Hopping & Leech.

1903.—Leeson, H. S. Further experiments upon the longevity of *Xenopsylla cheopis* Roths. (Siphonaptera). Parasitology, Cambridge **28** 1936 pp. 403–409, 3 figs.

Leeson, H. S. see De Meillon, Evans & Leeson.

1904.—Le Feuvre, W. P. The stick insects of the Cape suburbs. Cape Nat., Cape Town **1** 1936 pp. 80–86, 3 figs. [Orth.]

1905.—Legendre, J. La pénétration continentale du moustique maritime. C.R. Acad. Sci. Fr., Paris **202** 1936 pp. 874–876. [Dipt.]

1906.—Lehaie, J. H. de. Augmentation de la taille des abeilles. Bull. Nat. Mons **15–16** 1932–34 p. 220. [Hym.]

1907.—Leleup, N. Quelques observations éthologiques sur les Carabes et les *Cychrus* de la forêt de Soignes et sur *Carabus clathratus* Linn., *C. nitens* Linn. et *C. granulatus* Linn. Bull. Ann. Soc. ent. Belg., Brussels **76** 1936 pp. 202–207. [Col.]

1908.—Le Marchand, S. Clé ou table analytique pour la détermination des espèces françaises de *Lithocolletis* (Famille des Gracilariidae). Amat. Papillons, Paris **8** 1936 pp. 83–118 figs.

1909.—Lempke, B. J. *Heodes* (*Chrysophanus*) *dispar* Hw. ras *batavus* Obthr. Ent. Ber., Amsterdam **9** 1936 pp. 217–220. [Lep.]

1910.—Lempke, B. J. *Pararge aegeria* L. et ses formes (suite et fin). Lambillionea, Brussels **36** 1936 pp. 19–32. [Lep.]

1911.—Lempke, B. J. *Colias hyale* L. et ses formes. Lambillionea, Brussels 36 1936 pp. 70–82, 102–107, 136–141, 149–159.

1912.—Lempke, B. J. *Lymantria dispar* L. et ses formes. Lambillionea, Brussels 36 1936 pp. 227–236, 257–263. [Lep.]

1913.—Lempke, B. J. Catalogus der Nederlandsche Macrolepidoptera. Tijdschr. Ent., Amsterdam 79 1936 pp. 238–315.

1914.—Lengersdorf, F. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 36. Diptera. 11. Fungivora und Sciaridae. Ark. Zool., Stockholm 27B (sep. dated 1933) 1936 no. 5, 2 pp.

1915.—Lengersdorf, F. Schwierigkeiten in der Bestimmung der Lycoriiden (Sciariden). Decheniana, Bonn 91 1935 pp. 205–210, 8 figs. [Dipt.]

Lengersdorf, F. see Bukowski & Lengersdorf.

Lent, H. see Neiva & Lent.

1916.—Leonard, M. D. Additions to the New York State list of Aphids with notes on other New York species. J. New York ent. Soc., 44 1936 pp. 177–185. [Hem.]

1917.—Lepage, H. S. Uma especie nova do género *Chionaspis* (Homoptera: Coccoidea). Arch. Inst. Biol. São Paulo 6 1935 pp. 167–170, 13 figs.

1918.—Lépiney, J. de. Sur l'instinct éducateur d'*Eumenes maxillosus* (De Geer) (Hyménoptères Vespidae). Bull. Soc. Sci. nat. Maroc, Rabat 16 1936 pp. 6–14, 3 figs.

1919.—Lepsi, I. Ueber Culiciden und die Malaria der Gegend von Chişinau-Bessarabien. Bull. Mus. nat. Sci. nat. Kishineff 6 1935 pp. 42–58. [Dipt.]

1920.—Leruth, R. Exploration biologique des cavernes de la Belgique et du Limbourg hollandais. XXI. contribution. Deuxième liste des grottes visitées. Natuurh. Maandbl., Maastricht 25 1936 pp. 8–10, 17–21, 29–32, 45–48, 52–56, 66–68, 80–82, 95–98, 116–118, 125–127, 130, 6 figs.

1921.—Lesne, P. Nouvelles données sur les coléoptères de la famille des Sphaeriidae. Livre jubilé. Bouvier, Paris 1936 pp. 241–248, 18 figs.

1922.—Lesne, P. Diagnoses préliminaires de Lycitides et Bostrychides nouveaux (Col.) de l'Indo- et de l'Austro-Malaisie. Bull. Soc. ent. Fr., Paris 41 1936 pp. 131–138, 9 figs.

1923.—Lesne, P. Contributions à l'étude de la faune du Mozambique. Voyage de M. P. Lesne (1928–1929). 22^e note. Les *Enneadesmus* du Mozambique et des régions voisines (Coleoptera, Bostrychidae). Rev. franç. Ent., Paris 3 1936 pp. 55–62, 6 figs.

1924.—Lestage, J. Notes trichoptérologiques. XIV, XV. Bull. Ann. Soc. ent. Belgique, Brussels 76 1936 pp. 165–192, 213–220, 3 figs.

1925.—Lestage, J. A. Notes de Limnobiologie. XI. Nouvelle station de *Liponeura belgica* Bischoff (Diptera: Blepharoceridae). Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 270–272.

1926.—Lestage, J. A. Les Ephéméroptères de la Belgique, VIII. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 420–424.

1927.—Lever, R. J. A. W. A new species of *Amblypelta* (Heteroptera, Coreidae) from the British Solomon Islands. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 324–325, 1 fig.

1928.—L'Héritier, P. Sur l'apparition de différences de pigmentation entre diverses souches de *Drosophila melanogaster*, type sauvage, à la suite d'une intoxication larvaire. C.R. Acad. Sci. Fr., Paris 203 1936 pp. 1392–1393. [Dipt.]

1929.—L'Héritier, P. & Tessier, G. Proportion des sexes dans des populations de *Drosophiles* en équilibre. C.R. Acad. Sci. Fr., Paris 202 1936 pp. 692–694. [Dipt.]

1930.—Lhomme, L. A propos de l'article précédent sur la migration des Lépidoptères. Amat. Papillons, Paris 8 1936 pp. 23–25.

1931.—Lhomme, L. Lettre ouverte sur la préparation des papillons de petite taille. Amat. Papill., Paris 8 1936 pp. 124–137, 147–151.

1932.—Lhoste, J. L'organe copulateur mâle dans la famille des Scydmaenidae (Coleopt.). Livre jubilé. Bouvier, Paris 1936 pp. 249–251, 12 figs.

1933. — Lhoste, J. Entomological expedition to Abyssinia, 1926-27: Coleoptera, Scydmaenidae. *Ann. Mag. nat. Hist.*, London (10) **18** 1936 pp. 610-619, 11 figs.

1934. — Lhoste, J. Notes sur quelques Scydménides africains du Musée de Hambourg. *Rev. franç. Ent.*, Paris **2** (1935) 1936 pp. 251-256, 10 figs. [Col.]

1935. — Lhoste, J. Sur la phylogénie du genre *Mastigus* Latr. (Col. Scydmaenidae). *Rev. franç. Ent.*, Paris **3** 1936 pp. 190-199, 14 figs.

1936. — Li, Feng-swen & Wu, Shih-cheng. Notes on the morphology of Culicine larvae in Hangchow. *Yearb. Bur. Ent. Hangchow* **1934** 1935 pp. 95-120, 18 pls.

1937. — Li, Ju-Chi. Genetic studies of the notopleural deficiency in *Drosophila melanogaster*. *Peking nat. Hist. Bull.* **11** 1936 pp. 39-48. [Dipt.]

1938. — Li, J.-C. & Tsui, Y.-L. The development of vestigial wings under high temperature in *Drosophila melanogaster*. *Genetics*, Menasha **21** 1936 pp. 248-263, 29 figs. [Dipt.]

1939. — Liche, H. Beiträge zur Ethologie der Dermestiden. *Bull. int. Acad. Cracovie* **1936** 1936 B II pp. 141-162, 4 figs. [Col.]

1940. — Liche, H. Observations sur la façon de se comporter des Gerrides (Hémiptères hétéroptères). *C.R. Acad. Cracovie* **1936** 1936 p. 5.

1941. — Lichy, R. Dos lepidópteros nuevo para Venezuela. *Bol. Soc. venezol. Cienc. nat.*, Caracas **3** 1936 pp. 204-209, 2 figs., pp. 323-327, 1 fig.

1942. — Lichy, R. Consideraciones sobre los orígenes de los colores en los Lepidópteros. *Bol. Soc. venezol. Cienc. nat.*, Caracas **3** 1936 pp. 318-322.

1943. — Liebermann, J. Catalogo sistemático y razonado de Acridoideos Argentinos. Géneros: *Prionolopha*, *Diedronotus*, *Eleaochlora* y *Chromacris* (Orthop., Acrididae). *Rev. Soc. ent. Argent.*, Buenos Aires **7** 1935 pp. 25-50, 3 pls.

1944. — Liebermann, J. El género *Chromacris* en la Argentina y la importancia del estudio de los Acridios solitarios. *Rev. chil. Hist. nat.*, Santiago **39** (1935) 1936 pp. 116-124, 1 pl. [Orth.]

1945. — Liebke, M. Neue Carabiden aus Costa Rica (Col.). *Rev. Ent.*, Rio de Janeiro **6** 1936 pp. 125-128.

1946. — Liebke, M. Neue Carabiden aus Argentinien (Col. Carab.). *Rev. Ent.*, Rio de Janeiro **6** 1936 pp. 300-304.

1947. — Liebke, M. Die Gattung *Lachnophorus* Dejean (Col. Carabidae). *Rev. Ent.*, Rio de Janeiro **6** 1936 pp. 461-468.

1948. — Lieftinck, M. A. On certain types among the Odonata. I. *Pseudagrion australasiae* Selys 1876. *Konowia*, Vienna **15** 1936 pp. 167-170, 2 figs.

1949. — Lieftinck, M. A. Die Odonaten der Kleinen Sunda-Inseln. *Rev. suisse Zool.*, Geneva **43** 1936 pp. 99-160, 19 figs.

1950. — Lieftinck, M. A. Studies in Oriental Mecoptera. I. The genus *Leptopanorpa* in Malaysia. *Treubia*, Buitenzorg **15** 1936 pp. 271-320, 11 pls. 8 figs.

1951. — Lieftinck, M. A. A new genus and species of Libellulidae from Celebes (Odon.). *Treubia*, Buitenzorg **15** 1936 pp. 399-403, 2 figs.

1952. — Lienhart, R. Les Orthoptères du département de la Moselle. *Bull. Soc. Hist. nat. Moselle, Metz* (3) **10** 1935 pp. 294-300.

1953. — Lieu, K. O. V. Preliminary notes on the biology and control of the mulberry-borer, *Paradoxecia pيلي* Lieu (Lepidoptera, Aegeriidae). [In Chinese with English summary.] *Rep. Hangchow Bur. Ent.* 1935 31 pp.

1954. — Light, S. F. & Zimmermann, E. C. Termites of southeastern Polynesia. *Occ. Pap. Bishop Mus.*, Honolulu **12** 1936 no. 12, 12 pp. 1 pl. [Isopt.]

1955. — Lindberg, H. Hemiptera aus Nordost-Grönland. *Skr. Svalb. Ishavet*, Oslo **65** 1935 pp. 11-17, 1 map.

1956. — Lindberg, H. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen-Chinas. 47. Hemiptera. 2. Hemiptera-Heteroptera. *Ark. Zool.*, Stockholm **27A** (sep. dated 1934) 1936 no. 28, 43 pp. 4 pls.

1957. — Lindberg, H. Drei neue Tingitiden aus Herrn A. Thérys Sammlung. *Bull. Soc. Sci. nat. Maroc*, Rabat **16** 1936 pp. 81-85, 3 figs. [Hem.]

1958.—Lindberg, H. Die Heteropteren der Kanarischen Inseln. Comment. biol., Helsingfors 6 1936 no. 7 43 pp. 2 pls.

1959.—Lindberg, H. Die Cicadinen der Kanarischen Inseln. Comment. biol., Helsingfors 6 1936 no. 9, 19 pp., 45 figs. [Hem.]

1960.—Lindberg, H. Bidrag till kännedom om skalbaggs faunan i Sverige. Notul. ent., Helsingfors 16 1936 pp. 110–122. [Col.]

1961.—Lindberg, H. Halophile und halobionte Hemiptera. Tierwelt N.-u. Ostsee, Leipzig 30 1936 no. 11e 4 pp. 103–124, 20 figs.

1962.—Lindgren, D. L. The respiration of insects in relation to the heating and the fumigation of grain. Tech. Bull. Minnesota agric. Exp. Sta., St. Paul no. 109 1935 32 pp. 15 figs.

1963.—Lindinger, L. Ueber einige Schildläuse des Berliner botanischen Gartens (Coccidae). Arb. physiol. angew. Ent. Berlin 3 1936 pp. 153–155. [Hem.]

1964.—Lindinger, L. Wie neue Schildlaus-Arten gemacht werden. Ent. Z., Frankfurt a. M. 50 1936 pp. 285–286. [Hem.]

1965.—Lindinger, L. Neue Beiträge zur Kenntnis der Schildläuse (Coccidae). Ent. Z., Frankfurt a. M. 49 1936 pp. 444. [Hem.]

1966.—Lindner, E. Die Fliegen der palaearktischen Region. Stuttgart 1935. General 1 pp. 241–280, 2 pls. 40 figs.; Tendipedidae (Chironomidae) 13b 81 pp. 6 pls. 100 figs.; Stratiomyidae 18 pp. 1–48, 38 figs.; Cyrtidae (Acroceridae) 21 36 pp. 3 pls.; Bombyliidae 25 pp. 401–560, 1 pl. 64 figs.; Agromyzidae 59 pp. 513–570, 2 pls. 2 figs.; Chamaemyiidae (Ochthophilidae) 103 24 pp. 23 figs. See Czerny, Engel, Goetghebuer, Hendel, Lindner & Sack.

1967.—Lindner, E. Die Fliegen der Palaearktischen Region. Stuttgart, 1936. General 1 pp. 241–280, 2 pls. 40 figs.

1968.—Lindner, E. Stratiomyiidae. In Lindner, Flieg. palaearkt. Reg. 18 1936 pp. 1–48, 38 figs.

1969.—Lindner, E. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen

Chinas. 35. Diptera. 10. Phryneidae, Rhagionidae und Stratiomyidae. Ark. Zool., Stockholm 27B (sep. dated 1933) 1936 no. 4, 5 pp.

1970.—Lindner, E. Stratiomyiiden von Madagaskar (Dipt.). Konowia, Vienna 15 1936 pp. 33–60, 7 figs.

1971.—Lindner, E. Ueber die von Gerd Heinrich im Jahre 1935 in Bulgarien gesammelten Diptera-Stratiomyiidae. Mitt. naturw. Inst. Sofia 9 1936 pp. 91–92, 1 fig.

1972.—Lindner, E. Stratiomyiiden von Costa Rica (Dipt.). Stettin. ent. Ztg. 97 1936 pp. 153–158.

1973.—Lindner, E. Die amerikanische *Hermetia illucens* L. im Mittelmeergebiet. (Stratiomyiidae, Dipt.) Zool. Anz., Leipzig 113 1936 pp. 335–336.

1974.—Lindner, E. Ein *Nemotelus*-Zwitter (Stratiomyiidae, Dipt.). Zool. Anz., Leipzig 114 1936 pp. 82–84, 6 figs.

1975.—Lindner, E. & Schneider, C. Jahresbericht 1935 des Entomologischen Vereins Stuttgart 1869 E.V. Ent. Rdsch., Stuttgart 53 1936 pp. 325–327, 339–343, 19 figs. [Lep.]

1976.—Lindquist, A. W. Notes on the habits and biology of a sandfly, *Phlebotomus diabolicus* Hall, in southwestern Texas (Diptera: Psychodidae). Proc. ent. Soc. Washington 38 1936 pp. 29–32, 2 figs.

1977.—Lindqvist, E. Das bisher unbekannte Männchen von *Lygaeonematus retusus* (Hym. Tenth.). Notul. ent., Helsingfors 16 1936 pp. 109–110.

1978.—Lindroth, C. H. Die Coleopterenfauna am See Pjeskejaure im schwedischen Lappland. Ark. Zool., Stockholm 28A 1935 no. 8, 60 pp. 3 figs.

Lindroth, C. H. see Palm & Lindroth.

1979.—Lingonblad, B. Formes nouvelles de la Laponie. Lambillionea, Brussels 36 1936 pp. 236–239. [Lep.]

1980.—Lingonblad, B. Iakttagelser över finska Lepidoptera. II. Notul. ent., Helsingfors 16 1936 pp. 3–12, 2 figs.

1981.—Linnaniemi, W. M. Beitrag zur Kenntnis der Collembolenfauna Spitzbergens. Ann. Ent. Fenn., Helsingfors 1 1935 pp. 137–141.

1982.—Linnaniemi, W. M. Collem-bolen aus Nordost-Grönland. Skr. Svalb. Ishavet, Oslo 65 1935 pp. 19-25, 1 map.

1983.—Linsley, E. G. Preliminary studies in the North American Phoracanthini and Sphaerionini (Coleoptera, Cerambycidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 461-479, 1 pl.

1984.—Linsley, E. G. Observations on the habits of some western Longicorn beetles (Coleoptera, Cerambycidae). Pan-Pacific Ent., San Francisco 12 1936 pp. 199-200.

1985.—Linsley, E. G. Studies in the genus *Aulicus* Spinola (Coleoptera-Cleridae). Univ. Calif. Pub. Ent., Berkeley 6 1936 pp. 249-262, 17 figs.

1986.—Linsley, E. G. & Usinger, R. L. Insect collecting in California—II. Foothill regions. Pan-Pacific Ent., San Francisco 12 1936 pp. 49-55, 2 pls.

1987.—[Lipina, N. N.] Липина, Н. Н. Larves des Chironomides vivantes sur les plantes aquatiques riveraines des rivières du bassin du Donetz septentrional. [In Ukrainian.] Trav. Soc. Nat. Charkow 52 1929 pp. 287-310. [Dipt.]

Lisitzuina, L. I. *see* Emel'yanov, Pravdin, Kuzina & Lisitzuina.

1988.—Lison, L. La coloration vitale des nucléoles dans le tube de Malpighi chez *Forficula auricularia* Linn. Bull. Acad. Belg. Cl. Sci., Brussels (5) 22 1936 pp. 1189-1196. [Dermapt.]

1989.—Liu, C. L. A bibliographic and synonymic catalogue of the Vespidae of China, with a cross-referring index for the genera and species. Peking nat. Hist. Bull., Peiping 11 1936 pp. 91-114.

1990.—Liu, C. Y. Catalogue of Chinese Siphonaptera. Lingnan Sci. J., Canton 15 1936 pp. 379-390, 583-594.

1991.—Liu, Chi-Ying. Studies on the spring brood larvae of the paddy borer, *Schoenobius incertellus* Walker. Lingnan Sci. J., Canton 15 1936 pp. 543-556. [Lep.]

1992.—Liu, Gaines. Catalogue of the Phytophagous beetles of China [contd.]. Lingnan Sci. J., Canton 15 1936 pp. 19-30, 249-261.

1993.—Liu, Kwo-si. Notes on the life-history of *Agrotis ypsilon* Rott. in Hangchow (Lep. Noctuidae). [In

Chinese with English summary.] Yearb. Bur. Ent. Hangchow 1934 1935 pp. 121-140, 2 pls.

1994.—Liu, Kwo-si & Fan, Ping-fa. Life-history of *Calomycterus* sp. in Hangchow (Col. Curculionidae). [In Chinese.] Yearb. Bur. Ent. Hangchow 1934 1935 pp. 282-284, 2 figs.

1995.—Liw, T. W. Prima studo de morfologio, habito, vivhistono kaj kontrolatado de *Raphidopalpi femoralis* Motsch. [In Chinese.] Insekto interesa, Nantung 2 1936 no. 1 pp. 12-23. [Col.]

1996.—Lizer y Trelles, C. A. Algunas cochinillas nuevas para la fauna de la República Argentina. Physis, Buenos Aires 12 1936 pp. 113-116. [Hem.]

Ljungdahl, D. *see* Nordström, Wahlgren, Tullgren & Ljungdahl.

1997.—Lloyd, Ll. Assessment of a testee population. Bull. ent. Res., London 27 1936 pp. 261-267, 1 fig. [Dipt.]

1998.—Lloyd, Ll. & Turner, J. N. The migrations of the larvae of *Metriocnemus longitarsus* Goet. (Chironomidae) in response to gravity and light. Proc. Leeds phil. lit. Soc. 3 1936 pp. 177-188. [Dipt.]

Lloyd, Ll. *see* Dyson & Lloyd.

Lobashov, M. E. *see* Bogachenko & Lobashov.

1999.—Löfgren, A. Reconhecimento geológico nos rios Tocantins e Araguaya. Bol. Serv. geol. min. Brasil, Rio de Janeiro 80 1936 pp. 1-61, 3 maps, 16 pls. [Fossil.] [Insects p. 28.]

Loh, Nie-tsin *see* Chen, Loh & Wang.

2000.—Lombardi, P. L. Il tessuto adiposo e l'intestino hanno la funzione di assorbire ed eliminare i pigmenti vari essententi nelle larve e nelle crisalidi del *Bombyx mori*, L.? Boll. Sta. sper. Gelsicholt. Bachicolt. Ascoli Piceno 15 1936 pp. 84-88, 2 figs. [Lep.]

2001.—Lombardi, P. L. Come si comporta la nuova razza S.A. n. 15 nell'incrocio (*Bombyx mori*, L.). Boll. Sta. spec. Gelsicolt. Bachicolt. Ascoli Piceno 15 1936 pp. 88-90. [Lep.]

2002.—Lombardi, P. L. Caratteristiche fattori letali nella razza S.N. n. 15 di *Bombyx mori*, L. Boll. Sta. sper. Gelsicolt. Bachicolt. Ascoli Piceno 15 1936 pp. 90-93. [Lep.]

2003.—Lombardi, P. L. Dominante eredità patricolina nella forma, colore, presenza di glutine nelle uova di vari incroci e nelle nuove razze pure di *Bombyx mori*, L. Boll. Sta. sper. Gelsicolt. Bachicolt. Ascoli Piceno 15 1936 pp. 93–95. [Lep.]

2004.—Lona, C. Curculionidae: Otiorrhynchinae I. Coleopt. Catalogus, 's-Gravenhage 148 1936 226 pp.

2005.—Longfield, C. Studies on African Odonata, with synonymy and descriptions of new species and sub-species. Trans. R. ent. Soc. London 85 1936 pp. 467–498, 10 figs.

2006.—Longstaff, T. G. Entomological note on Mr. J. M. Wordie's expedition to N.W. Greenland and E. Baffinland in 1934. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 531–533.

Lopes see Souza Lopes.

Lopez Cristobal see Cristobal.

2007.—Lotmar, R. Anatomische Untersuchungen an Cyklopen-Bienen. Rev. suisse Zool., Geneva 43 1936 pp. 51–72, 32 figs. [Hym.]

2008.—[Lozina-Lozinskii, L. K.] Лозина-Лозинский, Л. К. Cold hardiness in the larvae of *Loxostege sticticalis* L. [In Russian with English summary.] Bull. Inst. sci. Lesshaft, Leningrad 19 1936 pp. 121–162, 8 graphs. [Lep.]

2009.—[Lučnik, V. N.] Лучник, В. Н. Matériaux pour servir à l'étude de la tribu des Pogonina (Coleoptera, Carabidae), II. [In Russian with Latin descriptions.] Rev. Ent. U.R.S.S. Leningrad 25 1935 pp. 265–270.

2010.—[Lučnik] Lutshnik, V. Analecta carabidologica V. Acta Soc. ent. Cech., Prague 33 1936 pp. 176–177. [Col.]

2011.—[Lučnik] Lutshnik, V. The Carabidae of Anapa, Caucase. Folia zool. hydrobiol., Riga 9 1936 pp. 138–142. [Col.]

2012.—Ludwig, A. Die Pflanzen-gallen des Siegerlandes und der angrenzenden Gebiete. Abh. Westf. prov. Mus. Naturk., Münster i. W. 6 1935 no. 2 pp. 1–68.

2013.—Ludwig, D. The effect of desiccation on survival and meta-

morphosis of the Japanese beetle (*Popillia japonica* Newman). Physiol. Zool., Chicago 9 1936 pp. 27–42, 1 fig. [Col.]

2014.—Ludwig, D. & Abercrombie, W. F. Histological changes accompanying the growth of the mid-intestine of Japanese beetle larvae (*Popillia japonica* Newman). J. Morph., Philadelphia 59 1936 pp. 113–122.

2015.—Luh, Chin-jen. The skeletal structures of the tympanum of Arctiidae (Order Lepidoptera). Peking nat. Hist. Bull., Peiping 11 1936 pp. 83–90, 1 pl.

2016.—Lühmann, M. Beiträge zur Chrysomelidenbiologie. 2. Ent. Bl., Crefeld 32 1936 pp. 126–128, 1 fig.

2017.—Luke, H. & Keith-Roach, E. The Handbook of Palestine and Trans-Jordan. 3rd Ed. London, Macmillan & Co. 1934 xvi + 549 pp. 1 map, 1 col. pl. [Insects pp. 425–429.]

2018.—Lumma, C. Biologisches über die drei *Lygris*-arten: *associata* Bkh., *pyropata* Kb. und *prunata* L. Lepidopt. Geometridae, Fam. Larentiinae. Ent. Z., Frankfurt a. M. 49 1936 pp. 462–465.

2019.—Lundbeck, J. Untersuchungen über die Bodensiedelung der Alpenrandseen. Arch. Hydrobiol., Stuttgart Suppl. 10 1936 pp. 205–358, 2 pls. 33 figs.

2020.—Lundbeck, J. Untersuchungen über die Mengenverteilung der Bodentiere in den Lunzer Seen. Int. Rev. Hydrobiol., Leipzig 33 1936 pp. 50–72, 9 figs.

2021.—Lundblad, O. Die altweltlichen Arten der Veliidengattungen *Rhagovelia* und *Tetraripis*. Ark. Zool., Stockholm 28A 1936 no. 21, 63 pp. 13 pls. 13 figs. [Hem.]

2022.—Lundblad, O. Eine neue *Micronecta*-Art aus Schweden. Ent. Tidskr., Stockholm 57 1936 pp. 23–28, 1 pl. 2 figs. [Hem.]

2023.—Lundblad, O. De svenska vattenhemipterernas ekologi och djurgeografiska ställning. Ent. Tidskr., Stockholm 57 1936 pp. 29–74, 6 figs.

2024.—Lunt, J. The Christmas butterfly. Cape Nat., Cape Town 1 1936 pp. 67–69, 1 fig. [Lep.]

2025.—Lunt, J. Butterflies of the Cape Peninsula. Cape Nat., Cape Town 1 1936 pp. 92–94. [Lep.]

2026.—Lupo, V. Revisione delle specie di *Aonidiella* Berl. et Leon. del gruppo *A. aurantii* (Mask.). Boll. Lab. Zool. Portici 29 1936 pp. 249–261, 4 figs. [Hem.]

Lutshnik see Lučnik.

2027.—Lutz, A. & Oliveira Castro, G. M. de. Considerações sobre espécies affins do género *Melpia* Walker (1850) e descrição de um género novo e duas espécies novas. Mem. Inst. Oswaldo Cruz, Rio de Janeiro 31 1936 pp. 169–177. [Dipt.]

2028.—Lutz, A. & de Oliveira Castro, G. M. Sobre duas espécies novas do género *Fidena* Walker. Mem. Inst. Oswaldo Cruz, Rio de Janeiro 31 1936 pp. 179–183. [Dipt.]

2029.—Lutz, F. E. How about the tent caterpillar? Nat. Hist., New York 37 1936 pp. 149–158, 17 photos, 1 fig. [Lep.]

Lyaschenko, A. see Sabaneev, Nosal' & Lyaschenko.

2030.—Ma, Tsing-Chao. Notes on two subterranean *Vespa* of Hangchow (Hym.). [In Chinese.] Ent. & Phytopath., Hangchow 4 1936 pp. 6–11, 1 pl.

2031.—Ma, Tsing-Chao. Nesting and flower-visiting habits of certain bees and wasps of E. China. I. [In Chinese.] Ent. & Phytopath., Hangchow 4 1936 pp. 59–68, 9 figs.

2032.—Ma, Tsing-Chao. Notes on some weevils of China, I. [In Chinese.] Ent. & Phytopath., Hangchow 4 1936 pp. 443–446. [Col.]

2033.—Ma, T. C. Notes on some Aculeata from Szechwan, West China. Ent. & Phytopath., Hangchow 4 1936 pp. 466–471. [Hym.]

2034.—Ma, T. C. Descriptions of two new species of *Tiphia* from East China (Hym., Tiphidae). Lingnan Sci. J., Canton 15 1936 pp. 461–464.

Ma, Tsing-chao see Wong & Ma.

2035.—Määr, A. & Voore, V. Notizen über die auf der Biologischen Station der Universität Tartu in Kuusnemme (Saaremaa, Eesti) beobachteten Borken-

käfer-Fauna. [In Estonian with German summary.] Estländ. Forstw. Jb., Tartu 7 1935 pp. 641–651, 5 figs. [Col.]

2036.—Machotin, A. Zu den Reduktionserscheinungen in der Morphologie des erwachsenen Frostspanners (*Operophtera brumata* L.). C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 2 1936 pp. 401–404, 2 figs. [Lep.]

2037.—Macht, D. I. Pharmacological studies of extracts on periodical Cicadas and on grasshoppers. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 46. [Orth.]

2038.—Măciucă, C. Contribution à la biologie de *Pyrrochoris apterus* Linn. (Note préliminaire.) Notat. biol., Bucarest 3 1935 pp. 11–15. [Hém.]

Mackenzie, C. see Campbell, Mackenzie & Borgström.

2039. — Mackiewicz-Gutowska, R. Beitrag zur Kenntnis der Ephemeropterenfauna des nordöstlichen Polen. [In Polish, with German summary.] Trav. Soc. Sci. Wilno, Cl. Sci. math. nat. 9 (1934) 1935 pp. 287–306.

2040.—McKeown, K. The Tuross river, an entomological paradise. Aust. Mus. Mag., Sydney 6 1936 pp. 85–90, 6 figs.

2041.—MacLagan, D. S. & Dunn, E. The experimental analysis of the growth of an insect population. Proc. roy. Soc. Edinburgh 55 (1934–5) 1936 pp. 126–139, 5 figs.

2042.—McClure, H. E. Psocid habits. Ent. News, Philadelphia 47 1936 pp. 113–118, 143–146.

2043.—McClure, H. E. An old hibernaculum. Psyche, Boston 43 1936 p. 19.

2044. — McDunnough, J. A new Arctic Baetid (Ephemeroptera). Canad. Ent., Orillia 68 1936 pp. 33–34, 1 pl.

2045.—McDunnough, J. A new *Haploptilia* with notes on two other species (Lepid.). Canad. Ent., Orillia 68 1936 pp. 52–55, 2 figs.

2046.—McDunnough, J. Further notes on Canadian plume moths (Lepid., Pterophoridae). Canad. Ent., Orillia 68 1936 pp. 63–69, 1 fig.

2047.—McDunnough, J. Further notes on the genus *Ameletus* with descriptions of new species (Ephem.). Canad. Ent., Orillia 68 1936 pp. 207-211, 2 figs.

2048.—McDunnough, J. A critical review of the treatment of North American *Parnassius* species by Felix Bryk in Das Tierreich. Part 65. Canad. Ent., Orillia 68 1936 pp. 216-225. [Lep.]

2049.—McDunnough, J. Further notes on the synonymy of North American Eupithecias (Lepid., Geom.). Canad. Ent., Orillia 68 1936 pp. 257-259.

2050.—Macfie, J. W. S. Two new species of Ceratopogonidae (Diptera) from the wings of dragonflies. Proc. R. ent. Soc. London (B) 5 1936 pp. 62-64, 1 fig.

2051.—Macfie, J. W. S. Four species of Ceratopogonidae (Diptera) from the wings of insects. Proc. R. ent. Soc. London (B) 5 1936 pp. 227-230, 1 fig.

2052.—Macgillivray, D. Over het voorkomen van *Cicindela maritima* Latr. in Nederland, buiten het Noord-zee-strand. Ent. Ber., Amsterdam 9 1936 pp. 214-217. [Col.]

2053.—McKenzie, H. L. An anatomical and systematic study of the genus *Anatis* of America (Coleoptera-Coccinellidae). Univ. Calif. Pub. Ent., Berkeley 6 1936 pp. 263-272, 10 figs.

Mackey, L. S. *see* Pate, Mackey & Cresson.

McMasters, J. H. *see* Schenk & McMasters.

2054.—Macy, R. W. A practical method for inducing oviposition in diurnal Lepidoptera. Science, New York 84 1936 pp. 141-142, 1 fig.

2055.—Mader, L. Neue *Pharoscyminus* Bed. aus Aegypten (Coleoptera-Coccinellidae). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 26-28.

2056.—Mader, L. Neue Coleoptera aus Süd und Zentralamerika. Ent. Anz., Vienna 16 1936 pp. 25-27.

2057.—Mader, L. Bestimmungstabelle der Coleopterenfamilie Nilionidae. Ent. NachrBl., Troppau 10 1936 pp. 73-102.

2058.—Mader, L. Neue Coleopteren und Notizen. Ent. Rdsch., Stuttgart 54 1936 pp. 61-66, 69-71, 97-101, 112-115.

2059.—Mader, L. Beitrag zur Kenntnis der Hymenopteren. I. Ent. Z., Frankfurt a. M. 50 1936 pp. 261-263, 275-277, 288-290.

2060.—Madle, H. Die Larven der Gattung *Aphodius* II. Arb. physiol. angew. Ent. Berlin 3 1936 pp. 1-20. [Col.]

2061.—Maertens, H. Die Wanzen (Hemiptera-Heteroptera) des Mittleren Saaletales, besonders der näheren Umgebung von Naumburg. Ent. Anz., Vienna 16 1936 pp. 17-20, 57-60, 89-92, 129-131, 133-136.

2062.—Magnan, A. La cinématographie ultra-rapide pour l'étude du vol des oiseaux et des insectes. Livre jubil. Bouvier, Paris 1936 pp. 253-256, 1 pl.

2063.—Magnan, A. La locomotion chez les animaux. I. Le vol des insectes. Paris, Hermann & Cie 1934 186 pp., 36 pls., 209 figs.

2064.—Magne de la Croix, P. Interpretation de la ninfosis. An. Soc. Cient. Argent., Buenos Aires 122 1936 pp. 65-85, 9 figs.

2065.—Mahdihassan, S. The range of host selection and the specific differentiation of lac and other parasites. Arch. Naturgesch., Leipzig (N.F.) 5 1936 pp. 1-22. [Hem.]

2066.—Mahdihassan, S. The dorsal spine of the lac insect and its function. Curr. Sci., Bangalore 5 1936 pp. 205-206, 2 figs. [Hem.]

Maidl, F. *see* Yasumatsu & Maidl.

2067.—Mainx, F. Eine neue Faktormutation von *Drosophila melanogaster*. Z. indukt. Abstamm.- u. Vererb. Lehre, Leipzig 71 1936 pp. 303-304, 8 figs. [Dipt.]

2068.—Maki, T. Studies of the skeletal structure, musculature and nervous system of the alder fly *Chauliodes formosanus* Petersen. Mem. Fac. Sci. Agric. Taihoku Univ. 16 1936 pp. 117-243, 10 pls. [Neur.]

2069.—Maki, T. Anatomical studies of alimentary canals and their appendages in Syrphid flies. *Trans. nat. Hist. Soc. Formosa* 25 1935 pp. 379-391, 2 pls. [Dipt.]

2070.—Makino, S. The spiral structure of chromosomes in the meiotic divisions of *Podisma* (Orthoptera). *J. Fac. Sci. Hokkaido Univ., Sapporo Zool.* 5 1936 pp. 29-40, 1 pl. 4 figs.

2071.—Makólski, J. & Smreczynski, S. Les Coléoptères du pléistocène de l'eki Dolne près Pilzno. *C.R. Acad. Cracovie* 1936 1936 no. 6 p. 9. [Fossil.]

2072.—Malabotti, A. Histologische Untersuchung der Stabheuschrecken (*Dixippus morosus* Br. et Redt.) mit replantierten Köpfen. *Anz. Akad. Wiss. Wien* 72 1935 pp. 168-169. [Orth.]

2073.—Mallach, N. Dritter Beitrag zur Kenntnis der Blattwespenfauna Chinas. *Bull. Fan mem. Inst. Biol., Peiping* 6 1936 pp. 217-222. [Hym.]

2074.—Malloch, J. R. Diptera Calyptratae from the Federated Malay States (Fifth paper). *J. F.M.S. Mus., Kuala Lumpur* 13 1936 pp. 154-158, 2 figs.

2075.—Malloch, J. R. A new genus and species of Muscidae from Puerto Rico. *Proc. ent. Soc. Washington* 38 1936 pp. 9-10. [Dipt.]

2076.—Malloch, J. R. Notes on Australian Diptera. XXXV. *Proc. Linn. Soc. N.S.W., Sydney* 61 1936 pp. 10-26, 9 figs., pp. 259-261, 4 figs.

2077.—Maloeuf, N. S. R. Quantitative studies on the respiration of aquatic arthropods and on the permeability of their outer integument to gases. *J. exp. Zool., Philadelphia* 74 1936 pp. 323-351, 6 figs.

2078.—[Malov, N. N. & Friesen, H.] Малов, Н. Н. и Фризен, Г. Морфозы при *Drosophila melanogaster*, die durch Einwirkung eines hochfrequenten elektrischen Feldes hervorgerufen wurden. [In Russian with German summary.] *Biol. J., Moscow* 5 1936 pp. 561-568. [Dipt.]

Mal'tzeva, A. S. see Vasil'eva & Mal'tzeva.

2079.—Malucelli, P. Sulla migrazione precoce e tardiva dei pigmenti nella ghiandola serigene del *Bombyx mori*.

[With French summary, p. 232.] *Boll. Sta. sper. Gelsicolt. Bachic. Ascoli Piceno* 14 1935 pp. 193-232.

2080.—Malucelli, P. Ancora sulla migrazione precoce e tardiva dei pigmenti nelle ghiandole serigene del *Bombyx mori* (terza ed ultima nota). *Boll. Staz. sper. Gelsic. Bachic. Ascoli Piceno* 15 1936 pp. 53-68. [Lep.]

2081.—Malyshev, S. I. The nesting habits of solitary bees (a comparative study). *Eos, Madrid* 11 1936 pp. 201-309, 13 pls. Hym.

Malzeva, A. S. see Vassil'eva & Malzeva.

2082.—Mamet, R. New species of Coccidae (Hemipt. Homopt.) from Mauritius. *Proc. R. ent. Soc. London (B)* 5 1936 pp. 90-96 6 figs.

2083.—Mamet, R. Note sur les Cochenilles de l'île d'Agaléga. *Rev. agric. Ile Maurice* no. 88 1936 pp. 152-153. [Hem.]

2084.—Mamitza, R. Wissenschaftliche Ergebnisse der entomologischen Expedition seiner Durchlaucht des Fuersten Alessandro della Torre e Tasso in Nordafrika und Sizilien. *Pubb. Mus. ent. Pietro Rossi, Udine* 1 1936 pp. 233-235, 1 fig. [Col.]

2085.—Mancini, C. Raccolte entomologiche nelle isole di Capraia fatte da C. Mancini e F. Capra (1927-1931). IV. Hemiptera. *Mem. Soc. ent. ital., Genoa* 14 1935 pp. 4-16.

2086.—Mancini, C. Contributo alla conoscenza degli Emittenti della Tripolitana e della Cirenaica. *Ann. Mus. Stor. nat. Genova* 59 1936 pp. 195-201.

2087.—Mandl, K. Vorarbeiten für eine monographische Neuarbeitung der paläarktischen Cicindelen. Revision der *Cicindela hybrida*-Gruppe. *Arb. morph. taxon. Ent. Berlin* 3 1936 pp. 5-32, 4 figs. [Col.]

2088.—Mandl, K. *Cicindela soluta* Dej. und ihre Rassen. *Koleopt. Rdsch., Vienna* 22 1936 pp. 117-119, 3 figs. 1 map.

2089.—Mandl, K. Die Rassen von *Tapinophorus kaufmanni* Ganglb. (Col.). *Mitt. naturw. Inst. Sofia* 9 1936 pp. 101-107, 10 figs.

2090.—**Maneval, H.** *L'Anthidium caturgense*, son nid et sa larve (Hym. Apidae). Ann. Soc. ent. Fr., Paris **105** 1936 pp. 1-5, 3 figs.

2091.—**Maneval, H.** Insectes fossiles des calcaires oligocènes de Ronzon (Le Puy). Ann. Soc. linn. Lyon (n.s.) **79** 1936 pp. 23-27, 5 figs.

2092.—**Maneval, H.** Nouveau genre et nouvelles espèces de *Platygasterinae* (Hym.) de la faune franco-belge. Bull. Ann. Soc. ent. Belg., Brussels **76** 1936 pp. 45-58, 8 figs.

2093.—**Maneval, H.** Renseignements nouveaux sur le genre *Chionea* (Dipt. Tipulidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 40-42.

2094.—**Maneval, H.** Nouvelles notes sur divers Hyménoptères et leurs larves. Rev. franç. Ent., Paris **3** 1936 pp. 18-32, 6 figs.

2095.—**Mani, M. S.** Notes on some Indian gall forming Psyllidae (Homoptera). J. Asiat. Soc. (Sci.), Bengal **1** 1935 pp. 99-108, 1 pl. 1 fig.

2096.—**Mani, M. S.** A new Encyrtid Chalcid genus, *Krishnieriella*, gen. nov., from India. Rec. Ind. Mus., Calcutta **37** 1935 pp. 421-423, 1 fig. [Hym.]

2097.—**Mani, M. S.** Studies on Indian Itonididae (Cecidomyiidae; Diptera). II, III. New midges and galls. Rec. Ind. Mus., Calcutta **37** 1935 pp. 425-454, 14 figs.; **38** 1936 pp. 193-197.

2097A.—**Mani, M. S.** Chalcids (parasitic Hymenoptera) from India. Rec. Ind. Mus., Calcutta **38** 1936 pp. 125-129.

2097B.—**Mani, M. S.** A new Encyrtid parasite (Chalcidoidea: Hymenoptera) of a cockroach from India. Rec. Ind. Mus., Calcutta **38** 1936 pp. 131-132, 1 fig.

2098.—**Mani, M. S.** Some new and little known parasitic Hymenoptera from India. Rec. Indian Mus., Calcutta **38** 1936 pp. 333-340.

2099.—**Mani, M. S.** On a collection of parasitic Hymenoptera from the Government Museum, Madras. Rec. Indian Mus., Calcutta **38** 1936 pp. 469-472.

Manolache, C. I. see Knechtel & Manolache.

2100.—**Mansbridge, G. H.** Experiments on the resistance of the flour moth (*Ephestia kühniella* Zell.) to abnormally high temperatures. Ann. appl. Biol., Cambridge **23** 1936 pp. 803-821, 4 figs. [Lep.]

2101.—**Manski, M. J.** How do butterflies distinguish their foodplants? N. Qd. Nat., Cairns **4** 1936 pp. 22-24. [Lep.]

2102.—**Manunta, C.** I pigmenti del sangue e i pigmenti delle uova, carotinoidi e flavoni, in varie razze di bachi da seta. Ricerca della vitamina A nel sangue. Arch. zool. ital., Torino **23** 1936 pp. 273-281. [Lep.]

2103.—**Manunta, C.** Variazioni durante lo sviluppo delle ghiandole serigene, del contenuto in carotinoidi, carotene exantofille nelle varie porzioni del serbatoio, in razza *majella*. Arch. zool. ital., Torino **23** 1936 pp. 191-199. [Lep.]

2104.—**Manunta, C.** I flavoni nel vitello e nei gusci delle uova di bachi da seta e nel tegumento dei bachi a pelle gialla. Boll. Soc. ital. Biol. sper., Naples **11** 1936 pp. 50-51. [Lep.]

2105.—**Manunta, C.** Esperienze sul comportamento fisiologico del bianco dominante nei bachi da seta (*Bombyx mori*). Boll. Zool., Torino **7** 1936 pp. 89-93. [Lep.]

2106.—**Maran, J.** Dva novi Carabidi ze surie (Col. Carab.). Acta Soc. ent. Cech., Prague **33** 1936 p. 153.

2107.—**Maran, J.** De novis Alleculidarum speciebus formisque regionis palaearcticae. Pars II. Sborn. ent. odd. Nár. Mus. Praze **14** 1936 pp. 205-207. [Col.]

2108.—**Marchal, P.** Recherches sur la biologie et le développement des Hyménoptères parasites, Les Trichogrammes. Ann. Epiphyt., Paris (N.S.) **2** 1936 pp. 447-567, 1 pl. 22 figs.

Marchal, P. see Balachowsky & Mesnil.

2110.—**Marcu, G.** Die Wasserkäferfauna (Haliplidae, Hygrobiidae, Dytiscidae, Gyrinidae) der Bucovina. Festschr. 60. Geburtst. E. Strand, Riga **1** 1936 pp. 629-637. [Col.]

2111.—Marcu, O. Zur Biologie der in Rumänien vorkommenden *Sclero-phaedon*-Formen (Chrysomelidae). Ent. Bl., Crefeld 32 1936 pp. 10–12, 1 fig.

2112.—Marcu, O. Ueber das Zirporgan der Dytisciden (Coleoptera). Ent. Bl., Crefeld 32 1936 pp. 140–144, 3 figs.

2113.—Maréchal, P. Ethologie des *Trypoxylon* (Hym. Spég.) et observations sur *T. attenuatum* Sm. Bull. Ann. Soc. ent. Belgique, Brussels 76 1936 pp. 373–396, 1 pl. 4 figs.

Maréchal, P. see Crèvecoeur & Maréchal.

2114. — Marelli, C. A. El Microhimenóptero Calcidoideo *Encarsia galdardoi* n. sp. de la familia Eulophidae. Ministerio Obras pub. Prov. Buenos Aires, La Plata 1933 10 pp. 1 pl. 4 figs. [Hym.]

2115. — Mariani, M. Una nuova specie di *Eustaintonia* Spul. a studio sulla morfologia comparata delle larve del genere (Lepidoptera, Momphidae). Boll. Soc. ent. ital., Genoa 63 1936 pp. 97–103, 8 figs.

2116.—Marriner, T. F. Some Cumberlând sawflies. Ent. Rec., London 43 1936 pp. 41–44. [Hym.]

2117.—Marshak, A. The structure of the chromosomes of the salivary gland of *Drosophila melanogaster*. Amer. Nat., New York 70 1936 pp. 181–184. [Dipt.]

2118.—Marshak, A. A rapid method for making permanent mounts of *Drosophila* salivary gland chromosomes. Amer. Nat., New York 70 1936 pp. 406–407. [Dipt.]

2119.—Marshall, Sir G. A. K. Contributions à l'étude de la faune du Mozambique. Voyage de M. P. Lesne (1928–1929). 21^e note—Coleoptera: Curculionidae. Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935 53 pp. 2 figs.

2120.—Marshall, Sir G. A. K. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 48. Coleoptera 9 (Curculionidae (Col.)). Ark. Zool., Stockholm 27A (sep. dated 1934) 1936 no. 29, 8 pp.

2121.—Marshall, Sir G. A. K. Curculionidae (Col.) attacking cultivated plants. Bull. ent. Res., London 27 1936 pp. 253–259, 2 figs.

2122. — Marshall, Sir G. New injurious Curculionidae (Col.) from South America. Bull. ent. Res., London 27 1936 pp. 497–501, 3 figs.

2123.—Marshall, Sir G. A. K. New Indian Curculionidae (Col.). Ind. For. Rec., Delhi 1 1936 pp. 205–231, 1 pl.

2124.—Marshall, Sir G. A. K. New Australian Curculionidae (Col.). Proc. R. ent. Soc. London (B) 5 1936 pp. 189–195, 2 figs.

Marshall, Sir G. A. K. see Schenkling & Marshall.

Martin, C. H. see Wilcox & Martin.

2125.—Martin, K. Einige melanistische Falter-Aberrationen. Zool. Meded., Leyden 19 1936 pp. 67–72, 1 fig.

2126. — Martini, E. Beitrag zur Kenntnis der Variabilität bei Culiciden. [In German and Russian.] In Parasites, transmetteurs anim.-venimeux, Rec. Trav. 25 Anniv. sci. Pavlovsky 1909–34, Moscow 1935 pp. 260–263. [Dipt.]

2127.—Martynov, A. V. The fauna of Trichoptera of Anadyr region and Chukchee peninsula and its origin. [In Russian with English summary.] Artica, Leningrad 4 1936 pp. 179–194, 3 figs.

2128.—Martynov, A. V. A find of Thysanoptera in the Permian deposits. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 3 1935 pp. 333–335 4 figs. [Fossil.]

2129.—Martynov, A. On a collection of Trichoptera from the Indian Museum. Part II.—Integripalpia. Rec. Indian Mus., Calcutta 38 1936 pp. 239–306, 74 figs.

2129A.—Masaki, J. On the insect fauna of various islands in Korea (1). Kontyû, Tokyo 10 1936 pp. 251–274.

2130.—Maschke, K. Die Höhlenfauna des Glatzer Schneeberges. 5. Die Metazoenfauna der Bergwerte bei Mährisch-Altsch. Beitr. Biol. Glatzer Schneeberges, Breslau 2 1936 pp. 175–191, 1 fig.

Maschke, K. see Pax & Maschke.

2131.—Masi, L. Nuovo *Elasmus* ottenuto da un nido di *Polistes* (Hymen. Chalcididae). Boll. Soc. ent. ital., Genoa 67 1935 pp. 131–133.

2132.—Masi, L. Chalcidinae raccolte dal Dott. Alberto Mochi nell'Eritrea (Hymen.). Ann. Mus. Stor. nat. Genova 59 1936 pp. 118–135, 3 figs.

2133.—Masi, L. Risultati scientifici delle caccie entomologiche di S.A.S. Il Principe Alessandro della Torre e Tasso in Egitto e Palestina. Nuovo genere di Chalcodectini raccolto nel Sinai (Hymen. Chalcididae). Boll. Soc. ent. ital., Genoa 68 1936 pp. 67–71.

2134.—Masi, L. Notes sur les *Hockeria*, avec description d'une nouvelle espèce d'Egypte (Hymenoptera-Chalcididae). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 252–258.

2135.—Masi, L. On some Chalcidinae from Japan (Hymenoptera, Chalcididae). Mushi, Fukuoka 9 1936 pp. 48–51.

2136.—Mather, K. The determination of position in crossing-over. I. *Drosophila melanogaster*. J. Genet., London 33 1936 pp. 207–235, 5 figs. [Dipt.]

Mathur, C. B. see Husain & Mathur.

2137.—Matsumura, S. Six new species of Homoptera collected at Okinawa by Mr. Chiro Yohena. Insecta matsum., Sapporo 10 1936 pp. 81–84.

2138.—Matsumura, S. A new genus of Papilionidae. Insecta matsum., Sapporo 10 1936 p. 86, 1 pl. [Lep.]

2139.—Matsumura, S. Two new butterflies from Formosa. Insecta matsum., Sapporo 10 1936 pp. 127–128, 2 figs. [Lep.]

2140.—Matsumura, S. New *Caccobius* species in Japan with a tabular key. Insecta matsum., Sapporo 11 1936 pp. 61–66. [Col.]

2140A.—Matsushita, M. Zur Kenntnis der japanischen Cerambyciden. Kontyû, Tokyo 10 1936 pp. 146–149. [Col.]

2141.—Maulik, S. The Fauna of British India including Ceylon and Burma. Coleoptera. Chrysomelidae (Galerucinae). London, Taylor & Francis 1936 xiv + 648 pp. 1 pl. 1 map 144 figs.

2142.—Maulik, S. A new Brazilian Hispine beetle. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 392–397, 2 figs.

2143.—Maulik, S. Notes on Hispine beetles. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 397–402, 2 figs.

2144.—Mausser, F. Synchrone Metamorphose deplantierte Vorderbeine mit dem Wirtstiere *Dixippus morosus* Br. et Redt. Anz. Akad. Wiss. Wien 72 1935 p. 168. [Orth.]

2145.—Mavromoustakis, G. A. New and little-known African bees of the subfamily Anthidiinae (Apoidea). Part I. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 31–47, 600–606, 10 figs. [Hym.]

2146.—Mavromoustakis, G. A. Notes on some Anthidiine bees (Apoidea) from Borneo. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 288–289. [Hym.]

2147.—Mavromoustakis, G. A. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930. New bees of the genus *Anthidium*. Ann. Transv. Mus., Pretoria 17 1936 pp. 141–144, 3 figs. [Hym.]

2148.—Mavromoustakis, G. A. New African Anthidiinae (Apoidea). Ann. Transv. Mus., Pretoria 18 1936 pp. 147–150, 5 figs. [Hym.]

2149.—Mayer, K. Die Mundwerkzeuge von *Pterobosca odonatiphila* Macfie (Diptera: Ceratopogonidae). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 1–3, 3 figs.

2150.—Mayer, K. Ceratopogoniden aus ostalpinen Gewässern. (Ein Nachtrag zu den Arbeiten Strouhal und Pesta). Arch. Hydrobiol., Stuttgart 29 1936 pp. 545–546. [Dipt.]

2151.—Mayer, K. Erster Beitrag zur Kenntnis der Trichopteren der Tschechoslowakischen Republik. [In Czech with German summary.] Sborn. Kl. přír. Brně 18 1936 pp. 41–47.

Maynard, L. A. see Melampy & Maynard.

2152.—Mazek-Fiella, K. Die tiergeographische Stellung und die Biotope der Stepp eam Neusiedler See in Bezug auf pontische, mediterrane und halophile Tierformen. Arch. Naturgesch., Leipzig (N.F.) 5 1936 pp. 449–482, 6 maps 10 figs.

2153.—Mazek-Fialla, K. Angaben zur Lebensweise von *Sceliphron destillatorius* Illig. am Neusiedlersee, mit besonderer Berücksichtigung des Nestbaues. Z. wiss. Zool. Leipzig **148** 1936 pp. 298-308, 14 figs. [Hym.]

2154.—Mazetier, G. Coléoptères du Calvados (suite). Bull. Soc. linn. Normandie, Caen (8) **8** (1935) 1936 Trav. orig. pp. 121-128.

2155.—Mazion, A. Notes biologiques sur certain Lépidoptères de Saône-et-Loire. Bull. Soc. Hist. nat. Creusot **1** 1932-33 pp. 24-29.

2156.—Mazza, S. Ratificación de la identidad de *Triatoma rosenbuschi* Mazza, 1936. Invest. Enferm. Chagas, Univ. Buenos Aires pub. no. **29** 1936 pp. 3-17, 9 figs. [Hem.]

2157.—Medvedev, N. N. The contributory effect of cold with irradiation in the production of mutations. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) **4** 1935 pp. 283-285. [Dipt.]

Medvedev, S. see Semenov-Tian-Shanskii & Medvedev.

2158.—Méhely, L. Naturgeschichte der Urbielen. [In Magyar with German translation.] Budapest, Jena, Fischer 1925 214 pp. 60 pls. 3 figs. [Hym.]

2159.—[Meier (Meyer), N. F.] Мейер, Н. Ф. Tables systématiques des Hyménoptères parasites (Fam. Ichneumonidae) de l'U.R.S.S. et des pays limitrophes. [In Russian.] Tabl. anal. Fn. URSS, Moscow **5** 1936 340 pp. 8 figs.

2160.—[Meier, N. F.] Мейер, Н. Ф. Tables systématiques des Hyménoptères parasites (fam. Ichneumonidae) de l'URSS et des pays limitrophes. Vol. VI. Tabl. anal. fauna URSS, Leningrad no. **22** 1936 356 pp. 9 figs.

2161.—Meiners, E. P. The dimorphic blue female of *Everes comyntas* Godt. (Lepidoptera: Lycaenidae). Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 620-621.

2162.—Meiners, E. P. Notes on *Papilio asterius* Cram. and a record of var. *americanus* Kollar (Lepidoptera: Papilionidae). Ent. News, Philadelphia **47** 1936 p. 269.

2163.—Meisel, P. Auch ein Zuchterfolg. Aquarium, Berlin **10** 1936 pp. 29-30, 1 fig. [Hem.]

2164.—Meissner, O. Beobachtungen an *Carausius hilaris*. Ent. Rdsch., Stuttgart **53** 1936 pp. 156-159. [Orth.]

2165.—Meissner, O. Zur Ueberwinterung der Coccinelliden. Ent. Rdsch., Stuttgart **53** 1936 pp. 323-325. [Col.]

2166.—Meissner, O. Die Maikäferhäufigkeit in Deutschland in 1936. Ent. Rdsch., Stuttgart **53** 1936 pp. 520, 528, 544. [Col.]

2167.—Meissner, O. Bemerkungen zu dem Aufsatz des Herrn Herzog-Wien über *Colias croceus* Fourcroy. Die Häufigkeit von *Colias edusa* in Deutschland 1928 und 1929. Ent. Z., Frankfurt a. M. **50** 1936 pp. 299-301. [Lep.]

2168.—Melampy, R. M. & Maynard, L. A. Nutrition studies with the cockroach, *Blattella germanica*. Anat. Rec., Philadelphia **67** 1936 suppl. 1 p. 38. [Orth.]

2169.—Melinossi, R. Morfologia dell'apparato velenifero degli Imenotteri vulneranti. Mem. Soc. tosc. Sci. nat., Pisa **45** 1935 pp. 87-127, 16 figs

2170.—Melis, A. Tisanotteri italiani genus *Taeniothrips*. Redia, Florence **22** 1936 pp. 53-95, 24 figs.

2171.—Melis, A. Contributo alla conoscenza morfo-biologica della *Polia (Mamestra) pisi* L. Redia, Florence **22** 1936 pp. 1-31, 4 pls. 20 figs. [Lep.]

2172.—Melis, A. Contributo alla conoscenza morfo-biologica della *Barathra (Mamestra) brassicae* L. Redia, Florence **22** 1936 pp. 33-34. [Lep.]

2173.—Mell, R. Beiträge zur Fauna sinica. X. Die Agaristiden Chinas (Lepidopt. Heteroc.). Stettin. ent. Ztg. **97** 1936 pp. 1-43, 161-188, 1 pl. 18 figs.

2174.—Mell, R. Beiträge zur Fauna sinica. XI. Zur Biologie und Systematik der chinesischen *Catocala* (Lep. Heter.). Iris, Dresden **50** 1936 pp. 49-90, 3 pls. 37 figs.

2175.—Mellanby, H. The later embryology of *Rhodnius prolixus*. Quart. J. micr. Sci., London (N.S.) **79** 1936 pp. 1-42, 22 figs. [Hem.]

2176.—Mellanby, K. Humidity and insect metabolism. *Nature*, London **138** 1936 pp. 124–125.

Mellanby, K. *see* Buxton & Mellanby.

Mellor, J. E. M. *see* Pethybridge & Mellor.

2177.—[Mel'nichenko, A. N.] Мельниченко, А. Н. Regularities of mass flying of the adult *Loxostege sticticalis* L. and the problem of the prognosis of their flights migrations. [In Russian with English summary.] *Bull. Plant Prot., Leningrad* (1) **Ent. no. 17** 1935 55 pp. 8 figs. [Lep.]

2178.—[Mel'nichenko, A. N.] Мельниченко, А. Н. Periodic appearance of Collembola on the snow. [In Russian with English summary.] *Probl. Ecol. Biocenol., Leningrad* 1935 pp. 210–220, 1 fig.

2179.—Melzer, J. Novos Cerambycideos do Brasil, da Argentina e de Costa Rica. *Arch. Inst. Biol. veg., Rio de Janeiro* **2** 1935 pp. 173–205. [Col.]

2180.—Menon, R. & George, C. J. Notes on *Oligotoma* collected from Bombay and Cochin together with the description of a new species. *J. Univ. Bombay* **4** 1936 no. 5 pp. 89–95, 3 pls. [Embiop.]

2181.—Menozi, C. Due nuovi Dacetini di Costa Rica e descrizione della larva di uno di essi (Hymenoptera: Formicidae). *Arb. morph. taxon. ent. Berlin* **3** 1936 pp. 81–85, 3 figs.

2182.—Menozi, C. Reperti mirmecofaunistici raccolti dal Prof. L. di Caporiacco nelle oasi di Cufra e in altre località del deserto Libico. *Atti Soc. Nat. Mat. Modena* **65** 1936 pp. 152–166. [Hym.]

2183.—Menozi, C. Nuovi contributi alla conoscenza della fauna delle isole italiane dell'Egeo. VI. Hymenoptera-Formicidae. *Boll. Lab. Zool. Portici* **29** 1936 pp. 262–311, 19 figs.

2184.—Menozi, C. Nuovi contributi alla conoscenza della fauna delle isole italiane dell'Egeo. VII. Dermatteri di Rodi e Scarpanto. *Boll. Lab. zool. Portici* **30** 1936 pp. 24–31, 4 figs.

2185.—Menusan, jr., H. The influence of constant temperatures and humidities on the rate of growth and relative size of the bean weevil, *Bruchus*

obtectus Say. *Ann. ent. Soc. Amer., Columbus* **29** 1936 pp. 279–288, 5 figs.

2186.—Méquignon, A. Additions et corrections au catalogue des Coléoptères de France de J. Sainte-Claire Deville. *Bull. Soc. ent. Fr., Paris* **41** 1936 pp. 210–213.

2187.—Mer, G. G. Experimental study on the development of the ovary in *Anopheles elutus*, Edw. (Dipt. Culic.). *Bull. ent. Res., London* **27** 1936 pp. 351–359.

Mer, G. *see* Kligler & Mer.

2188.—Merisuo, A. Das Männchen von *Pemphredon flavistigma* Thoms. (Hym., Sphecidae) gefunden. *Ann. ent. fenn., Helsingfors* **2** 1936 pp. 120–123, 4 figs.

2189.—Meschkat, A. Zwei neue minierende Insectenlarven aus dem Balaton. *Arb. ung. biol. Forsch.-Inst., Tihany* **8** 1936 pp. 101–105, 15 figs.

2190.—Meschnigg, J. Ein neuer *Neotrechus* und zwei neue *Duvalius* aus Albanien. *Koleopt. Rdsch., Vienna* **22** 1936 pp. 44–49, 3 figs.

2191.—Meserve, F. G. The Silphidae of Nebraska (Coleoptera). *Ent. News, Boston* **47** 1936 pp. 132–134.

2192.—Meserve, F. G. The Cicindeliidae of Nebraska (Coleoptera). *Ent. News, Philadelphia* **47** 1936 pp. 270–275.

Mesnil, L. *see* Balachowsky & Mesnil; Villeneuve & Mesnil.

2193.—Metcalf, Z. P. General catalogue of the Hemiptera. Fasc. IV Fulgoroidea. Part 2. Cixiidae. Northampton, Mass., Smith College 1936 269 pp.

Metcalf, J. W. *see* Pierce & Metcalfe.

2194.—Metschl, C. & Sälzl, M. Die Schmetterlinge der Regensburger Umgebung. I. Teil. Gross-Schmetterlinge. [Contd.] *Iris, Dresden* **49** 1936 pp. 145–161.

2195.—Metz, C. W. Studies on salivary gland chromosomes in Diptera. *Anat. Rec., Philadelphia* **67** 1936 suppl. 1 p. 64.

2196.—Metz, C. W. Effects of mechanical distortion on the structure of salivary gland chromosomes. *Biol. Bull. Woods Hole, Lancaster, Pa.*, **71** 1936 pp. 238–248, 5 figs.

2197. — Metzger, W. Gesetze des Sehens 5. Gestaltgesetze im Dienste der Tarnung. Natur u. Volk, Frankfurt a. M. 65 1935 pp. 600–618, 25 figs.

2198. — Meyer, J. Eine interessante Zucht des Hybriden *C. harmuthi* Kord. neben einigen weiteren bemerkenswerten Beobachtungen der Bastardzuchten im Jahre 1934. Ent. Z., Frankfurt a. M. 50 1936 pp. 27–35.

Meyer, N. F. *see* Meier.

2199. — Meyrick, E. Exotic Microlepidoptera. Marlborough, 1936 4 pp. 609–642; 5 pp. 1–64.

2200. — Meyrick, E. New species of Pyrales and Microlepidoptera from the Deutsches Entomologisches Institut. Arb. morph. taxon. Ent. Berlin 3 1936 pp. 94–109.

2201. — Meyrick, E. Descriptions and notes on New Zealand Lepidoptera. Trans. roy. Soc. N.Z., Dunedin 66 1936 pp. 281–283.

2202. — Meyrick, E. On Venezuelan Pyralidina and Microlepidoptera. Veröff. dtsh. kol. Mus. Bremen 1 1936 pp. 321–334, 1 pl.

Meyrick, E. *see* Caradja & Meyrick.

2203. — Michel, J. Jahresbericht des Entomologenbundes für die Tschechoslowakische Republik für das Jahr 1935. Ent. Z., Frankfurt a. M. 50 1936 pp. 153–157.

2204. — Michel, J. Veröffentlichung des Entomologenbundes für die Tschechoslowakische Republik. Ein neuer Beitrag zur Fauna Böhmens. Ent. Z., Frankfurt a. M. 49 1936 pp. 435–438, 449–452, 471–473, 490–491, 21 figs. [Lep.]

2205. — Michel, J. Einige bemerkenswerte Zwitter. Ent. Z., Frankfurt a. M. 49 1936 pp. 546–548, 7 figs. [Lep.]

2206. — Michel, J. Eine merkwürdige Eiablage von *Papilio machaon* L. Ent. Z., Frankfurt a. M. 50 1936 pp. 7–9. [Lep.]

2207. — Michel, J. Die zweite Generation von *Gonepteryx rhamni* L. Ein Beitrag zu C. Vorbrodts Anregung "Eine offene Frage." Ent. Z., Frankfurt a. M. 50 1936 pp. 113–117. [Lep.]

2208. — Micheli, L. Note biologiche morfologiche sugli Imenotteri. Boll. Soc. venez. Stor. nat., Venice 1 1935 pp. 126–134, 2 figs.

2209. — Micheli, L. Note biologiche e morfologiche sugli Imenotteri (VI serie). Atti Soc. ital. Sci. nat. Milan 75 1936 pp. 5–16, 5 figs.

2210. — Michener, C. D. Western bees of the genus *Ceratina*, subgenus *Zaodontomerus*. Amer. Mus. Novit., New York no. 844 1936 13 pp. 18 figs.

2211. — Michener, C. D. Some North American Osmiinae (Hymenoptera, Apoidea). Amer. Mus. Novit. New York no. 875 1936 30 pp. 4 figs.

2212. — Michener, C. D. Some western Anthophorid and Nomiine bees. Amer. Mus. Novit., New York no. 876 1936 4 pp.

2213. — Michener, C. D. Some bees of the genus *Halictus*. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 281–287. [Hym.]

2214. — Michener, C. D. Some western Anthophoridae (Hymen.). Bull. Brooklyn ent. Soc. 31 1936 pp. 92–95.

2215. — Michener, C. D. New Californian Osmiinae (Hymen., Megachilidae). Bull. S. Calif. Acad. Sci., Los Angeles 35 1936 pp. 84–93.

2216. — Michener, C. D. Some Pacific Coast *Panurginus* (Hymen., Apoidea). Canad. Ent. Orillia 67 (1935) 1936 pp. 275–278.

2217. — Michener, C. D. Some western bees of the genus *Osmia*. Canad. Ent., Orillia 68 1936 pp. 39–43. [Hym.]

2218. — Michener, C. D. Some California bees, *Townsendiella* and *Hesperapis* (Hymen.: Apoidea). Ent. News, Philadelphia 47 1936 pp. 181–185.

2219. — Michener, C. D. Bees from coastal northern California. Pan-Pacific Ent., San Francisco 11 (1935) 1936 pp. 178–184. [Hym.]

2220. — Michener, C. D. Some bees of the genus *Ashmeadiella*. Pan-Pacific Ent., San Francisco 12 1936 pp. 56–64, 6 figs. [Hym.]

2221. — Michener, C. D. On certain Halictidae from northern California. Pan-Pacific Ent., San Francisco 12 1936 pp. 165–172. [Hym.]

2222. — Mickel, C. E. New species and records of Nearctic Mutillid wasps of the genus *Dasymutilla* (Hymenoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 29–60, 3 figs.

- 2223.—Mickel, C. E. Two new genera and five new species of Mutillidae. *Ann. ent. Soc. Amer., Columbus* **29** 1936 pp. 289–297. [Hym.]
- 2224.—Mickel, C. E. A new species of *Smicromyrme* from Japan (Mutillidae; Hymenoptera). *Mushi, Fukuoka* **9** 1936 pp. 52–54.
- 2225.—Mickel, C. E. Descriptions and records of Californian Mutillidae. *Pan-Pacific Ent., San Francisco* **12** 1936 pp. 91–96. [Hym.]
- 2226.—Mihályi, F. Untersuchungen über Anatomie und Mechanik der Flugorgane an der Stubenfliege. *Arb. ung. biol. Forsch.-Inst., Tihany* **8** 1936 pp. 106–119, 11 figs. [Dipt.]
- 2227.—Mikulski, J. S. The effect of constant and alternating temperatures on the survival of some developmental stages of *Tribolium confusum* Duv. (Col.). *Bull. int. Acad. Cracovie* **1936** 1936 BII pp. 361–372, 3 graphs.
- 2228.—Mikulski, J. S. On the changes of developmental velocity of some developmental stages of *Tribolium confusum* Duv. (Col.) when influenced by constant and alternating temperatures. *Bull. int. Acad. Cracovie* **1936** 1936 B II pp. 373–385, 2 graphs.
- 2229.—Mikulski, J. S. L'influence des températures constantes et alternantes sur la survivance de quelques stades du développement de *Tribolium confusum* Duv. (Col.). *C.R. Acad. Cracovie* **1936** 1936 no. 7 p. 6.
- 2230.—Mikulski, J. S. L'influence des températures constantes et alternantes sur les variations de la rapidité du développement dans quelques stades de l'embryogénie de *Tribolium confusum* Duv. (Col.). *C.R. Acad. Cracovie* **1936** 1936 no. 7 pp. 6–7.
- 2231.—Miles, H. W. On the biology of certain species of *Holocneme* Kon. (Hymenoptera-Symphyta). *Ann. Appl. Biol., Cambridge* **23** 1936 pp. 781–802, 2 pls. 4 figs.
- 2232.—Miles, H. W. On the biology of *Emphytus cinctus*, L., and *Blenno-campa Waldheimi*, Gimm. (Hym. Symphyta). *Bull. ent. Res., London* **27** 1936 pp. 467–473, 2 pls. 3 figs.
- 2233.—Miles, H. W. A revision of the British species of *Hoplocampa* Hartig (Hymenoptera Symphyta). *Ent. mon. Mag., London* **72** 1936 pp. 58–62, 1 pl.
- 2234.—Miles, H. W. A contribution to our knowledge of the biology of certain sawflies of the genus *Empria* Lep. (Hymenoptera Symphyta). *J. Linn. Soc. London, Zool.*, **39** 1936 pp. 465–478, 1 pl. 2 figs.
- 2235.—Miller, jr., F. E. A histological study of the eye and brain of a one-eyed bee. *Ann. ent. Soc. Amer., Columbus* **29** 1936 pp. 66–69, 1 pl. [Hym.]
- 2236.—Miller, F. W. The digestive epithelium of the Aphid, *Macrosiphum sanbornii*. *Proc. Pennsylvania Acad. Sci., Harrisburg* **6** 1932 pp. 148–151, 4 figs. [Hem.]
- 2237.—Miller, F. W. Variations in the wing venation of *Aphis feminea* (Homoptera-Aphididae). *Proc. Pennsylvania Acad. Sci., Harrisburg* **7** 1933 pp. 69–71.
- 2238.—Miller, F. W. Three new species of Aphids. *Canad. Ent. Orillia* **68** 1936 pp. 81–82. [Hem.]
- 2239.—Miller, F. W. Nephrocyte cells and their function in the Aphididae (Homoptera). *Ent. News, Philadelphia* **47** 1936 pp. 169–170.
- Miller, F. W. *see* Speicher & Miller.
- 2240.—Miller, N. C. E. *Dasyneus piperis* China (Heteroptera-Coreidae). A minor pest of pepper (*Piper nigrum* L.). *J. F.M.S. Mus., Kuala Lumpur* **13** 1936 pp. 109–116, 2 pls.
- 2241.—Miller, N. C. E. New and little known Malayan Rhynchota (Hem. Homopt.). *Proc. R. ent. Soc. London (B)* **5** 1936 pp. 65–67, 2 figs.
- 2242.—Miller, N. C. E. A collection of Acrididae made in Southern Rhodesia (Orthoptera). *Proc. R. ent. Soc. London (B)* **5** 1936 pp. 153–161, 5 figs.
- Millsaps, V. *see* Coker, Millsaps & Rice.
- 2243.—Milne, L. J. Studies in North American Trichoptera, 3. Cambridge, Mass. 1936 pp. 56–128, 2 pls.
- 2244.—Milne, P. S. A device for the rapid counting of large numbers of small insects. *Bull. ent. Res., London* **27** 1936 pp. 269–271, 1 pl.
- Milnthorpe, W. M. *see* Hamilton & Milnthorpe.

2245.—Mimeur, J. Aphididae du Maroc (Septième note). Bull. Soc. Sci. nat. Maroc, Rabat 15 (1935) 1936 pp. 251–258, 4 figs. [Hem.]

2246.—Mimeur, J. Plantes hôtes des Aphididae du Maroc (Additions à la première liste). Bull. Soc. Sci. nat. Maroc, Rabat 15 (1935) 1936 pp. 259–260.

2247.—Minckwitz, H. & Hänel, K. Käfer der Nordsee-Insel Borkum. Ent. Bl., Crefeld 32 1936 pp. 17–21.

Miner, J. R. *see* Pearl & Miner.

2248.—Minkiewicz, R. Les types de comportement des mâles de Sphégiens. Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 1–20, 1 fig. [Hym.]

2249.—Minkiewicz, R. Les Pompilides à nid fixe et ceux à nid momentané (Etude d'éthologie comparée). Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 43–60, 1 pl. [Hym.]

2250.—Mianich, D. E. The responses of caterpillars to sounds. J. exp. Zool., Philadelphia 72 1936 pp. 439–453. [Lep.]

2251.—[Miram, E. F.] Мирам, Э. Ф. Blattodea, Mantodea, Phasmodea und Orthoptera von Tadjikistan. [In Russian with German descriptions.] Trud. Tadzhiik Sect. Acad. Sci. R.S.S.R., Moscow 5 (Zool. & Parasit.) 1935 pp. 219–236, 11 figs.

2252.—Missiroli, A. Sulle caratteristiche termiche dei focolai di *Anopheles plumbeus*. Riv. Malariol., Rome 14 1935 pp. 449–456, 3 figs. [Dipt.]

2253.—Mitchell, T. B. A revision of the genus *Megachile* in the Nearctic Region. Part IV. Taxonomy of subgenera *Xanthosarus*, *Phaenoserus*, *Megachiloides* and *Derotropis* (Hymenoptera: Megachilidae). Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 117–166, 4 pls.

2254.—Mitono, T. Descriptions of new species of Longicorn beetles from Formosa (III, IV). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 31–33, 4 figs., 420–425, 2 figs.

2255.—Mitono, T. & Nishimura, G. Description of a new genus and species of longicorn Coleoptera from Kyushu, Japan (Cerambycidae). Mushu, Fukuoka 9 1936 pp. 33–37, 1 pl.

2256.—Mitra, K. The role of olfactory sensation in selection of food by ants. J. Dep. Sci. Calcutta Univ. 4 zool. 1922 pp. 109–124. [Hym.]

2257.—Mitra, K. Prepotency of stimuli. A study in the behaviour of house flies. J. Dep. Sci. Calcutta Univ. 6 zool. 1924 pp. 1–9. [Dipt.]

2258.—Miwa, Y. Coleoptera from Amami-Islands in Loochoo Archipelago. Trans. Kansai ent. Soc., Osaka no. 6 1935 pp. 11–30, 2 pls.

2259.—Miwa, Y. Descriptions of two new species of Lymexylonidae from Formosa. Trans. nat. Hist. Soc. Formosa 25 1935 pp. 456–458, 2 figs. [Col.]

2260.—Miwa, Y. Insects of Jehol (VI). Order Coleoptera. [In Japanese and English.] Rep. First scient. Exped. Manchoukuo, Tokyo (5) 1 pt. x (1935) 1936 art. 48, 3 pp. 1 col. pl. (Buprestidae); art. 49, 8 pp. 2 pls. (Tenebrionidae).

2261.—Miwa, Y. & Yoshida, T. Catalogue of Japanese Insects. Fasc. IX. Coleoptera. Coccinellidae. [In Japanese.] Ent. World, Tokyo 3 1935 no. 22 pp. 31–53.

2262.—Möbius, E. Verzeichnis der Kleinschmetterlinge von Dresden und Umgebung. Iris, Dresden 50 1936 pp. 101–134.

2262A.—Mochizuki, M. A list of Coleoptera on Mt. Kongo in Chosen. Kontyû, Tokyo 10 1936 pp. 207–213.

Mohr, C. O. *see* DeLong & Mohr.

2263.—Molitor, A. Neue Versuche und Beobachtungen an Grabwespen, VIII. Biol. Zbl., Leipzig 56 1936 pp. 189–198. [Hym.]

2264.—Molitor, A. Experimentelle Beiträge zur Ethologie der Hymenopteren. Biol. Zbl., Leipzig 56 1936 pp. 518–532.

2265.—Montschadsky, A. Les larves des moustiques (Fam. Culicidae) de l'URSS et des pays limitrophes. [In Russian.] Tabl. analyt. Faune U.R.S.S., Moscow 24 1936 383 pp. 162 figs.

2266.—Moretti, G. Chironomidi italiani: subg. *Prodiamesa*. Boll. Soc. ent. ital., Genoa 67 1935 pp. 111–118, 1 pl.

2267.—Moretti, G. Studi sui Tricotteri—IV. Boll. Soc. ent. ital., Genoa **68** 1936 pp. 156–160.

2267A.—Morimoto, S. Notes on the etching figures that appear on the elytra of some species belonging to Scarabaeidae when Schultze's mixture is applied (Preliminary report). [In Japanese.] Kontyû, Tokyo **10** 1936 pp. 297–301, 14 figs.

2268.—Morishita, K. Further notes on the Anopheline mosquitos in Formosa. [In Japanese and English.] J. med. Ass. Formosa, Taihoku **35** 1936 pp. 888–897. [Dipt.]

2269.—Morishita, K. Classification of the Formosan Anophelines, with a key to species. Trans. nat. Hist. Soc. Formosa **26** 1936 pp. 347–355. [Dipt.]

2270.—Morishita, K. On the species of the Formosan Anophelines. [In Japanese with English summary.] Zool. Mag., Tokyo **48** 1936 pp. 573–579. [Dipt.]

2271.—Morita, C. A list of Coleoptera from Gunzan, Chosen. Ent. World, Tokyo **4** 1936 pp. 852–862.

2272.—Morley, C. The Hymenoptera of Suffolk. Trans. Suffolk Nat. Soc., Framlingham **3** 1935 pp. 17–52; 1936 pp. 132–162.

2273.—Morley, C. Notes on Braconidae: XV. — Microgasterinae. Entomologist, London **69** 1936 pp. 39–42, 64–67, 90–94, 115–119, 140–142, 161–163, 187–191, 209–215, 1 fig.

2274.—Morton, K. J. Further notes on the Neuroptera (sens. Linn.) of Kintyre. Ent. mon. Mag., London **72** 1936 pp. 79–82.

2275.—Morton, K. J. Note on a specimen of *Psectra* (Neur.) taken by Dr. F. H. Haines in the New Forest. Ent. mon. Mag., London **72** 1936 pp. 252–257, 1 pl. 4 figs.

2276.—Morton, K. J. Scottish Chrysopidae (Neuropt.) in 1935. J. Soc. Br. Ent., Southampton **1** 1936 pp. 154–155.

2277.—Mosely, M. E. New African Trichoptera.—I. Ann. Mag. nat. Hist., London (10) **17** 1936 pp. 429–451, figs.

2278.—Mosely, M. E. A new Kashmir caddis-fly (Trichoptera). Entomologist, London **69** 1936 pp. 13–14.

2279.—Mosely, M. E. Some records of British Trichoptera in 1933. Entomologist, London **69** 1936 pp. 87–89.

2280.—Mosely, M. E. The Indian Caddis-flies (Trichoptera). Part IV. J. Bombay nat. Hist. Soc. **28** 1936 pp. 447–478, 18 pls. 16 figs.

2281.—Mosely, M. E. Tasmanian Trichoptera or caddis-flies. Proc. zool. Soc. London **1936** pp. 395–424, 72 figs.

2282.—Mosely, M. E. A revision of the Triplectidinae, a subfamily of the Leptoceridae (Trichoptera). Trans. R. ent. Soc. London **85** 1936 pp. 91–130, 98 figs.

Mosely, M. E. *see* Berland & Mosely.

2283.—Moulton, D. Two new species of Thysanoptera in Argentina and records of other species. [In English and Spanish.] An. Soc. cient. Argent., Buenos Aires **120** 1935 pp. 254–261.

2284.—Moulton, D. New species of thrips from South-Western Australia. J. roy. Soc. W. Aust., Perth **21** 1935 pp. 97–100. [Thysanopt.]

2285.—Moulton, D. Thysanoptera from Africa. Ann. Mag. nat. Hist., London (10) **17** 1936 pp. 493–509.

2286.—Moulton, D. New American Thysanoptera. Bull. Brooklyn ent. Soc. **31** 1936 pp. 61–65.

2287.—Moulton, D. New California Thysanoptera. Pan-Pacific Ent., San Francisco **11** (1935) 1936 pp. 170–174.

2288.—Moulton, D. New Thysanoptera belonging to the genus *Thrips* Linn. Pan-Pacific Ent., San Francisco **12** 1936 pp. 104–110.

2289.—Moulton, D. A new thrips on cotton. Philipp. J. Agric., Manila **6** 1935 pp. 475–477.

2290.—Moulton, D. Thysanoptera of the Philippine Islands. Philipp. J. Agric., Manila **7** 1936 pp. 263–273.

2291.—Moulton, D. Thysanoptera of the Hawaiian Islands. Proc. Hawaii. ent. Soc., Honolulu **9** 1936 pp. 181–188.

2292.—Moulton, D. & Andre, F. Four new Thysanoptera, with a preliminary list of the species occurring in Iowa. Iowa St. Coll. J. Sci., Ames **10** 1936 pp. 223–234, 9 figs.

2293. — Montia, A. Termites in Mauritius. Bull. Dep. Agric. Mauritius, Sci. Ser., no. 21 1936 30 pp. 3 pls. 18 photos. [Isopt.]
2294. — Muesebeck, C. F. W. The genera of parasitic wasps of the Braconid subfamily Euphorinae, with a review of the Nearctic species. Misc. Pub. U.S. Dep. Agric., Washington, D.C. no. 241 1936 36 pp. 2 figs. [Hym.]
2295. — Muesebeck, C. F. W. A new species of parasite of *Typhlocyba pomaria* McAtee (Hymenoptera: Bethyridae). Proc. ent. Soc. Washington 37 (1935) 1936 pp. 167–168.
2296. — Muesebeck, C. F. W. On two little known genera of Braconidae (Hymenoptera). Proc. ent. Soc. Washington 37 (1935) 1936 pp. 173–177, 2 figs.
2297. — Mukerjee, D. Note on *Typhlopone fulva* var. *labiata*, Emery, syn. *Dorylus labiatus*, Schuck. J. Dep. Sci. Calcutta Univ. 7 Zool. 1926 no. 2 4 pp. 1 pl. [Hym.]
2298. — Mukerjee, D. Notes on the occurrence of ovaries in the worker of *Myrmicaria brunnea* Saunders. J. Dep. Sci. Calcutta Univ. 8 1927 no. 6 pp. 21–24, 1 pl. [Hym.]
2299. — Mukerji, D. D. & Bhuya, M. A. H. Life history of *Chaetostricha mukerji* Mani (Trichogrammatidae: Hymenoptera). Zool. Anz., Leipzig 115 1936 pp. 209–212, 4 figs.
2300. — Mukerji, S. see Smith, Mukerji & Chiranji Lal; Smith, Mukerji, Halder & Lal.
2301. — Muliyl, J. A. A study of the yolk (*y*-granules) of the male germ-cells. Quart. J. micr. sci., London (N.S.) 78 1936 pp. 513–532, 1 pl. 2 figs.
2302. — Müller, G. Nuovi contributi alla conoscenza del genere *Anophthalmus* (Coleopt. Carab.). Atti Mus. Stor. nat. Trieste 12 1935 pp. 183–225, 1 map, 28 figs.
2303. — Müller, G. Risultati scientifici della spedizione Ravasini-Lona in Albania. IX. Carabidae, Cantharidae. Boll. Soc. ent. ital., Genoa 67 1935 pp. 152–163. [Col.]
2304. — Müller, G. Sopra alcuni Meloidi dell'isola di Coo (Egeo). Boll. Soc. ent. ital., Genoa 68 1936 pp. 91–92. Col.]
2305. — Müller, G. Hemiptera-Heteroptera der Nordthüringen Landschaft. Beitrag zu einer Rhynchotenfauna Thüringens. Dtsch. ent. Z., Berlin, 1936 pp. 13–27.
2306. — Müller, G. Neue Carabiden von der Balkanhalbinsel (*Molops*, *Tapinopterus*, *Zabrus*, *Deltomerus*). Ent. NachrBl., Troppau 10 1936 pp. 103–110, 2 figs. [Col.]
2307. — Müller, G. Hemipteren der Mistelbüsche in Nordthüringen. Beitrag zur Rhynchotenfauna Deutschlands. Mitt. dtsch. ent. Ges., Berlin 7 1936 pp. 22–26.
2308. — Muller, J. Liste d'insects intéressants capturés surtout aux environs de Visé. Bull. Ann. Soc. ent. Belgique, Brussels 76 1936 pp. 161–163.
2309. — Müller, L. *Acidalia contiguaria* Hb. Mitt. münchn. ent. Ges., Munich 26 1936 pp. 1–32, 1 pl. [Lep.]
2310. — Müller, M. *Psithyrus barbutellus* Kirby und *P. maxillosus* Klug (Apid. Hym.). Mitt. dtsch. ent. Ges., Berlin 6 1936 pp. 73–76.
2311. — Müller-Rutz, J. *Acalla* (*Peronea*) *scabrana* (Schiff.) Hb. bona spec. Bestandteil der Schweiz. Fauna; weiteres über *Acalla hastiana* L. und *hippophaeana* Heyd. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 658–660. [Lep.]
2312. — Mumford, E. P. Terrestrial and fresh water-fauna of the Marquesas Islands. Ecology, Brooklyn, N.Y. 17 1936 pp. 143–157. [Insects pp. 149–150.]
2313. — Munro, H. K. A new species of Ceratitine Trypetidae (Dipt.) from Southern Rhodesia. Occ. Pap. Rhod. Mus., Bulawayo no. 5 1936 pp. 42–45.
2314. — Munro, H. K. & Fouché, F. A. A list of the scale insects and mealybugs (Coccidae) and their host-plants in South Africa. Bull. Dep. Agric. For. Un. S. Afr., Pretoria no. 158 1936 104 pp.
2315. — Munster, T. Northern *Olophrum* (Col., Staph.). Norsk ent. Tidsskr., Oslo 4 1936 pp. 97–102.
- Muramova, A. P. see Pokrovskii & Muramova.

2316.—Murayama, J. Notes sur les Scolytides (Coléoptères) de Honshu et Kiushu, Japon. *Tenthredo*, Kyoto 1 1936 pp. 122-149.

2317.—Murayama, H. & Culver, W. R. Winged jewels from many lands. *Nat. geogr. Mag.*, Washington 69 1936 pp. [673], [676-677], [680-681], [684-685], [688], 8 col. pls. [Lep.]

Murdock, G. E. *see* Ferris & Murdock.

2318.—Muspratt, V. Sur la migration des Lépidoptères. *Amat. Papillons*, Paris 8 1936 pp. 17-23.

2319.—Muspratt, V. M. Migrations de Lépidoptères. *Amat. Papill.*, Paris 8 1936 pp. 142-146.

2320.—Myers, D. J. Studies in nocturnal ecology with special reference to climax forest. *Ecology*, Brooklyn, N.Y. 12 1931 pp. 709-727, 6 graphs.

2321.—Nagel, P. A new stag-beetle from Malaya (Coleopt. Lucanidae). *J. F.M.S. Mus.*, Kuala Lumpur 13 1936 pp. 36-39, 1 fig.

2322.—Nagel, P. Neues über Hirschkäfer (Col. Fam. Lucanidae). *Senttin. ent. Ztg.* 97 1936 pp. 289-302, 9 figs.

2323.—Nägeli, W. Die kleine Fichtenblattwespe (*Lygaenematus pini* Retz. = *Nematus abietinus* Christ). *Mitt. schweiz. Anst. forstl. Versuchs- u. Anzuchtsw.*, Zurich 19 1936 pp. 213-381, 54 figs. [Hym.]

2324.—Najera Angulo, L. Observaciones sobre los *Phlebotomus* recogidos en Sigüenza. *Primer Congr. nac. Sandidad Madrid 1934*, Madrid 1935 pp. 305-316, 19 figs. [Dipt.]

2325.—Najera Angulo, L. N. Observaciones sobre la espermoteca del *Phlebotomus ariasi* Tonnoir, 1921. *Med. Países cálid.*, Madrid 9 1936 pp. 308-319, 9 figs. [Dipt.]

Nakamura, Y. *see* Kishida & Nakamura.

Narisada, G. *see* Yasumatsu & Narisada.

2326.—Nash, T. A. M. The relationship between the maximum temperature and the seasonal longevity of *Glossina submorsitans*, Newst., and *G.*

tachinoides, Westw., in Northern Nigeria. *Bull. ent. Res.*, London 27 1936 pp. 273-279, 2 figs. [Dipt.]

2327.—Nash, T. A. M. The part played by microclimates in enabling *Glossina submorsitans* and *G. tachinoides* to withstand the high temperatures of a West African dry season. *Bull. ent. Res.*, London 27 1936 pp. 339-345, 2 pls. [Dipt.]

2328.—Nast, J. Homopterologische Notizen. *Ann. Mus. zool. polon.*, Warsaw 11 1936 pp. 335-338, 5 figs.

2329.—Nast, J. Neue für Polen oder weniger bekannte Homopteren-Arten. *Fragm. Fn. Mus. zool. polon.*, Warsaw 2 1936 pp. 323-326.

2330.—Navás, L. Excursiones entomológicas de l'istiu de 1922. *Arx. Inst. Cienc.*, Barcelona 8 (1920) 1923 pp. 1-34, 13 figs.

2331.—Navás, L. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 29. *Plecoptera*. *Ark. Zool.*, Stockholm 27A (Sep. dated 1934) 1936 no. 15, 11 pp. 10 figs.

2332.—Navás, L. Odonatos de Colombia. *Bol. Soc. ent. Esp.*, Zaragoza 17 (1934) 1935 pp. 33-38, 3 figs.

2333.—Navás, L. Insectos de Berberia. *Bol. Soc. ent. Esp.*, Madrid 18 (1935) 1936 pp. 45-52, 3 figs., pp. 77-100, 19 figs. [Neur., etc.]

2334.—Navás, L. Rafidióptero (Ins.) nuevo de España. *Bol. Soc. ent. Esp.*, Madrid 18 (1935) 1936 pp. 71-74, 2 figs.

2335.—Navás, L. Décadas de insectos nuevos. *Brotéria*, Lisbon Ci. nat. 32 1936 pp. 161-170.

2336.—Navás, L. Mission au Tibet. *Paraneuroptères et Neuroptères*. *Mém. Acad. Sci. Paris* (2) 62 1936 pp. 72-74, 2 figs.

2337.—Navás, L. Mission scientifique de l'Omo. *Neuroptera, Embioptera, Plecoptera, Ephemeroptera et Trichoptera*. *Mém. Mus. H. n. Paris* 4 1936 pp. 101-128, 23 figs.

2338.—Navás, L. Névroptères et insectes voisins. Chine et pays environnants. *Notes Ent. chinoise*, Mus Heude, Shanghai 3 1936 pp. 37-62, 11 figs., pp. 117-132, 23 figs.

2339.—Navás, L. Comunicaciones entomológicas. 19. Insectos de Madagascar. Tercera serie. Rev. Acad. Cienc. Zaragoza **19** (1935) 1936 pp. 100–110, 7 figs. [Neur.]

2340.—Navás, L. Insectos neotrópicos. Rev. chil. Hist. nat., Santiago **37** 1933 pp. 194–197, 2 figs. [Neur. etc.]

2341.—Navás, L. Algunos insectos de Chile. Rev. chil. Hist. nat., Santiago **37** 1933 pp. 230–234, 4 figs.; **39** (1935) 1936 pp. 138–140, 2 figs. [Neur. etc.]

2342.—Navás, L. Insectos Neuropteros de Chile, poco conocidos. Rev. chil. Hist. nat., Santiago **40** 1936 pp. 179–181, 1 fig.

2343.—Navás, L. Insectes du Congo Belge. Série IX. Rev. Zool. Bot. afr., Brussels **28** 1936 pp. 333–368, 48 figs. [Neur. etc.]

2344.—Navelle, A. & Beaumont, J. de. Recherches sur les chromosomes des Névroptères. 2^e partie. Arch. Anat. micr., Paris **32** 1936 pp. 271–302, 101 figs. [Neur.]

2345.—Neave, S. A. The relations between mankind and the insect world. Proc. R. ent. Soc. London **10** 1936 pp. 112–121.

2346.—Needham, J. G. & Fisher, E. The nymphs of North American Libelluline dragonflies (Odonata). Trans. Amer. ent. Soc., Philadelphia **62** 1936 pp. 107–116, 2 pls.

2347.—Needham, J. G., Traver, J. R. & Hsu, Yin-chi. The biology of mayflies. New York, Ithaca, Comstock Pub. Co. 1935 xiv + 759 pp. 40 pls. 168 figs.

2348.—Neiva, A. & Lent, H. Notas e comentarios sobre Triatomídeos. Lista de especies e sua distribuição geográfica. Rev. ent., Rio de Janeiro **6** 1936 pp. 153–190. [Hem.]

2349.—Nelson, R. H. Observations on the life history of *Platynota stultana* Wlsm. on greenhouse rose. J. econ. Ent., Geneva, N.Y. **29** 1936 pp. 306–312.

2350.—Netolitzky, F. Materiali zoologici raccolti dalla spedizione italiana al Karakoram. Coleoptera, Carabidae: Bembidiini. Atti Mus. Stor. nat. Trieste **12** 1935 pp. 89–100, 1 pl.

2351.—Netolitzky, F. Aus der Praxis des Käfersammlers. XXVIII. Das Sammeltuch. (Ergänzendes zu vorstehendem Aufsatz über das Sammeltuch [von] A. Winkler.) Koleopt. Rdsch., Vienna **21** (1935) 1936 pp. 201–205.

2352.—[Neuhaus, M. E. & Shekhtman, Ya. L.] Нейгауз, М. Е. и Шехтман, Я. Л. The effect of the length of X-ray waves on the frequency of visible mutations in *Drosophila melanogaster*. [In Russian with English summary.] J. Biol., Moscow **4** 1935 pp. 923–928, 2 graphs. [Dipt.]

2353.—Nevermann, F. Berichtigung zum Cucujidenkatalog. Ent. Bl., Crefeld **32** 1936 pp. 195–199.

2354.—Neves, M. Contribution à l'étude des Coccides du Portugal—I. Bull. Soc. portug. Sci. nat., Lisbon **12** 1935 pp. 59–61, 1 pl. 1 fig. [Hem.]

2355.—Newcombe, A. P. A Lepidopterist's contribution to problems of plant distribution. Vasculum, New-castle-on-Tyne **22** 1936 pp. 64–68.

2356.—Newell, G. E. & Baxter, E. W. On the nature of the free cell-border of certain mid-gut epithelia. Quart. J. micr. Sci., London (N.S.) **79** 1936 pp. 123–151, 1 pl. 7 figs.

2357.—Newman, L. J. Thrips census. J. roy. Soc. W. Aust., Perth **21** 1935 pp. 93–97. [Thysanopt.]

2358.—Ng, Yuk Chau. Notes on moths collected in Canton. Lingnan Sci. J., Canton **15** 1936 pp. 121–124. [Lep.]

2359.—Niblett, M. British Trypetidae, additional notes. Ent. Rec., London **48** 1936 pp. 13–14. [Dipt.]

2360.—Nicol, E. A. T. The fauna of Loch Bee. Scot. Nat., Edinburgh no. **221** 1936 pp. 131–134. [Insects p. 133.]

2361.—Nidault, M. St. Laurent d'Andenay. Entomologie. Bull. Soc. Hist. nat. Creusot **3** 1935 pp. 59–62.

2362.—Nielsen, C. Odonati del Fezzan raccolti dal Prof. G. Scortecci (Missione della R. Società Geografica) e catalogo delle specie finora catturate. Atti Soc. ital. Sci. nat., Milan **74** 1935 pp. 372–382, 7 figs.

2363.—Nielsen, C. Collezioni zoologiche fatte nell' Uganda dal Dott. E. Bayon. XXI. Odonati. Ann. Mus. Stor. nat. Genova 59 1936 pp. 187–194.

2364.—Nielsen, C. Odonati dell' Africa orientale italiana. Boll. Soc. ent. ital., Genoa 68 1938 pp. 123–131, 1 fig.

2365.—Nielsen, E. The biology of *Homonotus sanguinolentus* Fabr. (Hym. Psammocharidae). Ent. Medd., Copenhagen 19 1936 pp. 385–404, 1 pl. 5 figs.

2366.—Nielsen, E. T. Sur les habitudes des Hyménoptères aculéates solitaires. V. La nidification. Avec quelques considérations sur une méthode comparée à l'étude de la biologie des insectes. Ent. Medd., Copenhagen 19 1936 pp. 298–384, 5 pls.

2367.—Niemi, P. Mitteilungen über die Apiden (Hym.) Finnlands. I. Ann. Ent. Fenn., Helsingfors 2 1936 pp. 86–96, 140–149, 14 figs.

2368.—Nieschulz, O. Die Entwicklungsstadien von *Tabanus rubidus* Wied. und *T. striatus* Fabr. Arch. Naturgesch., Leipzig (N.F.) 5 1936 pp. 230–255, 10 figs. [Dipt.]

2369.—Niesiowski, W. *Pieris napi* L. subsp. *bryoniae* Ochs. unter besonderer Berücksichtigung der Karpathen-Formen. Ann. Mus. zool. polon., Warsaw 11 1936 pp. 213–236, 1 pl. 1 map.

2370.—[Nikitin, M. I.] НИКИТИН, М. И. The geographical distribution of Lepidoptera in Manchuria. [In Russian with English summary.] Naturalist of Manchuria, Harbin January 1936 pp. 2–6, 22–23.

2371.—Niklas, O. Die Eientwicklung der Feuerwanze. Mikrokosmos, Stuttgart 28 1935 pp. 185–189, 10 figs. [Hem.]

2372.—Nino, F. L. Verbreitungsgebiet der Triatomidae (Hemipt.-Heteropt.) in Argentinien und Beschreibung einer neuen Art. Z. Parasitenk., Berlin 8 1936 pp. 606–610, 2 figs. Berichtigung und Ergänzung 9 p. 144.

Nishimura, G. see Mitono & Nishimura.

2373.—Nixon, G. E. J. The African species of Teleasinae (Hym., Procto-

trupoidea, Fam. Scelionidae). Ann. Mag. nat. Hist., London (10) 17 1936 pp. 114–141, 161–191, 18 figs.

2374.—Nixon, G. E. J. New parasitic Hymenoptera from Africa (Proctotrupoidea, Subfam. Telenominae). Ann. Mag. nat. Hist., London (10) 17 1936 pp. 558–564, 3 figs.

2375.—Nixon, G. E. J. Notes on wasps (5). Ent. mon. Mag., London 72 1936 pp. 6–8. [Hym.]

2376.—Nixon, G. E. J. Three new species of Telenominae (Hym. Proctotrupoidea, Scelionidae). Proc. R. ent. Soc. London (B) 5 1936 pp. 131–134, 3 figs.

2377.—Noble, N. S. The citrus gall wasp (*Eurytoma fellis* Girault). Sci. Bull. Dep. Agric. N.S. Wales, Sydney no. 53 1936 41 pp. 18 figs. [Hym.]

Nordenskiöld, M. see Bonnier & Nordenskiöld.

2378.—Nordman, A. F. Några synpunkter beträffande fjärilspuppans larvala, pupala och imaginala karaktärer. Forh. skand. naturf. Møte, Helsingfors 19 1936 pp. 497–498. [Lep.]

2379.—Nordman, A. F. & Rebel, H. Verzeichnis der von Richard Frey und Ragnar Stora auf den Kanarischen Inseln gesammelten Lepidopteren. Comment. biol., Helsingfors 6 1935 no. 4 20 pp., 6 figs.

2380.—Nordström, F., Wahlgren, E., Tullgren, A. & Ljungdahl, D. Svenska Fjärilar. Stockholm [1936] I (Allmänna Delen) pp. 17–32, 3 pls.; II (Syst. Delen) pp. 33–72.

2381.—Normand, H. Contribution au catalogue des Coléoptères de la Tunisie. Bull. Soc. Hist. nat. Afr. N., Algiers 27 1936 pp. 81–100, 144–164, 355–383, 3 figs.

2382.—Normand, H. Nouveaux Staphylinides de l'Afrique du Nord. Rev. franç. Ent., Paris 2 (1935) 1936 pp. 193–195, 1 fig. [Col.]

2383.—Norris, M. J. (Mrs. O. W. Richards). Experiments on some factors affecting fertility in *Trogoderma versicolor* Creutz. (Coleoptera, Dermestidae). J. Anim. Ecol., Cambridge 5 1936 pp. 19–22.

2384.—Norris, M. J. Inbreeding in *Ephestia kühniella* Z. (Lepidoptera, Phycitidae). J. Genet., London **32** 1936 pp. 179-181.

2385.—Norris, M. J. The feeding-habits of the adult Lepidoptera Heteroneura. Trans. R. ent. Soc. London **85** 1936 pp. 61-90.

Nosal', P. *see* Sabaneev, Nosal' & Lyaschenko.

2386.—Noskiewicz, J. Die wichtigsten Ergebnisse meiner Forschungen über die Hymenopterenfauna Podoliens in den Jahren 1932-1935. [In Polish with German summary.] Polsk. Pismo ent., Lwow **13** (1934) 1936 pp. 132-182, 2 pls.

2387.—Noskiewicz, J. Die Palearktischen *Colletes*-Arten. Prace Nauk. Wydawn. Tow. Nauk. Lwow **II** 3 1936 pp. 1-531, 28 pls. 40 figs. [Hym.]

2388.—Noskiewicz, J. & Poluszyński, G. Embryologische Untersuchungen an Strepsipteren. II. Teil. Polyembryonie. Zool. polon., Lwów **1** 1935 pp. 53-94, 3 pls. [Col.]

Notley, F. B. *see* Gunn & Notley.

2389.—Noury, E. M. A propos de la Diptéroécidie de *Haplodiplosis equestris* (Wagn.) Rübs. Marcellia, Naples **29** (1934-35) 1936 pp. 3-6. [Dipt.]

2390.—Nowicki, S. Descriptions of new genera and species of the family Trichogrammatidae (Hym. Chalcidoidea) from the Palearctic region, with notes.—II. Z. angew. Ent., Berlin **23** 1936 pp. 114-148, 20 figs.

2391.—Nurse, E. J. Two rare moths in Lakeland. Northw. Nat., Arbroath **11** 1936 pp. 339-340. [Lep.]

2392.—Nunberg, M. Key to the most important insect pests of forests. [In Polish.] Warsaw, Inst. Rech. Forêts domaniales 1935 288 pp. 359 figs.

2393.—[Nuzhdin, N. I.] Нуждин, Н. И. Genetic analysis of certain problems of the physiology of development of *Drosophila melanogaster*. [In Russian with English summary.] Biol. J., Moscow **5** 1936 pp. 571-624, 1 pl. 29 figs. [Dipt.]

2394.—Obenberger, J. Eine Festarbeit zum sechzigjährigen Jubiläum meines Freundes Univ.-Prof. Dr.

Embrük Strand. Festschr. 60. Geburtst. Embrük Strand, Riga **1** 1936 pp. 97-145, 8 figs. [Col.]

2395.—Obenberger, J. Nouvelles espèces du genre *Agrilus* (Bupr.) des colonies italiennes. Boll. Soc. ent. ital., Genoa **67** 1935 pp. 156-163. [Col.]

2396.—Obenberger, J. Etude sur les espèces du genre *Julodis* de l'Afrique méridionale (Col. Bupr.). Acta Soc. ent. Čsl., Prague **33** 1936 pp. 6-15, 1 pl.

2397.—Obenberger, J. De novis generis *Steraspis* formis (Col. Bupr.). Acta Soc. ent. Čsl., Prague **33** 1936 pp. 22-23.

2398.—Obenberger, J. De novis regionis orientalis *Agrili* generis speciebus (Col. Bupr.). II. Acta Soc. ent. Čsl., Prague **33** 1936 pp. 33-44.

2399.—Obenberger, J. Sur les espèces japonaises du genre *Chrysobothris* (Col. Bupr.). Acta Soc. ent. Čsl., Prague **33** 1936 pp. 70-71.

2400.—Obenberger, J. Synonymia *Agrilorum* (Col. Bupr.). II, III. Acta Soc. ent. Čsl., Prague **33** 1936 pp. 91-92, 139.

2401.—Obenberger, J. De speciebus novis palaearteticis generis *Agrilus* (Col. Bupr.). Acta Soc. ent. Čsl., Prague **33** 1936 pp. 104-118.

2402.—Obenberger, J. De novis Japoniae generis *Agrili* speciebus (Col. Bupr.). Acta Soc. ent. Čsl., Prague **33** 1936 pp. 140-141.

2403.—Obenberger, J. De novis generis *Chalcophorella* formis (Col. Bupr.). Acta Soc. ent. Čsl., Prague **33** 1936 p. 175.

2404.—Obenberger, J. Etude analytique de genre *Janthe* Mars. de la région orientale et paléarctique (Col. Bupr.). Sborn. ent. odd. Nár. Mus. Praze **14** 1936 pp. 5-12.

2405.—Obenberger, J. Etude analytique sur les *Janthe* de la région éthiopienne (Col. Bupr.). Sborn. ent. odd. Nár. Mus. Praze **14** 1936 pp. 58-65.

2406.—Obenberger, J. De novis generis *Leioptleura* H. Deyr. speciebus (Col. Bupr.). Sborn. ent. odd. Nár. Mus. Praze **14** 1936 pp. 145-156.

2407.—Obraztsov, N. S. Untersuchungsergebnisse der nächtlichen Lepidopterenfauna in der Stadt Nikolaew. [In Russian with German summary.] Trav. Mus. zool. Kiev no. 15 1935 pp. 141–161.

2408.—Obraztsov, N. S. Neue Lepidopteren-Formen. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 637–642, 2 figs.

2409.—Obraztsov, N. S. Zur geographischen Variabilität von *Aphantopus hyperantus* L. Festschr. 60. Geburtst. E. Strand, Riga 2 1936 pp. 242–243. [Lep.]

2410.—Obraztsov, N. S. Zur Lepidopterenfauna des südlichen Transdneprgebietes. Festschr. 60. Geburtst. E. Strand, Riga 2 1936 pp. 229–242.

2411.—Obraztsov, N. S. Studien über die palaearktischen Amatiden. I. Versuch einer Vereinheitlichung der Aberrationsnamen der Gattung *Amata* F. (*Syntomis* O.). Ent. Anz., Vienna 16 1936 pp. 38–39, 46–48, 116. [Lep.]

2412.—Obraztsov, N. S. Studien über die palaearktischen Amatiden. Ent. Rdsch., Stuttgart 53 1936 pp. 184–187, 199–203, 254–256, 304–308, 1 pl. 5 figs.

2413.—Obraztsov, N. S. Materialien zur Lepidopterenfauna des Parkes von Vessjolaja Bokovenjka (Ukraine). Folia zool. hydrobiol., Riga 9 1936 pp. 29–57.

2414.—Obraztsov, N. S. Weiteres über *Lycaena* (*Arícia*) *allous* Hb. Folia zool. hydrobiol., Riga 9 1936 pp. 58–60, 1 fig. [Lep.]

2415.—Obraztsov, N. S. Nouvelles races de *Lycaena* (*Lysandra*) *thersites* Cant. Lambillionea, Brussels 36 1936 pp. 11–18. [Lep.]

2416.—Obraztsov, N. S. Nouvelles formes de *Lythria* Hb. Lambillionea, Brussels 36 1936 pp. 98–102. [Lep.]

2417.—Obraztsov, N. S. Zur Variabilität von *Lythria purpuraria* L. Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 98–104, 4 figs. [Lep.]

2418.—Obraztsov, N. S. Neue palaearktische Rhopaloceren-Formen. Z. öst. Ent. Ver., Vienna 21 1936 pp. 46–48.

2419.—O'Byrne, H. I. Observations on the life history of the "Baltimore

checker-spot" butterfly, *Euphydryas phaeton*. Trans. Acad. Sci. St. Louis 28 1934 pp. 227–230. [Lep.]

2420.—Ochmann, A. Insekteneier unterm Mikroskop. Mikrokosmos, Stuttgart 29 1936 pp. 185–187, 7 figs. [Lep.]

2421.—Ochs, G. Ein neuer Beitrag zur Kenntnis der Gyriniden-Fauna Chinas unter Berücksichtigung einiger verwandter Arten aus Hinter-Indien. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 601–613. [Col.]

2422.—Oettingen, H. v. Biologie und Statistik einiger Thysanopterenarten. Nachr. Schäd. Bekämpf., Leverkusen 11 1936 pp. 189–198, 8 figs.

2423.—Overmann, H. Das statische Verhalten einiger Wasserwanzenarten. Z. wiss. Zool., Leipzig 147 1936 pp. 595–628, 4 figs. [Hem.]

2424.—Ogloblin, A. A. Especies nuevas o poco conocidas del género *Gonatocerus* (Hym. Mymaridae) de la República Argentina. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 65–78, 2 pls.

2425.—[Ogloblin, D. A.] Орлоблин, Д. А. Faune de l'URSS. Insectes Coléoptères. XXXVI. No. 1. Chrysomelidae, Galerucinae. Moscow, Leningrad, Inst. zool. acad. Sci. U.R.S.S. 1936 xiv + 455 pp. 146 figs.

2426.—Ohaus, F. Three new species of *Anomala* (Col. Scarab. Rutelinae) from New Guinea. Proc. R. ent. Soc. London (B) 5 1936 pp. 125–126, 3 figs.

2427.—Ohaus, F. Neue Ruteliden (Coleoptera Scarabaeidae) des Musée du Congo Belge. Rev. Zool. Bot. Afr., Brussels 28 1936 pp. 389–393, 3 figs.

2428.—Ohaus, F. Beitrag zur Kenntnis der Rutelinae (Col. Scarab.). Stettin. ent. Ztg. 97 1936 pp. 141–153, 11 figs.

2429.—Ohaus, F. Verzeichnis einer Sammlung Rutelinae des Buitenzorgers Museums (Col.). Treubia, Buitenzorg 15 1936 pp. 353–361, 3 figs.

2431.—Ohmachi, F. A comparative study of chromosome complements in the Gryllodea in relation to taxonomy. Stud. Tokugawa Inst., Tokyo 3 1935 sep. pp. 1–48, 30 figs. [Orth.]

2432.—Ohmachi, F. A comparative study on the chromosome complements in Grylloidea. [In Chinese.] *Ent. & Phytopath.*, Hangchow 4 1936 pp. 696-705. [Orth.]

2433.—Ohmori, H. Experimental studies on the influence of low temperatures upon the tropical bed bug, *Cimex hemipterus* Fab. Third report. On the influence of a temperature of 6° C. [In Japanese with English summary.] *J. med. Ass. Formosa, Taihoku* 35 1936 pp. 624-644. [Hem.]

2434.—Ohmori, H. On the fleas of Formosa. [In Japanese.] *Oyo-Dobuts. Zasshi, Tokyo* 8 1936 pp. 158-164. [Siphonapt.]

Okabe, K. *see* Yasumatsu & Okabe.

2435.—Okada, —. Einige Nemato-cera aus den Süd-Kurilen (Diptera). *Insecta matsum.*, Sapporo 10 1936 pp. 99-103, 1 fig.

2436.—Okada, I. Beitrag zur Kenntnis der Fungivoriden-Fauna Japans II, III. (Dipt.) *Insecta matsum.*, Sapporo 11 1936 pp. 21-24, 1 fig., 56-60, 1 fig.

2437.—Okada, I. Ueber die 2 Pilzmücken, *Bolitophila disjuncta* Loew und *Bolitophilella cinerea* (Meigen). *Kontyû, Tokyo* 10 1936 pp. 28-35, 4 figs. [In Japanese.]

2438.—Olave, L. E. Reseña histórica características y clasificación de los Buprestidos. *Rev. chil. Hist. nat., Santiago* 39 (1935) 1936 pp. 51-55. [Col.]

2439.—Olave, L. E. Revisión de los Buprestidos chilenos. *Rev. chil. Hist. nat., Santiago* 29 (1935) 1936 pp. 349-376, 2 pls. 3 figs. [Col.]

2440.—Oldroyd, H. & Ribbands, C. R. On the validity of trichiation as a systematic character in *Trichogramma* (Hym., Chalcididae). *Proc. R. ent. Soc. London (B)* 5 1936 pp. 148-152, 3 figs.

Oliveira Castro, G. M. de *see* Lutz & Oliveira Castro.

2441.—Oliver, C. P. The relation of induced infertility to the genetic effects induced in *Drosophila* males. *Amer. Nat.*, New York 70 1936 p. 58. [Dipt.]

2442.—Oliver, G. B. What is aberrational influence? *Entomologist*, London 69 1936 pp. 34-36.

2443.—Olsoufieff, G. Les Cicindélides de Madagascar. Deuxième partie. Essai de revision systématique et biologique. *Mém. Acad. malgache, Tananarive* 20 1934 pp. 31-76, 1 map, 3 pls. 27 figs. [Col.]

2444.—Olsoufieff, G. Quelques conseils sur la conservation des insectes. *Bull. Soc. linn. Lyon (n.s.)* 4 1935 pp. 124-127.

2445.—Olsoufieff, G. L'étalage des papillons. *Bull. Soc. linn. Lyon (n.s.)* 5 1936 pp. 5-8. [Lep.]

2446.—Olsoufieff, G. Les larves des Pogonostomes Coleoptera Cicindelini. *Bull. Soc. linn. Lyon (n.s.)* 5 1936 pp. 125-128.

Olsuf'ev, N. *see* Pavlovskii, Stein & Olsuf'ev.

2447.—Oman, P. W. Two new leafhoppers from tropical America. *Pan-Pacific Ent.*, San Francisco 12 1936 pp. 116-119, 1 fig. [Hem.]

2448.—Oman, P. W. New neotropical empoascan leafhoppers. *J. Washington Acad. Sci.* 26 1936 pp. 34-40, 28 figs. [Hem.]

2449.—Oman, P. W. Distributional and synonymical notes on the beet leafhopper, *Eutettix tenellus* Baker. *Proc. ent. Soc. Washington* 38 1936 pp. 164-165. [Hem.]

2450.—Oman, P. South American leafhoppers of the genus *Xerophloea* Germar (Hem.). *Rev. Ent.*, Rio de Janeiro 6 1936 pp. 394-401, 9 figs.

2451.—Omura, S. Artificial insemination of *Bombyx mori*. *J. Fac. agric. Hokkaido imp. Univ.*, Sapporo 38 1936 pp. 135-150, 3 figs.

2452.—Omura, S. Studies on the reproductive system of the male of *Bombyx mori*. I. *J. Fac. Agric. Hokkaido imp. Univ.*, Sapporo 38 1936 pp. 151-180, 3 pls. 8 figs. [Lep.]

Onisimova, Z. G. *see* Konakov & Onisimova.

2453.—Oosthuizen, M. J. The effect of high temperature on the confused flour beetle. *Tech. Bull. Minnesota Agric. Exp. Sta.*, St. Paul no. 107 1935 44 pp. 11 figs. [Col.]

2554.—Oosthuizen, M. J. & Shepard, H. H. Prothetely in larvae of the confused flour beetle (*Tribolium confusum* Jacq.-Duv.). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 268-272. [Col.]

2455.—Opoczynska-Sembratowa, Z. Anatomie et innervation du cœur de *Carausius morosus* Br. C.R. Acad. Cracovie 1936 1936 no. 7 pp. 7-8. [Orth.]

2456.—d'Orchymont, A. Une phase de l'étude des Coléoptères.—Les Palpicornes. C.R. Congr. Sci. nat. Bruxelles 1930 1930 pp. 850-855.

2457.—d'Orchymont, A. Inventa entomologica itineris Hispanici et Maroccani quod a. 1926 fecerunt Harald et Håkan Lindberg. XXII. Palpicornia. Comment. biol., Helsingfors 5 1935 no. 1 22 pp. 9 figs. [Col.]

2458.—d'Orchymont, A. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930. Hydrophilidae. Ann. Transv. Mus., Pretoria 17 1936 pp. 109-116, 1 pl. [Col.]

2459.—d'Orchymont, A. Synonymies nouvelles d'*Hydraena*. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 115-119. [Col.]

2460.—d'Orchymont, A. Notes sur quelques espèces du genre *Laccobius* Erichson (Col. Palp.). Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 425-438, 2 figs.

2461.—d'Orchymont, A. Quelques synonymies nouvelles d'*Hydrophilidae* (Col.). Bull. Mus. Hist. nat. Belg., Brussels 12 1936 no. 23, 29 pp. 4 figs.

2462.—d'Orchymont, A. Les *Hydraena* de la péninsule ibérique. (En annexe synonymie de deux formes méditerranéennes.) Bull. Mus. Hist. nat. Belg., Brussels (2) 6 1936 48 pp. 2 pls. 30 figs. [Col.]

2463.—d'Orchymont, A. Revision des *Coelostoma* (s. str.) non Américains. Bull. Mus. Hist. nat. Belg., Brussels (2) 7 1936 38 pp. 25 figs. [Col.]

2464.—d'Orchymont, A. Au sujet de la phylogénie du genre *Hydraena* (Col. Palpicornia Fam. Hydraenidae). Mém. Mus. Hist. nat. Belg., Brussels (2) 3 1936 pp. 61-67, 2 figs.

2465.—Orfila, R. N. Estudios de Lepidopterologia chilena. III. Rev. chil. Hist. nat., Santiago 37 1933 pp. 82-85.

2466.—Orfila, R. N. Notas criticas sobre las formas de *Dysdaemonia fosteri* R. y J. (Lep. Rhescynth.). Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 51-63, 2 pls.

2467.—Orfila, R. N. Lepidoptera Neotropica. I, II. Rev. Soc. ent. argent., Buenos Aires 7 1935 pp. 177-182, 225-226.

2468.—Örösi-Pál, Z. Ueber die Artfrage, Ernährung und Lebensweise der auf Honigbienen gefundenen *Meloë-Triungulinen*. Z. Parasitenk., Berlin 9 1936 pp. 20-27, 1 fig. [Hym. Col.]

2469.—Örösi-Pál, Z. Ueber die Melanosekrankheit der Honigbiene. Z. Parasitenk., Berlin 9 1936 pp. 125-139, 4 figs. [Hym.]

Osorno, M. E. see Komp & Osorno.

2470.—Ossiannilsson, F. Ueber einige schwedischen Arten der Gattung *Cicadula* (Homoptera Cicadina). Opusc. ent., Lund 1 1936 pp. 6-11, 16 figs.

2471.—Ossiannilsson, F. Einige Bemerkungen zur schwedischen Cicadinenfauna. Opusc. ent., Lund 1 1936 pp. 47-51. [Hem.]

2742.—Osthelder, L. Lepidopteren-Fauna von Marasch in türkisch Nordsyrien. (Microlepidopteren-Fortsetzung.) Mitt. münchn. ent. Ges., Munich 25 (1935) 1936 pp. 67-90.

Otero, J. L. see Wolcott, G. N.

2473.—Ōuchi, Y. 1935 supplements to bibliographical introduction to the study of Chinese insects. (Entomological Report no. 3.) J. Shanghai Sci. Inst. (sect. 3) 3 1936 pp. 125-220.

2474.—Ouellet, —. Le *Paramesus nervosus* Fallen dans la faune du Québec. Nat. canad., Quebec 63 1936 pp. 184-186, 4 figs. [Hem.]

2475.—Ozaki, J. Studies on the mineral matter contents of prepupae and pupae, and the sexual difference of prepupal oil of silkworm moth, *Bombyx mori*. [In Japanese with English summary.] Res. Bull. Tokyo seric. Coll. 1 1936 pp. 121-125. [Lep.]

2476.—Ozaki, J. Studies on the change of body constituents of the silkworm, *Bombyx mori*, during metamorphosis. [In Japanese with English summary.] Res. Bull. Tokyo seric. Coll. 1 1936 pp. 126–155. [Lep.]

2477.—Packard, C. E. Termite distribution in the United States. Science, New York 83 1936 p. 575. [Isopt.]

2478.—Pagast, F. Chironomidenstudien II. Stettin. ent. Ztg. 97 1936 pp. 270–278. [Dipt.]

2479.—Pagast, F. Ueber Bau und Funktion der Analpapillen bei *Aedes aegypti* L. (*fasciatus* Fabr.). Zool. Jb., Jena Allg. Zool. 56 1936 pp. 183–218, 2 pls. 6 figs. [Dipt.]

2480.—Painter, R. H. The food of insects and its relation to resistance of plants to insect attack. Amer. Nat., New York 70 1936 pp. 547–566.

2481.—Paladino, G. Osservazioni sulla morfologia del capo del Grillo-talpa. Arch. zool. ital., Torino 23 1936 pp. 423–451, 9 figs. [Orth.]

2482.—Palm, T. Die nordischen *Hypocyptus* Mannerh. (Coleoptera: Staphylinidae), mit Beschreibung zweier neuer Arten. Göteborgs vetensk. Samh. Handl. (5) B 4 1935 no. 13 38 pp. 2 maps 10 figs.

2483.—Palm, T. De svenska arterna av släktet *Astenus* Stephens (Col. Staphylinidae). Ent. Tidskr., Stockholm 57 1936 pp. 75–83, 10 figs.

2484.—Palm, T. Coleoptera i bivråk- och ormvråkbön. Ent. Tidskr., Stockholm 57 1936 pp. 84–96.

2485.—Palm, T. & Lindroth, C. H. Coleopterfaunan vid Klarälven. I. Allmän del. Ark. Zool., Stockholm 28A 1936 no. 19, 42 pp. 7 figs.

Palm, T. see Jansson & Palm.

2486.—Palmer, M. A. Four new Aphids from Colorado. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 273–278, 4 figs. [Hem.]

2487.—Palmer, M. A. Additions and corrections to the "Aphidae of Colorado." Ann. ent. Soc. Amer., Columbus 29 1936 pp. 729–748, 21 figs. [Hem.]

2488.—[Pantazis, G.] Пантазис, Г. Les effets de la salinité de l'eau sur les larves des Culicines. [In French, with

Greek summary.] Prak. Akad. Athen. 10 1935 pp. 348–356. [Dipt.]

2489.—Paoli, G. Nota sui generi *Spalacomimus* Karsch e *Bradyopisthius* Karsch (Orthopt. Phasgonur.). Ann. Mus. Stor. nat. Genova 58 1936 pp. 102–114, 3 figs.

2490.—Paoli, G. Alcune specie di *Empoasca* viventi in Egitto (Hemiptera-Homoptera). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 144–151, 4 figs.

2491.—Paoli, G. Descrizione di alcune nuove specie di *Empoasca* (Hemipt. Homopt.) e osservazioni su specie note. Mem. Soc. ent. ital., Genoa 15 1936 pp. 5–24, 9 figs.

2492.—Papadakis, A. On sandflies in general. The Greek species of sandflies and their distribution throughout Greece. [In Greek.] All Greece Malaria Congr., Salonica 2 1935 reprint 11 pp.

2493.—Papadakis, A. The species of Anopheline mosquitos of the island Crete. Geographical distribution and biology. [In Greek.] Thesis, Univ. Athens n.d. [recd. Feb. 1937] 44 pp. [Dipt.]

2494.—Papadakis, A. The head pattern of *Anopheles sacharovi* (Edw.) and *A. maculipennis* and its diagnostic value. [In Greek with English summary.] Prakt. Akad. Athen. 10 1935 pp. 457–462; latr. Athens (Med. Athens) no. 88 1936 8 pp. [Dipt.]

2495.—Paramonov, S. J. Dipterologische Fragmente. [In Russian with German summary.] Trav. Mus. zool. Kiev no. 15 1935 pp. 163–166.

2496.—Paramonov, S. J. Beiträge zur Monographie der Gattung *Anthrax* (Bombyliidae Diptera). [In Russian with German key and descriptions.] Trav. Mus. zool. Kiev no. 16 1936 pp. 3–31. [Dipt.]

2497.—Paramonov, S. J. Ueber einige interessante Dipteren im Mariupolschen Gebiet. [In Russian with German summary.] Trav. Mus. zool. Kiev no. 16 1936 pp. 113–123, 6 figs.

2498.—Paramonov, S. J. Beiträge zur Monographie der Gattung *Lampetia* (*Merodon* olim), Syrphidae, Diptera (I. Teil). [In Russian with German summary.] Trav. Mus. zool. Kiev no. 17 1936 pp. 3–13.

2499.—Paramonov, S. J. Zur Biologie des Blausiebs (*Zeuzera pyrina* L.). [In Russian with German summary.] Trav. Mus. zool. Kiev no. 17 1936 pp. 96–101. [Lep.]

2500.—Paramonov, S. J. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 45. Diptera. 13. Bombyliidae (bis). Ark. Zool., Stockholm 27A (sep. dated 1934) 1936 no. 26, 7 pp.

2501.—Paramonov, S. J. Ueber neue und alte *Antonia*-Arten (Bombyl. Dipt.). Mitt. dtsh. ent. Ges., Berlin 7 1936 pp. 27–31.

2502.—Pardi, L. Sulla supposta origine nucleare dei granuli albuminoidi delle cellule dei corpi grassi degli Insetti. Proc. verb. Soc. tosc. Sci. nat., Pisa 44 1936 pp. 67–70.

2503.—Pardo-Alcaide, A. Contribution à la connaissance de la faune entomologique marocaine. Bull. Soc. Hist. nat. Afr. N., Algiers 57 1936 pp. 392–393. [Col.]

2504.—Parent, O. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 37. Diptera. 12. Dolichopodidae. Ark. Zool., Stockholm 27B (sep. dated 1933) 1936 no. 6, 3 pp. 2 figs.

2505.—Parent, O. Diptères Dolichopodides du Congo Belge conservés au Musée Royal d'Histoire naturelle de Belgique. Bull. Mus. Hist. nat. Belg., Brussels 12 1936 no. 15, 19 pp. 18 figs.

2506.—Parent, O. Sur quelques Diptères du Lyonnais. Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 94–95.

2507.—Parent, O. Diptères Dolichopodides. Nouvelle contribution à la faune Ethiopienne. Rev. Zool. Bot. afr., Brussels 28 1936 pp. 317–327 7 figs. [Dipt.]

Parish, H. E. see Laake, Cushing & Parish.

2508.—Park, O. Beetles associated with the mound-building ant, *Formica ulkei* Emery. Psyche, Boston 42 1935 pp. 216–231, 2 figs. [Col., Hym.]

2509.—Park, T. Studies in population physiology. V. The oxygen consumption of the flour beetle, *Tribolium confusum* Duval. J. cell. comp. Physiol., Philadelphia 7 1936 pp. 313–323. [Col.]

2510.—Park, T. Studies in population physiology. VI. The effect of differentially conditioned flour upon the fecundity and fertility of *Tribolium confusum* Duval. J. exp. Zool., Philadelphia 73 1936 no. 3, pp. 393–404, 2 graphs. [Col.]

2511.—Park, T. A note on the occurrence of a pupal abnormality in the flour beetle *Tribolium confusum* Duval. J. Washington Acad. Sci., Menasha 26 1936 pp. 543–545, 4 figs. [Col.]

2512.—Park, T. & Woolcott, N. Studies in population physiology. VII. The relation of environmental conditioning to the decline of *Tribolium confusum* populations. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 127. [Col.]

2513.—Parker, D. E. *Chrysis shanghaiensis* Smith, a parasite of the oriental moth. J. agric. Res., Washington, D.C. 52 1936 pp. 449–458, 5 figs. [Hym. Lep.]

2514.—Parkin, E. A. A study of the food relations of the *Lyctus* powder-post beetles. Ann. appl. Biol., Cambridge 23 1936 pp. 369–400, 1 pl. 4 figs. [Col.]

2515.—Parrot, L. Les éléments de diagnose spécifique des Diptères du genre *Phlebotomus* (Psychodidae). In Parasites, transmetteurs, anim.; venimeux, Rec. Trav. 25^e Anniv. sci. Pavlovsky 1909–34, Moscow 1935 pp. 198–201.

2516.—Parrot, L. Notes sur les Phlébotomes. XVII–XXIII. Arch. Inst. Pasteur Algér., Algiers 14 1936 pp. 30–51, 17 figs., 137–143, 5 figs., 144–147, 2 figs., 427, 428–431, 2 figs. [Dipt.]

2517.—Parrot, L. Les espèces algériennes du genre *Phlebotomus* (Psychodidae). Bull. Soc. Hist. nat. Afr. N., Algiers 26 bis (Vol. jubilé) 1935 pp. 145–149. [Dipt.]

2518.—Patay, R. Physiologie du cryptonéphridisme chez la larve du Coléoptère *Tenebrio molitor* L. Bull. Soc. zool. Fr., Paris 61 1936 pp. 207–215, 5 figs.

2519.—Pate, V. S. L. Studies on the Nyssonine wasps. II. The subgenera of *Sphecius* (Hymenoptera: Sphecidae: Gorytini). Bull. Brooklyn ent. Soc. 31 1936 pp. 198–200.

2520.—Pate, V. S. L. *Rhectognathus*, a new group in the *Lindenius* complex (Hymenoptera: Sphecidae: Crabronini). Ent. News, Philadelphia 47 1936 pp. 147–153.

2521.—Pate, V. S. L. New Neotropical species of *Bicyrtes* (Hym. Sphecidae, Bembicini). Rev. Ent., Rio de Janeiro 6 1936 pp. 219–221.

2522.—Pate, V. S. L. Studies in the Nyssonine wasps (Gorytini: Sphecidae; Hymenoptera). I. Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 49–56.

2523.—Pate, V. S. L., Mackey, L. S. & Cresson, jr., E. T. Entomological literature. Ent. News, Philadelphia 47 1936 pp. 21–27, 45–51, 78–83, 108–112, 135–140, 159–165, 190–196, 216–224, 249–254, 276–284.

Patterson, J. T. see Painter & Patterson.

2524.—Patton, W. S. Studies on the higher Diptera of medical and veterinary importance. A Revision of the genera of the family Muscidae Testaceae Robineau-Desvoidy based on a comparative study of the male and female terminalia. Ann. trop. Med. Parasit., Liverpool 30 1936 pp. 57–69, 8 figs., 71–89, 22 figs., pp. 151–168 23 figs., pp. 305–330, 25 figs., pp. 453–468, 12 figs., pp. 469–490, 11 figs.

2525.—Patton, W. S. & Wainwright, C. J. The British species of the subfamily Sarcophaginae, with illustrations of the male and female terminalia [contd.]. Ann. trop. Med. Parasit., Liverpool 30 1936 pp. 187–201, 8 figs., pp. 337–350, 8 figs.

2526.—Paulian, R. Le polymorphisme des mâles de Coléoptères. Paris, Herman & Cie 1935 36 pp. 11 figs.

2527.—Paulian, R. Sur quelques *Onthophagus* Américains nouveaux ou peu connus (Col. Lamellicornes). Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 506–509, 1 fig.

2528.—Paulian, R. Catalogue des Coléoptères de l'île d'Yeu (Vendée). Bull. Soc. Sci. nat. Ouest, Nantes (5) 4 (1934) 1935 pp. 99–150.

2529.—Paulian, R. Faune entomologique de Madagascar. Coleoptera Lamellicornia - Scarabaeidae, Scarabaeini et Aphodiini.

Bull. Acad. malgache, Tananarive (N.S.) 18 (1935) 1936 pp. 121–144, 2 pls.

2530.—Paulian, R. Les Coléoptères coprophages du genre *Paraphytus* Harold. Bull. Soc. ent. Fr., Paris 41 1936 pp. 82–87.

2531.—Paulian, R. Contribution à l'étude de quelques Aphodiini asiatiques. (Coléoptères Lamellicornes.) Folia zool. hydrobiol., Riga 9 1936 pp. 62–66, 2 figs.

2532.—Paulian, R. La larve de *Staphylinus (Tasgius) pedator* Grav. Misc. ent., Castanet-Tolosan 37 1936 pp. 101–103, 1 pl.

2533.—Paulian, R. The Indian Aphodiinae of the subgenus *Trichonotulus* (Coleoptera: Lamellicornia). Rec. Indian Mus., Calcutta 38 1936 pp. 363–365, 2 figs.

2534.—Paulian, R. Sur la nature génétique de certains cas de polymorphisme chez les mâles de Lucanides. Proc. zool. Soc. London 1936 pp. 751–759, 3 figs. [Col.]

2534A.—Paulian, R. Coléoptères Lamellicornes coprophages de l'île de Kangean. Treubia, Buitenzorg 15 1936 pp. 395–398, 2 figs.

Pavlov, E. see Tiflov & Pavlov.

2535.—[Pavlovskii, E. N.] Павловский, Е. Н. Methods of studying bloodsucking mosquitoes (Culicidae). [In Russian.] Moscow, Zool. Acad. Sci. U.R.S.S. no. 14 (Instruct. Collect.) 1935 176 pp. 77 figs. [Dipt.]

2536.—[Pavlovskii, E., Stein, A. & Olsuf'ev, N.] Павловский, Е. Н., Штейн, А. К. и Олсуфьев, Н. Г. Experimental investigation of the action of the saliva of gadflies on the skin. [In Russian with English summary.] In Parasites, transmetteurs animaux-venimeux, Rev. Trav. 25^e Anniv. sci. Pavlovsky 1909–34, Moscow 1935 pp. 426–447, 20 figs. [Dipt.]

2537.—Pax, F. Die Reyersdorfer Tropfsteinhöhle und ihre Tierbevölkerung. Mitt. Höhlen- u. Karstf., Berlin 1936 1936 pp. 97–122, 1 map, 2 figs.

2538.—Pax, F. & Maschke, K. Die Tierwelt der Quellen. i. Die Metazoenfauna der Akratopogen. Beitr. Biol. Glatzer Schneeberges, Breslau 2 1936 pp. 135–171, 2 maps, 8 figs.

2539.—Payne, N. M. Excretory products of the Mediterranean flour moth larva (*Ephestia kuehniella* Zeller). Anat. Rec., Philadelphia **67** 1936 suppl. 1 p. 37. [Lep.]

2540.—Payne, M. A. Intravital studies on the Hemipteron, *Leptocoris trivittatus*. B. Description of the female reproductive organs. Zool. Jb., Jena Anat. **61** 1936 pp. 45–50, 1 pl.

2541.—Peake, A. M. Notes on the distribution of the European species of the genus *Melanargia* (Lep. Satyridae). Entomologist, London **69** 1936 pp. 231–238.

2542.—Pearl, R. & Miner, J. R. Life tables for the pecan nut case bearer, *Acrobasis caryae* Grote. Mém. Mus. Hist. nat. Belg., Brussels (2) **3** 1936 pp. 169–184, 3 graphs. [Lep.]

2543.—Pearman, J. V. The taxonomy of the Psocoptera: Preliminary sketch. Proc. R. ent. Soc. London (B) **5** 1936 pp. 58–62.

2544.—Pearman, J. V. Two new Psocids from Ceylon. Spolia zeyl., Colombo **20** 1936 pp. 1–7, 1 pl.

2545.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc., Chapel Hill **52** 1936 pp. 174–222, 2 pls. [Insects pp. 197–207.]

2546.—Pearse, A. S. Parasites from Yucatan. Pub. Carnegie Instn. Washington **457** 1936 pp. 45–59, 21 figs. [Insects pp. 51, 52.]

2547.—Pearse, A. S. Chironomid larvae from Yucatan. Pub. Carnegie Instn. Washington **457** 1936 p. 151. [Dipt.]

2548.—Pearse, A. S. et al. The ecology of *Passalus cornutus* Fabricius, a beetle which lives in rotting logs. Ecol. Monogr., Durham, N.C. **6** 1936 pp. 455–490, 43 figs. [Col.]

Peirson, L. G. see Baiss & Peirson.

2549.—Peking, F. Ueber das Ei und das Vorkommen von *Eubolia murinaria* F. Ein Beitrag zur Fauna Böhmens. Ent. Z., Frankfurt a. M. **50** 1936 pp. 391–392, 5 figs. [Lep.]

2550.—Peláez, D. Un nuevo membrácido africano del género *Platybelus* Stål (Hem. Homopt.). Bol. Soc. esp. Hist. nat., Madrid **36** 1936 pp. 193–197, 1 fig.

2551.—Peláez, D. Un nuevo *Orthobelus* americano del grupo *urus* (Hem. Homopt.). Bol. Soc. esp. Hist. nat., Madrid **36** 1936 pp. 277–282, 2 figs.

2552.—Peltzer, A. Sulla variabilità delle larve di *Polistes gallicus* (L.). Boll. Soc. ent. ital., Genoa **67** 1935 pp. 133–138, 2 figs. [Hym.]

2553.—Peltzer, J. Der Bienenwolf *Philanthus triangulum*. Nat. am Niederrhein, Krefeld **12** 1936 pp. 41–49, 15 figs. [Hym.]

2554.—Pendlebury, H. M. Some new records of butterflies from the Malayan Peninsula. J. F.M.S. Mus., Kuala Lumpur **13** 1936 pp. 178–186. [Lep.]

Pendlebury, H. M. see Corbet & Pendlebury.

2555.—Penecke, K. A. Neubeschreibung, kritische Darlegungen und kurze Mitteilungen über paläarktische Curculioniden (Schluss). Koleopt. Rdsch. Vienna **21** (1935) 1936 pp. 206–227.

2556.—Peng, Peng. Biology of *Icerya purchasi* Mask. in Hangchow (Homoptera, Coccidae). [In Chinese with English summary.] Yearb. Bur. Ent. Hangchow **1934** 1935 pp. 189–203, 15 figs.

2557.—Peng, Peng. Life history of *Papilio polytes* Linn. in Hwangyen. [In Chinese with English summary.] Yearb. Bur. Ent. Hangchow **1934** 1935 pp. 285–294, 8 figs. [Lep.]

2558.—Perereczko-Baumanowa, J. Die in Stadt Oszmiana und Umgebung in Jahren 1930–32 gesammelten Zoocecidien. [In Polish.] Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. **9** (1934) 1935 pp. 239–263.

2559.—[Perfil'ev, P.] Перфильев, П. Contributions à la biologie, à la taxonomie et à la géographie des Phlébotomes de la section *major*. [In Russian.] Trud. Tadzhik Sect. Acad. Sci. S.S.R., Moscow **5** (Zool. & Parasit.) 1935 pp. 29–51, 17 figs. [Dipt.]

2560.—[Perfil'ev, P. P. & Popov, V. V.] Перфильев, П. П. и Попов, В. В. Contributions à la faune des Phlébotomes de Kuljab, Tadzhikstan. [In Russian.] Trud. Tadzhik Sect. Acad. Sci. S.S.R., Moscow **5** (Zool. & Parasit.) 1935 pp. 15–27. [Dipt.]

Perilli, R. see Tagliabue & Perilli.

2561.—Perkins, J. F. On a new species of *Nemeritis* bred from the bee-hole borer of teak (Hym. Ichn.). Bull. ent. Res., London **27** 1936 pp. 431-433.

2562.—Perkins, J. F. Notes on British Metopini (Hym. Ichneumonidae). Ent. mon. Mag., London **72** 1936 pp. 83-86, 3 figs.

2563.—Perkins, R. C. L. Twenty-five years of insect-collecting in Devon. Trans. Torquay nat. Hist. Soc. **7** 1936 no. 2 pp. 19-26.

2564.—Perret, J. Observations sur *Epilachna chrysomelina* Fabr. Coccinelle du melon. Rev. Path. vég. Ent. Agric., Paris **23** 1936 pp. 177-184, 1 fig. [Col.]

Perry, F. see Sherman & Perry.

2565.—Pessôa, S. B. & Ayrosa Galvão, A. L. Novo gênero e nova espécie de Streblidae (Dipt. Pupipara) parasita do morcego do Brasil. Rev. Ent., Rio de Janeiro **6** 1936 pp. 242-248, 4 figs.

2566.—Pessôa, S. B. & Guimarães, L. R. Contribuições para o conhecimento das Mallophagas das aves do Brasil. I, II. Ann. Fac. Med. Univ. S. Paulo **11** 1935 pp. 169-171, 6 figs., 311-314, 7 figs.

2567.—Pessôa, S. B. & Guimarães, L. R. Contribuições para o conhecimento das Mallophagas das Aves do Brasil. III. Rev. Biol. Hyg., S. Paulo **6** 1935 pp. 105-112, 12 figs.

2568.—Pesson, P. Notes de faunistique armoricaine. (2^e-3^e notes.) Bull. Soc. sci. Bretagne, Rennes **12** (1935) 1936 pp. 190-199, 1 fig.; **13** 1936 pp. 83-89.

2569.—Pesson, P. Contribution à l'étude du tube digestif des Coccides. III. Monophlébines: *Icerya purchasi* Mask. Bull. Soc. zool. Fr., Paris **61** 1936 pp. 282-293, 5 figs. [Hem.]

Pesson, P. see Abbayes & Pesson.

2570.—Petherbridge, F. R. & Mellor, J. E. M. Observations on the life history and control of the cabbage aphid, *Brevicoryne brassicae* L. Ann. appl. Biol., Cambridge **23** 1936 pp. 329-341, 1 pl. [Hem.]

2571.—[Petrishcheva, P. A.] Петришчева, П. А. Faune, biologie et écologie des Phlébotomes de la Turcomanie. [In Russian with French summary.] In Parasites, transmetteurs

anim.-venimeux, Rec. Trav. 25^e Anniv. sci. Pavlovsky 1909-34, Moscow 1935 pp. 202-259, 12 figs. 2 charts. [Dipt.]

Petty, B. K. see Ripley, Petty & van Heerden.

2572.—Peus, F. Zur Kenntnis der Dixiden-Fauna Nordeuropas (Dipt., Nematoc.). Norsk ent. Tidsskr., Oslo **4** 1936 pp. 117-127, 4 figs.

2573.—Peyerimhoff, P. de. Coléoptères nouveaux ou mal connus de Berbérie. V. Le genre *Planeustomus* J. du V. (Staphylinidae). Bull. Soc. ent. Fr., Paris **41** 1936 pp. 233-236, 2 figs.

2574.—Peyerimhoff, P. de. Les *Saprinus* sabulicoles du Nord de l'Afrique (Coleoptera-Histeridae). Bull. Soc. ent. Egypte, Cairo **20** 1936 pp. 213-228, 3 figs.

2575.—Peyerimhoff, P. de. Notes sur les *Nebria* Latr. (Col. Carabidae) du Nord de l'Afrique. Bull. Soc. Hist. nat. Afr. N., Algiers **27** 1936 pp. 319-325.

2576.—Peyerimhoff, P. de. Mission au Tibesti. Coléoptères (avec la description d'un genre et de deux espèces nouvelles). Mém. Acad. Sci. Paris (2) **62** 1936 pp. 74-81, 1 pl.

2577.—Pfalzer, E. von. Lebenszyklen der Lygaeiden (Hem.). Notul. ent., Helsingfors **16** 1936 pp. 65-85, 9 figs.

2578.—Pfeffer, A. Beitrag zur Ipidenfauna (Coleopt.) Bulgariens. Mitt. naturw. Inst. Bulg., Sofia **9** 1936 pp. 89-90.

2579.—Pflugfelder, O. Bau und morphologische Bedeutung der sog. Ocellen der Schildlaus-Männchen (*Lecanium corni* March.). Zool. Anz., Leipzig **114** 1936 pp. 49-55, 6 figs. [Hem.]

2580.—Philip, C. B. Notes on certain males of North American horseflies (Tabanidae). Bull. Brooklyn ent. Soc. **31** 1936 pp. 189-197. [Dipt.]

2581.—Philip, C. B. *Tabanus rhombicus* and related western horseflies. Canad. Ent., Orillia **68** 1936 pp. 148-160. [Dipt.]

2582.—Philip, C. B. An interesting new horsefly from North Carolina (Diptera: Tabanidae). Ent. News, Philadelphia **47** 1936 pp. 229-231, 1 fig.

2583.—Philip, C. B. New Tabanidae (horseflies) with notes on certain species of the *longus* group of *Tabanus*. Ohio J. Sci., Columbus **36** 1936 pp. 149–156.

2584.—Philip, C. B. The *furcatus* group of western North American flies of the genus *Chrysops* (Diptera: Tabanidae). Proc. ent. Soc. Washington **37** (1935) 1936 pp. 153–161.

2585.—Phillipp, P. Parthenogenese, Geschlechterverhältnis und Gynandromorphismus bei Chironomiden. Ent. Rdsch., Stuttgart **54** 1936 pp. 45–50, 3 figs. [Dipt.]

2586.—Phillipp, P. Methode zur qualitativen und quantitativen Erfassung des Insektenfluges über Gewässern. Zool. Anz., Leipzig **114** 1936 pp. 235–240, 5 figs.

2587.—Phillips, W. J. A second revision of the Chalcid flies of the genus *Harmolita* (*Isosoma*) of America north of Mexico, with descriptions of 20 new species. Tech. Bull. U.S. Dep. Agric., Washington, D.C. no. **518** 1936 25 pp. 4 figs. [Hym.]

2588.—Pic, M. Nouveaux Coléoptères de la Cyrénaïque. Atti Mus. Stor. nat. Trieste **12** 1935 pp. 147–150.

2589.—Pic, M. Mission scientifique de l'Omo. Coleoptera. VII. Lampyridae, Cantharidae, Melyridae, Gecercidae et Helodidae. Miss. scient. Omo, Paris **2** 1935 pp. 291–302.

2590.—Pic, M. Deux nouveaux Coléoptères néotropiques (Coleoptera: Cantharidae et Ptinidae). Arb. Morph. tax. Ent. Berlin **3** 1936 p. 131.

2591.—Pic, M. Descriptions de Coléoptères. Bull. Soc. ent. Fr., Paris **41** 1936 pp. 213–216.

2592.—Pic, M. Nouveaux Coléoptères exotiques. Bull. Soc. zool. Fr., Paris **61** 1936 pp. 126–128, 298–300.

2593.—Pic, M. Neue Coleoptera (Malacodermata). Ent. Anz., Vienna **16** 1936 pp. 1–3.

2594.—Pic, M. Coléoptères nouveaux de la presqu'île malaise et de Borneo (III, IV). J. F.M.S. Mus., Kuala Lumpur **13** 1936 pp. 54–59, 167–172.

2595.—Pic, M. Nouveaux Coléoptères de Chine. Notes Ent. chinoise, Mus. Heude, Shanghai **3** 1936 pp. 15–17.

2596.—Pic, M. Diagnoses préliminaires de Coléoptères. Rev. franç. Ent., Paris **3** 1936 pp. 213–215.

2597.—Pic, M. Les *Pelonium* Spin., de la république argentine (Col. Cleridae). Rev. Soc. ent. argent., Buenos Aires **7** 1935 pp. 99–101.

2598.—Pic, M. Coléoptères phytophages d'Angola (Cryptocephalides et divers). Rev. suisse Zool., Geneva **43** 1936 pp. 623–629.

2599.—Pic, M. Nouveaux Lycides du Congo. Rev. Zool. Bot. afr., Brussels **28** 1936 pp. 328–330. [Col.]

2600.—Pic, M. Nouveaux Coléoptères du Congo. Rev. Zool. Bot. afr., Brussels **28** 1936 pp. 419–420.

2601.—Pic, M. Nouveaux Coléoptères de l'Afrique occidentale. Rev. Zool. Bot. afr., Brussels **29** 1936 pp. 34–36.

2602.—Pic, M. Nouveaux Coléoptères paléarctiques. Echange, Moulins **51** 1936 hors-texte pp. 1–4.

2603.—Pic, M. Notes diverses, nouveautés. Echange, Moulins **51** 1935 pp. 11–15, **52** 1936 pp. 21–23. [Col.]

2604.—Pic, M. Coléoptères exotiques en partie nouveaux. Echange, Moulins **51** 1935 pp. 15–16; 1936 p. 20.

2605.—Pic, M. Excursions dans le massif de la Chartreuse. Echange, Moulins **51** 1935 hors-texte pp. 9–16.

2606.—Pic, M. Coléoptères Hétéromères "Mordellidae." Echange, Moulins **52** 1936 hors-texte pp. 1–4.

2607.—Pic, M. Nouveautés diverses. Mélanges exot.-ent., Moulins **67** 1936 pp. 1–36. [Col.]

2608.—Picard, F. Sur le genre *Iridophaga* (Hym. Chalcididae) avec la description d'une nouvelle espèce parasite de *Blepharopsis mendica* F. Bull. Soc. ent. Fr., Paris **41** 1936 pp. 75–77.

2609.—Picard, F. Un cas de poecilandrie chez un Hyménoptère Chalcidide, *Podagrion pachymerum* Walk., parasite de la mante religieuse. Bull. Soc. zool. Fr., Paris **60** 1936 pp. 468–472, 2 figs.

2610.—Pickles, W. Populations and territories of the ants, *Formica fusca*, *Acanthomyops flavus*, and *Myrmica ruginodis*, at Thornhill (Yorks). J. Anim. Ecol., Cambridge 5 1936 pp. 262-270, 1 map 1 fig. [Hym.]

2611.—Pictet, A. Quelques problèmes de faunistique résolus par la zoogéographie expérimentale. Livre jubilé. Bouvier, Paris 1936 pp. 263-267.

2612.—Pictet, A. La zoogéographie expérimentale dans ses rapports avec la génétique. Mém. Mus. Hist. nat. Belg., Brussels (2) 3 1936 pp. 233-282, 3 pls. 16 figs. [Lep.]

2613.—Pictet, A. Sur des croisements de races géographiques de Lépidoptères de pays très éloignés. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 706-715.

2614.—Piel, O. Nidification de *Megachile monticola*, Smith, chez *Xylocopa rufipes* Sm. ♀, *pictifrons* Sm. ♂. Bull. Univ. Aurore, Shanghai 22 1930 pp. 1-11, 2 pls. 1 fig. [Hym.] [Cf. Zool. Rec. 69 1932 p. 108, no. 2303.]

2615.—Piel, O. Recherches biologiques sur les Hyménoptères vulnérants du bas Yang-Tse. Apidae (Les Megachiles). Bull. Univ. Aurore, Shanghai 27 1934 pp. 1-30, 17 figs. [Cf. Zool. Rec. 70 1933 p. 109, no. 2310.]

2616.—Piel, O. Biologie de *Pareumenes quadrispinosus* Saussure (Hyménoptère Vespidae) et de ses parasites, en particulier: *Calosota sinensis* Ferrière. Bull. Univ. Aurore, Shanghai 32 1936 pp. 1-36, 4 pls. 3 figs. [Cf. Zool. Rec. 72 1935 p. 116, no. 2366.]

2617.—Piel, O. Nidification aérienne d'*Astatus boops* Schrank en Chine. Notes Ent. chinoise, Mus. Heude, Shanghai 3 1936 pp. 19-35, 1 pl. 1 fig. [Hym.]

Piepho, H. see Kühn & Piepho.

2618.—Pierantoni, U. L'organo simbiotico di *Silvanus surinamensis* (L.). Rend. Accad. Lincei, Rome Cl. Sci. fis., mat. nat. 9 1929 pp. 451-455, 1 fig. [Col.]

2619.—Pierantoni, U. La simbiosi fisiologica nei termitidi xilofagi e nei loro flagellati intestinali. Arch. zool. (ital.), Torino 22 1936 pp. 135-173, 15 figs. [Isopt.]

2620.—Pierantoni, U. Gli studi sulla endosimbiosi ereditaria nelle origini e nei più recenti sviluppi. Arch. zool. (ital.), Torino 23 1936 Suppl. pp. 137-195, 15 figs.

2621.—Pierce, D. W. The position of the Strepsiptera in the classification of insects. Ent. News, Philadelphia 47 1936 pp. 257-263. [Col.]

2622.—Pierce, F. N. & Metcalfe, J. W. The genitalia of the Tineid families of the Lepidoptera of the British Islands. Oundle, F.N. Pierce 1935 xxii + 116 pp. 68 pls.

2623.—Piéron, H. Sens du temps et horloge chimique de l'abeille à l'homme. Livre jubilé. Bouvier, Paris 1936 pp. 269-272.

2624.—Pinchin, R. D. & Anderson, J. On the nocturnal activity of Tipulinae (Diptera) as measured by a light trap. (1) The time of flight and proportion of sexes. Proc. R. ent. Soc. London (A) 11 1936 pp. 69-78, 4 figs.

Pincus, G. see Crozier, Pincus & Zahl.

2625.—Ping, C. On four fossil insects from Sinkiang. [In English with Chinese summary.] Chinese J. Zool., Nanking 1 1935 pp. 107-115, 4 figs. [Dermapt. Plectopt.]

2626.—Pinniger, E. B. Notes on dragonflies, 1935. London Nat. 1935 1936 pp. 71-72. [Odon.]

2627.—Pionneau, P. Sur quelques Rhopalocères paléarctiques. Échange, Moulins 51 1936 pp. 17-19; 52 pp. 23-24.

Pinto da Fonseca, J. see Toledo Piza & Pinto da Fonseca.

2628.—Pirion, A. Costumbres de algunos Odonatos de Marga-Marga. Rev. chil. Hist. nat., Santiago 37 1933 pp. 78-82, 1 fig.

Pitcher, R. S. see Austin & Pitcher.

2629.—Piton, L. Insectes fossiles des cinérites et randannites d'Auvergne. de Bussac, Clermont-Ferrand 1933 4 pp. 1 pl.

2630.—Piton, L. Les Orthoptères tertiaires d'Auvergne. Misc. Ent., Castanet-Tolosan 37 1936 pp. 77-79, 1 pl.

2631.—Piton, L. Les Hémiptères Homoptères de l'Eocène de Menal (P.-de-D.). Misc. Ent., Castanet Tolosan 37 1936 pp. 93-95, 1 pl.

2632.—Piton, L. Faune entomologique des argiles cinéritiques miopliocènes de Varennes (Puy-de-Dôme). Rev. Auvergne, Clermont-Ferrand 50 1936 no. 2 pp. 17–20.

2633.—Piton, L. Addition à la faune entomologique des cinérites du Lac Chambon (Puy-de-Dôme). Rev. sci. Bourbonn., Moulins 1936 pp. 16–24. [Fossil.]

2634.—Piton, L. & Rudel, A. Sur de nouveaux gisements d'insectes fossiles dans l'oligocène de la Limagne. Bull. mens. Soc. linn. Lyon (N.S.) 5 1936 pp. 78–81, 6 figs.

2635.—Piton, L. & Théobald, N. La faune entomologique des gisements miopliocènes du massif central. Rev. Sci. nat. Auvergne, Clermont-Ferrand 1 1935 pp. 65–104, 5 pls. [Fossil.]

Pjatakova, V. see Semenov-Tian-Shanskii & Pjatakova.

2636.—Plagge, E. Transplantationen von Augenimaginalscheiben zwischen der schwarz- und der rotäugigen Rasse von *Ephestia kühniella* Z. Biol. Zbl., Leipzig 56 1936 pp. 406–409. [Lep.]

2637.—Plagge, E. Bewirkung der Augenausfärbung der rotäugigen Rasse von *Ephestia kühniella* durch Implantation artfremder Hoden. Nachr. Ges. Wiss. Göttingen Biol. (N.F.) 2 1936 pp. 251–256. [Lep.]

2638.—Plagge, E. Der zeitliche Verlauf der Auslösbarkeit von Hoden- und Imaginalaugenfärbung durch den A-Wirkstoff bei *Ephestia* und die zur Ausscheidung einer wirksamen Menge nötige Zeitdauer. Z. indukt. Abstamm.-u. Vererb. Lehre, Leipzig 72 1936 pp. 127–137, 4 figs. [Lep.]

Plagge, E. see Kühn, Caspari & Plagge.

2639.—Platania, E. Sulla natura della peritrofica di *Reticulitermes lucifugus* (Rossi). Atti Accad. Lincei, Rome, Rend. 24 1936 pp. 41–43. [Isopt.]

2640.—Plaumann, F. Im Urwald. Ent. Rdsch., Stuttgart 54 1936 pp. 120–125.

2641.—Plavilstshikov, N. N. Faune del'URSS. Insectes Coléoptères. Cerambycidae (I). XXI. Leningrad, Inst. zool. Acad. Sci. U.R.S.S. 1936 ix + 611 pp. 247 figs.

Plavilstshikov, N. see Semenov-Tian-Shanskii & Plavilstshikov.

2642.—[Pliginskii, V. G.] Плигинский, В. Г. Notizen über Meloiden (Coleoptera, Meloidae), III. Rev. Ent. U.R.S.S., Leningrad 25 1935 pp. 320–323.

2643.—Ploch, L. Eine insektenkundliche Exkursion mit einer biologischen Arbeitsgemeinschaft von Lehrern. Ent. Z., Frankfurt a. M. 50 1936 pp. 38–44, 51–56.

2644.—Plough, H. H. & Child, G. Developmental modifications in unhatched pupae induced in genetically different stocks of *Drosophila* by high temperature. Amer. Nat., New York 70 1936 p. 60. [Dipt.]

2645.—Plummer, C. C. New Membracidae (Homoptera) from Mexico, with notes on other species. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 682–693, 2 pls.

2646.—Poche, F. Neuarbeitung der Internationalen Regeln der Zoologischen Nomenklatur, zwecks Erzielung einer eindeutigen, möglichst rationellen, Einheitlichen und Stabilen Benennung der Tiere, von der Nomenklaturkommission des verbandes Deutschsprachlicher Entomologenvereine der Internationalen Nomenklaturkommission und dem Internationalen Zoologenkongress vorgeschlagen. Konowia, Vienna 15 1936 pp. 264–320.

2747.—Poisson, R. Quelques observations sur la structure de l'oeuf des insectes Hémiptères-Hétéroptères. Bull. Soc. sci. Bretagne, Rennes 10 1933 pp. 40–77, 31 figs.

2648.—Poisson, R. Hémiptères aquatiques des Balkans. Bull. Soc. sci. Bretagne, Rennes 11 (1934) 1935 pp. 163–167, 1 fig.

2649.—Poisson, R. Tableau synoptique des Corises de France (Hémiptères-Hétéroptères aquatiques) et de leurs principales formes affines paléarctiques. Bull. Soc. sci. Bretagne, Rennes 13 1936 pp. 55–66, 4 figs.

2650.—Poisson, R. Nouvelles observations sur les processus spermatogénétiques dans les éléments sexuels d'Hémiptères aquatiques (*Velia currens* Fab. et *Gerris*). Arch. Zool. exp. gén., Paris 78 1936 pp. 133–194, 5 pls. 19 figs.

2651.—Poisson, R. Sur une nouvelle espèce africaine du genre *Laccocoris* (Hemipt. Cryptocer.). Livre jubil. Bouvier, Paris 1936 pp. 273–275, 2 figs.

2652.—Poisson, R. Mission scientifique de l'Omo. Hemiptera. I. Aquatica. Mém. Mus. Hist. nat. Paris 4 1936 pp. 191–218, 29 figs.

2653.—[Pokrovskii, S. V. & Muramova, A. P.] Покровский, С. В. и Мурамова, А. П. Matériaux pour l'étude des variétés d' *Anopheles maculipennis* Meig. des régions de Moscou et de Kalinine. [In Russian with French summary.] Med. Parasit. parasit. Dis., Moscow 5 1936 pp. 942–949. [Dipt.]

Polezhaev, V. G. see Smirnov & Polezhaev.

2654.—Poll, M. Le tube de Malpighi des insectes comparé au tube urinaire des Vertébrés. Ann. Soc. zool. Belg., Brussels 65 1934 pp. 87–95, 1 fig.

2655.—Poll, M. Recherches histophysiologiques sur les tubes de Malpighi du *Tenebrio molitor* L. Rec. Inst. zool. Torley-Rousseau, Bruxelles 5 1935 pp. 73–126, 23 figs. [Col.]

2656.—Poll, M. La methode des injections colorées appliquée à l'étude de l'excrétion chez les insectes. C.R. 2^{me} Congr. nat. Sci. Brux. June 1935, Brussels 1935 pp. 1072–1076, 1 pl.

2658.—Poll, M. La biologie des insectes de la plage d'Argelès-sur-Mer (Pyrénées orientales). Ann. Soc. zool. Belg., Brussels 66 (1935) 1936 pp. 67–85, 2 pls.

2659.—Poll, M. Contribution à l'étude de l'histophysiologie de l'appareil urinaire des larves de Myrméléontides. Mém. Mus. Hist. nat. Belg., Brussels (2) 3 1936 pp. 635–666, 21 figs. [Neur.]

2660.—Poluszyński, G. Cytological observations on gametogenesis in insects. (Spermatogenesis of flies of the family Ephydridae (Diptera).) [In Polish.] Arch. Tow. nauk. Lwów (3) 5 1931 pp. 127–221, 5 pls., 8 figs.

Poluszyński, G. see Noskiewicz & Poluszyński.

2661.—Pomini, F. Alcune considerazioni di carattere zoogeografico sulle specie italiane di *Platycarabus* (*Carabus*) Mor. Atti Soc. ital. Sci. nat., Milan 75 1936 pp. 64–66. [Col.]

2662.—Pongràcz, S. Berichtigungen in der Enumeration der ungarischen Fauna. [In Magyar with German summary.] Állat. Közlem., Budapest 33 1936 pp. 181–193, 2 maps.

2663.—Poncetton, F. & Reymond, A. Note sur les races géographiques françaises du *Chrysocarabus solieri* Dejean (Col.). Bull. Soc. ent. Fr., Paris 40 (1935) 1936 pp. 271–272.

Poor, M. E. see Drake & Poor.

2664.—[Popov, V. V.] Попов, В. В. Beiträge zur Bienenfauna von Tadjikistan (Hymenoptera, Apoidea). [In Russian with German descriptions.] Trud. Tadzhiik Sect. Acad. Sci. S.S.R., Moscow 5 (Zool. & Parasit.) 1935 pp. 351–408, 18 figs.

2665.—Popov, V. B. Neue Formen der Bauchsammler aus Turkmenien (Hymenoptera, Apoidea). Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 591–598, 2 figs.

2666.—Popov, V. B. Neue und wenig bekannte paläarktische Panurgidae (Hymenoptera, Apoidea). Folia zool. hydrobiol., Riga 9 1936 pp. 1–13, 21 figs.

2667.—Popov, V. B. Beiträge zur Synonymie einiger Bienen-Arten (Hymenoptera, Apoidea). Konowia, Vienna 15 1936 pp. 159–161.

2668.—Popov, V. B. Bees of the genus *Psithyrus* Lep. from Prof. Fr. Klapálek's collection (Hymenoptera, Apoidea). Sborn. ent. odd. Nár. Mus. Praha 14 1936 pp. 200–203.

2669.—[Popov, V.] Попов, В. To the knowledge of the genus *Dioxys* Lep. (Hymenoptera Apoidea). [In Russian with English descriptions.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad 3 1936 pp. 3–32, 16 figs.

2670.—Popov, V. & Guiglia, D. Note sopra i gen. *Ctenoplectra* Sm. e *Macropis* Panz. (Hymenoptera, Apidae). Ann. Mus. Stor. nat. Genova 59 1936 pp. 275–288, 5 figs.

Popov, V. V. see Perfil'ev & Popov.

2671.—Popoff, V. I. Corn borer (*Pyrausta nubilalis* Hb.) as corn and hemp pest in Bulgaria. Minist. Agric. nat. Domains, Sofia no. 68 1936 103 pp. 17 figs.

2672.—Porter, C. E. Notas zoogeográficas acerca de algunos Bruquidos chilenos. Rev. chil. Hist. nat., Santiago 37 1933 pp. 86-87. [Col.]

2673.—Porter, C. E. Acerca de los Thyreocorinae chilenos. Rev. chil. Hist. nat., Santiago 37 1933 pp. 198-200. [Hem.]

2674.—Porter, C. E. Los Prioninae de Chile. Rev. chil. Hist. nat., Santiago 37 1933 pp. 200-209, 2 pls. [Col.]

2675.—Porter, C. E. Los estudios ortopterológicos en Chile. Rev. chil. Hist. nat., Santiago 37 1933 pp. 218-229, 2 figs.

2676.—Porter, C. E. El piojo de las abejas (*Braula coeca* Nitzsche, 1818). Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 141-144, 1 fig. [Dipt.]

2677.—Porter, C. E. El *Margarodes vitium* Giard. Notas sinonimicas, zoogeográficas y bibliográficas. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 323-335. [Hem.]

2678.—Portillo, J. del. Beziehungen zwischen den Oeffnungswinkeln der Ommatiden, Krümmung und Gestalt der Insektenaugen und ihrer funktionellen Aufgabe. Z. vergl. Physiol., Berlin 23 1936 pp. 100-145, 55 figs.

2679.—Portmann, A. Falterschönheit. Exotische Schmetterlinge in farbigen Naturaufnahmen. Bern, Iris Verlag 1935 22 pp. 12 col. pls. [Lep.]

2680.—Poulton, E. B. Recent advances in the knowledge of insect mimicry. Trans. Oxford Univ. jr. sci. Cl. (3) 5 1921 pp. 133-145.

2681.—Poulton, E. B. Mimicry in the butterflies of Fiji. Trans. Oxford Univ. jr. sci. Cl. (4) 4 1924 pp. 101-106. [Lep.]

2682.—Poulton, Sir E. Assemblies of Coccinellid beetles observed in N. Uganda (1927) by Prof. Hale Carpenter and in Bechuanaland (1935) by Dr. W. A. Lamborn. Proc. R. ent. Soc. London (A) 11 1936 pp. 99-100.

Pravdin, F. N. see Emel'yanov, Pravdin, Kuzina & Lisitzuina.

2683.—Praviel, G. Observations sur la *Lithina scutularia* et description d'une nouvelle sous-espèce (Lepidopt. Geometridae). Livre jubil. Bouvier, Paris 1936 pp. 277-280, 1 pl., 1 fig.

2684.—Praviel, G. Lépidoptères nouveaux pour les Alpes-Maritimes. Bull. Soc. ent. Fr., Paris 41 1936 pp. 29-32.

2685.—Praviel, G. Remarques sur *Parnassius phoebus* Fabricius (Lep. Papilionidae) et description d'une nouvelle sous-espèce. Bull. Soc. ent. Fr., Paris 41 1936 pp. 265-269.

2686.—Prell, H. Beiträge zur Kenntnis der Dynastinen. Ueber die Homonymieverhältnisse der Namen von Gattungen und Untergattungen. Ent. Bl., Crefeld 32 1936 pp. 145-152.

2687.—Presswalla, M. J. & George, C. J. The respiratory system and the mode of transpiration of the water-bug, *Sphaerodema rusticum* Fabr. with remarks on those of *Nepa*, *Laccotrepes* and *Ranatra*. Proc. Indian Acad. Sci., Bangalore (B) 2 1935 pp. 280-315, 3 pls. 13 figs. [Hem.]

2688.—Presswalla, M. J. & George, C. J. The morphology of *Sphaerodema rusticum* Fabr. J. Univ. Bombay 4 1936 no. 5 pp. 29-67, 3 pls. 19 figs. [Hem.]

2689.—Priesner, H. A preliminary review of the non-fossil species of the genus *Melanthrips* Hal. (Thysanoptera). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 29-54, 2 pls.

2690.—Priesner, H. Studies on the genus *Haplothrips* Serv. (Thysanoptera). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 61-75, 8 figs.

2691.—Priesner, H. On some further new Thysanoptera from the Sudan. Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 83-104, 8 figs.

2692.—Priesner, H. Ueber einige neue und wenig bekannte Thysanopteren. Proc. R. ent. Soc. London (B) 5 1936 pp. 208-214.

2693.—Priesner, H. Fünf neue *Taeniothrips*-Arten von Sumatra (Thysanoptera). Treubia, Buitenzorg 15 1936 pp. 323-328.

2694.—Priesner, H. & Quiévreux, F. Thysanoptères des couches de potasse du Haut-Rhin. Bull. Soc. géol. Fr., Paris (5) 5 (1935) 1936 pp. 471-477, 2 pls. [Fossil.]

2695.—Princis, K. Ergänzungen und Berichtigungen zur Orthopterenfauna Lettlands. I. Folia zool. hydrobiol., Riga 9 1936 pp. 90-92.

2696.—Pringle, J. F. A quick method for relaxing large insects. *Bull. Sth. Afr. Mus. Ass., Durban* 1 1936 pp. 15-16, 1 fig.

2697.—Procházka, R. Etude sur l'importance morphomatique et systematique de la nervation des ailes des Malacodermata. [In Czech with French summary.] *Sborn. ent. odd. Nár. Mus. Praha* 14 1936 pp. 100-132, 2 pls. [Col.]

2698.—[Promptov, A. N.] Промитов, А. Н. Effect of hard ultra violet rays on the appearance of hereditary mutations in *Drosophila melanogaster*. [In Russian.] *J. Biol. exp., Moscow* 7 1931 pp. 552-569, 10 figs. [Dipt.]

2699.—Prout, L. B. Fauna Americana 8 The American Geometridae pp. 73-104 [pp. 81-88 not yet recd.], 3 pls.; Geometridae Suppl. 4 pp. 57-64, 2 pls. In Seitz *Macrolep. Wld.* (Engl. edn.), 1936.

2700.—Prüffer, J. Ueber die Chemorezeptoren an den Fühlern von *Saturnia pyri* (Lepidop.). *Zool. Anz., Leipzig* 115 1936 pp. 157-159, 2 figs.

2701.—Pruthi, S. Studies on Indian Jassidae (Homoptera). III. *Mem. Ind. Mus., Calcutta* 11 1936 pp. 101-131, 2 pls. 26 figs.

2702.—Przibram, H. Die niedrigen Männchen des Hirschkäfers, *Lucanus cervus* L., als Warmeformen. *Anz. Akad. Wiss. Wien* 72 1935 pp. 45-46. [Col.]

2703.—Przibram, H. Zur Kenntniss der Lebensweise entfühlerter Wasserkäfer, *Hydrous piceus* L. (Col. Hydroph.) *Anz. Akad. Wiss. Wien* 72 1935 pp. 62-64.

2704.—Przibram, H. Wärmesumme und Temperaturquotient. *Anz. Akad. Wiss. Wien* 72 1935 pp. 169-171.

2705.—Pu, J. Unrecorded glands in the mouthparts of Hydrophilidae. *Peking nat. Hist. Bull.* 10 1936 pp. 353-359, 37 figs. [Col.]

2706.—Puel, L. Notes sur les Carabiques (suite). *Misc. ent., Castanet-Tolosan* 37 1936 sep. pp. 69-74, 81-88. [Col.]

2707.—Pugh, C. H. W. Additions to the list of Shropshire Diptera, 1935. *Rec. Bare Facts, Shrewsbury* 45 (1935) 1936 pp. 16-19.

2708.—Puisségur, C. Notes de chasses pyrénéennes. *Misc. ent., Castanet-Tolosan* 37 1936 pp. 109-111. [Col.]

2709.—Pumphrey, R. J. & Rawdon-Smith, A. F. Hearing in insects: The nature of the response of certain receptors to auditory stimuli. *Proc. roy. Soc., London (B)* 121 1936 pp. 18-27 2 pls. 7 figs.

2710.—Püngeler, R. Zur Schmetterlingsfauna des Gangelter Bruches. *Decheniana, Bonn* 92 1935 pp. 248-249. [Lep.]

2711.—Puri, I. M. The distribution of Anopheline mosquitoes in India: additional records, 1931-1935. *Rec. Malar. Surv. India, Calcutta* 6 1936 pp. 177-211. [Dipt.]

2712.—Puschni, R. Ueber das Vorkommen der Kleinlibelle *Nehalonia speciosa* Charp. *Carinthia, ii, Klagenfurt* 125 1935 pp. 96-100. [Odon.]

2713.—Puységur, K. de. Contributions à l'étude des variations de *Thias hypermerestra* Scopoli dans les Alpes-Maritimes. *Amat. Papill., Paris* 8 1936 pp. 56-64, 1 pl.

2714.—Puzanova-Malysheva, E. W. *Syntomaspis eurytomae* nov. sp., eine Chalcide mit gemischter Ernährung im Larvenstadium. *Z. angew. Ent., Berlin* 22 1936 pp. 631-642, 8 figs. [Hym.]

2715.—[Puzirni, R.] Пузырный, Р. *Scotogramma trifolii* Rott. [In Ukrainian with German summary.] *Trav. Soc. Nat. Charkow* 53 1930 pp. 93-101, 5 figs. [Lep.]

2716.—Qadri, M. A. H. Studies on the mouth-parts of Mallophaga infesting North-Indian birds. *Proc. Indian Acad. Sci., Bangalore (B)* 3 1936 pp. 411-423, 9 figs.

2717.—Qadri, M. A. H. Male genitalia of Mallophaga infesting North-Indian birds. *Proc. Indian Acad. Sci., Bangalore (B)* 4 1936 pp. 454-470, 16 figs.

2718.—Qadri, M. A. H. Some new Mallophaga from North-Indian birds. *Z. Parasitenk., Berlin* 8 1936 pp. 638-644, 10 figs.

2719.—Querci, O. Effects of temperature on the development of *Zerynthia rumina*. *Ent. Rec., London* 48 1936 pp. 4-8. [Lep.]

2720.—Querci, O. Effects of the temperature on the development of *Pieris brassicae* L. Ent. Rec., London 48 1936 pp. 37–41. [Lep.]

2721.—Querci, O. Effects of alimentation on the development of some Pierinae. Ent. Rec., London 48 1936 pp. 110–111. [Lep.]

2722.—Querci, O. Le développement de quelques Papilionidae. Lam-billionea, Brussels 37 1936 pp. 65–68.

2723.—Querci, O. Notes on *Pontia protodice* Boisduval & Leconte (Lepidoptera: Pieridae). Trans. Amer. ent. Soc., Philadelphia 62 1936 pp. 37–47.

Quiévreux, F. see Priesner & Quiévreux.

2724.—Radovanović, M. Ueber die gegenwärtige Kenntnis der balkanischen Trichopteren. Verh. int. Ver. Limnologie, Beograd 7 1935 pp. 100–105.

2725.—Rahman, K. A. The gula and labium of mandibulate insects. Abstr. Diss. Univ. Cambridge 1935–36 1936 pp. 37–38.

Raja, K. C. K. E. see Smith, Mukerjee, Halder & Lal.

2726.—Raichoudhury, D. P. Retardation of spermatogenesis and reduction of motility of sperm in *Ephestia kühniella* Z. (Lepidoptera, Phycitidae) caused by high temperature. Proc. zool. Soc. London 1936 pp. 789–805.

2727.—Ramakrishna Ayyar, T. V. Notes on Coccidae (Homoptera: Rhynchotha) from South India. J. Bombay Soc. nat. Hist. 39 1936 pp. 146–148.

Ramakrishna Ayyar, T. V. see Chatterjee & Ramakrishna Ayyar.

2728.—Ramme, W. 3. Nachtrag zur märkischen Dermapteren- und Orthopterenfauna. Märk. Tierw., Berlin 1 1936 pp. 224–233.

Raoul, Y. see Gounelle & Raoul.

2729.—Rau, P. Notes on the behavior of certain ants of St. Louis County, Mo. Trans. Acad. Sci. St. Louis 28 1934 pp. 207–215. [Hym.]

2730.—Rau, P. Notes on the behavior of certain solitary and social bees. Trans. Acad. Sci. St. Louis 28 1934 pp. 219–224. [Hym.]

Rawdon-Smith, A. F. see Pumphrey & Rawdon-Smith.

2731.—Ray, E. The neotropical Mordellidae of the Deutsches Entomologisches Institut, with descriptions of new species (Coleoptera). Arb. morph. tax. Ent. Berlin 3 1936 pp. 142–150, 215–221, 8 figs.

2732.—Ray, E. Studies on North American Mordellidae, I. (Coleoptera). Canad. Ent., Orillia 68 1936 pp. 124–129, 1 pl.

2733.—Ray, E. Studies on Philippine Mordellidae (Coleoptera), II. Philipp. J. Sci., Manila 59 1936 pp. 433–436.

2734.—Ray, O. M. Ultraviolet irradiation of grasshopper embryos (*Melanoplus differentialis*). Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 100. [Orth.]

2735.—Rayment, T. Contributions to the fauna of Rottneest Island. VIII. Apoidea. With description of new species. J. roy. Soc. W. Aust., Perth 20 (1933–34) 1934 pp. 201–212, 1 pl. [Hym.]

2736.—Rayment, T. Biology of a new Halictine bee and specific descriptions of its parasites. Arb. physiol. angew. Ent. Berlin 3 1936 pp. 289–294.

2737.—Raynal, J. Contribution à l'étude de *Phlebotomus* d'Indochine. II.—Systématique des espèces de l'Indochine-Nord. Arch. Inst. Pasteur Indochine, Saigon 6 1935 pp. 235–311, 36 pls. [Dipt.]

2738.—Raynal, J. Sur une nouvelle espèce de Phlébotome du nord de la Chine: *Phlebotomus khawi* n. sp. Ann. Parasit. hum. comp., Paris 14 1936 pp. 529–540, 2 pls. 7 figs. [Dipt.]

2739.—Raynaud, P. Les Tenuirostres. Butill. Inst. catal. Hist. nat., Barcelona 35 1935 pp. 35–39, 1 pl. [Col.]

2740.—Raynaud, P. Hybrides d'élevage de *Carabus* Lin. Misc. ent., Castanet-Tolosan 37 1936 sep. pp. 1–14.

2741.—Raynaud, P. Contribution à l'études des larves. Misc. Ent., Castanet-Tolosan 37 1936 sep. pp. 33–56, 1 pl.

2742.—Rebel, H. Lepidopteren von den Aegäischen Inseln. S.B. Akad. Wiss. Wien 144 1935 Abt. i pp. 253–262.

2743.—Rebel, H. Zoologische Ergebnisse einer Dodekanesreise von O. Wettstein 1935 (mit Subvention der Akademie der Wissenschaften in Wien aus der Zsch-Stiftung). Lepidoptera. S.B. Akad. Wiss. Wien **145** 1936 Abt. i pp. 19–33.

2744.—Rebel, H. Lepidopteren aus der Umgebung Ankaras. II. Teil. Ann. naturh. Mus. Wien **47** 1936 pp. 43–58, 2 figs.

2745.—Rebel, H. Bernstein-Lepidopteren. Iris, Dresden **49** 1936 pp. 162–186, 1 pl.

2746.—Rebel, H. Neue Mikrolepidopteren von Sardinia. Iris, Dresden **50** 1936 pp. 92–100.

2747.—Rebel, H. Drei neue Mikrolepidopterenarten aus der Schweiz. Z. öst. EntVer., Vienna **21** 1936 pp. 2–4, 11–13, 1 pl. 4 figs.

2748.—Rebel, H. Zwei neue mediterrane Microlepidopteren. Z. öst. EntVer., Vienna **21** 1936 pp. 22–24.

Rebel, H. see Nordman & Rebel.

2749.—Rebouillon, A. Contribution à l'étude pratique des vers à soie à cocons blancs. Ann. Ecole nat. Agric. Montpellier (N.S.) **24** 1936 pp. 69–100. [Lep.]

2750.—Reclaire, A. 2^e Vervolg op de Naamlijst der in Nederland en het omliggend gebied waargenomen wantsen (Hemiptera-Heteroptera). Ent. Ber., Amsterdam **9** 1936 pp. 243–260.

2751.—Reclaire, A. & Van der Wiel, P. Bijdrage tot de kennis der Nederlandsche kevers. II. (14^e vervolg op het aanhangsel in "Coleoptera Neerlandica III.") Ent. Ber., Amsterdam **9** 1936 pp. 228–239. [Col.]

2752.—Rehberger, K. Studies on the mouth organs of Malacodermata. Sborn. ent. odd. Nár. Mus. Praze **14** 1936 pp. 44–57, 1 pl.

2753.—Rehn, J. A. G. Zoological results of the George Vanderbilt African Expedition of 1934. Part V. Dermaptera. Proc. Acad. nat. Sci. Philadelphia **88** 1936 pp. 507–526, 9 figs.

2754.—Rehn, J. A. G. & J. W. H. A study of the genus *Hemimerus* (Dermaptera, Hemimerina, Hemimeri-

dae). Proc. Acad. nat. Sci. Philadelphia **87** (1935) 1936 pp. 457–508, 2 pls., 1 map.

2755.—Rehn, J. A. G. & J. W. H. On new or undefined genera of Nearctic *Melanopli* (Orthoptera: Acrididae, Cyrtacanthacrinae). Trans. Amer. ent. Soc., Philadelphia **62** 1936 pp. 1–30, 2 pls.

2756.—Reich, P. Neue Arctiidae. Ent. Rdsch., Stuttgart **53** 1936 pp. 418–424. [Lep.]

2757.—Reichensperger, A. Ergebnisse neueren Forschungen an Ameisen- und Termitengästen. Arb. phys. angew. Ent. Berlin **3** 1936 pp. 186–192, 5 figs.

2758.—Reichensperger, A. Die Zwitterigkeit bei den Termitoxeniiden (Termitenfliegen). Forsch. u. Fortschr., Berlin **12** 1936 pp. 382–383, 2 figs. [Dipt.]

2759.—Reichensperger, A. Beitrag zur Kenntnis der Myrmecophilen- und Termitophilenfauna Brasiliens und Costa Ricas. IV. (Col. Hist. Staph. Pselaph.). Rev. Ent., Rio de Janeiro **6** 1936 pp. 222–242, 1 pl. 12 figs.

2760.—Reichensperger, A. Paussiden aus Madagaskar nebst einigen Bemerkungen. Rev. franç. Ent., Paris **3** 1936 pp. 199–205, 1 pl. [Col.]

2761.—Reichert, A. *Agilus sexguttatus* Brahm. in der Fauna von Leipzig. Veröff. dtsch. kol. Mus. Bremen **1** 1936 pp. 393–396. [Col.]

2762.—[Reikhardt, A. N.] Рейхардт, А. Н. Neue Opatrinen (Coleoptera, Tenebrionidae) aus Tadzhikistan. [In Russian with Latin descriptions.] Trud. Tadzhik Sect. Acad. Sci. S.S.R., Moscow **5** (Zool. & Parasit.) 1935 pp. 251–256, 1 fig.

2763.—Reikhardt, A. Descriptions of new species of Histeridae (Col.). Proc. R. ent. Soc. London (B) **5** 1936 pp. 31–34, 1 fig.

2764.—[Reikhardt, A.] Рейхардт, А. Revision des Opatrines (Coleoptera Tenebrionidae) de la région paléarctique. [In Russian with Latin descriptions.] Tabl. anal. Fn. URSS., Inst. zool. Acad. Sci. no. **19** 1936 223 pp. 122 figs. 1 map.

2765.—[Reikhardt, A.] Рейхардт, А. Uebersicht der *Pedinus*-Arten der USSR. und des Fernen Ostens (Coleoptera, Tenebrionidae). [In Russian with Latin descriptions.] Trav. Inst. zool. Acad. Sci. U.S.S.R., Leningrad 3 1936 pp. 669–692, 10 figs.

Reikhardt, A. see Kizeritzkii & Reikhardt.

2766.—[Reingard, L. V.] Рейнгард, Л. В. Contribution à l'étude de la morphologie et de la biologie de l'*Anopheles hyrcanus*, trouvé dans les limites de l'ancien gouvernement de Catherinoslav. [In Ukrainian.] Trav. Soc. Nat. Charkow 50 1927 no. 2 pp. 85–91. [Dipt.]

2767.—Reinig, W. F. Beiträge zur Kenntnis der Hummelfauna von Mandschukuo (Hym. Apid.). Mitt. dtsh. ent. Ges., Berlin 7 1936 pp. 2–10.

2768.—Reinig, W. F. *Bombus cingulatus* Wahlb. (Hym. Apid.). S.B. Ges. naturf. Fr. Berlin 1936 1936 pp. 130–138.

2769.—Reiss, H. Ein Zygaenenfund aus der Tertiärzeit. Ent. Rdsch., Stuttgart 53 1936 pp. 554–556, 1 pl. [Fossil, Lep.]

2770.—Reiss, H. Neue Bausteine zur Zygaenenfauna der Pyrenäenhalbinsel. Ent. Rdsch., Stuttgart 54 1936 pp. 28–30, 57–60, 71–76, 88–92, 1 pl. [Lep.]

2771.—Reisser, H. Neue Heteroceren aus der Sierra de Gredos. Ent. Rdsch., Stuttgart 53 1936 pp. 106–109, 125–128, 135–138, 145–147, 152–155 4 pls. 7 figs.

2772.—Rempel, J. G. The life-history and morphology of *Chironomus hyperboreus*. J. biol. Board Canada, Ottawa 2 1936 pp. 209–221, 6 figs. [Dipt.]

2773.—Renkonen, O. Zwei neue Arten der Gattung *Stenus* (Col. Staphylinidae) aus Finnland. Ann. Ent. Fenn., Helsingfors 1 1935 pp. 27–32, 6 figs.

2774.—Renkonen, O. Zur Morphologie von *Athetis islandica* Kraatz (Col. Staphylinidae). Ann. ent. fenn., Helsingfors 2 1936 pp. 115–120, 3 figs.

2775.—Renkonen, O. Ergänzendes und Berichtigendes über *Stenus confusoides* Renk. und *St. linnaniemi*

nom. nov. (= *St. distrans* Renk.; Col. Staphylinidae). Ann. ent. fenn., Helsingfors 2 1936 pp. 178–179.

2776.—Reuss, F. A. T. Einige Aufzeichnungen über die Biologie von *Colias rhammi* (Linné) in der Mark Brandenburg. Mit einer vergleichenden Neubeschreibung der Raupen von *C. rhammi* und *Anthocharis cardamines* (L.) im fünften Stadium und anderen kritischen Vergleichen. Ent. Z., Frankfurt a. M. 50 1936 pp. 325–329. [Lep.]

2777.—Reuss, F. A. T. Zwei Prioritätsnamen bei Arten der Argyreidae (= *Argynnis*, *Brenthis*, etc., auctorum) und Revision von 4 Gattungsnamen derselben Familie (vgl. I. E. Z. Guben, 22. Jg., 1928, Nr. 14, S. 145). Ent. Z., Frankfurt a. M. 50 1936 pp. 373–375. [Lep.]

2778.—Reuter, J. Orienteerend onderzoek naar de oorzaak van het gedrag van *Anopheles maculipennis* Meigen bij de voedselkeuze. [With English summary.] Proefschr. Rijks-univ. te Leiden 1936 118 pp. 6 figs. [Dipt.]

2779.—Rey, P. La longévité des *Galleria* adultes mâles et femelles. C.R. Soc. Biol., Paris 121 1936 pp. 1184–1186. [Lep.]

2780.—Reymond, A. Deux localités d'Indo-Chine: Ban-methuoi et le Song-Lagna. Misc. ent., Castanet-Tolosan 37 1936 pp. 1–4. [Col.]

Reymond, A. see Colas & Reymond.

2871.—Reynolds, J. M. The nature of aptery in the Apterygota. Amer. Nat., New York 70 1936 pp. 75–80.

2782.—Ribaut, H. Homoptères auchénorhynques. I. (Typhlocybidæ). Faune de France 31. Paris, Lechevalier 1936 228 pp. 629 figs.

2783.—Ribaut, H. Espèces nouvelles de genre *Agallia* (Homoptera-Jassidae). Bull. Soc. Hist. nat. Toulouse 67 1935 pp. 29–36, 15 figs.

Ribbands, C. R. see Oldroyd & Ribbands.

Rice, R. see Coker, Millsaps & Rice.

2784.—Richards, jr., A. G. A revision of the Noctuid genus *Balia* Walker (= *Cirrhobolina* Grote) (Lepidoptera). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 431–437, 1 pl.

2785.—Richards, jr., A. G. *Forsebia*—a new genus of American Erebinæ (Lepidoptera, Noctuidæ). *Canad. Ent., Orillia* **67** (1935) 1936 pp. 264–267, 4 figs.

2786.—Richards, jr., A. G. A generic synopsis of the *Phoberia-Melipotis Drasteria-Boryza* series of Erebinæ (Lepidoptera, Noctuidæ). *Rev. Ent., Rio de Janeiro* **6** 1936 pp. 338–374, 16 figs.

2787.—Richards, O. W. Notes on American species of *Trypoxylon* (Hymenoptera, Sphecoidea). *Ann. Mag. nat. Hist., London* (10) **18** 1936 pp. 457–463.

2788.—Richards, O. W. The Cameron collection of Dryinidae. *Ann. Mag. nat. Hist., London* (10) **18** 1936 pp. 463–467. [Hym.]

2789.—Richards, O. W. On a collection of humble-bees (*Bombus* and *Psithyrus*, Hymenoptera) from Cara Island, Argyllshire. *Ent. mon. Mag., London* **72** 1936 pp. 109–111.

2790.—Richards, O. W. A second note on the genus *Pachyophthalmus* B. & B. (Diptera, Tachinidae). *Proc. R. ent. Soc. London* (B) **5** 1936 pp. 89–90.

2791.—Richards, O. W. Further notes on the nomenclature of British Aculeate Hymenoptera. *Proc. R. ent. Soc. London* (B) **5** 1936 pp. 169–173.

2792.—Richards, O. W. & M. J. The fauna of a small stream at Le Trayas, Var, France, in July–August, 1932. *Proc. R. ent. Soc. London* (A) **11** 1936 pp. 33–34.

Richards, Mrs. O. W. *see* Norris, M. J.

2793.—Richtet, C. Un instinct des chenilles processionnaires. *Livre jubil. Bouvier, Paris* 1936 p. 281.

2794.—Ricker, W. E. New Canadian Perlidae (Part II). *Canad. Ent., Orillia* **67** (1935) 1936 pp. 256–264, 1 pl. [Plecopt.]

2795.—Riedel, M. Das Männchen von *Phanacis centaureae* (Kalt.) Först. (Hymenoptera: Cynipidae). *Arb. morph. taxon. Ent. Berlin* **3** 1936 pp. 3–5, 1 fig.

2796.—Riegel, G. T. An insect with seven tarsi (Coleop.; Scarabaeidae). *Ent. News, Philadelphia* **47** 1936 p. 158, 2 figs.

2797.—Riel, P. Microlepidoptera praecipue lugdunensia. I. Famille des Pyralidae. *Bull. Soc. linn. Lyon* (n.s.) **5** 1936 pp. 106–108.

2798.—Ries, D. T. Description of the male of *Neosyrista japonica* Benson (Hymenoptera-Cephidae). *Proc. R. ent. Soc. London* (B) **5** 1936 pp. 179–180, 5 figs.

2799.—Rigalleau, L. Observations sur les Ephippigères: I. Anatomie. *Rev. Zool. agric., Bordeaux* **35** 1936 pp. 113–125, 137–144, 7 figs.

2800.—Riley, N. D. Some varieties of British Lepidoptera. *Entomologist, London* **69** 1936 pp. 221–222, 1 pl.

2801.—Riley, W. A. Caustic potash preparations of insects and insect parts. *Trans. Amer. micr. Soc., Menasha* **55** 1936 pp. 510–512.

2802.—[Rimskii-Korsakov, M. N.] Рымский-Корсаков, М. Н. Notiz über einige Wasserschlupfwespen aus dem Fluss Donetz. [In Ukrainian with German summary.] *Trav. Soc. Nat. Charkow* **52** 1929 pp. 311–315, 3 figs. [Hym.]

2803.—Ringdahl, O. Anteckningar till svenska arter av familjen Scopeumatidae (Diptera). *Ent. Tidskr., Stockholm* **57** 1936 pp. 158–179, 6 figs.

2804.—Ringdahl, O. Anteckningar till svenska arter av släktet *Platychirus* St. Farg. et Serv. (Diptera: Syrphidae). *Opusc. ent., Lund* **1** 1936 pp. 1–3, 1 fig.

2805.—Ringdahl, O. Några anteckningar till släktet *Mydaea* R. D. (Diptera: Muscidae). *Opusc. ent., Lund* **1** 1936 pp. 44–47.

2806.—Ripley, L. B., Petty, B. K. & van Heerden, P. W. Studies on gustatory reactions and feeding of wattle bagworm with special reference to dusted foliage. *Sci. Bull. Dep. agric. Un. S. Afr., Pretoria* no. 148 1936 27 pp. 6 figs. 6 charts. [Lep.]

2807.—Ripper, W. Lebensweise und Bekämpfung des Halmerdflohes (*Chaetocnema aridula* Gyllh.). *Z. angew. Ent., Berlin* **23** 1936 pp. 370–416, 23 figs. [Col.]

2808.—Ris, F. & Schmidt, E. Die *Pseudagrion*-Arten des kontinentalen Afrika. (Insecta, Odonata.) Abh. senckenb. naturf. Ges., Frankfurt a. M. 433 1936 68 pp. 38 figs.

2809.—Risbec, J. Les parasites du caféier en Nouvelle-Calédonie. Agron. colon., Paris 25 1936 pp. 105–123.

2810.—Robá, R. P. La hormiga de amaga. Rev. Cafetera Colombia, Bogota 6 1936 pp. 2023–2034, 13 figs. [Hym.]

2811.—Robbie, W. Effect of cyanide on respiration of *Melanoplus differentialis* eggs. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 102. [Orth.]

2812.—Röber, J. Ueber einige afrikanische *Charaxes*-Arten und andere exotische Falter. Ent. Rdsch., Stuttgart 53 1936 pp. 575–580, 7 figs. [Lep.]

Roberts, A. W. R. see Rymer Roberts.

2813.—Robertson, C. W. The metamorphosis of *Drosophila melanogaster*, including an accurately timed account of the principal morphological changes. J. Morph., Philadelphia 59 1936 pp. 351–400, 4 pls. [Dipt.]

2814.—Robertson, W. R. B. Morphology and cytology of a gynandromorph of *Paratettix texanus*. Amer. Nat., New York 70 1936 p. 61. [Orth.]

2815.—Rocci, U. Ricerche sulle forme del gen. *Zygaena* (Lepid. Zygaen.). Mem. Soc. ent. ital., Genoa 14 1935 pp. 47–58, 4 figs.

2816.—Rocci, U. Ricerche sulle forme del gen. *Zygaena* (Lepid. Zygaen.). X. Boll. Soc. ent. ital., Genoa 68 1936 pp. 41–46.

2817.—Rocco, M.-L. Présence de l'allantoïnase chez les insectes. C.R. Acad. Sci. Fr., Paris 202 1936 pp. 1947–1948.

2818.—[Rodendorf, B.] Родендорф, Б. Beiträge zur Kenntnis der Tachinen des Wiesenzünslers (*Loxostege sticticalis* L.). [In Russian with German summary.] Bull. Acad. Sci. U.R.S.S., Moscow 1935 1935 pp. 753–780, 21 figs. [Dipt. Lep.]

2819.—[Rodendorf, B. B.] Родендорф, Б. В. Versuch einer Bestimmungstabelle für Sarcophaginen-Weibchen. [In

Russian with German summary.] Bull. Soc. Nat. Moscou (N.S.) 45 1936 Sect. Biol. pp. 279–284. [Dipt.]

2820.—Roebuck, A. Fluctuations of insect populations: Field observations. Ann. appl. Biol., Cambridge 23 1936 pp. 441–444.

2821.—Roebuck, A. The larger Hemiptera of Lincolnshire. Trans. Lincoln. Nat. Union, Louth 1935 1936 pp. 19–35, 1 pl.

2822.—Roeder, K. D. Raising the praying Mantis for experimental purposes. Science, New York 83 1936 pp. 582–583.

Rohdendorf see Rodendorf.

2823.—Roller, H. Faunistisch-ökologische Studien an den Lössswänden Südosthänge des Bisamberges. Z. Morph. Oekol. Tiere, Berlin 31 1936 pp. 294–327, 9 figs. [Insects pp. 306–327.]

2824.—Roman, A. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 58. Hymenoptera. 11. Ichneumoniden. Ark. Zool., Stockholm 27A 1936 no. 40, 30 pp.

2825.—Roman, A. The Linnean Ichneumon types of the Stockholm Museum. Ent. Tidskr., Stockholm 57 1936 pp. 1–5, 2 figs. [Hym.]

2826.—Roman, E. Sur les premiers états (larve et nymphe) d'*Aedes sticticus* Meig. (Dipt. Culicidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 199–202, 6 figs.

2827.—Roman, E. Sur l'amplitude du vol chez *Culex pipiens* (Diptère, Culicidae). Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 24–25.

2828.—Romaniszyn, J. Papillons nouveaux ou plus rares pour la faune de la Pologne. [In Polish with French summary.] Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 183–187. [Lep.]

2829.—Romaniszyn, J. Eine Aufklärung über die Uebereinstimmung meiner ab. *communiarea* mit der ab. *ruberrima* Hann. von *Lythria purpurata* L. Z. öst. EntVer., Vienna 21 1936 p. 64, 2 figs. [Lep.]

Romberg, G. von see Stempel, Romberg & Ulpts.

2830.—Romieux, J. Sur la présence de quelques Lépidoptères dans le Haut-Katanga (Congo Belge). Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 716-721.

2831.—Ronna, A. Observações biológicas sobre dois dípteros parasitas de *Apis mellifica* L. (Dipt. Phoridae, Sarcophagidae). Rev. Ent., Rio de Janeiro 6 1936 pp. 1-9, 2 figs.

2832.—Roonwal, M. L. The growth-changes and structure of the egg of the African migratory locust, *Locusta migratoria migratorioides*, R. & F. (Orthoptera, Acrididae). Bull. ent. Res., London 27 1936 pp. 1-14, 5 figs.

2833.—Roonwal, M. L. On the existence of two different types of striped eyes among solitary type specimens of the desert locust *Schistocerca gregaria* Forsk. Curr. Sci., Bangalore 5 1936 p. 24, 2 figs. [Orth.]

2834.—Roonwal, M. L. Studies on the embryology of the African migratory locust, *Locusta migratoria migratorioides* R. and F. I. The early development, with a new theory of multi-phased gastrulation among insects. Philos. Trans., London (B) 226 1936 pp. 391-421, 3 pls., 16 figs. [Orth.]

2835.—Roonwal, M. L. Sexual dimorphism and post-embryonic growth in *Dialeurodes dissimilis* Quaint. and Baker (Homoptera, Aleurodidae). Proc. nat. Acad. Sci. India, Allahabad 6 1936 pp. 197-205, 3 figs.

2836.—Rorich, J. Beitrag zur Biologie von *Oxytrypia orbiculosa* Esp. (Lep. Noctuid.). Ent. Z., Frankfurt a. M. 49 1936 pp. 554-558.

2837.—Rosario, F. del. The American species of *Psychoda* (Diptera: Psychodidae). Philipp. J. Sci., Manila 59 1936 pp. 85-148, 6 pls. 1 fig.

2838.—Rosario, F. del. Philippine Psychodidae (Diptera), I. Psychodinae. Philipp. J. Sci., Manila 59 1936 pp. 553-571, 2 pls. 4 figs.

2839.—Ross, H. H. The ancestry and wing venation of the Hymenoptera. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 99-111, 2 pls.

2840.—Ross, H. H. A new Pecan sawfly, *Megaxyela langstoni* n. sp. (Hymenoptera: Xyelidae). Ent. News, Boston 47 1936 pp. 131-132.

2841.—Ross, H. H. The sawfly genus *Empria* in North America (Hymenoptera, Tenthredinidae). Pan-Pacific Ent., San Francisco 12 1936 pp. 172-178, 1 pl.

2842.—Ross, H. H. The nearctic sawflies of the genus *Fenusa* (Hymenoptera, Tenthredinidae). Trans. Ill. Acad. Sci., Springfield 29 1936 no. 2 pp. 263-266, 19 figs.

2843.—Rösler, P. Beitrag zur Kenntnis der Ameisenfauna von Japan. Ent. Anz., Vienna 16 1936 pp. 121-122. [Hym.]

2844.—Rösler, P. Beiträge zur Kenntnis der Ameisenfauna von Mitteleuropa. III. Tijdschr. Ent., Amsterdam 79 1936 pp. 55-63, 3 figs. [Hym.]

2845.—Rothschild, Lord. On a female of *Troides victoriae regis* with male coloration. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 306-307. [Lep.]

2846.—Rothschild, Lord. New species of *Chionaema*, *Asura* and *Mitrochrista*. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 465-490. [Lep.]

2847.—Rothschild, Lord. New species and subspecies of *Zygaenosis*. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 483-485. [Lep.]

2848.—Rothschild, Lord. New species and subspecies of *Caprimima* (Lithosiinae, Lepidoptera). Novit. zool., Tring 40 1936 pp. 1-2.

2849.—Rothschild, M. *Megalothris rectangulatus* Wahlg. 1903, a flea new to Great Britain. Novit. zool., Tring 39 1936 pp. 270-274, 6 figs. [Siphonapt.]

2850.—Rothschild, M. Siphonaptera from Western Australia. Novit. zool., Tring 40 1936 pp. 3-16, 19 figs.

2851.—Rotrou, P. Capture de deux espèces de Necrophores dans la région de Taza. Bull. Soc. Sci. nat. Maroc, Rabat 15 (1935) 1936 pp. 249-250. [Col.]

2852.—Roubal, J. Beschreibung einer neuen UnterGattung, einer Varietät und einer Form der Coleopteren. Festschr. 60. Geburtst. Embrik Strand, Riga 1 1936 pp. 53-58.

2853.—Roubal, J. Beschreibung des *Aphodius* (*Mendidaphodius* Reitt.) *makólskii* sp. n. nebst einer Uebersicht der *Medidaphodius*-Arten aus der Gruppe mit ungezähntem Clipeus beiderseits seiner Ausbuchtung. Ent. Bl., Crefeld **32** 1936 pp. 99–100, 2 figs.

2854.—Roubal, J. Ein Beitrag zur Kenntnis der Coleopterenfauna der Kleinkarpathen. Ent. Rdsch., Stuttgart **54** 1936 pp. 33–36.

2855.—Roubal, J. Contribution à la connaissance des Elatérides (Coleopt.) de la Bulgarie. Mitt. naturw. Inst. Sofia **9** 1936 pp. 57–67.

2856.—Roubal, J. L'exploration zoologique dans le parc national limitrophe "pieniny" sur la rive du Dunajec entre la Pologne et la Tchécoslovaque. [In Czech with French summary.] Sborn ent. odd. Nár. Mus. Praha **14** 1936 pp. 180–199. [Col.]

2857.—Roubaud, E. L'Anophélisme en extrême-orient. Contribution faunistique et biologique. Paris, Masson & Cie, 1936 viii & 434 pp. 75 figs. [Dipt.]

2858.—Roubaud, E. Le besoin de vol dans le comportement sexuel chez les insectes ptérygotes. Livre jubil. Bouvier, Paris 1936 pp. 287–292, 1 pl.

2859.—Roubaud, E. Recherches expérimentales sur le criquet pélerin. III. Bull. Soc. Hist. nat. Afr. N., Algiers **57** 1936 pp. 387–391. [Orth.]

2860.—Roubaud, E. & Treillard, M. Sur une variété portugaise de l'*Anopheles maculipennis* (groupe *atroparvus*). Bull. Soc. Path. exot., Paris **29** 1936 pp. 726–730, 2 figs. [Dipt.]

2861.—Roubaud, E., Treillard, M. & Toumanoff, C. Nouvelles expériences d'intercroisement de biotypes chez l'*Anopheles maculipennis*. Bull. Soc. Path. exot., Paris **29** 1936 pp. 898–901, 3 figs. [Dipt.]

2862.—Rouet, J. M. L'aiguillon de la guêpe. Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) **4** 1936 p. 13, 2 figs. [Hym.]

2863.—Rousseau-Decelle, G. Des variations parallèles chez les Morphos des espèces *hecuba* et *perseus* (Lepidopt. Morphidae). Livre jubil. Bouvier, Paris 1936 pp. 293–296, 1 pl.

2864.—Rowe, J. A. & Knowlton, G. F. Pangoniinae of Utah (Tabanidae: Diptera). Ohio J. Sci., Columbus **36** 1936 pp. 253–258, 1 pl.

2865.—Rozeboom, L. E. The larva and adult of *Culex rooti* Rozeboom. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 266–267, 2 figs. [Dipt.]

2866.—Rozeboom, L. E. The life cycle of laboratory-bred *Anopheles albimanus* Wiedemann. Ann. ent. Soc. Amer., Columbus **29** 1936 pp. 480–489, 1 chart. [Dipt.]

2867.—Rozeboom, L. E. The rearing of *Anopheles albimanus* Wiedemann in the laboratory. Amer. J. trop. Med., Baltimore **16** 1936 pp. 471–478. [Dipt.]

Rozhdestvenskaya, V. see Demyanovskii, Gal'tzova & Rozhdestvenskaya.

Rubcov, see Rubtzov.

2868.—[Rubtzov, I. A.] Рубцов, И. А. Gesetzmässigkeiten der Entwicklung und Vermehrung der Heuschrecken Sibiriens in Abhängigkeit vom Klima. [In Russian with German summary.] Bull. Acad. Sci. U.R.S.S., Moscow **1935** 1935 pp. 789–824, 3 figs. [Orth.]

2869.—[Rubtzov] Rubcov, I. A. Eine neue Simuliidenart (*Simulium oligocenicum* sp. n.) aus dem Bernstein. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) **2** 1936 pp. 353–355, 1 fig. [Dipt.]

2870.—Rudakova, K. Eine Chondrillaschildlaus. [In Russian with German summary.] Trans. Rubber & Guttapercha Inst. (Articles on rubber plants 2), Moscow 1932 pp. 55–61, 13 figs. [Hem.]

Rudakova, K. V. see Kozulina & Rudakova.

Rudel, A. see Piton & Rudel.

2871.—Ruediger, E. Der Kuckucksspeichel. Ent. Rdsch., Stuttgart **53** 1936 pp. 219–220. [Hem.]

2872.—Ruediger, E. Der Rosenkönig. Ent. Rdsch., Stuttgart **53** 1936 pp. 288–291.

2873.—Ruediger, E. Kerfe als Raubritter und Wegelagerer. Ent. Rdsch., Stuttgart **53** 1936 pp. 380–383.

2874.—Ruediger, E. Insekten als Athleten. Ent. Rdsch., Stuttgart **54** 1936 pp. 11–13.

Ruilova, K. N. see Efroimson & Ruilova.

2875.—Ruiz, F. Notas sobre Eumenidos poco conocidos de Chile. Rev. chil. Hist. nat., Santiago 37 1933 pp. 156–159. [Hym.]

2876.—Ruiz, P. F. Notas sobre Pompilidae chilenos. Rev. chil. Hist. nat., Santiago 37 1933 pp. 209–218, 1 pl. [Hym.]

2877.—Ruiz, F. Algunas notas entomológicas. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 271–278. [Hym.]

2878.—Ruiz, H. F. & Stuardo, C. Insectos colectados en las termas de Chillan. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 313–322, 2 figs.

2879.—Rungs, C. Un Bupreste nouveau du Maroc. Livre jubil. Bouvier, Paris 1936 pp. 297–298. [Col.]

2880.—Rungs, C. Coccidae du Maroc (3^{me} note). Rev. Path. vég. Ent. agric., Paris 22 1935 pp. 270–282, 1 pl. [Hem.]

2881.—Rungs, C. Diaspines (Hem. Coccidae) nouvelles du Maroc. Bull. Soc. ent. Fr., Paris 41 1936 pp. 50–56, 2 figs.

2882.—Rungs, C. Observations sur quelques Hyménoptères du Maroc (Deuxième note). Bull. Soc. Sci. nat. Maroc, Rabat 16 1936 pp. 15–31.

2883.—Rupp, F. Neues und Altes für die Sammlung. Ent. Rdsch., Stuttgart 53 1936 pp. 209–210. [Lep.]

2884.—Rüschkamp, J. Wie steht es mit der Erforschung der im Rheinland vorkommenden Käfer? Wiss. Mitt. Ver. nat.-u. Heimatk. Köln 1 1934 pp. 111–114.

2885.—Russell, P. F. & Baisas, F. E. A practical illustrated key to adults of Philippine *Anopheles*. Philipp. J. Sci., Manila 59 1936 pp. 15–64, 34 pls. 6 figs. [Dipt.]

2886.—Russell, S. G. C. A list of British gynandromorphous specimens of *Argynnis paphia* Linn. (1758). Ent. Rec., London 69 1936 pp. 173–174. [Lep.]

2887.—Russo, G. Contributo alla conoscenza degli insetti della Repubblica Dominicana (Antille). Nota su alcuni Tisanotteri. Mem. Soc. ent. ital., Genoa 15 1936 pp. 42–54, 4 figs.

2888.—[Ruzskii, M. D.] Ружский, М. Д. Die Ameisen des Transbaikalgbiets. [In Russian with German summary.] Trav. Inst. sci. Biol. Tomsk 2 1936 pp. 89–97. [Hym.]

2889.—Rydén, N. S. Till kännedom om svenska bladminerare. IV. Opusc. ent., Lund 1 1936 pp. 29–31.

2890.—Rymer Roberts, A. W. Observations on the spiracles of Curculionid larvae in the first instar. Livre jubil. Bouvier, Paris 1936 pp. 283–286, 4 figs.

2891.—Rzóska, J. Oekologische Untersuchungen über die Verbreitung der Litoralfauna zweier polnischer Seen. (Kiekrzsee, Wigrysee.) [In Polish with German summary.] Prace Kom. mat. przyr. Poznań (B) 7 1935 pp. 345–398, 2 pls.

2892.—Saalas, U. Ueber *Incurvaria pectinea* Hw. (Lep., Incurvariidae). Ann. ent. fenn., Helsingfors 1 1935 pp. 113–137; 2 1936 pp. 1–16, 17 figs.

2893.—Saalas, U. Ueber das Flügelgeäder und die phylogenetische Entwicklung der Cerambyciden. Ann. Zool. Soc. zool.-bot. Vanamo 4 1936 no. 1 pp. 1–198, 19 pls. 28 figs. [Col.]

2894.—[Sabaneev, P., Nosal' P. & Lyashenko, A.] Сабанеев, П., Носаль, П. и Ляшенко, О. Materialien zur Frage über die Ernährung der Jungfische in den Uberschwemmungsbecken des Flusses Dnieper. [In Russian with German summary.] Trav. Soc. hydrobiol. Kiev no. 8–9 1935 pp. 3–83.

2895.—Sabrosky, C. W. A synopsis of the Nearctic species of *Oscinella* and *Madiza*, based on a study of the types (Diptera, Chloropidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 707–728.

2896.—Sabrosky, C. W. A review of the Nearctic species of *Chloropisca* (Diptera, Chloropidae). Canad. Ent., Orillia 68 1936 pp. 170–177.

2897.—Sabrosky, C. W. Some synonymy in the Chloropid genera *Hippelates* and *Diplotaxa* (Diptera). Ent. News, Philadelphia 47 1936 pp. 245–248.

2898.—Sack, P. Cyrtidae (Acroceridae). In LINDNER Flieg. palaearct. Reg., Stuttgart 21 1936 36 pp. 3 pls.

2899.—St. Quentin, D. Libellen aus dem Distrikt Darjeeling nebst Beschreibung einer neuen *Chlorogomphus*-Art. Konowia, Vienna 15 1936 pp. 102–105, 2 figs. [Odon.]

2900.—St. Quentin, D. Der Putzapparat der Odonaten. Zool. Anz., Leipzig 115 1936 pp. 225–231, 2 figs.

2901.—Sakimura, K. Host ranges of some Hawaiian thrips (Preliminary report). Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 351–352.

2902.—Salfi, M. Grillidi della Guiana inglese raccolti dalla spedizione Beccari (1931–32). Ann. Mus. zool. Univ. Napoli (N.S.) 6 1935 no. 17, 7 pp. 4 figs. [Orth.]

2903.—Salfi, M. Contribuzioni alla conoscenza degli Ortotteri libici. 7. Sull' Ortotterofauna del Fezzan. (Missione Scortecchi della R. Società Geografica italiana.) Atti Soc. ital. Sci. nat., Milan 74 1935 pp. 383–388.

2904.—Salfi, M. Missione scientifica del Prof. Edoardo Zavattari nel Sahara italiano (1934). Contribuzione alla conoscenza degli Ortotteri libici. 8. Boll. Soc. ent. ital., Genoa 67 1935 pp. 120–124, 6 figs.

2905.—Salfi, M. Note sulla morfologie della tibia e del tarso in *Haematopinus suis* (Linn.). Boll. Zool., Torino 7 1936 pp. 105–111, 2 figs. [Anoplura.]

2906.—Salem, H. H. A summary of the Egyptian species of the genus *Sarcophaga* with a description of *S. rohdendorfi* nov. sp. (Diptera-Tachinidae). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 229–247, 3 figs.

2907.—Salt, G. Experimental studies in insect parasitism. IV. The effect of superparasitism on populations of *Trichogramma evanescens*. J. exp. Biol., Cambridge 13 1936 pp. 363–375, 1 fig. [Hym.]

Sälzl, M. see Metschl & Sälzl.

2908.—Šamal, J. Les Ephémères et les Plécoptères des ruisseaux de la Yougoslavie méridionale. Verh. int. Ver. Limnologie, Beograd 7 1935 pp. 113–116, 1 map.

2909.—Samson, — Le décalquage des papillons (Procédé Jules Culot). Bull. Soc. linn. Lyon (n.s.) 4 1935 pp. 109–111. [Lep.]

2910.—[Samsoniya, K. P.] Самсо́нья, К. П. Sur la nature de l'influence des carbonates sur le charançon de grenier (*Calandra granaria* L.). [In Russian with French summary.] Bull. Soc. Nat. Moscou (N.S.) 45 1936 Sect. Biol. pp. 307–311. [Col.]

2911.—Sandeman, R. G. C. C. Notes on the habits of *Vespa vulgaris* and *V. germanica* (Hymenoptera). Proc. R. ent. Soc. London (A) 11 1936 pp. 88–90.

2912.—Sanders, D. F. Butterflies o Secunderabad. J. Bombay nat. Hist. Soc. 38 1936 pp. 800–802.

2913.—Sandhouse, G. A. A new species of *Tracheloides* (Hymenoptera: Sphecidae). Ent. News, Philadelphia 47 1936 pp. 2–4.

2914.—Sandhouse, G. A. The bees of the genus *Agapostemon* (Hymenoptera: Apoidea) occurring in the United States. J. Washington Acad. Sci., Menasha, Wis. 26 1936 pp. 70–83, 10 figs.

Sandhouse, G. A. see Clark & Sandhouse.

2915.—Santschi, F. Mission scientifique de l'Ômo. Hymenoptera. I. Formicidae. Miss. scient. Ômo, Paris 2 1935 pp. 255–277, 7 figs.

2916.—Santschi, F. Etude sur les fourmis du genre *Monomorium* Mayr. Bull. Soc. Sci. nat. Maroc, Rabat 16 1936 pp. 32–64, 33 figs. [Hym.]

2917.—Santschi, F. Mission au Tibesti. Hyménoptères. Fourmis. Mém. Acad. Sci. Paris (2) 62 1936 pp. 81–82.

2918.—Santschi, F. Contribution à l'étude des fourmis de l'Amérique du Sud. Rev. Ent., Rio de Janeiro 6 1936 pp. 196–218, 11 figs. [Hym.]

2919.—Santschi, F. Fourmis nouvelles ou intéressantes de la République Argentine. Rev. Ent., Rio de Janeiro 6 1936 pp. 402–421, 28 figs.

Sapiro see Shapiro.

2920.—Sasaki, C. *Anoecia karatanei*, a new gall-producing Aphid. Proc. imp. Acad. Japan, Tokyo 12 1936 pp. 103–104, 3 figs. [Hem.]

Sauczyńska, J. see Fuchsówna & Sauczyńska.

1921.—Saylor, L. W. New Californian and Texas Scarabs. *J. Ent. Zool., Claremont* 28 1936 pp. 1-4, 5 figs. [Col.]

1922.—Saylor, L. W. Three new neotropical Melolonthids (Coleoptera: Scarabaeidae). *J. Ent. Zool., Claremont* 28 1936 pp. 62-64, 2 figs.

1923.—Saylor, L. W. Four new Neotropical Melolonthids (Col. Scarabaeidae). *Rev. Ent., Rio de Janeiro* 6 1936 pp. 293-296.

1924.—Saz, E. Maravillas del instinto que guía á los animales en el cuidado de sus hijos. *Bol. Soc. ent. Esp., Zaragoza* 17 (1934) 1935 pp. 39-47. [Hym.]

1925.—Scatizzi, I. Sulle concrezioni pigmentate delle cellule pericardiali in termiti. *Boll. Soc. ital. Biol. sper., Naples* 11 1936 pp. 45-46. [Isopt.]

1926.—Scatizzi, I. Primi dati sulla differenza di dimensioni delle cellule germinative in razze bivoltine e univoltine di *Bombyx mori*. *Boll. Soc. ital. Biol. sperim., Milan* 11 1936 pp. 734-735. [Lep.]

1927.—Schack, E. Mein erster *Argynnis pandora* Schiff. *Ent. Z., Frankfurt a. M.* 50 1936 pp. 125-128. [Lep.]

1928.—Schaefer, L. Les *Anthaxia* de France. Essai monographique (Coleopt. Buprestidae). *Ann. Soc. ent. Fr., Paris* 105 1936 pp. 301-354, 53 figs.

1929.—Schaefer, L. Note sur le genre *Chalcophora* Solier (Col. Buprestidae). *Bull. Soc. ent. Fr., Paris* 41 1936 pp. 238-243, 4 figs.

1930.—Schaefer, L. Deuxième et troisième notes sur les Buprestides. *Misc. ent., Castanet-Tolosan* 37 1936 pp. 5-9, 117-123. [Col.]

1931.—Schaefer, L. Notes biologiques sur les Buprestides. *Rev. franç. Ent., Paris* 3 1936 pp. 110-116.

1932.—Schatzmayr, A. Risultati scientifici della spedizione entomologica di S.A.S. il Principe Alessandro della Torre e Tasso in Egitto e nella penisola del Sinai. *Pubb. Mus. ent. Pietro Rossi, Udine* 1 1936 pp. 1-114. [Col.]

1933.—Schatzmayr, A. Due nuovi Bembidiini anoftalmi della Regione

Paleartica. *Pubb. Mus. ent. Pietro Rossi, Udine* 1 1936 pp. 327-328. [Col.]

1934.—Schauberger, E. Zur Kenntnis der paläarktischen Harpalinen. Ueber *Trichotichnus*-Arten. *Koleopt. Rdsch., Vienna* 22 1936 pp. 1-22.

1935.—Schaus, W. New species of Lasiocampidae from Neotropical countries. *Ann. Mag. nat. Hist., London* (10) 17 1936 pp. 47-66, 192-210.

1936.—Schawerda, C. Beitrag zur Mikrolepidopterenfauna Sardiniens. *Z. öst. EntVer., Vienna* 21 1936 pp. 60-64, 65-67, 79-83.

1937.—Schedl, K. E. Platypodidae des Museo Civico di Storia naturale di Genova. *Ann. Mus. Stor. nat. Genova* 59 1936 pp. 43-62. [Col.]

1938.—Schedl, K. E. Scolytidae und Platypodidae (Coleopt.)—neue Zentral- und Suedamerikanische Arten. *Arch. Inst. Biol. veg. Rio de Janeiro* 3 1936 pp. 99-110.

1939.—Schedl, K. E. Notes on Malayan Scolytidae and Platypodidae and descriptions of some new species. *J. F.M.S. Mus., Kuala Lumpur*, 18 1936 pp. 1-18. [Col.]

1940.—Schedl, K. E. Some new Scolytidae and Platypodidae from the Malay Peninsula. *J. F.M.S. Mus., Kuala Lumpur* 13 1936 pp. 19-35, 1 fig. [Col.]

1941.—Schedl, K. E. Scolytidae and Platypodidae: Fauna Philippinensis, IV. *Philipp. J. Sci., Manila* 60 1936 pp. 59-67, 5 figs. [Col.]

1942.—Schedl, K. E. New Platypodidae from French Guyana. *Rev. franç. Ent., Paris* 2 (1935) 1936 pp. 224-251. [Col.]

1943.—Schedl, K. E. Neue Platypodidae und Scolytidae aus Afrika. *Rev. Zool. Bot. afr., Brussels* 29 1936 pp. 126-137. [Col.]

1944.—Schedl, K. E. Populationsregulatoren und ihre Wechselbeziehungen bei Borkenkäfern. *Z. angew. Ent., Berlin* 23 1936 pp. 149-173, 9 figs. [Col.]

2945.—Schedl, K. L. Der Schwammspinner (*Porthetria dispar* L.) in Euroasien, Afrika und NeuEngland. Monog. angew. Ent., Berlin no. 12 1936 242 pp. 95 figs. [Lep.]

2946.—Scheerpeltz, O. Die von Prof. Dr. H. Eidmann gelegentlich seiner im Jahre 1933 nach Brasilien unternommenen Studienreise aufgesammelten Staphyliniden. I. Die in den Nestern von *Atta sexdens* L. aufgefundenen Staphyliniden, nebst einigen Bemerkungen über die Gattung *Scariphaeus* Er. Arch. Naturgesch., Leipzig (N.F.) 5 1936 pp. 483–540, 13 figs. [Col.]

2947.—Scheerpeltz, O. Un genre nouveau et une espèce nouvelle de Staphylinides troglodytes du Maroc (Coleoptera). Bull. Soc. Sci. nat. Maroc, Rabat 12 (1935) 1936 pp. 238–248, 5 figs.

2948.—Scheerpeltz, O. Aus der Praxis des Käfersammlers. XXIX. Ueber Tötung, Konservierung und Präparation von Käfern. Koleopt. Rdsch., Vienna 22 1936 pp. 23–33, 103–116, 7 figs.

2949.—Scheerpeltz, O. Die westpaläarktischen Arten der Gattung *Edaphus* Leconte (Col. Staphylinidae). Koleopt. Rdsch., Vienna 22 1936 pp. 189–225, 8 figs. 1 map.

2950.—Scheibe, A. et al. Entomologische Sammelergebnisse der Deutschen Hindukusch-Expedition 1935 der Deutschen Forschungsgemeinschaft. I. Einleitung. Arb. morph. tax. Ent. Berlin 3 1936 pp. 173–213 figs. [Col.]

2951.—Scheibel, O. Neue Trechini aus Jugoslawien und albanien nebst Bemerkungen zu bekannten Arten. Koleopt. Rdsch., Vienna 22 1936 pp. 226–229, 7 figs.

2952.—Schenk, E. T. & McMasters, J. H. Procedure in taxonomy, including a reprint of the international rules of zoological nomenclature with summaries of opinions rendered to the present date. London, Oxford Univ. Press & California, Stanford Univ. Press 1936 vii + 72 pp.

2953.—Schenkling, S. & Marshall, G. A. K. Curculionidae: Prionomerinae (11 pp.), Aterpinae (9 pp.),

Amalactinae (3 pp.), Haplonychinae (8 pp.), Omophorinae (2 pp.). Coleopt. Catalogue, 's-Gravenhage 150 1936.

2954.—Scherdlin, P. Contribution à la faune de la chaîne des Vosges et des régions limitrophes. Coléoptères. Nouvelles captures et observations. Bull. Soc. Hist. nat. Colmar (N.S.) 24 (1933–34) 1935 pp. 87–149.

2955.—Schimitschek, E. Das Massenaufreten des Tannentriebwicklers *Cacoecia murinana* Hb. in Niederösterreich 1929–1934. Z. angew. Ent., Berlin 22 1936 pp. 565–602, 16 figs. [Lep.]

2956.—Schipper, A. L. Resistance of grasshopper embryos to hypertonic solutions. Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 100. [Orth.]

2957.—Schlusche, M. Ein Beitrag zur Kenntnis des Stachelapparates der Vespiden mit besonderer Berücksichtigung seiner Drüsen. Zool. Jb., Jena Anat. 61 1936 pp. 77–98, 16 figs. [Hym.]

2958.—Schmidt, E. Die europäischen *Leucorrhina*-Larven, analytisch betrachtet (Ordnung Odonata). Arch. Naturgesch., Leipzig (N.F.) 5 1936 pp. 287–295, 9 figs.

2959.—Schmidt, E. Die mitteleuropäischen *Aeschna*-Larven nach ihren letzten Häuten. Dtsch. ent. Z., Berlin 1936 pp. 53–73, 15 figs. [Odon.]

2960.—Schmidt, E. Die westpaläarktischen Gomphidenlarven nach ihren letzten Häuten (Ins. Odon.). Senckenbergiana, Frankfurt a. M. 18 1936 pp. 270–282, 10 figs.

2961.—Schmidt, E. Ueber die Anhänge der Abdominalbasis des Männchens von *Epiophlebia superstes* Selys (Ordnung Odonata). Zool. Anz., Leipzig 116 1936 pp. 130–136, 7 figs.

Schmidt, E. see Ris & Schmidt.

2962.—Schmidt, G. Zur Kenntnis der geographischen Verbreitung einiger Aphodiinen. Arb. morph. taxon. Ent. Berlin 3 1936 pp. 32–35. [Col.]

2963.—Schmidt, G. Studien über *Trox hispidus* Pontopp. und seine Formen. Ent. Bl., Crefeld 32 1936 pp. 75–78.

2964. — Schmidt, K. Eine neue *Sehirus*-Art aus dem Mittelmeergebiet (Hem. Heteropt., Cydn.). Dtsch. ent. Z., Berlin 1936 pp. 47–53, 1 fig.
2965. — Schmiedeknecht, O. Opuscula Ichneumonologica. Blankenburg i. Thur 1936 Suppl. fasc. 25.
2966. — Schmitz, H. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 33. Diptera. 8. Phoridae. Ark. Zool. Stockholm 27B (sep. dated 1933) 1936 no. 2, 5 pp. 1 fig.
2967. — Schmitz, H. Vier neue europäische Phoriden (Diptera). Konowia, Vienna 15 1936 pp. 190–175, 1 fig.
2968. — Schmitz, H. Hermaphroditismus der *Termitoxenia*. Natuurh. Maandbl., Maastricht 25 1936 pp. 27–29, 1 fig. [Dipt.]
2969. — Schmitz, H. Nieuw overzicht van het systeem der Termitoxeniidae. Natuurh. Maandbl., Maastricht 25 1936 pp. 38–40, 3 figs. [Dipt.]
2970. — Schmitz, H. Phoriden von der französischen-spanischen Grenze bei Hendaya. Tijdschr. Ent., Amsterdam 79 1936 pp. 222–228, 1 pl. 1 fig. [Dipt.]
2971. — Schmitz, H. Der Aufbau der reduzierten Flügel bei den Termitoxeniiden (Diptera). Zool. Anz., Leipzig 114 1936 pp. 209–216, 2 figs.
2972. — Schneeur, A. Einige Bemerkungen nebst Verbesserungen über das Werk Bodo v. Bodemeyers "Ueber meine entomologischen Reisen" und der merkwürdigen Verbreitungsgrenze der Falter in Nord-Afrika. Ent. Z., Frankfurt a. M. 49 1936 pp. 480–481. [Lep.]
2973. — Schneeur, A. Die Nachtfalter von Mittel-Tunis. Ent. Z., Frankfurt a. M. 50 1936 pp. 190–194. [Lep.]
2974. — Schneider, C. Lepidopterologische Beobachtungen 1935. Jh. Ver. vaterl. Naturk. Württemb., Stuttgart 91 1935 pp. 125–127.
- Schneider, C. see Lindner & Schneider.
2975. — Schnetters, M. Die Entwicklung von Zweiglarven in geschnürten Bieneneiern. Verh. dtsh. zool. Ges. Leipzig 38 1936 pp. 82–88, 4 figs. [Hym.]
2976. — Schreier, H. Massenflug verschiedener Lepidopteren in der Umgebung von Bielefeld. Ent. Z. Frankfurt a. M. 49 1936 p. 569.
2977. — Schreiter, R. Sphingidae. Estudio sobre las especies tucumanas de esta familia. Bol. Mus. Hist. nat. Univ. Tucumán, Buenos Aires 1 1926 no. 9, 24 pp. 23 pls. [Lep.]
2978. — Schreiter, R. Contribución al estudio biológico de los Papilionidos del norte Argentino y *Papilio argentinus* Jörg. (nueva especie). Bol. Mus. Hist. nat. Univ. Tucumán, Buenos Aires 2 1930 no. 5, 10 pp. 8 pls. [Lep.]
2979. — Schulthess-Schindler, A. v. Die Ausbeute der Deutschen Chaco-Expedition 1925–26. Hymenoptera. I. Vespidae (Vespinæ et Eumenidinae). Konowia, Vienna 15 1936 pp. 176–179.
2980. — Schultz, V. G. M. Irrwege in der Reliktforschung. Arb. phys. angew. Ent. Berlin 3 1936 pp. 259–262.
2981. — Schultz, W. Erhöhung der Zelltemperatur auf etwa 35° vermindert die Farbstoffbildung in den verschiedensten Klassen der Lebewesen und zerstört Farbstoffbildendes Ferment. Arch. EntwMech. Org., Berlin 134 1936 pp. 294–312.
2982. — Schürhoff, P. N. Beiträge zur Kenntnis der Cetoniiden. iv (Col.). Die Gattung *Poeccilopharis* Kraatz. Mitt. dtsh. ent. Ges., Berlin 6 1936 pp. 65–73.
2983. — Schüssler, H. Lepidopt. Catal., 's-Gravenhage. Syssphingidae 70 1936 230 pp.; Oxytenidae 75 1936 20 pp.; Cercophanidae 76 1936 12 pp.
2984. — Schuster, A. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 44. Coleoptera. 8. Tenebrionidae. Ark. Zool., Stockholm 27A (sep. dated 1934) 1936, no. 24, 6 pp.
2985. — Schuster, A. Die Tenebrioniden (Col.)—Ausbeute von Prof. Dr. Franz Werner und Kustos Dr. Otto Wettstein von den Griechischen, Aegäischen Inseln und dem italienischen Dodekanes in den Jahren 1934 und 1935. S.B. Akad. Wiss. Wien 145 1936 Abt. i pp. 65–80.

2986.—**Schuurmans-Stekhoven**, jr., J. H. Schwedisch-chinesische wissenschaftliche Expedition nach den nord-westlichen Provinzen Chinas. 46. Diptera. 14. Pupipara, Fam. Hippoboscidae. Ark. Zool., Stockholm 27A (sep. dated 1934) 1936 no. 27, 2 pp.

2987.—**Schwanwitsch**, B. N. Symmetry in the wing-pattern of some Papilionid butterflies. Entomologist, London 69 1936 pp. 7-12, 3 figs.

2988.—**Schwardt**, H. H. Variations of seasonal cycle in the genus *Tabanus*. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 589-592. [Dipt.]

2989.—**Schwarz**, H. F. Further comments on *Melipona*. J. N.Y. ent. Soc. 44 1936 pp. 1-6. [Hym.]

2990.—**Schwerdtfeger**, F. Zur Kenntnis der roten Kiefernbuschhorn blattwespe, *Diprion sertifer* Geoffr. (*Lophyrus rufus* Panz.). Z. Pflkrankh., Stuttgart 46 1936 pp. 513-534, 8 figs. [Hym.]

Schwingenschuss, L. see Zerny, H.

2991.—**Scortecchi**, G. Note sui termitidi del Fezzan raccolti dalla Missione Scortecchi della R. Soc. Geografica e determinati dal Prof. F. Silvestri. Natura, Milan 27 1936 pp. 1-12, 5 figs. [Isopt.]

2992.—**Scott**, A. C. Haploidy and aberrant spermatogenesis in a Coleopter, *Micromalthus debilis* Leconte. J. Morph., Philadelphia 59 1936 pp. 485-509, 3 pls. 3 figs.

2993.—**Scott**, H. Descriptions and records of Nycteribiidae (Diptera Pupipara), with a discussion of the genus *Basilis*. J. Linn. Soc. London, Zool. 39 1936 pp. 479-505, 11 figs.

2994.—**Scott**, H. Some general remarks on the bat-parasites of the family Nycteribiidae. Proc. Linn. Soc. Lond. 1935-1936 1936 pp. 119-120. [Dipt.]

Scott, H. see Eggers, H.

2995.—**Scott**, W. N. An experimental analysis of the factors governing the hour of emergence of adult insects from their pupae. Trans. R. ent. Soc. London 85 1936 pp. 303-330, 6 figs.

2996.—**Seabra**, A. F. de. Aditamento ao estudo sobre os Hemípteros Heteró-

pteros da Mata de Leiria. Arq. Secç. Biol. Mus. zool. Univ. Coimbra 2 1935 pp. 159-164.

2997.—**Searls**, E. M. & **Harris**, H. H. Handy insect cages made from cellophane. J. econ. Ent., Menasha, Wisc. 29 1936 pp. 1158-1160, 4 figs.

2998.—**Sebess v. Zilah**, G. Die Heleiden Fauna von Szeged und Umgebung. Acta Univ. Szeged Biol. 4 1936 pp. 39-45, 3 figs. [Dipt.]

2999.—**Sebess v. Zilah**, G. Ueber Heleiden des Balaton-Gebiets. [In Magyar with German summary.] Arb. ung. biol. Forsch.-Inst., Tihany 8 1936 pp. 196-206, 4 figs. [Dipt.]

3000.—**Seemann**, R. Massenhaftes Auftreten von Insektenpuppen im obermiozänen Süßwasserkalk vom Goldberg im Ries. Jh. Ver. vaterl. Naturk. Württemb., Stuttgart 91 1935 pp. 19-21, 2 figs. [Fossil, Dipt.]

3001.—**Segal**, B. Synopsis of the Tabanidae of New York, their biology and taxonomy. I. The genus *Chrysops* Meigen. J. New York ent. Soc. 44 1936 pp. 51-78, 125-154.

3002.—**Séguy**, E. Diptères neotropiques nouveaux. Rev. chil. Hist. nat., Santiago 37 1933 pp. 256-260, 1 pl.

3003.—**Séguy**, E. Un nouveau Conopide marocain et synopsis générique des Conopides de la région holarctique. Livre jubilé. Bouvier, Paris 1936 pp. 299-302, 1 fig. [Dipt.]

3004.—**Séguy**, E. L'*Acemyia calloti*, insecte Diptère à larves endoparasites des sauterelles. Ann. Parasit. hum. comp., Paris 14 1936 pp. 321-326, 2 figs.

3005.—**Séguy**, E. Voyage de MM. L. Chopard et A. Méquignon aux Açores (Août-Septembre 1930). X. Diptères. Ann. Soc. ent. Fr., Paris 105 1936 pp. 11-26, 2 figs.

3006.—**Séguy**, E. Un nouveau Pucellinae asiatique (Dipt. Muscidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 281-282, 3 figs.

3007.—**Séguy**, E. Un nouveau Muscicide nuisible à l'orge au Maroc. Liste des Diptères vivant sur les *Hordeum*. Bull. Soc. Sci. nat. Maroc, Rabat 16 1936 pp. 3-5, 1 fig. [Dipt.]

- 3008.—Séguy, E. Mission au Tibesti. Diptères. Mém. Acad. Sci. Paris (2) **62** 1936 pp. 87–92, 7 figs.
- 3009.—Seidel, F. Entwicklungsphysiologie des Insekten-Keims. Verh. dtsch. zool. Ges., Leipzig **38** 1936 pp. 291–336, 24 figs.
- 3010.—Seiler, J. Neue Ergebnisse aus der Kreuzung parthenogenetischer Schmetterlinge mit Männchen zweigeschlechtlicher Rassen. Verh. dtsch. zool. Ges., Leipzig **38** 1936 pp. 147–150. [Lep.]
- 3011.—Seiler, J. Ergebnisse aus der Kreuzung parthenogenetischer und zweigeschlechtlicher Schmetterlinge. IV. Entwicklungsmechanische Bemerkungen über die intersexen, F_1 -Puppen aus den *Solenobia triquetrella*-Kreuzungen. Z. indukt. Abstamm.- u. Vererb. Lehre Leipzig **72** 1936 pp. 361–377, 4 figs. [Lep.]
- 3012.—Seitner, M. *Lacknuss cembrae* n. sp. Die Zirbenblattlaus. Zbl. ges. Forstw., Vienna **62** 1936 pp. 33–49, 8 figs. [Hem., Hym.]
- 3013.—Seitz, A. Ueber den Einfluss milder Winter auf den Insektenflug. Ent. Rdsch., Stuttgart **53** 1936 pp. 141–144.
- 3014.—Seitz, A. Macrolep. World (Engl. edn.), Stuttgart 1936. Fauna Americana **6** pp. 1141–1240, 10 pls.; Fauna Americana **7** pp. 301–396, 6 pls.; Fauna Americana **8** pp. 73–104 [except pp. 81–88 not yet recd.], 3 pls.; Fauna Africana **15** pp. 159–254, 15 pls.; Fauna Palaearctica Suppl. **3** pp. 217–240, 2 pls.; Suppl. **4** pp. 57–64, 2 pls. See Draudt, Gaede, Prout & Zukowsky.
- 3015.—Seitz, A. Ueber Zygaenen-vorkommen. Ent. Rdsch., Stuttgart **53** 1936 pp. 291–294, 302–304, 384–387, 397–400, 1 fig. [Lep.]
- 3016.—Seitz, A. Die *Atalanta*-Frage. Ent. Rdsch., Stuttgart **53** 1936 pp. 409–412, 452–456. [Lep.]
- 3017.—Seitz, A. Ueber Syntomiden-vorkommen. Ent. Rdsch., Stuttgart **53** 1936 pp. 523–528, 548–552. [Lep.]
- 3018.—Seitz, A. Warum überhaaren die Weibchen mancher Schmetterlinge ihre Eigelege mit der Analwolle? Ent. Rdsch., Stuttgart **53** 1936 pp. 263–264, 1 fig. [Lep.]
- 3019.—Seitz, A. Raupenbilder aus Paraguay. Ent. Rdsch., Stuttgart **53** 1936 pp. 537–539, 569–570, 1 col. pl. [Lep.]
- 3020.—Seitz, A. Schmetterlingsfang in Australien. Ent. Rdsch., Stuttgart **54** 1936 pp. 82–88, 105–108, 117–119, 133–136. [Lep.]
- 3021.—Seki, K. Ueber die *Cagosima*-Arten (Col. Ceramb.). [In Japanese and German.] Ent. World, Tokyo **4** 1936 pp. 374–380.
- 3022.—Sellke, K. Biologische und morphologische Studien an schädlichen Wiesenschnaken (Tipulidae, Dipt.). Z. wiss. Zool., Leipzig **148** 1936 pp. 465–555, 43 figs.
- 3023.—Semenov-Tian-Shanskii, A. P. Aperçu général de la faune Dermaptera de l'URSS. [In Russian.] Bull. Acad. Sci. U.R.S.S., Moscow **1935** 1935 pp. 824–830.
- 3024.—Semenov-Tian-Shanskii, A. Analecta coleopterologica. Rev. Ent. U.R.S.S., Leningrad **25** 1935 pp. 271–281.
- 3025.—Semenov-Tian-Shanskii, A. P. Les *Prionus* polyarthriques (ci-devant genre *Polyarthron* Serv.) de la faune touranienne, leurs relations phylogéniques et zoogéographiques (Coleoptera, Cerambycidae). [In Russian with Latin descriptions.] Trud. Tadzhiik Sect. Acad. Sci. S.S.R., Moscow **5** (Zool. & Parasit.) 1935 pp. 237–249, 8 figs.
- 3026.—Semenov-Tian-Shanskii, A. & Bogatshev, A. Supplément à la révision du genre *Blaps* F. (Coleoptera, Tenebrionidae) de G. Seidlitz, 1893. Festschr. 60. Geburtst. E. Strand, Riga **1** 1936 pp. 553–568.
- 3027.—Semenov-Tian-Shanskii, A. & Medvedev, S. Specierum novarum generis *Lethrus* Scop. (Coleoptera, Scarabaeidae) diagnoses. Rev. Ent. U.R.S.S., Leningrad **25** 1935 pp. 282–287.
- 3028.—Semenov-Tian-Shanskii, A. & Medvedev, S. Synopsis des genres et espèces de la tribu Lethrini (fam. Scarabaeidae). Tabl. anal. Faune URSS, Leningrad **18** 1936 104 pp. 316 figs. [Col.]

3029.—Semenov-Tian-Shanskii, A. & Pyatakova, V. Nouvelle tribu dans la famille Elateridae (Coleoptera). Acta Soc. ent. Csl., Prague **33** 1936 pp. 101-103.

3030.—Semenov-Tian-Shanskii, A. & Plavilstshikov, N. Description de quelques Cérambycides nouveaux du Tibet et de la Mongolie. Eos, Madrid **11** 1936 pp. 389-394. [Col.]

Semenov-Tian-Shanskii, A. P. see Dmitriev, G. V.

3031.—Semichon, L. Observations sur les larves de *Colletes daviesanus* (Hymenopt. Apidae). Livre jubilé. Bouvier, Paris 1936 pp. 303-306, 3 figs.

3032.—Sen, A. C. Anomalies in the wing-structure of *Pompilus wroughtoni* Cam. (Hymenoptera). J. Dep. Sci. Calcutta Univ. **10** 1933 no. 14 2 pp. 2 figs.

3033.—Senevet, G. Notes sur les moustiques—IV. Quelques Culicidés de la région de l'Aurès (Algérie). Arch. Inst. Pasteur Algérie, Algiers **14** 1936 pp. 432-448, 3 figs. [Dipt.]

3034.—Senevet, G. Les moustiques de la Martinique. Arch. Inst. Pasteur Algérie, Algiers **14** 1936 pp. 123-134, 5 figs. [Dipt.]

3035.—Seok, D. Pri la du novaj specoj de Papilioj, *Neptis okazimai* kaj *Zephyrus ginzii*. [In Japanese.] Zool. Mag., Japan **48** 1936 pp. 60-66, 8 figs. [Lep.]

3036.—Seok, D. M. Studo pri la V varieco kaj malbonformuloj de *Pieris rapae* Linné. [In Japanese.] Zool. Mag., Tokyo **48** 1936 pp. 337-345, 2 pls., 3 figs. [Lep.]

3037.—Seok, D. M. Pri *Aphantopus hyperantus* Linné en Korenjo kaj unu nova modo sur la studo de ocelli (Rhopalocera). Zool. Mag., Tokyo **48** 1936 pp. 995-1000.

3038.—Sergent, Ed. Un procédé simple de conservation des oeufs d'Anophèles. Arch. Inst. Pasteur Algérie, Algiers **14** 1936 p. 23. [Dipt.]

3039.—Sergent, Et. Note sur les oeufs d'*Anopheles* d'eaux saumâtres du littoral algérien. Arch. Inst. Pasteur Algérie, Algiers **14** 1936 pp. 109-118, 13 pls. 15 figs. [Dipt.]

3040.—Servadei, A. Contributi alla conoscenza dei Tentredinidi (Hymenoptera, Symphyta) delle Rose. III. *Cladius difformis* (Panz.) Illig. Bol. Ist. Ent. Univ. Bologna **8** 1936 pp. 169-196, 17 figs.

3041.—Servadei, A. Contributi alla conoscenza dei Tentredinidi (Hymenoptera, Symphyta) delle Rose. IV. *Emphytus cinctus* (L.) King. Redia, Florence **22** 1936 pp. 97-129, 26 figs.

3042.—Seurat, L. G. Mode respiratoire et appareil trachéen de la larve du *Trichocladus seurati* (Dipt. Chironomidae). Livre jubilé. Bouvier, Paris 1936 pp. 307-311, 3 figs.

3043.—Sevastopulo, D. G. Early stages of Indian Lepidoptera (contd.). Ent. Rec., London **48** 1936 pp. 19, 58-59, 99.

3044.—Sevastopulo, D. G. Second and third note on the Heterocera of Darjeeling. J. Darjeeling nat. Hist. Soc. 1936 **10** pp. 134-145; **11** pp. 28-30.

3045.—Sevastopulo, D. G. On the preservation of Heterocera in India. J. Bombay nat. Hist. Soc. **38** 1936 pp. 634-636, 1 fig.

3046.—Severin, H. C. Additions to Hebard's list of Orthoptera of South Dakota, with observations on some previously recorded species. J. Kans. ent. Soc., McPherson **9** 1936 pp. 85-93.

3047.—Seyrig, A. Un Mutillide parasite d'un Lépidoptère: *Stenomutilla freyi*. Livre jubilé. Bouvier, Paris 1936 pp. 313-316, 1 pl., 6 figs.

3048.—Seyrig, A. Mission scientifique de l'Omo. Hymenoptera. II. Ichneumonidae: Cryptinae, Pimplinae, Tryphoninae et Ophioninae. Mém. Mus. Hist. nat. Paris **4** 1936 pp. 1-100, 52 figs.

3049.—Shannon, R. C. The hibernation of *Nymphalis polychloros* (L.) in Greece (Lepidoptera). Proc. R. ent. Soc. London (A) **11** 1936 pp. 59-60.

3050.—Shannon, R. C. & Hadjini-colaou, J. List of Tabanidae (Dipt.) of Greece. Acta Inst. Mus. zool. Univ. Athen. **1** 1936 pp. 160-172.

3051.—[Shapiro, D. S.] Шапиро Д. О. Contribution to a knowledge of the Curculionidae of Charkow region. [In Ukrainian.] Trav. Soc. Nat. Charkow **53** 1930 pp. 138-145. [Col.]

3052.—[S[h]apiro, N. I. Is there germ cell selection in *Drosophila melanogaster*? C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 2 1936 pp. 119-122. [Dipt.]

3053.—[Shapiro, D. S.] Шاپиро, Д. С. *Ceuthorrhynchus syrites* Germ. An insect injuring *Camelina sativa*. [In Ukrainian with English summary.] Proc. zool.-biol. Inst. scient. Res., Kharkov 1 1936 pp. 175-184, 7 figs. [Col.]

3054.—Sharif, M. The life history, the biology and the anatomy of the early stages of the rat-flea, *Nosopsyllus fasciatus*, Bosc. Abstr. Diss. Univ. Cambridge 1935-36 1936 pp. 29-30. [Siphonapt.]

3055.—Shaw, F. R. & Townes, jr. H. K. A preliminary report of the Mycetophilidae of North and South Carolina. Bull. Brooklyn ent. Soc. 31 1936 pp. 204-208. [Dipt.]

Shekhtman, Ya. L. *see* Neuhaus & Shekhtman.

3056.—[Shchelkanovtzev, Ya. P.] Шелкановцев, Я. П. Zur Kenntniss der Orthopterenfauna der Schwarzenmeerküste zwischen Sotshi und Adler. [In Russian with German summary.] Acta Univ. Voroneg. 8 1935 no. 3 pp. 59-66.

3057.—Sheldon, W. G. Tobago and its butterflies. Entomologist, London 69 1936 pp. 200-208.

3058.—Sheljuzhko, L. Zur Kenntniss der kaukasischen Zygaenen. Folia zool. hydrobiol., Riga 9 1936 pp. 14-21. [Lep.]

3059.—Shepard, H. H. Hesperidae: Subfamilia Pyrginae IV (74 pp. 561-579); Subfamiliae: Euschemoninae et Trapezitinae (77 35 pp.). Lepidopt. Catalogus, 's-Gravenhage 1936.

Shepard, H. H. *see* Oosthuizen & Shepard.

3060.—Sheppard, E. H. Notes on *Cryptolestes ferrugineus* Steph., a Cucujid occurring in the *Trichogramma minutum* parasite laboratory of Colorado State College. Tech. Bull. Colorado exp. Sta., Fort Collins no. 17 1936 20 pp. [Col.]

3061.—Sherman, R. S. & Perry, F. Insect and plant associations in the

Chilcotin. Rep. prov. Mus. nat. Hist. Victoria B.C. 1935 1936 pp. 30-34, 2 pls.

3062.—Shinji, O. Two new Japanese species of *Pseudococcus* (Hemiptera-Homoptera). [In Japanese.] Kontyû, Tokyo 10 1936 pp. 49-51, 2 figs.

3063.—Shinji, O. A preliminary list of the armed scale insects of Morioka, Japan. [In Japanese.] Kontyû, Tokyo 10 1936 pp. 93-98. [Hem.]

3064.—Shinji, O. On the Aphids of cotton at Moppo, Korea, especially an unrecorded and new species. [In Japanese.] Oyo-Dobuts. Zasshi, Tokyo 8 pp. 147-150. [Hem.]

3065.—[Shipitzina, N. K.] Шипицина, Н. К. The mouth apparatus of the mosquito larvae. I. Epipharynx of the larvae of *Anopheles*. [In Russian with English summary.] Med. Parasit. parasit. Dis., Moscow 5 1936 pp. 352-362, 9 figs. [Dipt.]

3066.—[Shpet, G. I.] Шпет, Г. И. Zur Phänogenetik der systematischen Unterschiede bei Geradflüglern. [In Russian with German summary.] Zool. J., Moscow 14 1935 pp. 674-700. [Orth.]

3067.—Shull, W. E. Inhibition of coagulation in the blood of insects by the fatty acid vapor treatment. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 341-349, 1 fig.

3068.—[Shurenkova, A. I.] Шуренкова, А. И. Nouvelle espèce de *Phlébotome-keshishini* sp. nov. [In Russian with French summary.] Med. Parasit. parasit. Dis., Moscow 5 1936 pp. 892-899, 5 figs. [Dipt.]

3069.—Silva Cruz, M. A. da. Um Lepidóptero (Rhopalocera) novo para Portugal e outró raro. Brotéria, Lisbon Ci. nat. 32 1936 pp. 80-82, 2 figs.

3070.—Silvey, J. K. G. An investigation of the burrowing inner-beach insects of some fresh water lakes. Pap. Mich. Acad. Sci., Ann Arbor 21 1936 pp. 655-696, 4 pls.

3071.—Silvestri, F. Ridescrizione del genere *Termitococcus* Silv. con una specie nuova del Brasile e descrizione di un nuovo genere affine. Boll. Lab. zool. Portici 30 1936 pp. 32-40, 7 figs. [Hem.]

3072.—Silvestri, F. Contribuzione alla conoscenza dei Projapygidae (Insecta, Diplura). Boll. Lab. zool. Portici **30** 1936 pp. 41-74, 21 figs. [Thysanura.]

3073.—Silvestri, F. Una nuova specie di Campodeidae (Dicillura) rappresentante di un nuovo genere, di grotta del Marocco. Bull. Soc. Sci. nat. Maroc, Rabat **16** 1936 pp. 86-89, 2 figs. [Thysanura.]

3074.—Silvestri, F. Yale North India expedition. Report on Diplura and Thysanura. Mem. Conn. Acad. Arts Sci., New Haven **10** 1936 pp. 253-259, 36 figs.

3075.—Silvestri, F. Descrizione di alcuni Machilidae (Thysanura) della Cina. Notes Ent. chinoise, Mus. Heude, Shanghai **3** 1936 pp. 103-115, 6 figs.

3076.—Simanton, W. A. & Andre, F. A biological study of *Lygaeus kalmii* Stål (Hemiptera-Lygaeidae). Bull. Brooklyn ent. Soc. **31** 1936 pp. 99-106, 1 pl.

3077.—Simonetti, V. Sul pigmento clorofilloide degli Ortoteri (Nota preliminare). Boll. Zool., Torino **7** 1936 pp. 7-8.

3078.—Singh, K. The antennae of Aleurodidae. Curr. Sci., Bangalore **5** 1936 p. 304, 6 figs.

3079.—Siribaed, L. The pleural hairs of Culicine mosquito larvae. Philipp. J. Sci., Manila **60** 1936 pp. 267-301, 4 pls. [Dipt.]

3080.—[Sirotnina, O. N.] Сиротинина, О. Н. Au sujet de la faune des Rhynchotes aquatiques du Donetz et de ses affluents (Lopagne et Oudy). [In Ukrainian.] Trav. Soc. Nat. Charkow **52** 1929 pp. 268-274. [Hem.]

3081.—[Sirotkina, M. M.] Сироткина, М. М. Beiträge zur Genetik des Seidenspinners. XV. Zusammenhang zwischen neutralen Merkmalen und Seidenquantum. [In Russian with German summary.] Zool. J., Moscow **15** 1936 pp. 409-436, 4 graphs. [Lep.]

3082.—Sitowski, L. O budowie gniazda misierki (*Megachile maritima* Kirby). [With German summary.] Roczn. Ochrony Roslin, Warsaw **3** 1936 pp. 168-170, 1 pl. [Hym.]

3083.—Sjöstedt, Y. Entomologische Ergebnisse der schwedischen Kamtchatka-Expedition 1920-1922. 37. Abschluss und Zusammenfassung. Ark. Zool., Stockholm **28A** 1935 no. 7, 19 pp.

3084.—Sjöstedt, Y. Revision der Australischen Acridiideen. 2. Monographie. K. svenska VetenskAkad. Handl., Stockholm (3) **15** 1935 no. 2 191 pp. 2 pls. [Orth.]

3085.—Sjöstedt, E. Havaintoja perhosten esiintymisestä Etela-Pohjanmaalla (Oa). [With German summary.] Notul. ent., Helsingfors **16** 1936 pp. 12-20.

3086.—Skala, H. Neue oberösterreich. Minen (Dipt., Col., Hymen.). Z. öst. EntVer., Vienna **21** 1936 pp. 55-56.

3087.—Skala, H. Minen aus Mittel- und Südeuropa. Z. öst. EntVer., Vienna **21** 1936 pp. 78-79. [Lep.]

Skala, H. see Klimesch & Skala.

3088.—[Skoblo, I. S.] Скобло, И. О. Feeding and fecundity of *Loxostege sticticalis* L. [In Russian with English summary.] Bull. Inst. sci. Lesshaft, Leningrad **19** 1936 pp. 163-210, 2 graphs, 2 figs. [Lep.]

3089.—[Skoblo, I. S.] Скобло, И. О. The duration of the sugarbeet webworm moth's life. [In Russian with English summary.] Bull. Inst. sci. Lesshaft, Leningrad **19** 1936 pp. 211-242. [Lep.]

3090.—[Skorikov, A. S.] Скороиков, А. С. Zur Mutilliden-Fauna Zentralasiens. [In Russian with German summary.] Trud. Tadzhih Sect. Acad. Sci. S.S.R., Moscow **5** (Zool. & Parasit.) 1935 pp. 257-349, 7 pls. 2 maps. [Hym.]

3091.—Skovgaard, O. S. Rødkløverens bestøvning, Humlebie og Humleboer undersøgelser over nogle i Danmark forekommende arter af Slægten *Bombus* Latr., deres traekplanter, boer og boplader, samt deres betydning for bestøvningen af rødkløver (*Trifolium pratense*). [In Danish with English summary.] K. danske vidensk. Selsk. Skr. Copenhagen (9) **6** 1936 no. 6, 140 pp., 1 map. [Hym.]

3092.—Slack, H. D. The food of caddis fly (Trichoptera) larvae. J. anim. Ecol., Cambridge **5** 1936 pp. 105-115, 2 figs.

3093.—Slifer, E. H. The scoloparia of *Melanoplus differentialis* (Orthoptera, Acrididae). Ent. News, Philadelphia 47 1936 pp. 174-180.

3094.—Slifer, E. H. & King, R. L. An internal structure in the Cyrtacanthacrinae (Orthoptera, Acrididae) of possible taxonomic value. J. N. York ent. Soc. 44 1936 pp. 345-348.

3095.—Smart, J. Notes on the Simuliidae occurring at Fortingal, Perthshire. Scot. Nat., Edinburgh no. 217 1936 pp. 22-26. [Dipt.]

3096.—Smart, J. Records of Sphaeroceridae (Borboridae) from Midlothian. Scot. Nat., Edinburgh no. 221 1936 p. 134. [Dipt.]

3097.—[Smirnov, E. S.] Смирнов, Е. С. Ueber das System der Syrphiden. [In Russian with German summary.] Bull. Soc. Nat. Moscou (N.S.) 45 1936 Sect. Biol. pp. 249-255, 2 figs. [Dipt.]

3098.—[Smirnov, E. S. & Polezhaev, V. G.] Смирнов, Е. С. и Полежаев, В. Г. Kampf um den Raum bei der Schildlaus *Lepidosaphes ulmi* L. [In Russian with German summary.] Wiss. Ber. Moskauer Staats Univ. 4 1935 pp. 37-43, 16 figs. [Hem.]

Smith, C. F. *see* Knowlton & Smith.

3099.—Smith, G. P. The growth-stimulation of blow-fly larvae fed on fatigued frog muscle. II. J. exp. Biol., London 13 1936 pp. 249-252. [Dipt.]

3100.—Smith, L. M. Biology of the mealy plum Aphid, *Hyalopterus pruni* (Geoffroy). Hilgardia, Berkeley 16 1936 pp. 167-209, 1 pl. 12 figs. [Hem.]

3101.—Smith, M. R. Ants of the genus *Ponera* in America, north of Mexico. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 420-430. [Hym.]

3102.—Smith, M. R. A list of the ants of Texas. J. New York ent. Soc. 44 1936 pp. 155-170. [Hym.]

3103.—Smith, R. C. & Kelly, E. G. The fourth annual summary of the more important insects of Kansas covering the year 1934. Trans. Kans. Acad. Sci., Manhattan 38 1935 pp. 171-185.

3104.—Smith, R. O. A., Mukerjee, S., Halder, K. C. & Lal, C. Bionomics of

P[hlebotomus] argentipes. Parts I, II. With an appendix by K. C. K. E. Raja. Ind. J. Med. Res., Calcutta 249 1936 pp. 295-311, 557-562. [Dipt.]

3105.—Smith, T. L. Synopsis of work on the biology, culturing methods and genetics of *Galleria mellonella*, Linn. Amer. Nat., New York 70 1936 pp. 67-68. [Lep.]

3106.—Smith-Stocking, H. Genetic studies on selective segregation of chromosomes in *Sciara coprophila* Lintner. Genetics, Menasha 21 1936 pp. 421-443, 3 figs. [Dipt.]

Smreczynski, S. *see* Makólski & Smreczynski.

3107.—Smulyan, M. T. A revision of the Chalcid flies of the genus *Perilampus* Latreille occurring in America North of Mexico. Proc. U.S. nat. Mus., Washington, D.C. 83 1936 no. 2990 pp. 369-412. [Hym.]

Snipes, B. T. *see* Tauber & Snipes.

3108.—Snodgrass, R. E. Morphology of the insect abdomen. Part III. The male genitalia (including Arthropods other than insects). Smithsonian. misc. Coll., Washington 95 1936 no. 14 96 pp. 29 figs.

3109.—Snyder, G. E. The chromosomes of two species of beetles of the genus *Tetraopes*. Proc. Pennsylvania Acad. Sci., Harrisburg 8 1934 pp. 50-51. [Col.]

3110.—Snyder, T. E. Our enemy the termite. New York, Ithaca, Comstock Pub. Co. 1935 xii + 196 pp. 1 pl. 56 figs.

Soika *see* Giordani Soika.

3111.—Sokolow, G. N. Die Evolution der Zeichnung der Arctiidae. Zool. Jb., Jena Anat. 61 1936 pp. 139-194, 133 figs. [Lep.]

3112.—[Sokolov, I. I.] Соколов, И. И. Zur Erforschung der Fauna der Wasserbecken der Stadt das "Alte Buchara" und deren Umgebung. [With German summary.] Trans. Uzbekistan Inst. trop. Med., Tashkent 1 1931 fasc. 11 16 pp.

3113.—Sollaud, E. Sur quelques formes endémiques de la faune cavernicole du Jura. Livre jubil. Bouvier, Paris 1936 pp. 317-322.

3114.—[Solodovnikov, S. V.] Солодовников, С. В. Contribution à l'étude de la faune et de la biologie des larves des Libellules du Donetz et de certains de ses affluents. [In Ukrainian.] Trav. Soc. Nat. Charkow 52 1929 pp. 249-268. [Odon.]

3115.—Solomon, M. E. On a new genus and two new species of Western Australian Aleyrodidae. J. roy. Soc. W. Aust., Perth 21 1935 pp. 75-92, 4 pls. [Hem.]

3116.—Son, G. van. Description of a new race of *Charaxes xiphares* (Cr.) from southern Rhodesia (Lepid.). Proc. R. ent. Soc. London (B) 5 1936 pp. 201-207, 1 pl.

3117.—Sonan, J. Description of two new species of the family Vespidae. Trans. n. H. Soc. Formosa 25 1935 pp. 370-372, 6 figs. [Hym.]

3118.—Sonan, J. Phymatidae of Formosa. Trans. nat. Hist. Soc. Formosa 25 1935 pp. 401-403, 4 figs. [Hem.]

3119.—Sonan, J. Formosan Ichneumon flies of the genus *Ephialtes* Schrank (= *Ichneumon* of Cushman and Rohwer). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 103-107.

3120.—Sonan, J. Descriptions of and notes on some Pimplinae in Formosa (Hym. Ichneumonidae). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 249-257, 1 fig.

3121.—Sonan, J. Two new species of Ichneumon-flies. Trans. nat. Hist. Soc. Formosa 26 1936 pp. 278-279. [Hym.]

3122.—Sonan, J. Notes on some Pimplinae in Formosa with a new species (Hymenoptera, Ichneumonidae). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 332-335, 1 fig.

3123.—Sonan, J. Six new species of Pimplinae (Hym. Ichneumonidae). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 413-419.

3124.—Sonan, J. Notes on some butterflies from Formosa. [In Japanese.] Zephyrus, Fukuoka 6 1936 pp. 205-216, 3 pls. [Lep.]

3125.—Soong, Chih-Chieng. Notes on the morphology and habits of the different stages of *Ceracris kiangsu* Tsai

in Hunan (Orth.). [In Chinese.] Ent. & Phytopath., Hangchow 4 1936 pp. 191-198, 4 figs.

Sonnenblick, B. P. see Howland & Sonnenblick.

3126.—Soudek, S. The pharyngeal glands of the honeybee (*Apis mellifica* L.). [In Czech with English summary.] Bull. Ec. sup. Agron. Brunn (C) 10 1927 63 pp. 3 pls. 15 figs. [Hym.]

3127.—Soudek, S. Fauna of the forest soil. [In Czech with English summary.] Bull. Ec. sup. Agron. Brunn (D) 8 1928 24 pp., 3 figs. [Insects pp. 14-20.]

3128.—Souza Lopes, H. de. Um novo genero de Diptera Acalypttratae e considerações sobre a familia Ctenostylidae. Arch. Inst. Biol. veg., Rio de Janeiro 2 1935 pp. 247-253, 9 figs.

3129.—Souza Lopes, H. de. Sarcophagideos neotropicos novos ou pouco conhecidos (Dipt.). Arch. Inst. Biol. veg., Rio de Janeiro 3 1936 pp. 71-90, 28 figs.

3130.—Souza Lopes, H. de. Sobre duas especies brasileiras de *Rhinotora* Schiner (Dipt. Rhopalomeridae). Rev. Ent., Rio de Janeiro 6 1936 pp. 106-109, 9 figs.

3131.—Souza Lopes, H. de. Sobre tres especies novas de Richardiidae do Brasil (Dipt.). Rev. Ent., Rio de Janeiro 6 1936 pp. 475-480, 1 pl. 15 figs.

3132.—Souza Lopes, H. de. Sobre alguns paratypos de Sarcophagidae conservados no Museu Paulista (Dipt.). Mus. Univ. São Paulo 21 1936 pp. 839-853, 4 pls.

3133.—[Sovins'kii, N. N.] Овинский, Н. Н. Ueber die Pyralididen der Kiewer Provinz. [In Russian with German summary.] Trav. Mus. zool. Kiev no. 15 1935 pp. 47-139, 4 figs [Lep.]

3134.—Spaček, K. Zur geographischen Verbreitung des Sägebockes *Prionus coriarius* L. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 482-487. [Col.]

3135.—Spaček, C. Prof. Dr. A. Semenov Tian-Shanskij als Coleopterologe. Folia zool. hydrobiol., Riga 9 1936 pp. 115-138, 1 photo.

1316.—Spaček, K. Verzeichnis der von Herrn Prof. Jan Roubal 1934–1935 in der Slowakei gesammelten Goldwespen (Hym., Chrysididae). *Folia zool. hydrobiol.*, Riga 9 1936 p. 166.

1317.—Spaček, K. 50. Jahre der wissenschaftlichen Tätigkeit des Prof. Dr. A. Semenov Tian-Shanskij. Lebensbild eines grossen russischen Entomologen. *Konowia*, Vienna 15 1936 pp. 1–31.

1318.—Spaeth, F. Die Untergattungen von *Coptocycla* mit gerieften Klauen. *Festschr.* 60. Geburtst. Embrik Strand, Riga 1 1936 pp. 251–261. [Col.]

1319.—Spaeth, F. Mitteilungen über neue oder bemerkenswerte Cassidinen aus dem Senckenberg-Museum (Ins. Col.). *Ent. Rdsch.*, Stuttgart 53 1936 pp. 109–111, 138–140, 170–173, 213–216, 259–262, 1 fig.

1340.—Spaeth, F. Neue Cassidinen und Hispinen (Col.) aus dem British Museum. *Proc. R. ent. Soc. London* (B) 5 1936 pp. 8–11.

1341.—Spaeth, F. Bestimmungstabelle der Gattung *Charidotis* (Col. Chrys. Cassid.). *Sborn. ent. odd. Nár. Mus. Praze* 14 1936 pp. 66–99.

1342.—Spaeth, F. Ueber die Australasiatischen Cryptonychini. *Temminckia*, Leyden 1 1936 pp. 277–294. [Col.]

1343.—Speicher, B. R. The demonstration of muscle contraction in insects. *Proc. Pennsylvania Acad. Sci.*, Harrisburg 6 1932 pp. 152–153, 4 figs.

1344.—Speicher, B. R. An atypical meiotic division in the parasitic wasp *Nemeritis*. *Anat. Rec.*, Philadelphia 67 1936 suppl. 1 p. 65. [Hym.]

1345.—Speicher, B. R. Oögenesis, fertilisation and early cleavage in *Habrobracon*. *J. Morph.*, Philadelphia 59 1936 pp. 401–421, 2 pls. [Hym.]

1346.—Speicher, B. R. & Miller, F. W. The mechanics of antennal movement in *Habrobracon*. *Proc. Pennsylvania Acad. Sci.*, Harrisburg 7 1935 pp. 66–69, 5 figs. [Hym.]

1347.—Speith, H. The life history of *Ephemera simulans* Walker in Lake Wawasee. *Canad. ent.*, Orillia 68 1936 pp. 263–266.

3148.—Spencer, G. J. A check list of the fleas of British Columbia with a note on fleas in relation to sawdust in homes. *Proc. ent. Soc. Br. Columbia*, Victoria no. 32 1936 pp. 11–17. [Siphonapt.]

3149.—Speyer, E. R. The genus *Aptinothrips* Haliday, further notes on the larval and pupal stages (Thysanoptera: Terebrantia). *Proc. R. ent. Soc. London* (A) 11 1936 pp. 120–121, 1 fig.

3150.—Speyer, W. Die Entwicklung von *Psylla mali* Schm. *Arb. physiol. angew. ent.* Berlin 3 1936 pp. 267–283, 10 figs. [Hem.]

3151.—Spotkov, E. M. The centriole in the parthenogenetic and fertilized eggs of *Habrobracon juglandis*. *Anat. Rec.*, Philadelphia 67 1936 suppl. 1 p. 114. [Hym.]

3152.—Squire, F. A. Observations on the pupal respiration of some insects of economic importance. *Bull. ent. Res.*, London 27 1936 pp. 381–384, 2 figs.

3153.—Stäger, R. Siedelungsverhältnisse bei den Ameisen der Hochalp. *Verh. schweiz. naturf. Ges.*, Aarau 116 1935 pp. 349–350. [Hym.]

3154.—Stäger, R. Topographische Konstanz der Strassen bei *Formica rufo-pratensis*. *Mitt. schweiz. ent. Ges.*, Berne 16 1936 pp. 679–684. [Hym.]

3155.—Stamm, R. H. A new find of *Rhipidius pectinicornis* Thbg. (*Symbius biattarum* Sund.) (Col. Rhipiphor.). [Concluded.] *Ent. Medd.*, Copenhagen 19 1936 pp. 289–297, 3 figs.

3156.—Stammer, H. J. Leuchtende Tiere in Schlesien. *Jber. schles. Ges. vaterl. Cult.*, Breslau 107 (1934) 1935 pp. 51–52.

3157.—Stammer, H. J. Die Wasserfauna der Schneeberghöhlen. *Beitr. Biol. Glatzer Schneeberges*, Breslau 2 1936 pp. 199–214.

3158.—Stammer, H. J. Studien an Symbiosen zwischen Käfern und Mikroorganismen. II. Die Symbiose des *Bromius obscurus* L. und der *Cassida*-Arten (Coleopt. Chrysomel.). *Z. Morph. Oekol. Tiere*, Berlin 31 1936 pp. 682–697, 13 figs.

3159.—**Stancati, M. F.** X-radiation and sex ratio in *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 p. 121. [Hym.]

3160.—**Stärcke, A.** Retouches sur quelques fournis d'Europe. I. Ent. Ber., Amsterdam 9 1936 pp. 277–279. [Hym.]

3161.—**Stärcke, A.** De sociale zijde van het intellect der mieren. Tijdschr. Ent., Amsterdam 79 1936 pp. xi–xv. [Hym.]

3162.—[**Stark, V.**] **Страк, В. А.** A revision of the bark-beetles of the genus *Hylesinus* found in U.S.S.R. [With English descriptions.] Plant Prot., Leningrad 8 1936 pp. 148–153. [Col.]

3163.—**Statz, G.** Drei neue Insektenarten aus dem Tertiär von Rott am Siebengebirge. Wiss. Mitt. Ver. Natur- u. Heimatk. Köln 1 1930 pp. 10–14, 6 figs. [Fossil, Odon. Isopt.]

3164.—**Statz, G.** Eine neue Bienenart aus Rott am Siebengebirge. Ein Beitrag zur Kenntnis der fossilen Honigbienen. Wiss. Mitt. Ver. Natur- u. Heimatk. Köln 1 1931 pp. 39–60, 11 figs. [Fossil, Hym.]

3165.—**Statz, G.** Neue Tipulidenfunde aus den Braunkohlenschiefern von Rott am Siebengebirge. Wiss. Mitt. Ver. Nat.-u. Heimatk. Köln 1 1934 pp. 90–106, 13 figs. [Fossil Dipt.]

Stebbins, F. M. see Nabours & Stebbins.

3166.—**Steeg, M.** Biologisches aus der Entomologie. Ent. Z., Frankfurt a. M. 50 1936 pp. 128–132, 141–143.

3167.—**Stehli, G.** Studien mit der Lupe, eine Vorstufe zur Mikroskopie. Mikrokosmos, Stuttgart 30 1936 pp. 43–47, 21 figs.

3168.—**Stehr, W. C.** Some notes and records of Minnesota Orthoptera. Ent. News, Philadelphia 47 1936 pp. 154–158.

Stein, A. see Pavlovskii, Stein & Olsuf'ev.

3169.—**Steinberg, A.** Zur Biologie und larvalen Entwicklung einer unbekannten *Baetis* Larve. Verh. int. Ver. Limnologie, Beograd 7 1935 pp. 466–474, 4 figs. [Ephem.]

3170.—**Steinberg, D. M. & Kamensky, S. A.** Les prémisses oecologiques de la

diapause de *Loxostege sticticalis* L. (Lepidoptera, Pyralidae). Bull. biol., Paris 70 1936 pp. 145–183.

3171.—**Steiner, P.** Beiträge zur Kenntnis der Schädlingsfauna Kleinasiens. III, IV. Z. angew. Ent., Berlin 23 1936 pp. 177–222, 11 figs., 339–369, 12 figs. [Col., Lep.]

3172.—**Steiniger, F.** Die Katalepsie von *Nepa cinerea* L. Ein Beitrag zur Kenntnis visueller Anpassungserscheinungen. Biol. gen., Vienna 12 1936 no. 1 pp. 49–68, 6 figs. [Hem.]

3173.—**Stelfox, A. W.** The Irish Ichneumon-flies of the genus *Banchus*. Irish Nat. J., Belfast 6 1936 pp. 63–64. [Hym.]

3174.—**Stella, E.** Sulla maturazione delle gonadi nelle Termite italiane. I, II. Boll. Soc. ital. Biol. sperim., Milan 11 1936 pp. 731–734. [Isopt.]

3175.—**Stella, E.** Etudes génétiques et cytologiques sur *Drosophila immigrans* Sturt. Rev. suisse Zool., Geneva 43 1936 pp. 397–414, 1 pl. 2 figs. [Dipt.]

3176.—**Stempel, W., Romberg, G. von & Ulpts, R.** Ueber erfolgreiche Behandlung von Pflanzentumoren mit Organismen-Strahlung aussendenden Mückenlarven. Biol. Zbl., Leipzig 56 1936 pp. 114–116, 1 fig. [Dipt.]

3177.—**Stempffer, H.** Mission scientifique de l'Omo. Lepidoptera. I. Lycaenidae. Sur les espèces éthiopiennes du genre *Syntarucus* Butler. Miss. scient. Omo, Paris 2 1935 pp. 219–240, 1 pl. 12 figs.

3178.—**Stempffer, H.** Note sur la systématique de *Lycaena eleusis* (Lepidopt. Lycaenidae). Livre jubilé. Bouvier, Paris 1936 pp. 323–327, 2 figs.

3179.—**Stempffer, H.** Contribution à l'étude des Lycaenidae éthiopiens. Bull. Soc. ent. Fr., Paris 41 1936 pp. 283–284. [Lep.]

3180.—**Stempffer, H.** Contribution à l'étude des Lycénides de l'Afrique orientale. Rev. franç. ent., Paris 3 1936 pp. 134–142, 6 figs. [Lep.]

3181.—**Steopoe, J. & Dornesco, G. T.** Etudes sur le système nerveux des insectes pendant la métamorphose. La gaine périganglionnaire. Arch. Zool. exp. gén., Paris Notes et Rev. 78 1936 pp. 99–112, 15 figs.

3182.—Stephan, J. Erinnerungen an São Paulo. Ent. Z., Frankfurt a. M. 49 1936 pp. 477–480, 1 fig.

3183.—Sterzl, O. Ein Beitrag zur Lepidopterenfauna des oberen Zillertales. Ent. Anz., Vienna 16 1936 pp. 4–7, 21–23, 33–37, 49–52, 65–68, 77–88, 101–104, 109–114.

3184.—Stichel, H. Neue Namen für neotropische Rhopalocera (Lep.). Mitt. dtsh. ent. Ges., Berlin 6 1936 pp. 63–65.

3185.—Stichel, W. Kleine heteropterologische Mitteilungen. Mitt. dtsh. ent. Ges., Berlin 7 1936 pp. 43–47.

3186.—Stiles, C. W. Notice of possible suspension of rules of nomenclature in certain cases. Canad. Ent., Orillia 68 1936 pp. 113–115; Ent. News, Philadelphia 47 pp. 214–215; Science, New York 83 pp. 552–553.

3187.—Stiller, V. Die Käferfauna der Ofner-Berge (Budai hegyek) bei Budapest. Ent. Rdsch., Stuttgart 54 1936 pp. 77–82. [Col.]

3188.—Stoneham, H. F. Variation in African Lepidoptera, being notes on the Acraeae. Part I. Bull. Stoneham Mus., Kitale no. 27 1936 3 pp. [Lep.]

3189.—Stoneham, H. F. Variation in African Lepidoptera, and new species and forms of African Acraeae. Bull. Stoneham Mus., Kitale no. 28 1936 2 pp.

3190.—Stoneham, H. F. Notes on *Charaxes*, O., from Kenya and Uganda, Brit. E. Africa. Bull. Stoneham Mus., Kitale no. 29 1936 3 pp. [Lep.]

3191.—Stork, M. N. A contribution to the knowledge of the puparia of Anthomyidae. Tijdschr. Ent., Amsterdam 79 1936 pp. 94–167, 35 figs. [Dipt.]

3192.—Strand, A. Ueber *Philonthus nigriventris* Ths. (Col.) eine in Skandinavien bisher z. T. verkannte Art. Norsk ent. Tidsskr., Oslo 4 1936 pp. 102–104.

3193.—Strand, A. Rettelser og tillegg till "Malselvns Koleoptera." Norsk ent. Tidsskr., Oslo 4 1936 pp. 106–109.

3194.—Strand, E. Lepidopterorum Catalogus, 's-Gravenhage. See Bryk, F., Draeseke, J., Schussler, H. & Shepard, H. H.

3195.—Strand, E. Miscellanea nomenclatorica zoologica et palaeontologica. Folia zool. hydrobiol., Riga 9 1936 pp. 167–170.

3196.—Straneo, L. Note sui *Pterostichus* paleartici. 2. Boll. Soc. ent. ital., Genoa 67 1935 pp. 98–102. [Col.]

3197.—Straneo, S. L. Contributo alla conoscenza dei Carabidi degli Abruzzi. Mem. Soc. ent. ital., Genoa 14 1935 pp. 59–62. [Col.]

3198.—Straneo, S. L. Note sui *Platysma* paleartici. 3^a. Ann. Mus. Stor. nat. Genova 59 1936 pp. 145–157, 2 figs. [Col.]

3199.—Straneo, S. L. Sui tipi dei Platysmatini (Coleopt. Carabid.) australiani della collezione Castelnau, nel Museo Civico di Genova. Ann. Mus. Stor. nat. Genova 59 1936 pp. 246–259.

3200.—Strasburger, E. H. Ueber Störungen der Eientwicklung bei Kreuzungen von *Epilachna chrysomelina* F. mit *Epilachna capensis* Thunb. Z. indukt. Abstamm.- u. Vererb. Lehre, Leipzig 71 1936 pp. 538–545, 5 figs. [Col.]

3201.—Strawinski, K. Untersuchungen der Wanzenfauna der Bäume und Sträucher Polens. [In Polish with German summary.] Trav. Inst. Rech. För. dom., Warsaw (A) no. 17 1936, 216 pp. [Hem.]

3202.—[Strel'nikov, I. D.] Стрельников, И. Д. Die Sonnenbestrahlung und das Mikroklima in der Oekologie von *Loxostege sticticalis*. [In Russian with German summary.] Bull. Inst. sci. Lesshaft, Leningrad 19 1936 pp. 1–76, 11 graphs. [Lep.]

3203.—[Strel'nikov, I. D.] Стрельников, И. Д. Die Wanderung von *Loxostege sticticalis*. [In Russian with German summary.] Bull. Inst. sci. Lesshaft, Leningrad 19 1936 pp. 77–120, 5 figs. [Lep.]

3204.—[Strel'nikov, I. D.] Стрельников, И. Д. Zur Frage über die Wärmeproduktion der Insekten infolge von Bewegungen und Sonnenbestrahlung. [In Russian with German summary.] Bull. Inst. sci. Lesshaft, Leningrad 19 1936 pp. 243–255.

3205.—**Strelnikov, I.** Wasserumsatz und Diapause bei *Loxostege sticticalis*. C.R. Acad. Sci. U.R.S.S., Moscow (N.S.) 1 1936 pp. 267–271. [Lep.]

3206.—[**Strelnikov, I. D.**] Стрельников, И. Д. Effect of the solar radiation and the micro-climate upon the body temperature and the behaviour of the larvae of *Locusta migratoria* L. [In Russian with English summary.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Moscow 2 1936 pp. 637–733, 16 figs. [Orth.]

3207.—**Stritt, W.** Kleine Mitteilungen über Blattwespen I. (Hymenoptera: Tenthredinidae). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 54–60 3 figs.

3208.—**Stritt, W.** Der Blattminierer *Fenusella glaucoptis* Knw. (Hym., Tenth.). Z. PflKrankh., Stuttgart 46 1936 pp. 608–614, 4 figs.

3209.—**Strohl, J.** L'embryogénie physiologique et l'organisation des insectes suivi de propos sur la métamorphose. Livre jubil. Bouvier, Paris 1936 pp. 329–334.

3210.—**Strohl, J. & Köhler, W.** Die Wirkung eines pleiotropen Gens auf Färbung, Lebensdauer und Fortpflanzungsfähigkeit der Imago bei der Mehlmotte *Ephestia kühniella* Z. Nachr. Ges. Wiss. Göttingen Biol. (N.F.) 2 1935 pp. 31–55, 8 figs. [Lep.]

3211.—**Strohl, J. & Köhler, W.** Wesen und Bedeutung der Pleiotropie oder Polyphaenie nach Versuchen an der Mehlmotte *Ephestia kühniella*. Verh. schweiz. naturf. Ges., Aarau 116 1935 pp. 351–355. [Lep.]

3212.—**Strohm, K.** Die Tierwelt des Kaiserstuhls. II. Die Insekten. Der Kaiserstuhl, Freiburg im Breisgau 1933 pp. 285–366, 44 figs.

3213.—**Strohm, K.** Tiergeographische Charakteristik des Kaiserstuhls. Der Kaiserstuhl, Freiburg im Breisgau 1933 pp. 384–401, 6 figs.

3214.—**Strouhal, H.** Die entotrophi (Ins. Apteryg.) von Warmbad Villach. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 519–529. [Thysanura.]

3215.—**Struve, R. & F.** Ein Beitrag zur Macrolepidopterenfauna der Insel Borkum. Ent. Rdsch., Stuttgart 53 1936 pp. 552–554.

Stuardo, O. see Ruiz & Stuardo.

3217.—**Stumper, R.** L'homme et la fourmi. Scientia, Bologna 60 1936 pp. 95–108, 2 figs. [Hym.]

3218.—**Sturdza, S. A.** Quelques observations relatives à l'action de la température sur l'activité motrice de la fourmi rousse (*Formica rufa pratensis* Retz.). Notat. biol., Bucarest 3 1935 pp. 1–10, 2 graphs. [Hym.]

3219.—**Sturtevant, A. H. & Dobzhansky, T.** Observations on the species related to new forms of *Drosophila affinis*, with descriptions of seven. Amer. Nat., New York 70 1936 pp. 574–584, 1 map 3 figs. [Dipt.]

3220.—**Sturtevant, A. H. & Dobzhansky, T.** Geographical distribution and cytology of "sex ratio" in *Drosophila pseudoobscura* and related species. Genetics, Menasha 21 1936 pp. 473–490, 1 pl. 5 figs. [Dipt.]

3222.—**Sugihara, Y.** Hymenoptera-fauna in Province Tosa, III. Chrysidiidae. [In Japanese.] Trans. Kansai ent. Soc. Osaka no. 6 1935 pp. 31–34.

3223.—**Sugihara, Y. & Kim, H. K.** A new species of Sapygidae from Korea (Hym.). Insecta matsum., Sapporo 10 1936 pp. 123–126, 2 figs.

3223A.—**Sugitani, I.** Corean butterflies. [In Japanese.] Zephyrus, Fukuoka 6 1936 pp. 155–174, 1 pl. 2 figs. [Lep.]

3224.—**Sumner, R.** Relation of gregarines to growth and longevity in the mealworm, *Tenebrio molitor* L. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 645–648, 1 fig. (Col.)

3225.—**Sun, P. T.** A study of experimental breeding technique for silkworm breeding. Agric. Sinica, Nanking 1 1936 pp. 375–397, 2 figs. [Lep.]

3226.—**Susskind, M. E. C.** A morphological study of the respiratory system in various larval instars of *Stenelmis sulcatus* Blatchley (Dryopidae; Coleoptera). Pap. Mich. Acad. Sci., Ann Arbor 21 1936 pp. 697–714, 3 pls.

3227.—**Šuster, P. M.** Régénération de la patte antérieure, après extirpation du ganglion, chez la sauterelle indienne *Dixippus* (= *Carausius*) *morosus* Br. & Redt. Ann. sci. Univ. Jassy 22 1936 pp. 140–146, 1 pl. 2 figs. [Orth.]

3228.—Šuster, P. M. Régénération de la patte antérieure (patte préhensile) après extirpation du ganglion, chez la mante égyptienne—*Sphodromantis bioculata* Burm. Ann. sci. Univ. Jassy 22 1936 pp. 147–158, 10 figs. [Orth.]

3229.—Šuster, P. M. Faune tachinidologique du mont Ceahlău. Ann. sci. Univ. Jassy 22 1936 pp. 159–168. [Dipt.]

3230.—Šuster, P. M. Nouvelle contribution à la faune tachinidologique de la Dobrogea. Ann. sci. Univ. Jassy 22 1936 pp. 169–176. [Dipt.]

3231.—Svircev, S. Eine neue höhlenbewohnende *Amaurops*-Art aus der südlichen Herzegowina. Koleopt. Rdsch., Vienna 22 1936 pp. 34–36.

3232.—Swain, R. B. Notes on the oviposition and life history of *Phlepsius decorus* O. & B. (Cicadellidae). Canad. Ent., Orillia 68 1936 pp. 280–281. [Hem.]

3233.—Swain, R. B. Notes on the oviposition and life-history of the leaf-hopper *Oncometopia undata* Fabr. (Homoptera: Cicadellidae). Ent. News, Philadelphia 47 1936 pp. 264–266.

3234.—Swain, R. B. An annotated list of the type Cicadellid material in the collections of the Colorado State College, Ft. Collins, Colorado. J. Kans. ent. Soc., McPherson 9 1936 pp. 49–58. [Hem.]

3235.—Swan, D. C. Berlese's fluid: Remarks upon its preparation and use as a mounting medium. Bull. ent. Res. London 27 1936 pp. 389–391.

3236.—Sweetman, H. L. The biological control of insects. With a chapter on weed control. Ithaca, New York, Comstock Pub. Co. 1936 xii + 461 pp. 142 figs.

3237.—Swezey, O. H. Some highly concentrated populations of species of endemic insects. Spec. Publ. Bishop Mus., Honolulu 26 1935 pp. 6–7.

3238.—Swezey, O. H. A preliminary report on an entomological survey of Guam. Hawaii. Planters' Rec., Honolulu 11 1936 pp. 307–314.

3239.—Swezey, O. H. The insect fauna of Ieie (*Freycinetia arborea*) in Hawaii. Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 191–196.

3240.—[Swezey, O. H.] Records of immigrant insects for the year 1935. Proc. Hawaii. ent. Soc., Honolulu 9 1936 p. 350.

3241.—Swynnerton, C. F. M. The tsetse flies of East Africa. A first study of their ecology, with a view to their control. Trans. R. ent. Soc. London 84 1936 xxxvi + 579 pp. 22 pls. 7 maps. 33 figs. [Dipt.]

3242.—Sylvest, E. Kromotaxis (*Xanthotaxis*) hos Glimmerbassen (*Meligethes aeneus*). (With English summary.) Ent. Medd., Copenhagen 19 1936 pp. 405–410.

3243.—Székessy, I. Ueber die xerotherme Koleopterenfauna der Halbinsel Tihany. [In Magyar with German summary.] Allat. Közlem., Budapest 33 1936 pp. 149–157, 4 figs.

3244.—Székessy, V. Ueber die sogenannten Ocellen der Silphidengattung *Pteroloma* Gyllh. Ann. Mus. nat. hungar., Budapest 30 1936 pp. 48–49. [Col.]

3245.—Székessy, W. Revision der borealpinen Koleopteren auf vergleichend anatomischer Grundlage. II. Teil. Ent. Tidskr., Stockholm 57 1936 pp. 97–126, 2 pls.

3246.—Székessy, W. Revision der borealpinen Koleopteren auf vergleichend anatomischer Grundlage. II. Teil. [In Magyar with German summary.] Mat. Term. Ért., Budapest 54 1936 pp. 918–922.

3247.—Szelényi, G. Beiträge zur Kenntniss der paläarktischen Calliceratiden (Hym. Proct.). Ann. Mus. nat. hungar., Budapest 30 1936 pp. 50–66, 17 figs.

3248.—Táborsky, K. Beitrag zur Kenntnis der Ascalaphiden (Planipennia-Ascalaphidae I). Acta Soc. ent. Cech., Prague 33 1936 pp. 164–165. [Neuropt.]

3249.—Táborsky, K. Monographische Bearbeitung der Art *Ascalaphus otomanus* Germar. [In Czech with German summary.] Sborn. ent. odd. Nár. Mus. Praha 14 1936 pp. 133–144, 1 pl. [Neuropt.]

3250.—Tagliabue, C. & Perilli, R. Ricerche sperimentali sulle diverse razze di *Anopheles maculipennis* e sulle preferenze alimentari degli anofeli in Provincia di Milano. Riv. Malariol., Rome 15 1936 pp. 207–216. [Dipt.]

3251.—Takagi, S. A list of Coleoptera on Oze and Oku-Nikkô (1). [In Japanese.] Kontyû, Tokyo 10 1936 pp. 189-206.

3252.—Takahashi, R. An interesting white fly from Africa (Hemiptera: Aleyrodidae). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 52-53, 1 fig.

3253.—Takahashi, R. Notes on the Aleyrodidae of Japan (Homoptera) IV. Kontyû, Tokyo 10 1936 pp. 150-151, 1 fig.

3254.—Takahashi, R. Food habits and new habitats of Formosan Psyllidae, with notes on the peculiar food habits of Formosan phytophagous insects. Kontyû, Tokyo 10 1936 pp. 291-296, 1 fig. [Hem.]

3255.—Takahashi, R. A new genus and species of Aphididae from China (Homoptera). Lingnan Sci. J., Canton 15 1936 pp. 197-200, 5 figs.

3256.—Takahashi, R. Three species of Aleyrodidae from China (Homoptera). Lingnan Sci. J., Canton 15 1936 pp. 453-455, 3 figs.

3257.—Takahashi, R. Some Aphididae from South China and Hainan (Homoptera), I. Lingnan Sci. J., Canton 15 1936 pp. 595-606, 3 figs.

3258.—Takahashi, R. Some Coccidae from Formosa and Japan (Homoptera), I. Mushi, Fukuoka 9 1936 pp. 1-8, 3 figs.

3259.—Takahashi, R. Some Coccidae from China (Hemiptera). Peking nat. Hist. Bull., Peiping 10 1936 pp. 217-222, 3 figs.

3260.—Takahashi, R. New white flies from the Philippines and Formosa (Aleyrodidae; Hemiptera). Philipp. J. Sci., Manila 59 1936 pp. 217-223, 1 fig.

3261.—Takahashi, E. Aphids of the genus *Astegopteryx* Karsch, with descriptions of new species from Sumatra and Formosa (Aphididae, Hemiptera). Proc. R. ent. Soc. London (B) 5 1936 pp. 96-102, 1 fig.

3262.—Takahashi, R. Two interesting scale insects attacking the Lauraceae in Formosa (Hemiptera). Trans. nat. Hist. Soc. Formosa, Taihoku 26 1936 pp. 80-83, 4 figs.

3263.—Takahashi, R. Some Aleyrodidae, Aphididae, Coccidae (Homoptera)

and Thysanoptera from Micronesia. Tenthredo, Kyoto 1 1936 pp. 109-120, 2 figs.

3264.—Takahashi, R. A new scale insect causing galls in Formosa (Homoptera). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 426-428, 2 figs.

3265.—Takahashi, R. Flattening of the body in the insects of the Stenorrhyncha, Hemiptera. [In Japanese with English summary.] Zool. Mag., Tokyo 48 1936 pp. 469-473, 4 figs.

3266.—Takahashi, S. Results of studies on *Pseudococcus comstocki* Kuwana. [In Japanese.] Extra Rep. Niigata-Ken agric. Exp. Sta., no. 36 1936 120 pp. 7 pls. [Hem.]

3267.—Takeuchi, K. Tenthredinoidae of Saghalien (Hymenoptera). Tenthredo, Kyoto 1 1936 pp. 53-108, 2 pls. [Hym.]

3268.—Takeuchi, K. Some sawflies from Sado Island. Tenthredo, Kyoto 1 1936 pp. 150-164, 3 pls. 5 figs. [Hym.]

3269.—Takeuchi, K. On the butterflies collected in Saghalien by M. K. Imanishi, with the description of a new *Lycaena*-species. [In Japanese.] Zephyrus, Fukuoka 6 1936 pp. 346-356, 2 pls. [Lep.]

3270.—Talbot, G. Notes upon some butterflies from Siam, with descriptions of new races and forms (Lep. Rhopalocera). Entomologist, London 69 1936 pp. 56-60.

3271.—Talbot, G. A new species of Danaidae (Lep. Rhop.) and other new butterflies. Entomologist, London 69 1936 pp. 112-114, 1 pl.

3272.—Tallice, R. V. Acción de las radiaciones solares sobre los Triatomas adultos. Arch. Soc. Biol. Montevideo 7 1936 pp. 217-219. [Hem.]

3273.—Tams, W. H. T. Dr. Karl Jordan's expedition to South-West Africa and Angola: Lasiocampidae. Novit. zool., Tring 40 1936 pp. 95-114, 9 pls. [Lep.]

Tan, C. C. *see* Dobzhansky & Tan.

3274.—Tanaka, M. On the cocoon of *Onidocampa flavescens*. [In Japanese.] Ent. World, Tokyo 4 1936 pp. 83-87, 10 figs. [Lep.]

3275.—Tanaka, R. New aberrant form and new gynandromorphisms of Formosan butterflies. [In Japanese.] Trans. Kansai ent. Soc., Osaka no. 6 1935 pp. 74–76, 5 figs.

Tao, Chia-Chu *see* Tseng & Tao.

3276.—[Tarnani, I. K.] Тарнани, И. К. Contribution à l'étude de la biologie de la *Hypoderma*. [In Ukrainian.] Trav. Soc. Nat. Charkow 50 1927 no. 2 pp. 79–81, 2 figs. [Dipt.]

Tashkir Ahmad *see* Ahmad.

Tate, H. D. *see* Harris, Drake & Tate.

3277.—Tate, P. & Vincent, M. The biology of autogenous and anautogenous races of *Culex pipiens* L. (Diptera: Culicidae). Parasitology, Cambridge 28 1936 pp. 115–145, 5 figs.

3278.—Tauber, O. E. Mitosis of circulating cells in the hemolymph of the roach, *Blatta orientalis*. Iowa State Coll. J. Sci. 10 1936 pp. 431–439, 3 figs. [Orth.]

3279.—Tauber, O. E. Studies on insect hemolymph with special reference to some factors influencing mitotically dividing cells. Iowa St. Coll. J. Sci., Ames 11 1936 pp. 121–124. [Orth.]

3280.—Tauber, O. E. & Snipers, B. T. Velocity of hemocyte circulation in the elytron of the cockroach, *Periplaneta americana* Linn. Proc. Soc. exp. Biol. Med., New York 35 1936 pp. 249–251. [Orth.]

3281.—Tauber, O. E. & Yeager, J. F. On the total hemolymph (blood) cell counts of insects. II. Neuroptera, Coleoptera, Lepidoptera and Hymenoptera. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 112–118.

3282.—Tauchert, F. Zur Frage der Abhängigkeit der Atmung von der Temperatur. Z. wiss. Zool., Leipzig 147 1936 pp. 455–458.

3283.—[Tauson, A. O.] Тавсон, А. О. Lake Dikoye and its biology. [In Russian with English summary.] Scient. Mem. Gorky St. Univ. Perm 1 1935 no. 2–3 pp. 3–56, 2 pls.

Taylor, A. C. *see* Brauer & Taylor.

3284.—Teilhard de Chardin, G. Contribution à la faune de Coléoptères d'Auvergne. Bull. Soc. Hist. nat.

Auvergne, Clermont-Ferrand 1923 3 pp. 29–30; 4 pp. 46–55; 1924 5 pp. 41–47; 6 pp. 57–63; 1925 7 pp. 44–47; 8 pp. 63–64; 1926 9 pp. 69–72; 10 pp. 70–80; 11 1927 pp. 63–71; 1928 13 pp. 34–42; 14 pp. 76–82; 17 1931 pp. 30–36; 18–19 1932 pp. 76–83; 21 1933 pp. 16–22.

3285.—Teilhard de Chardin, G. Contribution à la faune des Coléoptères d'Auvergne (fin). Rev. Sci. nat. Auvergne, Clermont-Ferrand 1 1935 pp. 111–113. [Col.]

3286.—Teissier, G. La loi de Dyar et la croissance des Arthropodes. Livre jubil. Bouvier, Paris 1936 pp. 335–342, 3 graphs.

Teissier, G. *see* L'Héritier & Teissier.

3287.—Telenga, N. A. Faune de l'URSS. Insectes Hyménoptères. Vol. V, no. 2. Fam. Braconidae (P.1). [In Russian with German descriptions.] Leningrad, Inst. zool. Acad. Sci. U.R.S.S. 1936 xvi + 402 pp. 53 figs.

3288.—Tempère, G. Nouveau coup d'oeil sur les Coléoptères des environs d'Arcachon et de la Teste. Proc.-verb. Soc. linn. Bordeaux 86 (1934) 1935 pp. 82–101.

3289.—Tenenbaum, S. Einige Wort über die Variabilität der *Melasoma 20-punctata* Scop. [In Polish with German summary.] Polsk. Pismo ent., Lwow 13 (1934) 1936 pp. 123–124, 1 fig. [Col.]

3290.—[Ter-Minasyan, M. E.] Тер-Минасян, М. Е. Uebersicht der *Anthonomus*- und *Furcipes*-Arten der Fauna der USSR (Coleoptera, Curculionidae). [In Russian with German summary.] Trav. Inst. zool. Acad. Sci. U.S.S.R., Leningrad 3 1936 pp. 165–182, 1 map 7 figs.

3291.—[Ter-Minasyan, M. E.] Тер-Минасян, М. Е. Coleopterous fauna of the composite plants in the State Steppe reservation Tshapli (Askania Nova) in Ukraine. [In Russian with English summary.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad 3 1936 pp. 429–438.

3292.—Testout, H. Contribution à l'étude des Saturnioides (Lépidopt. Hétérocer.). Ann. Soc. linn. Lyon (n.s.) 79 1936 pp. 39–51, 7 figs.

3293.—Testout, H. Notes sur les Coléoptères aquatiques, recueillis par M. Gaillard dans la région de Chenelette (Rhône). Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 123-124.

Théobald, N. see Piton & Théobald.

3294.—Theodor, O. On the relation of *Phlebotomus papatasi* to the temperature and humidity of the environment. Bull. ent. Res., London 27 1936 pp. 653-671, 16 figs. [Dipt.]

3295.—Théry, A. *Pachyschelus* du Tonkin (Coleopt. Buprestidae). Livre jubil. Bouvier, Paris 1936 pp. 343-347, 4 figs.

3296.—Théry, A. Essai d'une classification des *Julodis* de l'Afrique australe. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 327-370, 2 pls. 1 fig. [Col.]

3297.—Théry, A. Description de Buprestides nouveaux de la faune égyptienne et remarques synonymiques (Coleoptera). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 3-15 4 figs.

3298.—Théry, A. Contribution à l'étude des Buprestides du Sinai (Coleoptera). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 327-328.

3299.—Théry, A. Notes synonymiques sur les Buprestidae (Col.). Bull. Soc. ent. Fr., Paris 41 1936 pp. 59-61.

3300.—Théry, A. Formes nouvelles de Buprestides paléarctiques (Col.). Bull. Soc. ent. Fr., Paris 41 1936 pp. 118-121, 1 fig.

3301.—Théry, A. Notes sur le genre *Capnodis* (Col. Buprestidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 219-223.

3302.—Théry, A. Quelques Buprestides nouveaux du Brésil (troisième et quatrième notes). Rev. Ent., Rio de Janeiro 6 1936 pp. 37-47, 6 figs., 469-471, 1 fig. [Col.]

3303.—Thiel, H. Vergleichende Untersuchungen an den Vormägen von Käfern. Z. wiss. Zool., Leipzig 147 1936 pp. 395-432, 26 figs. [Col.]

3304.—Thienemann, A. Chironomiden-Metamorphosen XIV. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 531-553, 17 figs. [Dipt.]

3305.—Thienemann, A. Alpine Chironomiden. (Ergebnisse von Untersuchungen in den Gegend von Gar-

misch-Partenkirchen, Oberbayern.) Arch. Hydrobiol., Stuttgart 30 1936 pp. 167-262, 6 pls. 20 figs. [Dipt.]

3306.—Thienemann, A. Chironomiden-Metamorphosen. XIII. (Dipt.) Die Gattung *Dyscamptocladius* Thien. Mitt. dtsh. ent. Ges., Berlin 7 1936 pp. 49-54.

3307.—Thienemann, A. Chironomiden-Metamorphosen. XI. Die Gattung *Eukiefferiella*. Stettin. ent. Z. 97 1936 pp. 43-65, 2 pls. 14 figs. [Dipt.]

3308.—Thienemann, A. Chironomidenlarven und-puppen der Yale North India Expedition. Zoogeographica, Jena 3 1936 pp. 145-158, 3 figs. [Dipt.]

3309.—Thomas, A. J. The embryonic development of the stick-insect, *Carausius morosus*. Quart. J. micr. Sci., London (N.S.) 78 1936 pp. 487-512, 2 pls. [Orth.]

3310.—Thomas, I. On the occurrence in England of the pear fruit saw-fly, *Hoplocampa brevis* Klug. Ann. appl. Biol., Cambridge 23 1936 pp. 633-639, 1 pl. 3 figs.

3311.—Thompson, G. B. Three new genera of Mallophaga (Subfam. Esthiopterinae). Ann. Mag. nat. Hist., London (10) 18 1936 pp. 40-43.

3312.—Thompson, G. B. Some additional records of an association between Hippoboscidae and Mallophaga together with a bibliography of the previous records. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 306-312.

3313.—Thompson, G. B. A check list of the Hippoboscidae and Nycteribiidae parasitic on British birds and mammals. Ent. mon. Mag., London 72 1936 pp. 91-94. [Dipt.]

3314.—Thompson, G. B. The parasites of British birds and mammals. X. Records of Mallophaga from birds. Ent. mon. Mag., London 72 1936 pp. 224-228.

3315.—Thompson, V. Effects of various ions on the rhythmic movements of embryos (Acrididae, Orthoptera). Anat. Rec., Philadelphia 67 1936 suppl. 1 p. 42.

3316.—Thompson, V. & Bodine, J. H. Oxygen consumption and rates of dehydration of grasshopper eggs (Orthoptera). *Physiol. Zool.*, Chicago 9 1936 pp. 455-470, 10 figs.

3317.—Thornley, A. A provisional list of Cornish insects. Part III.—Diptera (Acalyptratae). *Trans. Soc. Br. Ent.*, Southampton 3 1936 pp. 155-171.

3318.—Thorpe, W. H. On a new type of respiratory interrelation between an insect (Chalcid) parasite and its host (Coccidae). *Parasitology*, Cambridge 28 1936 pp. 517-540, 24 figs.

3319.—Turner, J. Mons Caranthanus. Eine lepidopterologische Skizze des Ulrichsberges. *Carinthia* ii, Klagenfurt 123-124 1934 pp. 78-82.

3320.—Turner, J. Einige bemerkenswerte Lepidopterenfunde aus Mazedonien. *Z. öst. EntVer.*, Vienna 21 1936 pp. 6-7, 13-15.

3321.—Tichý, O. Quelques exemples des apparitions périodiques des papillons dans la région de Boskovice. *Acta Soc. ent. Cech.*, Prague 33 1936 pp. 149-152. [Lep.]

3322.—Tiensuu, L. On the Ephemeroptera-fauna of Laatokan Karjala (Karelia Ladogensis). *Ann. Ent. Fenn.*, Helsingfors 1 1935 pp. 3-23, 11 figs.

3323.—Tiensuu, L. The *Erinna* species of Finland (Dipt., Erinnidae). *Ann. Ent. Fenn.*, Helsingfors 1 1935 pp. 106-107.

3324.—[Tiflov, W.] Тифлов, В. Review of the literature on the fleas of USSR. [In Russian.] *Rev. Microbiol. Epidem. Parasit.*, Saratov 15 1936 pp. 131-141.

3325.—[Tiflov, W. & Pavlov, E.] Тифлов, В. и Павлов, Е. Material for the study of the Transbaikalian flea fauna. [In Russian with English summary.] *Rev. Microbiol. epidem. Parasit.*, Saratov 15 1936 pp. 79-88, 4 figs. [Siphonapt.]

Tiggelovend, L. M. J. *see* Franssen & Tiggelovend.

3326.—Tillyard, R. J. Tracing the dawn of life further backwards. *Cawthron Lecture 1935*, Cawthron Inst., Nelson 1936 37 pp. 7 pls. 10 figs. 5 tables.

3327.—Tillyard, R. J. Are termites descended from true cockroaches? *Nature*, London 137 1936 p. 655, 2 figs.

3328.—Tillyard, R. J. A new upper triassic fossil insect bed in Queensland. *Nature*, London 138 1936 pp. 719-720, 1 fig.

3329.—Tillyard, R. J. The trout-food insects of Tasmania. Part II.—A monograph of the mayflies of Tasmania. *Pap. Proc. roy. Soc. Tasmania* 1935 1936 pp. 23-59, 1 pl. 33 figs. [Ephemeropt.]

3330.—Timoféeff-Ressovsky, N. W. Auslösung von Vitalitätsmutationen durch Röntgenbestrahlung bei *Drosophila melanogaster*. *Nachr. Ges. Wiss. Göttingen*, Berlin *Biol. (N.F.)* 1 1935 pp. 163-180, 4 figs. [Dipt.]

3331.—Timoféeff-Ressovsky, N. W. Qualitativer Vergleich der Mutabilität von *Drosophila funebris* und *Drosophila melanogaster*. *Z. indukt. Abstamm.- u. VererbLehre*, Leipzig 71 1936 pp. 276-280. [Dipt.]

3332.—Timoféeff-Ressovsky, N. W. & Delbrück, M. Strahlen genetische Versuche über sichtbare Mutationen und die Mutabilität einzelner Gene bei *Drosophila melanogaster*. *Z. indukt. Abstamm.- u. VererbLehre*, Leipzig 71 1936 pp. 322-334, 1 graph. [Dipt.]

Timoféeff-Ressovsky, N. W. *see* Buchmann & Timoféeff-Ressovsky.

3333.—Tinbergen, N. Eenvoudige proeven over de zintuigfuncties van larve en imago van de geelgerande watertor. *Levende Natuur*, Amsterdam 41 1936 pp. 225-236, 14 figs. [Col.]

3334.—Tindale, N. B. Revision of the Australian ghost moths (Lepidoptera Homoneura, family Hepialidae). Part III. *Rec. S. Aust. Mus.*, Adelaide 5 1935 pp. 275-332, 129 figs.

3335.—Ting, P. C. The mouth parts of the Coleopterous group Rhynchophora. *Microentomology*, Stanford Univ. 1 1936 pp. 93-114, 8 pls.

3336.—Tinkham, E. R. *Spathosternum sinense* Uvarov considered to be a race of *S. prasiniferum* (Walker) (Orth.: Acrididae). *Lingnan Sci. J.*, Canton 15 1936 pp. 47-54, 1 pl.

3337.—Tinkham, E. R. Notes on a small collection of Orthoptera from Hupeh and Kiangsi with a key to *Mongolotettix* Rehn. Lingnan Sci. J., Canton 15 1936 pp. 201-218, 1 pl.

3338.—Tinkham, E. R. Four new species of Orthoptera from Loh Fau Shan, Kwangtung, South China. Lingnan Sci. J., Canton 15 1936 pp. 401-413, 649, 2 pls.

3339.—Tinkham, E. R. A new species of *Macromia* from Canton (Odonata: Anisoptera: Libellulidae). Lingnan Sci. J., Canton 15 1936 pp. 457-459.

3340.—Tinkham, E. R. Diurnal Lepidoptera from Loh Fau Shan, Lung T'au Shan and Yao Shan, Kwangtung, with a description of a new subspecies. Lingnan Sci. J., Canton 15 1936 pp. 557-568, 1 pl.

3341.—Tinkham, E. R. A new species of *Eugavalidium* from Formosa (Orth.: Acrid.: Acridinae). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 207-210.

3342.—Tinkham, E. R. A new genus and three new species of the group Podismæ from Formosa with key and faunistic notes (Orth.: Acrididae). Trans. nat. Hist. Soc. Formosa 26 1936 pp. 389-406, 2 pls.

3343.—[Tinyakov, G. G.] ТИНЯКОВ, Г. Г. The inert regions and general morphology of the chromosomes in the salivary gland cells of *Drosophila*. [In Russian with English summary.] Biol. J., Moscow 5 1936 pp. 753-802, 9 pls. [Dipt.]

3344.—Tirelli, M. Osservazioni sul ritmo e sul meccanismo delle inversioni circolatorie durante la metamorfosi di *Saturnia pavonia major* L. Arch. zool. (ital.), Torino 22 1936 pp. 279-307, 9 figs. [Lep.]

3345.—Tischler, W. Ein Beitrag zum Formensehen der Insekten. Zool. Jb., Jena Allg. Zool. 57 1936 pp. 157-202, 30 figs.

Tishchenko, O. D. see Yatzenko and Tishchenko.

Tissot, A. N. see Heyward and Tissot.

3346.—Tjeder, B. Beiträge zur Kenntnis schwedischer Diptera Nematocera 2-3. Ent. Tidskr., Stockholm 57 1935 pp. 132-135, 3 figs.

3347.—Tjeder, B. Contributions to the knowledge of *Forcipomyia eques* Joh. (Diptera, Ceratopogonidae). Notul. ent., Helsingfors 16 1936 pp. 85-88, 1 pl.

3348.—Tjeder, B. Studies on *Psectra diptera* Burm. (Neuroptera, Hemerobiidae). Notul. ent., Helsingfors 16 1936 pp. 97-101, 17 figs.

3349.—Tjeder, B. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 51. Mecoptera. Ark. Zool., Stockholm 27A 1936 no. 33, 14 pp. 7 pls.

3350.—Tokunaga, M. Three new crane-flies from Japan. Annot. zool. jap., Tokyo 15 1935 pp. 194-198, 1 pl. 6 figs. [Dipt.]

3351.—Tokunaga, M. Three marine crane-flies from Japan. Annot. zool. jap., Tokyo 15 1936 pp. 460-468, 18 figs. [Dipt.]

3352.—Tokunaga, M. The central nervous, tracheal and digestive systems of a Nymphomyid fly. Philipp. J. Sci., Manila 59 1936 pp. 189-216, 1 pl. 5 figs. [Dipt.]

3353.—Tokunaga, M. Chironomidae from Japan (Diptera), VI-VIII. Philipp. J. Sci., Manila 1936 59 pp. 525-552, 4 pls. 4 figs.; 60 pp. 71-85, 4 pls., pp. 303-321, 2 pls. 1 fig.

3354.—Tokunaga, M. Japanese *Cricotopus* and *Corynoneura* species (Chironomidae, Diptera). Tenthredo, Kyoto 1 1936 pp. 9-32, 3 pls. 2 figs.

3355.—Tokunaga, M. & Esaki, T. A new biting midge from Palau Islands, with its biological notes. Mushi, Fukuoka 9 1936 pp. 55-58, 1 pl. [Dipt.]

3356.—Tokunaga, M. & Kuroda, M. Unrecorded Chironomid flies from Japan (Diptera), with a description of a new species. Trans. Kansai ent. Soc., Osaka no. 6 1935 pp. 1-8, 1 pl. 15 figs.

3357.—Toleda Piza, jr., S. de. Um novo Phasmida do Brasil (Orth.). Rev. Ent., Rio de Janeiro 6 1936 pp. 98-100, 1 fig.

3358.—Toledo Piza, S. de. Uma nova especie de Pieridae (Lep. Rhopalocera) pertencente a um genero ainda não assignalado no Brasil. Rev. Ent., Rio de Janeiro 6 1936 pp. 117-120, 2 figs.

- 3359.**—Toledo Piza, jr., S. de. Os Phasmidas do Museu Paulista. I, Phasmidae, Baccillinae. Rev. Ent. Rio de Janeiro **6** 1936 pp. 280–292 1 pl. 1 fig.
- 3360.**—Toledo Piza, jr., S. de. & Pinto da Fonseca, J. *Heterospilus coffeicola* Schmied. parasita da broca do café *Stephanoderes hampei* (Ferr.). Arch. Inst. Biol. São Paulo **6** 1935 pp. 179–199, 1 pl. 12 figs. [Hem.]
- 3361.**—Toll, S. Noch über die heimischen Arten der Gattung *Neptacula* Zell. [In Polish with German summary.] Polsk. Pismo ent., Lwow **13** (1934) 1936 pp. 61–84, 1 pl. [Lep.]
- 3362.**—Tomiura, Makato & Tomiura, Megumu. A list of Coleoptera from Kwantung Province. Parts 3–4. [In Japanese.] Ent. World, Tokyo **4** 1936 pp. 153–157, 862–867.
- 3363.**—Tomlin, J. R. le B. Additions to the Coleoptera of Glamorgan. Trans. Cardiff Nat. Soc. **66** (1933) 1935 pp. 87–102.
- 3364.**—Tonner, F. Mechanik und Koordination der Atem- und Schwimmbewegung bei Libellenlarven. Z. wiss. Zool., Leipzig **147** 1936 pp. 433–454, 20 figs. [Odon.]
- 3365.**—Tonner, F. Das Hautnervensystem der Arthropoden. Zool. Anz., Leipzig **113** 1936 pp. 125–136, 5 figs.
- 3366.**—Torvik, M. M. Chromosomes of *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg **7** 1933 pp. 119–120, 7 figs. [Hym.]
- Toumanoff, C. see Roubaud, Treillard & Toumanoff.
- Townes, jr., H. K. see Shaw & Townes.
- 3367.**—Townsend, L. H. The mature larva and puparium of *Brachycoma sarcophagina* (Townsend) (Diptera: Metopiidae). Proc. ent. Soc. Washington **38** 1936 pp. 92–98, 1 pl.
- 3368.**—Townsend, C. H. T. Manual of Myiology. São Paulo, C. Townsend & Filhos 1936 Part 2 pp. 291–296; Part 3 294 pp.
- 3369.**—Toxopeus, L. J. Ueber seltene malayische Schmetterlinge. Ent. Med. Ned.-Ind., Buitenzorg **2** 1936 pp. 46–48, 53–58, 1 fig. [Lep.]
- 3370.**—Trager, W. Cell size and growth in mosquito larvae. Anat. Rec., Philadelphia **67** 1936 suppl. 1 p. 72. [Dipt.]
- 3371.**—Trajna, S. L'eredità nell'ape. Nota I. Studio sulle operaie di un apiario di Ape nera di Sicilia. Bull. Ist. zool. Univ. Palermo **2** 1935 pp. 177–181. [Hym.]
- 3372.**—Trappen, A. von der. Die Fauna von Württemberg. Die Käfer. Jh. Ver. vaterl. Naturk. Württemb., Stuttgart **90** 1934 pp. 134–168; **91** 1935 pp. 128–145. [Col.]
- Traver, J. R. see Needham, Traver & Hsu.
- Trehan, K. N. see Husain, Trehan & Verma.
- 3373.**—Treillard, M. Tableau synoptique pour la détermination rapide des Anophèles d'Asie (Régions orientale et extrême-orientale). I. Adultes. Bull. Soc. Path. exot., Paris **29** 1936 pp. 148–150, 279–282, 1 fig. [Dipt.]
- Treillard, M. see Roubaud & Treillard; Roubaud, Treillard & Toumanoff.
- 3374.**—Trella, T. Verzeichnis der Käfer der Umgebung von Premysl. [In Polish with German summary.] Polsk. Pismo ent., Lwow **13** (1934) 1936 pp. 85–97, 4 figs. [Col.]
- 3375.**—[Trofimov, I. E. & Postnikova, E. D.] Трофимов, И. Е. и Постникова, Е. Д. The effect of the genotype on the reduction of the X-chromosomes in *Drosophila*. [In Russian with English summary.] J. Biol., Moscow **4** 1935 pp. 727–730. [Dipt.]
- 3376.**—[Trofimov, I. E. & Postnikova, E. D.] Трофимов, И. Е. и Постникова, Е. Д. The interaction of non-homologous chromosomes at meiosis in *Drosophila*. [In Russian with English summary.] J. Biol., Moscow **4** 1935 pp. 731–734. [Dipt.]
- 3377.**—Troniček, E. Quelques observations sur *Coenonympha iphis* S. V.—Lep. Acta Soc. ent. Čsl., Prague **33** 1936 pp. 58–63.
- 3378.**—Tseng, S. & Tao, Chia-Chu. A list of the Aphididae of China with descriptions of four new species. Ent. & Phytopath., Hangchow **4** 1936 pp. 120–176, 3 figs.
- 3379.**—Tsuda, M. Untersuchungen über die japanischen Wasserinsekten. I–III. Annot. zool. jap., Tokyo **15** 1936 pp. 394–399, 1 pl., pp. 400–409, 2 pls., pp. 525–537, 2 pls. [Trichopt. Lep.]

3380.—Tsuda, M. Einige Trichopterenlarven aus der Umgebung von Akan-See, Hokkaido. Kontyû, Tokyo 10 1936 pp. 99–102, 2 figs.

Tsui, Y.-L. *see* Li & Tsui.

3381.—Tsuneto, M. A study of the life-history of two species of Gyrinidae. [In Japanese.] Kontyû, Tokyo 10 1936 pp. 302–312, 11 figs. [Col.]

3382.—[Tuleschkov, K.] Тулешковъ, К. Einige für die Fauna Bulgariens neue Schmetterlingsarten. [In Bulgarian with German summary.] Mitt. bulg. ent. Ges. Sofia 9 1936 pp. 205–210. [Lep.]

Tuleschkow, K. *see* Buresch & Tuleschkow.

Tullgren, A. *see* Nordström, Wahlgren Tullgren & Ljungdahl.

3383.—Tulloch, G. S. The metasternal glands of the ant, *Myrmica rubra*, with special reference to the golgi bodies and the intracellular canaliculi. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 81–84, 2 figs.

3384.—Tuomikoski, R. Ein vermutheter Fall von geographischer Parthenogenesis bei der Gattung *Tachydromia* (Dipt., Empididae). Ann. ent. fenn., Helsingfors 1 1935 pp. 38–43.

3385.—Tuomikoski, R. Bemerkungen über die Clusiiden (Dipt.) Finnlands. Ann. ent. fenn., Helsingfors 2 1936 pp. 182–186, 2 figs.

3386.—Tuomikoski, R. Mittheilungen über die Empididen (Dipt.) Finnlands. I, II. Ann. ent. fenn., Helsingfors 1 1935 pp. 95–101, 11 figs.; 2 1936 pp. 74–85, 1 fig.; 187–190.

3387.—Turati, E. & Krüger, G. Contributi alla fauna cirenaica. Novità di Lepidotterologia. Mem. Soc. ent. ital., Genoa 15 1936 pp. 55–77, 1 pl.

3388.—[Turdakov, F. A.] Турдаков, Ф. А. The pre-embryonic plasmatic selection in the silkworm. [In Russian with English summary.] Zool. J., Moscow 15 1936 pp. 437–451, 3 graphs. [Lep.]

3389.—Turner, A. J. Revision of Australian Lepidoptera. Oecophoridae. V. Proc. Linn. Soc. N.S. Wales, Sydney 61 1936 pp. 298–317.

3390.—Turner, A. J. New Australian Lepidoptera. Proc. roy. Soc. Qd., Brisbane 47 1936 pp. 25–50.

3391.—Turner, H. J. The British Noctuae and their varieties (contd.). Ent. Rec., London 48 1936 sep. pp. 25–72.

Turner, J. N. *see* Lloyd & Turner.

3392.—Turner, R. E. A new Masarid wasp from Australia. Ann. Mag. nat. Hist., London (10) 18 1936 p. 352. [Hym.]

3393.—Turner, R. E. Notes on fossorial Hymenoptera.—XLV. On new Sphegid wasps from Australia. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 533–545, 2 figs.

3394.—Tutewohl, —. Was fliegt in 80 m Höhe in Grossberlin an die elektrischen Lichtquellen? Ent. Z., Frankfurt a. M. 50 1936 pp. 201–217, 1 fig.

3395.—Twinn, C. R. The blackflies of eastern Canada (Simuliidae, Diptera). Parts I, II. Canad. J. Res., Ottawa 14 1936 pp. 97–130, 131–150, 15 figs.

3396.—Tzonis, K. Gleichstromnarkose bei Insekten. Anz. Akad. Wiss. Wien 72 1935 pp. 174–176.

3397.—Tzonis, K. Beitrag zur Kenntnis des Herzens der *Corethra plumicornis*-Larve Fabr. (*Chaoborus crystallinus* Geer). Zool. Anz., Leipzig 116 1936 pp. 81–90, 10 figs. [Dipt.]

3398.—Uchida, T. Eine neue Art von Scoliidae aus Kiusu. Insecta matsum., Sapporo 10 1936 pp. 85–86, 1 fig. [Hym.]

3399.—Uchida, T. Drei neue Gattungen sowie acht neue und fuenf unbeschriebene Arten der Ichneumoniden aus Japan. Insecta matsum., Sapporo 10 1936 pp. 111–122, 6 figs. [Hym.]

3400.—Uchida, T. Erster Nachtrag zur Ichneumonidenfauna der Kurilen. Insecta matsum., Sapporo 1936 10 pp. 135–146, 2 figs.; 11 pp. 39–55. [Hym.]

3401.—Uchida, T. Zur Ichneumonidenfauna von Tosa (II). Subfam. Cryptinae. Insecta matsum., Sapporo 11 1936 pp. 1–20, 4 figs.

3402.—Uhmman, E. Amerikanische Hispinen aus dem zoologischen Museum der Universität Berlin. V. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 613–629, 6 figs. [Col.]

3403.—Uhmman, E. Hispinen von der Insel Ukerewe im Viktoria-See (Ostafrika) (Coleoptera: Chrysomelidae). Arb. morph. tax. Ent. Berlin 3 1936 pp. 123–125, 2 figs.

3404.—Uhmman, E. Südamerikanische Hispinen. III. Die Gattung *Cephalolia* Chev. (Col. Chrys.). Rev. Ent., Rio de Janeiro 6 1936 pp. 109–117, 6 figs.

3405.—Uhmman, E. Schlüssel der mir bekannten *Cephalolia*-Arten (Col. Chrys.). Rev. Ent., Rio de Janeiro 6 1936 pp. 481–485.

3406.—Uhmman, E. Die Hispinen du "Musée du Congo Belge." 4. Teil. Rev. Zool. Bot. Afr., Brussels 28 1936 pp. 407–415, 1 fig. [Col.]

3407.—Uhmman, E. Hispinen aus dem Kongogebiet. Rev. Zool. Bot. Afr., Brussels 28 1936 pp. 432–452. [Col.]

3408.—Ulyett, G. C. The physical ecology of *Microplectron fuscipennis*, Zett. (Hym. Chalc.). Bull. ent. Res., London 27 1936 pp. 195–217, 13 figs.

3409.—Ulyett, G. C. Host selection by *Microplectron fuscipennis*, Zett. (Chalcididae, Hymenoptera). Proc. roy. Soc., London (B) 120 1936 pp. 253–291, 5 figs.

3410.—Ulmer, G. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 54. Ephemeroptera. Ark. Zool., Stockholm 27A 1936 no. 36, 6 pp. 3 figs.

3411.—Ulmer, G. Neue chinesische Ephemeropteren, nebst Uebersicht über die bisher aus China bekannten Arten. Peking nat. Hist. Bull., Peiping 10 1936 pp. 201–215, 10 figs.

Ulpits, R. see Stempel, Romberg & Ulpits.

3412.—Ulrich, H. Ueber die Reaktionsnorm der Fortpflanzungsweise von paedogenetischen Cecidomyidenlarven. Verh. dtsh. zool. Ges., Leipzig 38 1936 pp. 163–168, 1 graph. [Dipt.]

3413.—Ulrich, H. Experimentelle Untersuchungen über den Generationswechsel der heterogenen Cecidomyide *Oligarces paradoxus*. Z. indukt. Abstamm.- u. Vererb. Lehre, Leipzig 71 1936 pp. 1–60, 7 figs. [Dipt.]

3414.—Umeya, Y. Inheritance of abnormal genitalia of the male moth in *Bombyx mori* L. J. Coll. Agric. Tokyo imp. Univ. 14 1936 pp. 11–30, 1 pl. [Lep.]

3415.—Upholt, W. M. A new species of mayfly from California (Ephemera: Baetidae). Pan-Pacific Ent., San Francisco 12 1936 pp. 120–122, 1 fig.

3416.—Urbahn, E. Inzucht und Metallsalzversuche mit *Phibalapteryx polygrammata* Bkh. (Lep. Geom.). Ent. Z., Frankfurt a. M. 50 1936 pp. 305–306.

3417.—Urbahn, E. Wie überwintert *Phibalapteryx polygrammata* Bkh. (Lep. Geom.)? Iris, Dresden 49 1936 pp. 186–190.

3418.—Urbanowski, J. Les Libellules (Odonata) de Ludwikowo. Bull. Soc. Amis Sci. Poznań (B) 6 (1932–33) 1934 pp. 27–31.

3419.—Ureta, E. Entomologia del territorio de Aysen. Bol. Mus. nac., Santiago de Chile 14 1935 pp. 83–96.

3420.—Ureta, E. El genero *Plusia*, Ochs. en Chile. Rev. chil. Hist. nat., Santiago 39 (1935) 1936 pp. 291–297, 1 fig.

3421.—Usinger, R. L. Studies in the American Aradidae with descriptions of new species. Ann. ent. Soc. Amer., Columbus 29 1936 pp. 490–516, 2 pls. [Hem.]

3422.—Usinger, R. L. New distributional records of Hawaiian Heteroptera. Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 209–210.

3423.—Usinger, R. L. The genus *Geocoris* in the Hawaiian Islands (Lygaeidae, Hemiptera). Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 212–215.

Usinger, R. L. see Linsley & Usinger.

3424.—Uvarov, B. P. Notes on the genus *Oedipoda* Linné (Orthoptera, Acrididae). Ann. Mag. nat. Hist., London (10) 18 1936 pp. 130–132.

3425.—Uvarov, B. P. New Orthoptera from Cyprus. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 505–515, 5 figs.

3426.—Uvarov, B. P. A new Tettigoniid genus from St. Helena (Orthoptera). Ann. Mag. nat. Hist., London (10) 18 1936 pp. 560–562, 1 fig.

3427.—Uvarov, B. P. Studies in the Arabian Orthoptera.—I. Descriptions of new genera, species and sub-species. J. Linn. Soc. London, Zool., 39 1936 pp. 531–554, 2 pls. 5 figs.

3428.—Uvarov, B. P. Some Orthoptera from Kashmir. Opusc. ent., Lund 1 1936 pp. 17–20, 1 fig.

3429.—Uye, T. Some jumping plant-lice of Kyushu. [In Japanese.] Ent. World, Tokyo 4 1936 pp. 8–14, 14 figs., pp. 849–852, 7 figs. [Hem.]

3430.—Uyttenboogaart, D. L. Report on Canarian Coleoptera collected by R. Frey and R. Storå in 1931 for the Museum Zoologicum Universitatis Helsingfors. (Contributions to the knowledge of the fauna of the Canary-Islands. XVI.) Comment. biol., Helsingfors 6 1935 no. 2 17 pp. 5 figs.

3431.—Uyttenboogaart, D. L. Remarks concerning Canarian and Madeiran Coleoptera in the collection of the Museo Pietro Rossi. Pubbl. Mus. ent. Pietro Rossi, Udine 1 1936 pp. 255–258.

Vachkovitchuté, A. see Dantchakoff & Vachkovitchuté.

3432.—Vadon, M. Note sur deux larves du genre *Pogonostoma* Klug. Bull. Acad. malgache, Tananarive (N.S.) 18 (1935) 1936 pp. 149–150. [Col.]

3433.—Valentine, J. M. Raciation in *Steniridia andrewsi* Harris, a supplement to speciation in *Steniridia*. J. Elisha Mitchell sci. Soc., Chapel Hill 52 1936 pp. 223–234, 1 pl. [Col.]

3434.—Valle, K. J. Macrolepidoptera. I. Paivaperhoset, Diurna. Animalia fennica, Helsinki 2 1935 174 pp. 11 pls. 70 figs.

3435.—Valle, K. J. Die Odonaten der Kanarischen Inseln. Comment. biol., Helsingfors 6 1935 no. 5, 7 pp.

3436.—Valle, O. Undersökningar över klöverarternas polination och fröbildning. Beretn. N.J.F.'s Kongr. København Fortryk. Sekt. II, no. 3 1935 9 pp. 3 figs.

3437.—Van den Bruel, W. E. Notes complémentaires sur *Napomyza lateralis* Fall. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 441–455, 3 figs. [Dipt.]

3438.—Vandervael, F. Des modifications provoquées dans l'aspect histologique de la fibre musculaire striée par quelques liquides d'imbibition. Arch. Biol., Paris 47 1936 pp. 71–85. [Insects pp. 73–78.]

3439.—Van der Vecht, J. Some notes on the life-history of *Apoderus clavatus* Pasc. (Col., Curculionidae). Ent. Meded. Ned.-Ind., Buitenzorg 2 1936 pp. 9–12, 2 figs.

3440.—Van der Vecht, J. Some further notes on *Provespa* Ashm. (Hym. Vespidae). J. F.M.S. Mus., Kuala Lumpur 13 1936 pp. 159–166, 3 figs.

3440A.—Van Duzee, E. P. A report on some Heteroptera from the Hawaiian Islands, with descriptions of new species. Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 219–229.

3441.—Van Dyke, E. C. A review of the subgenus *Nomaretus* Leconte of the genus *Scaphinotus* Dejean (Coleoptera-Carabidae). Bull. Brooklyn ent. Soc. 31 1936 pp. 37–43, 1 pl.

3442.—Van Dyke, E. C. New species of North American weevils in the family Curculionidae, subfamily Brachyrhininae, IV. Pan-Pacific Ent., San Francisco 12 1936 pp. 19–32, 73–85, 191.

Van Dyke, E. C. see Doane, Van Dyke, Chamberlin & Burke.

Van der Wiel, P. see Reclaire & Van der Wiel.

3443.—Van Oye, P. Observations sur la biologie des larves de *Simulium* (*Melusina*) Diptère. Mém. Mus. Hist. nat. Belg., Brussels (2) 3 1936 pp. 445–455, 11 figs.

3444.—Van Someren, V. G. L. Butterflies of Kenya and Uganda. Supplement to Volume I. J. E. Afr. Ug. nat. Hist. Soc., Nairobi 12 (1935) 1936 pp. 147–199, 32 pls.

3445.—Van Son, G. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930. Fam. Scarabaeidae subf. Cetoniinae (Coleoptera). Ann. Transv. Mus., Pretoria 17 1936 pp. 117–120, 1 fig.

3446.—Van Son, G. Scientific results of the Vernay-Lang Kalahari expedition, March to September, 1930.

Rhopalocera and Hesperioidea. Ann. Transv. Mus., Pretoria 17 1936 pp. 121-140, 1 pl. 2 figs.

Van Thiel, P. H. *see* Diemer & Van Thiel.

3447.—Van Zwaluwenburg, R. H. New records and new species of Elaterid beetles from Melanesia.—II. Ann. Mag. nat. Hist., London (10) 17 1936 pp. 368-376, 1 fig. [Col.]

3448.—Van Zwaluwenburg, R. H. The Elaterid beetles of the Philippine Islands. Philipp. J. Sci., Manila 59 1936 pp. 393-432. [Col.]

3450.—Van Zwaluwenburg, R. H. A new species of *Pyrophorus* (Coleoptera, fam. Elateridae) from Guatemala recently introduced into Hawaii. Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 231-234, 1 fig.

3451.—Vappula, N. A. Finnish entomological literature published in 1934 including economic entomology and control of insect pests. Suomen Hyönteistieteellinen Aikakauskirja (Ann. ent. fenn.), Helsingfors 1 1935 pp. 70-80, 107-112.

3452.—Varin, G. Variations de formes dans une race de *Satyrus briseis* L. Lambillionea, Brussels 36 1936 pp. 96-98. [Lep.]

3453.—Varricchio, P. Note sulla morfologia e lo sviluppo post-embrionale della *Dolichopoda palpata* Sulzer. Ann. Mus. zool. Univ. Napoli (N.S.) 6 1935 no. 19, 20 pp., 6 figs. [Dipt.]

3454.—[Varshalovich, A.] Варшалович, А. Study on some seed-eating Chalcididae of the genus *Systole*. [In Russian with English summary.] Plant Prot., Leningrad 10 1936 pp. 88-94, 6 figs. [Hym.]

3455.—[Vasil'ev, I.] Васильев, И. Pear-bugs as pest of fruit groves. [In Russian.] Plant Prot., Leningrad 7 1935 pp. 151-152. [Hem.]

3455A.—[Vasil'eva, N. A. & Mal'zeva, A. S.] Васильева, Н. А. и Мальцева, А. О. Verzeichniss der Blattläuse (Aphidodea) der Umgegenden von Woronesh und der Steppen Chrenowaja und Kamennaja. [In Russian with German summary.] Acta Univ. Voronegiensis 8 1935 pp. 67-81. [Hem.]

3456.—Vassal, R. Quelques formes et aberrations de Lépidoptères. Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 38-40, 8 figs.

3457.—Vassal, R. Quelques procédés pour la préparation des Microlépidoptères. Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 58-62, 2 figs.

3458.—Vassal, R. Procédé pour la détermination et la classification des Microlépidoptères. Bull. Soc. linn. Lyon (n.s.) 4 1935 pp. 156-158, 1 fig.

3460.—Vayssière, P. Remarques sur la morphologie et la biogéographie des Stictococcinae (Hemipt. Coccidae). Livre jubilé Bouvier, Paris 1936 pp. 349-356, 1 pl., 20 figs.

3461.—Vayssière, P. Trois nouveaux *Stictococcus* (Hem. Coccidae). Bull. Soc. ent. Fr., Paris 40 (1935) 1936 pp. 282-287, 2 figs.

3462.—Vayssière, A. Mission scientifique de l'Omo. Ephemeroptera. II. Formes larvaires. Mém. Mus. Hist. nat. Paris 4 1936 pp. 129-132.

3463.—Vazquez, L. Contribución al conocimiento de los lepidópteros mexicanos. III. An. Inst. Biol. Mexico 7 1936 pp. 65-75, 7 figs.

3464.—Veillet, A. Influence de l'acide acétique sur la ponte de la Drosophile (*Drosophila melanogaster* Meig.). Bull. Soc. zool. Fr., Paris 61 1936 pp. 39-48, 3 figs. [Dipt.]

Velando *see* Chaves Velando.

3465.—Veneroso, A. Studio sulla distribuzione del pigmento della sierosa nelle uova di *Bombyx mori*, L. durante l'estivazione, l'ibernazione e l'incubazione. Boll. Staz. sper. Gelsic. Bachic. Ascoli Piceno 15 1936 pp. 30-31. [Lep.]

3466.—Veneroso, A. Contributo allo studio dell'attività lipolitica del *Bombyx mori* L. Boll. Staz. sper. Gelsic. Bachic. Ascoli Piceno 15 1936 pp. 68-74. [Lep.]

3467.—Venet, H. De l'atrophie des élytres chez les *Carabus*. Livre jubilé Bouvier, Paris 1936 pp. 357-360, 2 figs.

3468.—Venkatraman, T. V. The biology of the shore-fly *Sarcophila cinerea* Fabricius (Diptera: Metopidae). Rec. Indian Mus., Calcutta 38 1936 pp. 367-372, 1 pl.

3469.—Venturi, F. Contributo alla conoscenza dell' Entomofauna del frumento. II (*Dizygomyza lateralis* Macquart). Boll. Ist. ent. Univ. Bologna 8 1936 pp. 1-26, 13 figs.

3470.—Venturi, F. Contributi alla conoscenza dell' entomofauna delle Graminacee coltivate e spontanee. III, IV. Boll. Ist. Ent. Bologna 1936 8 pp. 141-149; 9 pp. 1-22, 13 figs.

3471.—Vergne, M. Hyménoptères d'Auvergne (Vespiiformes prédateurs). Rev. Sci. nat. Auvergne, Clermont-Ferrand 1 1935 pp. 116-121.

3472.—Verity, R. The butterfly races of Macedonia. Ent. Rec., London 48 1936 sep. pp. 1-8.

3473.—Verity, R. The Lowland races of butterflies of the Upper Rhone valley (conclusion). Ent. Rec., London 48 1936 sep. pp. 77-89.

3474.—Verity, R. The male genital armature of *Aglais urticae* L., in connection with its variations and its phylogeny. Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 416-482. [Lep.]

3475.—Verlaine, L. Comparaison des architectures des abeilles et des guêpes. C.R. Congr. Sci. nat. Bruxelles 1930 1930 pp. 786-789. [Hym.]

3476.—Verlaine, L. L'autotomie psychique chez les Phasmides (*Dixippus morosus*). C.R. Congr. Sci. nat. Bruxelles 1930 1930 pp. 808-813. [Orth.]

3477.—Verlaine, L. L'instinct et l'intelligence chez les Hyménoptères. XXVII, XXVIII. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 34-44.

Verma, P. M. see Husain, Trehan & Verma.

3478.—Verrier, M. L. Observations préliminaires sur les cécidies de régions montagneuses. Livre jubil. Bouvier, Paris 1936 pp. 361-365.

3479.—Vicars-Harris, N. H. *Glossina swynnertoni*, Austen, in relation to various vegetation types. Bull. ent. Res., London 27 1936 pp. 533-557, 18 figs. [Dipt.]

3480.—Vichet, G. de. Emploi de l'enfumoir à abeilles pour la chasse aux insectes en général et aux Orthoptères en particulier. Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 8-11.

3481.—Vidal, J. P. Quelques Hémiptères. Hétéroptères nouveaux du Maroc. Bull. Soc. Hist. nat. Afr. N., Algiers 27 1936 pp. 197-199, 1 pl.

3482.—Villeneuve de Janti, J. Schwedisch-chinesische wissenschaftliche Expedition nach den nordwestlichen Provinzen Chinas. 52. Diptera. 16. Muscidae. Ark. Zool., Stockholm 27A 1936 no. 34, 13 pp. 1 fig.

3483.—Villeneuve de Janti, J. Myodaires supérieurs africains récoltés à Kampala (Uganda) par M. H. Hargreaves. Bull. Ann. Soc. ent. Belg., Brussels 76 1936 pp. 415-419, 1 fig. [Dipt.]

3484.—Villeneuve de Janti, J. Descriptions de Larvaevoridae africains (Dipt.). Bull. Mus. Hist. nat. Belg., Brussels 12 1936 no. 4 10 pp.

3485.—Villeneuve de Janti, J. Notes sur quelques Larvivoridae africains. Bull. Mus. Hist. nat. Belg., Brussels 12 1936 no. 12 5 pp. [Dipt.]

3486.—Villeneuve de Janti, J. Description de deux Myodaires supérieurs (Diptera: Trixiini ou Dexiinae). Bull. Soc. ent. Egypte, Cairo 20 1936 pp. 329-331.

3487.—Villeneuve de Janti, J. Myodaires supérieurs peu connus ou inédits de la Palestine et de l'Anatolie. Kownowia, Vienna 15 1936 pp. 155-158. [Dipt.]

3488.—Villeneuve de Janti, J. & Mesnil, L. Au sujet du genre *Salia* R. D. (Dipt. Tachinidae). Bull. Soc. ent. Fr., Paris 41 1936 pp. 270-276.

3489.—Vimmer, A. Ceskoslovenské Cecidomyiidae, které ze zoocécidií Vychoval Dr. Baudys. Sborn. ent. odd. Nár. Mus. Praze 14 1936 pp. 167-178, 16 figs. [Dipt.]

3490.—Vincent, J. La variation homogène des *Catocala* (Lepidopt. Noctuidae). Livre jubil. Bouvier, Paris 1936 pp. 367-369, 1 pl.

Vincent, N. see Tate & Vincent.

3491.—Vinson, J. Sur un procédé peu connu pour la conservation des collections d'insectes dans les pays chauds. Bull. Soc. linn. Lyon (n.s.) 5 1936 pp. 124-125.

3492.—[Vlasov, Ya. P.] Власов, Я. П. Sur la biologie de *Holotrichius bergrothi* Reut. (Fam. Reduviidae, Hemiptera): [In Russian with French summary.] Parasites, transm. anim. venim., Rec. Trav. 25^e Anniv. sci. Pavlovsky 1909–34, Moscow 1935 pp. 282–284.

3493.—Voelschow, A. Erlebnisse beim Versand von lebenden Zuchtmaterial. Ent. Z., Frankfurt a. M. 50 1936 pp. 67–70.

3494.—Vogel, R. Beobachtungen über Zweiflügler (Diptera), insbesondere parasitische, in Oberhessen. Ber. oberhess. Ges. Giessen (N.F.) 16 (1933–35) 1935 pp. 49–57, 2 figs.

3495.—Vogel, R. Die blutrote Singzikade (*Tibicen haematodes* Scop.) in Württemberg und Deutschland. Jh. Ver. vaterl. Naturk. Württemb., Stuttgart 91 1935 pp. 146–154, 4 figs. [Hem.]

3496.—[Vojnovskaja-Kruger, T. G.] Войновская-Кригер, Т. Г. Neue Braconiden-Arten aus der USSR. Rev. Ent. U.R.S.S., Leningrad 25 1935 p. 304. [Hym.]

Voores, V. see Määr & Voore.

3497.—Voris, R. Biologic investigations on the Staphylinidae (Coleoptera). Trans. Acad. Sci. St. Louis 28 1934 pp. 233–261.

3498.—Voris, R. The rapid spread of an European Staphylinid in North America (Coleoptera, Staphylinidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 78–80.

Vos see De Vos.

3499.—Voss, E. Ueber die Tribus Scolopterini sowie einige verwandte Gattungen und Gruppen von Neu-Seeland (Coleoptera: Curculionidae). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 60–62, 110–121, 3 figs.

3500.—Voss, E. Nachtragliches zu "Die Cossoninen Afrikas und Madagascars des Deutschen Entomologischen Instituts der Kaiser Wilhelm-Gesellschaft." (Coleoptera: Curculionidae). Arb. morph. taxon. Ent. Berlin 3 1936 pp. 296–298.

3501.—Voss, E. Ueber einige bekannte und unbekannte Rüssler der paläarktischen Region (Col. Curc.). Koleopt. Rdsch., Vienna 22 1936 pp. 37–40.

3502.—Voss, E. Monographie der Rhynchitinen-Tribus Auletini. III. Teil. Stettin. ent. Ztg. 97 1936 pp. 279–289. [Col.]

3503.—Voss, E. Ueber unbeschriebene Curculioniden der paläarktischen Region (Col. Curc.). (61. Beitrag zur Kenntnis der Curculioniden.) Mitt. dtsh. ent. Ges., Berlin 7 1936 pp. 55–61, 2 figs.

3504.—Wade, J. S. The officers of our society for fifty years (1884–1934). Proc. ent. Soc. Washington 38 1936 pp. 99–145.

3505.—Wadley, F. M. Development temperature correlation in the green bug, *Toxoptera graminum*. J. agric. Res., Washington, D.C. 53 1936 pp. 259–266, 3 figs. [Hem.]

3506.—Wagner, F. Zwei neue Noctuiden aus Nordpersien. Z. öst. EntVer., Vienna 21 1936 pp. 73–75. [Lep.]

3507.—Wagner, H. Ein neuer *Rhinoncus* aus Mitteleuropa. Ent. Bl., Crefeld 32 1936 pp. 70–75.

3508.—Wagner, H. Vorstudien zu einer monographischen Bearbeitung der Ceuthorrhynchinen Mitteleuropas (Col. Curcul.). Ent. Bl., Crefeld 32 1936 pp. 161–170, 178–188.

3509.—Wagner, J. Flöhe, Aphaniptera (Siphonaptera, Suctoria). Tierwelt Mitteleur., Leipzig 6 1936 iii Teil, 2 Lief., xvii, 24 pp. 84 figs.

3510.—Wagner, J. A new flea, *Ctenocephalides paradoxuri*, sp. n., from Ceylon. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 66–67, 2 figs.

3511.—Wagner, J. The fleas of British Columbia. Canad. Ent., Orillia 68 1936 pp. 193–207, 1 pl.

3512.—Wagner, J. Aphanipterologische Notizen. Konowia, Vienna 15 1936 pp. 85–96, 12 figs.

3513.—Wagner, J. Ueber die Aphanipterenfauna der Maulwurfsnester. Konowia, Vienna 15 1936 pp. 97–101, 1 fig.

3514.—Wagner, J. Einige neue oder wenig bekannte Floharten. Z. Parasitenk., Berlin 8 1936 pp. 332–350, 22 figs. [Siphonapt.]

- 3515.**—Wagner, J. Neue nord-amerikanischer Floharten. Z. Parasitenk., Berlin **8** 1936 pp. 654–658, 8 figs. [Siphon.]
- 3516.**—Wagner, J. Ueber den Bau des Hinterdarms bei Flohlarven und seine Veränderungen während der Metamorphose beim Menschenfloh (*Pulex irritans* L.). Zool. Jb., Jena Anat. **61** 1936 pp. 343–390, 4 pls. 8 figs. [Siphon.]
- Wahlgren, E.** see Nordström, Wahlgren, Tullgren & Ljungdahl.
- Wainwright, C. J.** see Patton & Wainwright.
- 3517.**—Wakely, S. Notes on Lepidoptera collected during 1935. Entomologist, London **69** 1936 pp. 197–199.
- 3518.**—Wakely, S. Notes on the plume moths. Proc. S. London ent. nat. Hist. Soc. **1935-36** 1936 pp. 97–99. [Lep.]
- 3519.**—Walch, E. W. & Walch-Sorgdrager, B. G. Over de morphologische eigenschappen van verschillende *subpictus* eieren. [With English summary.] Geneesk. Tijdschr., Batavia **76** 1936 pp. 394–422, 4 pls. 11 graphs. [Dipt.]
- 3520.**—Wald, H. Cytologic studies on the abnormal development of the eggs of the claret mutant type of *Drosophila simulans*. Genetics, Menasha **21** 1936 pp. 264–281, 12 figs. [Dipt.]
- 3521.**—Walley, G. S. New North American Corixidae with notes (Hemiptera). Canad. Ent., Orillia **68** 1936 pp. 55–63, 2 pls.
- 3522.**—Walley, G. S. A report on some Braconidae from Baffin Island (Hymenoptera). Canad. Ent., Orillia **68** 1936 pp. 187–190.
- 3523.**—Walrecht, B. J. J. R. Eenkele merkwaardige nesten van bijen en wespen. Levende Natuur, Amsterdam **41** 1936 pp. 249–252, 2 figs. [Hym.]
- 3524.**—Walton, G. A. Observations on Pembrokeshire aquatic Hemiptera. Northw. Nat., Arbroath **10** 1935 pp. 327–332, 1 map.
- 3525.**—Walton, G. A. A new species of Corixidae, *Sigara pearcei* (Hemipt.) from Ireland; together with descriptions of its closely related species. Trans. Soc. Br. Ent., Southampton **3** 1936 pp. 33–47, 4 pls.
- 3526.**—Walton, G. A. Oviposition in the British species of *Notonecta* (Hemipt.). Trans. Soc. Br. Ent., Southampton **3** 1936 pp. 49–57, 1 pl.
- 3527.**—Wang, Chung-Nie. A tentative list of insects of Hunan Province, I, II. Ent. & Phytopath., Hangchow **4** 1936 pp. 382–389, 404–409.
- Wang, Fei-peng** see Chen, Loh & Wang.
- 3528.**—Wardle, R. A. General Entomology. Philadelphia, Blakiston's Son & Co. 1936 vii + 311 pp. 96 figs.
- 3529.**—Warnecke, C. Microclimat et distribution des papillons. Amat. Papillons, Paris **8** 1936 pp. 35–44, 51–55, 2 figs.
- 3530.**—Warnecke, G. Ueber die Zahl der Insektenarten in Deutschland. Arb. phys. angew. Ent. Berlin **3** 1936 pp. 249–250.
- 3531.**—Warnecke, G. Ausgestorbene und aussterbende Schmetterlinge. Ent. Rdsch., Stuttgart **53** 1936 pp. 97–101, 120–124, 132–134, 147–152, 166–168.
- 3532.**—Warnecke, G. Ueber die Konstanz der ökologischen Valenz einer Tierart als Voraussetzung für zoogeographische Untersuchungen. Eine literar-historische Studie. Ent. Rdsch., Stuttgart **53** 1936 pp. 203–206, 217–219, 230–232.
- 3533.**—Warnecke, G. Die Grossschmetterlinge der nordfriesischen Insel Sylt. Ent. Rdsch., Stuttgart 1936 **53** pp. 281–287, 309–312, 345–350, 364–371, 377–380, 432–435, 441–446, 475–477, 545–548; **54** pp. 9–11, 37–39, 66–67, 93–97, 115–116, 119–120, 140–143, 3 maps, 16 figs. [Lep.]
- 3534.**—Warnecke, G. *Chrysophanus* (*Heodes*) *dispar* Haw., ein gefährdeter Tagfalter. Ent. Z., Frankfurt a. M. **49** 1936 pp. 439–443, 453–456, 2 maps, 6 figs. [Lep.]
- 3535.**—Warnecke, G. *Larentia* (*Cidaria*) *didymata* n. f. *koehni* Warn. und andere aberrative Formen dieser Art von den Färöer (Lepid. Geom.). Ent. Z., Frankfurt a. M. **50** 1936 pp. 420–421.

3536.—Warnecke, G. *Acidalia (Ptychopoda) ochrata* Hb. (Lepid. Geom.) auf der ostfriesischen Insel Borkum. (Ein Beitrag zur Frage des Einflusses des Mikroklimas auf die geographische Verbreitung). Mitt. dtsh. ent. Ges., Berlin 6 1936 pp. 61–63.

3537.—Warnecke, G. *Acidalia emutaria* Hb. (Lep. Geom.) an den Küsten der Nordsee. Mitt. dtsh. ent. Ges., Berlin 7 1936 pp. 61–63, 1 map.

3538.—Warnecke, G. & Goltz, H. Frhr. v. d. Ueber *Coscinia striata* L. Ent. Z., Frankfurt a. M. 50 1936 pp. 2–6, 14–15, 10 figs. [Lep.]

3539.—Warren, B. C. S. Monograph of the genus *Erebia*. London, Br. Mus. (Nat. Hist.) 1936 vii + 407 pp. 104 pls. [Lep.]

3540.—Watari, M. On the northern limit of the distribution of some Japanese Lycaenidae. [In Japanese.] Zephyrus, Fukuoka 6 1936 pp. 191–194, 2 figs. [Lep.]

3541.—Waterhouse, G. A. Notes on the genus *Xeniconympha* Novickij (Lepid.). Proc. R. ent. Soc. London (B) 5 1936 p. 173.

3542.—Waterlot, G. Paléozoologie du bassin de la Sarre. Ann. Soc. géol. Nord, Lille 59 1934 pp. 201–213. [Insects pp. 205–208.] [Fossil.]

3543.—Wattison, J. T. Heteróceros de Portugal. Mem. Mus. zool. Univ., Coimbra (I) no. 87 1935 104 pp. [Lep.]

3544.—Watts, J. G. A study of the biology of the flower thrips, *Frankliniella tritici* (Fitch) with special reference to cotton. Bull. S. Carolina agric. Exp. Sta., Clemson no. 306 1936 46 pp. 10 figs. [Thysanopt.]

3545.—Weber, E. Durch Brutraub entstandene Mischkolonien bei *Myrmica*. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 652–657. [Hym.]

3546.—Weber, E. Allianzversuche mit Myrmicinen. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 684–691. [Hym.]

3547.—Weber, H. Copeognatha. In Schulze, Biol. Tiere Dtschl., Berlin Lief. 39 1936 Teil 27, 50 pp. 27 figs.

3548.—Weber, H. H. Der Stand der Wanzenforschung in Schleswig-Holstein. Ent. Z., Frankfurt a. M. 50 1936 pp. 56–58, 63–66, 82–86. [Hem.]

3549.—Weber, P. Ueber Mikrolepidopteren. Mitt. schweiz. ent. Ges., Berne 16 1936 pp. 666–672, 1 pl.

Webster, R. L. see Hanson & Webster.

3550.—Weed, I. G. Removal of corpora allata on egg production in the grasshopper, *Melanoplus differentialis*. Proc. Soc. exp. Biol. Med., New York 34 1936 pp. 883–885. [Orth.]

3551.—Weed, I. G. Experimental study of moulting in the grasshopper, *Melanoplus differentialis*. Proc. Soc. exp. Biol. Med., New York 34 1936 pp. 885–886. [Orth.]

3552.—Wehrli, E. Nouvelles espèces et races de Geometridae provenant des monts Elbours, du Caucase et de l'Asie mineure. Amat. Papill., Paris 8 1936 pp. 151–155.

3553.—Wehrli, E. Bemerkungen zu *Cidaria (Entephria) Hb.) veletaria* Wrl. und *flavocincta* v. *altivolans* Wrl. Ent. Rdsch., Stuttgart 53 1936 pp. 207–208. [Lep.]

3554.—Wehrli, E. Neue Gattungen, Subgenera, Arten und Rassen (Lep. Geom.). Ent. Rdsch., Stuttgart 1936 53 pp. 513–516, 562–568; 54 pp. 1–7, 126–130, 144–146, 30 figs.

3555.—Wehrli, E. Nouveaux genres, nouvelles espèces et races des Monts Elbours, de l'Iran, de Transcaucasie et d'Asie mineure (Lep. Géom.). Lambillionea, Brussels 36 1936 pp. 276–283.

3556.—Wehrli, E. Einige neue Arten und Rassen aus den Ausbeuten des Herrn Ernst Pfeiffer, München. Mitt. münchn. ent. Ges., Munich 26 1936 pp. 33–37, 1 pl. [Lep.]

3557.—Weidner, H. Die Beziehungen zwischen Stammesgeschichte und Eigenentwicklung der Schmetterlinge. Ent. Rdsch., Stuttgart 43 1936 pp. 581–594, 6 figs. [Lep.]

3558.—Weidner, H. Beiträge zu einer Monographie der Raupen mit Gifthaaren. Z. angew. Ent., Berlin 23 1936 pp. 432–484, 10 figs. [Lep.]

3559.—Weidner, H. Der Hausbock. Z. PflKrankh. Stuttgart 46 1936 pp. 305–326, 20 figs. [Col.]

3560.—Weiler, P. Fühleruntersuchungen an Ameisen, insbesondere an Dorylinen. Inaug.-Diss. Zool. Inst. Univ. Bonn 1936 29 pp. 6 figs. [Hym.]

3561. — Wein, K. Beiträge zur Geschichte der Cecidologie mit besonderen Ausblicken auf die Entwicklung in Thüringen. Marcellia, Naples 29 (1934-35) 1936 pp. 7-72.

3562. — Wenzel, G. Eine *Callimorpha dominula* L.-Massenzucht (Macrolep.). Ent. Z., Frankfurt a. M. 49 1936 pp. 561-564, 1 fig.

3563. — Wenzel, G. Flugvermögen und Flugweise der Falter. Ent. Z., Frankfurt a. M. 50 1936 pp. 165-169. [Lep.]

3564. — Wenzel, R. L. Short studies in the Histeridae (Coleop.). No. 1. Canad. Ent., Orillia 38 1936 pp. 266-272.

3565. — Werneck, F. L. *Trichodectes expansus* Duges 1902 (Mallophaga). Mem. Inst. Oswaldo Cruz, Rio de Janeiro 31 1936 pp. 161-168, 6 figs.

3566. — Werneck, F. L. Contribuição ao conhecimento dos Mallophagos encontrados nos mamíferos sul-americanos. Mem. Inst. Oswaldo Cruz, Rio de Janeiro 31 1936 pp. 391-589, 1 pl. 227 figs.

3567. — Werner, F. Insekten und Arachnoideen von den Aegäischen Inseln. S.B. Akad. Wiss. Wien 144 1935 Abt. i pp. 281-297.

3568. — Werner, F. Ergebnisse einer zoologischen Forschungsreise nach dem Dodekanes, unternommen von Kustos Dr. Otto Wettstein. I. Orthoptera aus dem Dodekanes. S.B. Akad. Wiss. Wien 145 1936 Abt. i pp. 9-16.

3569. — Werner, F. Zur Kenntnis der Orthopterenfauna von Cypern. Zool. Anz., Leipzig 114 1936 pp. 14-19.

3570. — Wesselinoff, G. Die Ameise *Ponera coarctata* Latr. in Bulgarien. Mitt. bulg. ent. Ges. Sofia 9 1936 pp. 131-134, 1 map. [Hym.]

3571. — Wesson, L. G. Contributions toward the biology of *Strumigenys pergandei*: A new food relationship among ants (Hymen.: Formicidae). Ent. News, Philadelphia 47 1936 pp. 171-174.

3572. — West, A. Tillaeg og Rettelser til Fortegnelse over de danske Coleoptera. III. Ent. Medd., Copenhagen 19 1936 pp. 452-464.

3573. — West, R. M. A list of some named varieties of Coleoptera occurring

in the Isle of Wight. Proc. I. of Wight nat. Hist. Soc., Newport 2 1936 pp. 476-482.

3574. — Weyer, F. Zur Kenntnis der Rassen von *Anopheles maculipennis* im Schwarzwaldgebiet. Jh. Ver. vaterl. Naturk. Württemb., Stuttgart 91 1935 pp. 157-163. [Dipt.]

3575. — Weyer, F. Kreuzungsversuche bei Steckmücken (*Culex pipiens* und *Culex fatigans*). Arb. phys. angew. Ent. Berlin 3 1936 pp. 202-208, 4 figs. [Dipt.]

3576. — Weyer, F. Regenerationsvorgänge am Mitteldarm der Insekten. Verh. dtsh. zool. Ges., Leipzig 38 1936 pp. 157-163, 1 fig.

3577. — Weyer, F. Einige Erfahrungen bei der Aufzucht von Steckmückenlarven. Zbl. Bakt., Jena (I. Orig.) 136 1936 pp. 111-116, 2 figs. [Dipt.]

3578. — Weyrauch, W. K. Der Internodial-Lauf als Ausdrucksbewegung. Biol. gen., Vienna 11 1935 no. 2 pp. 27-42, 9 figs.

3579. — Weyrauch, W. *Dolichovespula* und *Vespa*. Vergleichende Uebersicht über zwei wesentliche Lebensstypen bei sozialen Wespen. Mit Bezugnahme auf die Frage nach der Fortschrittlichkeit tierischer Organisation. (ii. Teil.) Biol. Zbl. Leipzig 56 1936 pp. 287-301. [Hym.]

3580. — Weyrauch, W. Wie entsteht ein Wespennest? ii. Teil. Experimentelle Analyse des Verhaltens von *Vespa germanica* F. und *Vespa vulgaris* L. beim Bau der Hülle ihres Nestes. Z. Morph. Oekol. Tiere, Berlin 1936 30 pp. 731-773, 51 figs.; 31 pp. 64-105, 52 figs. [Hym.]

3581. — Weyrauch, W. Das Verhalten sozialer Wespen bei Nestüberhitzung. Z. vergl. Physiol., Berlin 23 1936 pp. 51-63, 3 figs. [Hym.]

3582. — Weyrauch, W. Untersuchungen und Gedanken zur Orientierung von Arthropoden. 5. Teil: Ueber die Orientierung nach dunklen Flächen. Zool. Anz., Leipzig 113 1936 pp. 115-125, 4 figs.

3583. — Weyrauch, W. Untersuchungen und Gedanken zur Orientierung von Arthropoden. 7. Teil. Ueber starke und schwache Orientierungsreize. Rev. suisse Zool., Geneva 43 1936 pp. 455-465, 4 figs.

- 3584.—Wheeler, W. M. Contributions to the fauna of Rottneest Island Western Australia. No. IX.—The ants. J. roy. Soc. W. Aust., Perth 20 (1933–34) 1934 pp. 137–163.
- 3585.—Wheeler, W. M. The Australian ant genus *Froggattella*. Amer. Mus. Nov., New York no. 842 1936 11 pp. [Hym.]
- 3586.—Wheeler, W. M. Binary anterior ocelli in ants. Biol. Bull., Woods Hole, Lancaster, Pa. 70 1936 pp. 185–192, 3 figs. [Hym.]
- 3587.—Wheeler, W. M. Ants from Hispaniola and Mona Island. Bull. Mus. comp. Zool. Harv., Cambridge, Mass. 80 1936 pp. 193–211. [Hym.]
- 3588.—Wheeler, W. M. Ecological relations of Ponerine and other ants to termites. Proc. Amer. Acad. Arts Sci., Boston 71 1936 pp. 159–243, 9 figs. [Hym.]
- 3589.—Wheeler, W. M. A singular *Crematogaster* from Guatemala. Psyche, Boston 43 1936 pp. 40–48, 1 fig. [Hym.]
- 3590.—Wheeler, W. M. Notes on some aberrant Indonesian ants of the subfamily Formicinae. Tijdschr. Ent., Amsterdam 79 1936 pp. 217–221. [Hym.]
- 3591.—Whelan, D. B. Coleoptera of an original prairie area in Eastern Nebraska. J. Kansas ent. Soc., MacPherson 9 1936 pp. 111–115.
- 3592.—Whiting, P. W. The parasitic wasp, *Habrobracon juglandis* (Ashm.) as laboratory class material. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 p. 116. [Hym.]
- 3593.—Whiting, P. W. Reproductive reactions of gynandromorphs. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 p. 117. [Hym.]
- 3594.—Whiting, A. R. Variegated eyes in *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 p. 118. [Hym.]
- 3595.—Whiting, A. R. How we draw *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 pp. 118–119. [Hym.]
- 3596.—Whiting, P. W. Sex-determination in bees and wasps. Proc. Pennsylvania Acad. Sci., Harrisburg 8 1934 pp. 103–106, 4 figs. [Hym.]
- 3597.—Whiting, P. W. Recent x-ray mutations in *Habrobracon*. Proc. Pennsylvania Acad. Sci., Harrisburg 9 1935 pp. 60–63. [Hym.]
- Wiel, Van der *see* Van der Wiel.
- 3598.—Wiessmandl, V. Die ostalpinen Arten der Gattung *Brosicosoma* Putz. (Carabidae). Koleopt. Rdsch., Vienna 21 1936 pp. 228–231, 3 figs.
- 3599.—Wigglesworth, V. B. The function of the corpus allatum in the growth and reproduction of *Rhodnius prolixus* (Hemiptera). Quart. J. micr. Sci., London (N.S.) 79 1936 pp. 91–122, 2 pls. 13 figs.
- 3600.—Wigglesworth, V. B. & Gillett, J. D. The loss of water during ecdysis in *Rhodnius prolixus* Stål (Hemiptera). Proc. R. ent. Soc. London (4) 11 1936 pp. 104–107, 3 figs.
- 3601.—Wilcox, J. New *Ommatius* with a key to the species (Diptera, Asilidae). Bull. Brooklyn ent. Soc. 31 1936 pp. 172–176, 1 pl.
- 3602.—Wilcox, J. *Laphria vultur* Osten Sacken and two related species (Diptera-Asilidae). Canad. Ent., Orillia 68 1936 pp. 7–11, 3 figs.
- 3603.—Wilcox, J. A new robber fly, with a key to the species of *Callinicus* and *Chrysoceria* (Diptera: Asilidae). Ent. News, Philadelphia 47 1936 pp. 208–210.
- 3604.—Wilcox, J. Asilidae, new and otherwise, from the south-west, with a key to the genus *Stichopogon*. Pan-Pacific Ent., San Francisco 12 1936 pp. 201–212, 1 fig.
- 3605.—Wilcox, J. & Martin, C. H. The genus *Nannocyrtopogon* (Diptera, Asilidae). Ann. ent. Soc. Amer., Columbus 29 1936 pp. 449–459, 1 pl.
- 3606.—Wilcox, J. & Martin, C. H. A review of the genus *Cyrtopogon* Loew in North America (Diptera-Asilidae). Ent. amer., Lancaster 16 1935 pp. 1–94, 5 pls.
- 3607.—Wilkinson, D. S. On two Braconids (Hym.) bred from economic hosts. Bull. ent. Res., London 27 1936 pp. 385–388, 2 figs.
- 3608.—Wilkinson, D. S. Microgasterinae: Notes and new species (Hym. Brac.). Proc. R. ent. Soc. London (B) 5 1936 pp. 81–88, 4 figs.

3609.—Wilkinson, D. S. A new Palaearctic species of *Apanteles* (Hym. Brac.). Proc. R. ent. Soc. Lond. (B), 5 1936 pp. 174–176, 2 figs.

3610.—Wilkinson, D. S. On the identity of *Apanteles pallipes* Reinhard with the description of a new, closely related, Palaearctic species (Hym. Brac.). Proc. R. ent. Soc. London (B) 5 1936 pp. 220–224, 1 fig.

3611.—Will, H. C. A list of the sawflies of the Tenthredininae (Hymenoptera) of Pennsylvania. Proc. Pennsylvania Acad. Sci., Harrisburg 6 1932 pp. 38–42.

3612.—Will, H. C. A list of the synonymy of the Tenthredininae (Hymenoptera) of America, north of Mexico. Proc. Pennsylvania Acad. Sci., Harrisburg 6 1932 pp. 42–46.

3613.—Will, H. C. Wing-venation variations in the rose sawfly, *Emphytus cinctipes* Norton (Tenthredinidae: Hymenoptera). Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 pp. 30–32, 3 figs.

3614.—Will, H. C. The genus *Tenthredopsis* of America, north of Mexico (Tenthredinidae: Hymenoptera). Proc. Pennsylvania Acad. Sci., Harrisburg 7 1933 pp. 32–34.

3615.—Will, H. C. Notes on the sawfly *Macrophya trisyllabus* (Norton) (Tenthredinidae: Hymenoptera). Proc. Pennsylvania Acad. Sci., Harrisburg 8 1934 pp. 106–107.

3616.—Will, H. C. Antennal segments of *Tenthredo* (*Labidia*) *opimus opimus* (Cresson) with a synopsis of *Labidia* (Tenthredinidae: Hymenoptera). Proc. Pennsylvania Acad. Sci., Harrisburg 9 1935 pp. 147–148, 2 figs.

3617.—Will, H. C. Occurrence of colonies of the giant saw wasp *Sphecius speciosus* (Drury) (Sphecidae: Hymenoptera). Proc. Pennsylvania Acad. Sci., Harrisburg 9 1935 pp. 149–150.

3618.—Willem, V. Nouvelles observations sur l'architecture des abeilles. C.R. Congr. Sci. nat. Bruxelles 1930 1930 pp. 782–785. [Hym.]

3619.—Willemse, C. Description of some new Acrididae from Celebes (Orthopt.). Livre jubilé. Bouvier, Paris 1936 pp. 371–373, 1 fig.

3620.—Willemse, C. Remarks on some Indo-Malayan Acrididae, with description of new species, II. Ent. Ber., Amsterdam 9 1936 pp. 197–204, 3 figs. [Orth.]

3621.—Willemse, C. Description of new Indo-Malayan Acrididae (Orthoptera). Part V. Natuurh. Maandbl., Maastricht 25 1936 pp. 11–12, 15–17, 4 figs.

3622.—Willemse, C. Une excursion orthoptérologique aux îles Canaries. Natuurh. Maandbl., Maastricht 25 1936 pp. 40–42, 56–57, 72–73, 86–89, 101–103, 113–115, 1 pl.

3623.—Willey, A. Reductions and reversions. Trans. roy. Soc. Canada, Ottawa (3) 30 1936 sect. 5 pp. 115–137, 18 figs. [Plecopt.]

3624.—Williams, C. B. The influence of moonlight on the activity of certain nocturnal insects, particularly of the family Noctuidae, as indicated by a light trap. Philos. Trans. roy. Soc. London (B) 226 1936 pp. 357–389, 7 figs. [Lep.]

3625.—Williams, C. B. Collected records relating to insect migration: Third series. Proc. R. ent. Soc. London (A) 11 1936 pp. 6–10.

3626.—Williams, H. B. Notes on the Spilosominae. Proc. S. London ent. nat. Hist. Soc. 1935–36 1936 pp. 93–96. [Lep.]

3627.—Williams, F. X. Notes on some Larrid wasps from the British Solomon Islands Protectorate, with the description of one new species. Ann. Mag. nat. Hist., London (10) 18 1936 pp. 124–130, 6 figs.

3628.—Williams, F. X. Notes on two Oxybelid wasps in San Francisco, California. Pan-Pacific Ent., San Francisco 12 1936 pp. 1–6, 1 pl. [Hym.]

3629.—Williams, F. X. Two water beetles that lay their eggs in the frothy egg masses of a frog or tree toad. Pan-Pacific Ent., San Francisco 12 1936 pp. 6–7. [Col.]

3630.—Williams, F. X. Biological studies in Hawaiian water-loving insects. Part I. Coleoptera or beetles. Part II. Odonata or dragonflies. Proc. Hawaii. ent. Soc., Honolulu 9 1936 pp. 235–349, 18 pls. 10 figs.

- 3631.—Williamson, E. B. Odonata from Yucatan. Pub. Carnegie Inst. Washington **457** 1936 pp. 139–143.
- 3632.—Williamson, K. B. Remarkable behaviour of *Precis almana*. Malayan Nat., Singapore **2** 1928 pp. 50–52. [Lep.]
- 3633.—Wilson, F. H. The segmentation of the abdomen of *Lipeurus heterographus* Nitzsch (Mallophaga). J. Morph., Philadelphia **60** 1936 pp. 211–219, 5 figs.
- 3634.—Wiltshire, E. P. More notes on the early stages of Syrian Lepidoptera. Ent. Rec., London **48** 1936 sep. pp. 9–11.
- 3635.—Winkler, A. Neue Bembiini, Trechini und Bathysciinae aus den Ostalpen und dem Balkan. Koleopt. Rdsch., Vienna **21** 1936 pp. 232–236, 1 fig.
- Winkler, A. see Netolitzky, F.
- 3636.—Winogradskaja, O. N. Osmotischer Druck der Haemolymph bei *Anopheles maculipennis messeae* Fall. Z. Parasitenk., Berlin **8** 1936 pp. 697–713. [Dipt.]
- 3637.—Wittmer, W. Un nouveau *Cephaloncus* tripolitain (Coleopt. Malachidae). Livre jubil. Bouvier, Paris 1936 pp. 375–376.
- 3638.—Wittmer, W. Neue Koleopteren aus Aegypten und dem Sinai aus der Sammlung des Museums Pietro Rossi, Duino. Bull. Soc. ent. Egypte, Cairo **20** 1936 pp. 16–18.
- 3639.—Wittmer, W. Zur Kenntnis der Malacodermata Aegyptens (Coleoptera-Malachiidae). Bull. Soc. ent. Egypte, Cairo **20** 1936 pp. 152–154.
- 3640.—Wittmer, W. *Matthiinus axillaris* Kies. und verwandte Formen. Mitt. schweiz. ent. Ges., Berne **16** 1936 pp. 676–679. [Col.]
- 3641.—Wize, K. Lépidoptères rencontrés à Gniezno et les environs. [In Polish with French summary.] Polsk. Pismo ent., Lwow **13** (1934) 1936 pp. 105–117.
- 3642.—Wnukowsky, W. Beiträge zur Insekten-Fauna des Bezirkes von Tomsk (West-Sibirien). Konowia, Vienna **15** 1936 pp. 113–128.
- 3643.—Wnukowsky, W. Contribution à la faunes des Lépidoptères de la Sibérie. Lambillionea, Brussels **36** 1936 pp. 51–52.
- 3644.—Wolcott, G. N. "Insectae borinquenses" A revised annotated check-list of the insects of Puerto Rico. With a host-plant index by J. L. Otero. J. Agric. Univ. P. Rico, Rio Piedras, P.R. **20** 1936 pp. 1–627 & [3] figs.
- 3645.—Wolf, B. Animalium cavernarum catalogus. 's-Gravenhage, W. Junk 1935 **1** pp. 49–64; **2** pp. 97–224; **3** pp. 225–464; 1936 **2** pp. 225–456; **3** pp. 465–720.
- Wolsky, A. see Huxley & Wolsky.
- 3646.—Womersley, H. A new species of Protura from Australia. Ent. mon. Mag., London **72** 1936 pp. 65–66, 2 figs.
- 3647.—Womersley, H. On some new species and records of Australian and New Zealand Collembola. Trans. Proc. R. Soc. S. Aust., Adelaide **59** 1935 pp. 207–218, 5 figs.
- 3648.—Womersley, H. Insects of the National Park. S. Aust. Nat., Adelaide **17** 1936 pp. 76–82, 2 figs.
- 3649.—Womersley, H. On the Collembolan fauna of New Zealand. Trans. roy. Soc. N.Z., Dunedin **66** 1936 pp. 316–328, 2 figs.
- 3650.—Wong Chi-yu, & Ma, Tsing-chao. Cicindelidae in the collection of the Bureau of Entomology, Hangechow. Yearb. Bur. Ent. Hangechow **1934** 1935 pp. 78–93, 1 pl. [Col.]
- 3651.—Woodhill, A. R. Observations and experiments on *Aedes concolor*, Tayl. (Dipt. Culic.). Bull. ent. Res., London **27** 1936 pp. 633–648. [Dipt.]
- Woolcott, N. see Park & Woolcott.
- Woore see Voore.
- 3652.—Worms, C. G. M. de. British Lepidoptera collecting, 1935. Entomologist, London **69** 1936 pp. 104–107, 132–135, 157–159.
- 3653.—Wormser, W. S. & Hayes, W. P. The permanent preservation of insects. Bull. Brooklyn ent. Soc. **31** 1936 pp. 111–128, 1 pl.
- Wu, C. C. see Yao & Wu.
- 3654.—Wu, C. F. The stoneflies of China (Order Plecoptera). Peking nat. Hist. Bull. **11** 1936 pp. 49–82, 163–189, 47 figs.

3655.—Wu, Liang-Yu. A study of Anopheline larvae of Kwangtung Province, with notes on their relation to the incidence of malaria. Lingnan Sci. J., Canton 15 1936 pp. 1-10, 3 pls.; pp. 265-274, 1 fig. [Dipt.]

3656.—Wu, Shih-Cheng. The eggs of some Chinese Anopheline mosquitoes. [With English summary.] Ent. & Phytopath., Hangchow 4 1936 pp. 261-273, 20 figs. [Dipt.]

3657.—Wu, S. C. Further notes on the mosquitoes collected in a few famous localities of Chekiang and Anhwei. Ent. & Phytopath., Hangchow 4 1936 pp. 462-463. [Dipt.]

Wu, Shih-cheng *see* Li & Wu.

3658.—Wulkopf, H. Hitze- und Frostreize in ihrer Wirkung auf das Flügelmuster der Mehlmotte *Ephestia kühniella* Zeller. Arch. EntwMech. Org. 134 1936 pp. 209-223, 23 figs. [Lep.]

3659.—Wundrig, G. Die Sehorgane der Mallophagen, nebst vergleichenden Untersuchungen an Liposcelliden und Anopluren. Zool. Jb., Jena Anat. 62 1936 pp. 45-110, 64 figs.

3660.—Yamada, M. Four kinds of Anopheline mosquitoes in Chosen. Keijo J. Med., Chosen 7 1936 pp. 191-210, 10 pls. [Dipt.]

3661.—Yamanoûti, T. Wachstumsmessungen an *Sphodromantis bioculata* Burm. V. Bestimmung der absoluten Zunahmswerte der Facetten-Grösse und -Anzahl. (Zugleich: Aufzucht der Gottesanbeterinnen. XIII. Mitteilung.) Biol. Gen., Vienna 12 1936 no. 1 pp. 126-142, 8 figs. [Orth.]

3662.—Yamanoûti, T. Koprometrie zur Wachstumsmessung der Orthopteren. (Zugleich: Aufzucht der Gottesanbeterinnen. XIV. Mitteilung.) Biol. Gen., Vienna 12 1936 no. 1 pp. 143-152, 7 figs. [Orth.]

3663.—Yang, W. I. Description of three new species of Gen. *Compastes* (Pentatominae. Hem.-Het.). Bull. Fan mem. Inst. Biol., Peiping 6 1935 pp. 98-102, 4 figs.

3664.—Yang, W. I. Notes on the Chinese Tessaratominae with description of an exotic species. Bull. Fan mem. Inst. Biol., Peiping 6 1935 pp. 103-144, 5 pls. 2 figs. [Hem.]

3665.—Yao, Hsiang-Chen. Two species of Aphididae new to China. Ent. & Phytopath., Hangchow 4 1936 pp. 653-656, 10 figs. [Hem.]

3666.—Yao, Y. T. & Wu, C. C. Some abnormalities of the morphology of the male hypopygia of *Anopheles hyrcanus* var. *sinensis* Wied., in Nanking. Peking nat. Hist. Bull. 11 1936 pp. 27-34, 3 pls. [Dipt.]

3667.—Yasumatsu, K. *Homonotus iwatai* Yasumatsu. [In Japanese.] Trans. Kansai ent. Soc., Osaka no. 6 1935 pp. 60-72, 2 pls. [Hym.]

3668.—Yasumatsu, K. The genus *Pison* Spinola of the Japanese Empire (Hymenoptera, Trypoxylonidae). Annot. zool. jap., Tokyo 15 1935 pp. 227-239, 1 pl. 2 figs.

3669.—Yasumatsu, K. On the occurrence of the subgenus *Zaodontomerus* Ashmead in Japan and Corea (Hymenoptera, Ceratinidae, Ceratina). Annot. zool. Jap., Tokyo 15 1936 pp. 550-553, 4 figs.

3670.—Yasumatsu, K. Two new Megachilidae from Japan (Hymenoptera). Annot. zool. Jap., Tokyo 15 1936 pp. 554-560, 3 figs.

3671.—Yasumatsu, K. A list of the known species of Colletidae from China and Japan, with description of the male of *Colletes gigas* Ckll. (Hym.). Ent. & Phytopath., Hangchow 4 1936 pp. 241-246.

3672.—Yasumatsu, K. Ueber einige neue oder seltene Mordwespen aus Japan (Hymenoptera, Psammocharidae, Psammocharinae). Mushi, Fukuoka 9 1936 pp. 23-29, 1 pl.

3673.—Yasumatsu, K. Ampulicidae of the Japanese Empire (Hymenoptera). Tenthredo, Kyoto 1 1936 pp. 165-232, 13 pls.

3674.—Yasumatsu, K. Hymenoptera of the Bonin Islands. Trans. nat. Hist. Soc. Formosa 26 1936 pp. 356-363, 2 figs.

3675.—Yasumatsu, K. & Maidl, F. A new genus and species of the family Nyssonidae sensu Kohl from the Far East (Hymenoptera). Festschr. 60. Geburtst. E. Strand, Riga 1 1936 pp. 501-504, 1 pl.

3876.—Yasumatsu, K. & Narisada, G. Miscellaneous notes on the Hymenopterous fauna of South Manchuria (second report). Mushi, Fukuoka **9** 1936 pp. 9–13, 1 pl.

3877.—Yasumatsu, K. & Okabe, K. Notes on *Cerceris formosana* Strand and its allied species (Hymenoptera, Cerceridae). Festschr. 60. Geburtst. E. Strand, Riga **1** 1936 pp. 495–500, 1 fig.

3878.—[Yatzenko, F. I. & Tishchenko, O. D.] Яценко, Ф. И. и Тищенко, О. Д. Some notes on the varieties of *Anopheles maculipennis* Mg. at Ukraina. [In Russian.] Med. Parasit. parasit. Dis., Moscow **5** 1936 pp. 629–630. [Dipt.]

Yeager, J. F. see Tauber & Yeager.

3879.—Yokoyama, T. Histological observations on a non-moulting strain of silkworm. Proc. R. ent. Soc. London (A) **11** 1936 pp. 35–44, 6 figs.

Yoshida, T. see Miwa & Yoshida.

3880.—Yu, C. T. Study of life-history of certain sphinx moth. [In Chinese.] Insekto interesa, Nantung **2** 1936 no. 4 pp. 1–16, 1 pl. [Lep.]

3881.—Yuasa, H. Insects of Jehol (vi). Order Coleoptera. Family Coccinellidae. [In Japanese and English.] Rep. First scient. Exped. Manchoukuo, Tokyo (5) **1** pt. x 1936 art. 43 19 pp. 1 pl. 15 figs. (Coccinellidae); art. 51, 29 pp. 2 pls. 1 fig. (Chrysomelidae).

3882.—Yûki, Z. On the wing-area and the weight of butterflies. [In Japanese.] Zephyrus, Fukuoka **6** 1936 pp. 363–367. [Lep.]

3883.—Zabinski, J. Inconstancy of the number of moults during the post-embryonal development of certain Blattidae. Ann. Mus. zool. polon., Warsaw **11** 1936 pp. 237–240, 3 tables. [Orth.]

3884.—Zach, O. Der Verdauungskanal der Honigbiene. Mikrokosmos, Stuttgart **29** 1936 pp. 153–155, 3 figs. [Hym.]

3885.—Zacher, F. Beitrag zur Nährpflanzenkenntnis der Samenkäfer (Col. Bruch.-Lariidae). Mitt. dtsh. ent. Ges., Berlin **7** 1936 pp. 10–13.

3886.—Začwilichowski, J. Ueber die Innervation und die Sinnesorgane der

Flügel von *Aphrophora alni* Fall. (Rhynchota-Homoptera). Bull. int. Acad. Cracovie **1936** 1936 B II pp. 85–99, 1 pl.

3887.—Začwilichowski, J. Ueber die Innervation und die Sinnesorgane der Flügel der Afterfrühlingsfliege *Isopteryx tripunctata* Scop. (Plecoptera). Bull. int. Acad. Cracovie **1936** 1936 B II pp. 267–284, 1 pl.

3888.—Začwilichowski, J. Recherches sur l'innervation et les organes sensoriels des ailes d'*Aphrophora alni* Fall. (Rhynchota Homoptera). C.R. Acad. Cracovie **1936** 1936 no. 2 pp. 6–7.

3889.—Začwilichowski, J. Recherches sur l'innervation et les organes sensoriels des ailes d'*Isopteryx tripunctata* Scop. (Plecoptera). C.R. Acad. Cracovie **1936** 1936 no. 5 p. 9.

3890.—Začwilichowski, J. Une nouvelle méthode pour obtenir des formes aberrantes de Lépidoptères sous l'influence d'agents chimiques. C.R. Acad. Cracovie **1936** 1936 no. 8 p. 6.

Zahl, P. A. see Crozier, Pincus & Zahl.

3891.—[Zaitzev, F. A.] Зайцев, Ф. А. Notes sur les Coléoptères aquatiques du bassin du Donetz. [In Ukrainian.] Trav. Soc. Nat. Charkow **52** 1929 pp. 275–286.

3892.—[Zakhvatkin, A. A.] Захваткин, А. А. Note on the Homoptera-Cicadina of Jemen. [In Russian with English summary.] Wiss. Ber. Moskauer Staats Univ. **4** 1935 pp. 106–115.

3893.—Zalessky, G. Sur deux restes d'insectes fossiles provenant du bassin de Kousnetz et sur l'âge géologique des dépôts qui les renferment. Bull. Soc. géol. France, Paris (5) **5** (1935) 1936 pp. 687–695, 6 figs. [Fossil, Mecopt., Protoperl.]

3894.—Zavřel, J. Chironomiden-fauna der Hohen Tatra. Verh. int. Ver. Limnologie, Beograd **7** 1935 pp. 439–448. [Dipt.]

3895.—Zavřel, J. Tanypoden-Larven und -Puppen aus Partenkirchen. Arch. Hydrobiol., Stuttgart **30** 1936 pp. 318–326, 3 figs. [Dipt.]

Zeck, E. H. see Carter & Zeck.

Zeit, W. see Carey & Zeit.

3696.—Zerny, H. Die Lepidopteren-fauna des grossen Atlas in Marokko und seiner Randgebiete. Mit Beiträgen von L. Schwingenschuss. Mém. Soc. Sci. nat. Maroc **42** 1935 163 pp. 2 pls. 4 figs.

3697.—Zerny, H. & Beier, M. Ordnung der Pterygoenea: Lepidoptera = Schmetterlinge. In Kükenthal, Handb. Zool., Berlin 4 1936 Hfte 2 Lief. 7, 8 pp. 1554–1728, 195 figs.

3698.—Zeuner, F. E. The recent and fossil Tympanophorinae (Tettigoniidae, Saltatoria). Trans. R. ent. Soc. London **85** 1936 pp. 287–302, 2 pls.

3699. — Zeuner, F. E. The prothoracic tracheal apparatus of Saltatoria (Orthoptera). Proc. R. ent. Soc. London (A) **11** 1936 pp. 11–21, 15 figs.

3700.—Zeuner, F. E. The geographical distribution of *Tympanophora* White. Proc. R. ent. Soc. London (A) **11** 1936 p. 87. [Orth.]

3701.—Zeuner, F. The subfamilies of Tettigoniidae (Orthoptera). Proc. R. ent. Soc. London (B) **5** 1936 pp. 103–109.

3702.—Zilch, A. Zur Frage des Flimmerepithels bei Arthropoden. Z. wiss. Zool., Leipzig **148** 1936 pp. 89–132, 11 figs. [Dipt. pp. 102–113.]

3703.—Zimmermann, A. & Gschwendtner, L. Monographie der paläarktischen Dytisciden. VII. Colymbetinae. Koleopt. Rdsch., Vienna **22** 1936 pp. 81–102.

3704.—Zimmerman, E. C. Review of the genus *Orochlesis* (Coleoptera, Curculionidae). Occ. Pap. Bishop Mus., Honolulu **12** 1936 no. 1, 19 pp., 3 figs.

3705.—Zimmerman, E. C. Baridinae of southeastern Polynesia (Coleoptera, Curculionidae). Occ. Pap. Bishop Mus., Honolulu **12** 1936 no. 3, 8 pp., 2 figs.

Zimmermann, E. C. see Light & Zimmermann.

3706.—Zimmermann, K. Die geographischen Rassen von *Epilachna chrysomelina* F. und ihre Beziehungen zu *Epilachna capensis* Thunbg. Z. induct. Abstamm.- u. VererbLehre, Leipzig **71** 1936 pp. 527–537, 2 maps 11 figs. [Col.]

3707.—[Zimin, L. S.] Зимин, Л. С. Der Synonymie und geographische Verbreitung von *Echinomyia magna* Giglio-Tos (Diptera, Tachinidae) im paläarktischen Reich. [In Russian with German summary.] Rev. Ent. U.R.S.S., Leningrad **25** 1935 pp. 308–313, 1 fig.

3708.—Zirngiebl, L. Experimentelle Untersuchungen über die Bedeutung der Cenchri bei den Blattwespen. Beitr. naturk. Forsch. Südwestdeutschl., Karlsruhe i. B. **1** 1936 pp. 37–41. [Hym.]

3709.—[Znojko, D. V.] Знойко, Д. В. Die Larven des Grossen Getroidelaufkäfers (*Zabrus blapoides* Croutz.) und des Hirselaufkäfers (*Harpalus calceatus* Duft.) (Coleoptera, Carabidae). [In Russian with German summary.] Rev. Ent. U.R.S.S., Leningrad **25** 1935 pp. 232–238, 5 figs.

3710. — [Znojko, D.] Знойко, Д. Ueber die systematische Stellung der Familie Petriidae (Coleoptera). [In Russian and German.] Trav. Inst. zool. Acad. Sci. U.R.S.S., Leningrad **3** 1936 pp. 67–77, 6 figs.

3711. — Zolk, K. Beiträge zur Ökologie der Borkenkäfer L. [In Estonian with German summary.] Estländ. Forstw. Jb., Tartu **7** 1935 pp. 259–294, 18 figs. [Col.]

3712.—[Zolotarev, E.] Золотарев, Е. Е. Die Existenzbedingungen und die individuelle Variabilität der Wanderheuschrecke. [In Russian with German summary.] Zool. J., Moscow **14** 1935 pp. 722–736. [Orth.]

3713.—[Zolotarev, E. Kh.] Золотарев, Е. Х. The migratory locust (*Locusta migratoria* L.) of the Povolzhje (Middle Volga region). [In Russian with English summary.] Bull. Soc. Nat. Moscou (N.S.) **45** 1936 Sect. Biol. pp. 285–293.

3714.—[Zonova, E. V.] Зонова, Е. В. Die Lärchenfliege (*Chortophila laricicola* Karl) als Schädling der Lärchensamen. [In Russian with German summary.] Rev. Ent., U.R.S.S., Leningrad **25** 1935 pp. 206–220, 17 figs. [Dipt.]

3715.—Zotta, G. Races d'*Anopheles maculipennis* en Yougoslavie (Notes préliminaire sur les recherches faites en Yougoslavie pendant l'été de 1934). Arch. roum. Path. exp. Microbiol. **8** 1935 pp. 427–447, 1 map. [Dipt.]

3716.—Zukowsky, B. Aegeriidae. In Seitz, Macrolep. Wld. (Engl. edn.) Fauna Americana **6** 1936 pp. 1215–1240, 1 pl.

3717.—Zukowsky, B. Neue Arten und Formen der paläarktischen Familien Aegeriidae und Cossidae (Lep.). Ent. Rdsch., Stuttgart **53** 1936 pp. 534–537, 2 figs.

3718.—Züllich, R. Zur Technik des Lichtfanges. Ent. Z., Frankfurt a. M. **49** 1936 pp. 526–531, 1 fig.

3719.—Züllich, R. Beitrag zur Macrolepidopterenfauna des Rilogeirges in Bulgarien. Z. öst. EntVer., Vienna **21** 1936 pp. 17–19, 24–28, 35–36, 49–55, 68–73.

3720.—Zumpt, F. Die Tsetsefliegen. Ihre Erkennungsmerkmale, Lebensweise und Bekämpfung. Jena. G. Fischer 1936 149 pp. 121 figs. 15 tables. [Dipt.]

3721.—Zumpt, F. Zur Kenntniss der *Otiorynchus carceli*-Gruppe (Col. Curcul.). Acta Inst. Mus. zool. Univ. Athenien., Athens **1** 1936 pp. 112–120, 6 figs.

3722.—Zumpt, F. Curculioniden-Studien XIV. Revision der palaearktischen Arten der Gattung *Sharpia* Tourn. Mem. Soc. ent. ital., Genoa **15** 1936 pp. 25–34, 5 figs. [Col.]

3723.—Zumpt, F. Zwei neue Rüsselkäfer aus China. Curculioniden-Studien XV. Mitt. dtsh. ent. Ges., Berlin **7** 1936 pp. 14–16. [Col.]

3724.—Zumpt, F. Curculioniden-Studien XVII. Revision der palaearktischen Arten der Gattung *Lepyrus* Germ. Pubb. Mus. ent. Pietro Rossi, Udine **1** 1936 pp. 259–290, 14 figs. [Col.]

3725.—Zumpt, F. Der Geschlechtsapparat der Glossinen und seine taxonomische Bedeutung. Z. Parasitenk., Berlin **8** 1936 pp. 546–560, 13 figs. [Dipt.]

II.—SUBJECT INDEX.

N.B.—The full reference may be obtained from "Titles" by means of the Author's name and number.

GENERAL.

TEXTBOOKS, TREATISES.

AUBERTIN, In Regan, Natural History, **104**; BALACHOWSKY & MESNIL, Les insectes nuisibles aux plantes cultivées, ii, **141**; BURR, British grasshoppers and their allies, **453**; CHEESMAN, Islands near the sun, **529**; DOANE, VAN DYKE, CHAMBERLIN & BURKE, Forest Insects, **773**; HOPKINS, Mosquitos of the Ethiopian Region, **1455**; KORSCHULT, History of comparative development in animals, **1799**; LUKE & KEITH-ROACH, Handbook of Palestine and Trans-Jordan, **2017**; MÉHELÿ, Natural history of primitive bees, **2158**; NEEDHAM, TRAVER & HSU, Biology of mayflies, **2347**; NUNBERG, Key to insect pests of forests, **2392**; PIERCE & METCALFE, Genitalia of British Tineidae, **2622**; PORTMANN, Exotische Schmetterlinge in farbigen Naturaufnahmen, **2679**; SNYDER, Our enemy the termite, **3110**; SWEETMAN, The biological control of insects, with a chapter on weed control, **3236**; TOWNSEND, Manual of Myiology [contd.], **3368**; WARDLE, General Entomology, **3528**; ZUMPT, Die Tsetsefliegen, **3720**.

HISTORICAL.

DONISTHORPE, oldest insect on record, *Stenamma westwoodi*, Ent. Rec. **48** p. 1; ESSIG, history of Entomology, **910**; FLEUTIAUX, remembrances of an entomologist, **999**; HENRIKSEN, history of Danish entomology (contd.), **1340**; HORN, some old biological ideas of Linnaeus, Plenciz & Matthew, **1469**; KEMNER, Entomological history of Lund Univ., **1676**; KORSCHESKY, The 50th Anniversary of the German Entomological Institute, Berlin, **1798**; PORTER, writers and their publications on Orthoptera in Chile, **2675**; WADE, Officers of the Ent. Soc. Washington, 1884–1934, **3504**.

BIBLIOGRAPHY.

ANON, list of books on S. African insects, Cape Nat. **1** pp. 95–96; BORGMEIER bibl. of literature of Neotropical

fauna, Rev. Ent. Rio de J. 6 pp. 131-152, 309-322, 491-514; BUTOVITCH, Russian literature on forest entomology, 1930-1934, 461; GRIFFIN, dates of publication of Motschulsky's Etudes entomologiques, I-XI, 1853-1862, 1184; contents of parts and dates of appearance of SEITZ Grossschmett. Erde (Macrolep. Wld.) Lief. 1-130 Pal., 1-575 Exot., vols. 1-16, 1907-1935, 1185; MACGILLAVRY, dates of publication of Bull. Soc. ent. France, Ent. Ber., Amsterdam 9 p. 204; ŌUCHI, bibliography of Chinese insects [contd.], 2473; PATE, MACKAY & CRESSON, Entomological literature, 2523; RÜSCHKAMP, bibl. of beetles of Rhineland, 2884; THOMPSON, bibl. of records of association between Hippoboscidae and Mallophaga, 3312; TIFLOV, review of literature on fleas of U.S.S.R., 3324; VAPPULA, Finnish entomological literature, 1934, 3451; WEBER, publications on Hemiptera of Schleswig-Holstein, 3548.—Publications of: ACQUA, by Lombardi, Boll. Staz. sper. Gelsic. Bachic. Ascoli Piceno 15 pp. III-V; CAUDELL, by M. Concord, Proc. ent. Soc. Wash. 33 pp. 35-47; DEUBEL, by Holdhaus, Arb. morph. taxon. Ent. Berl. 3 p. 48; HENDEL, by Lindner, Konowia 15 pp. 243-247; HEYROVSKY, by Spaček, Ent. NachrBl. 10 pp. 41-59; LACKSHEWITZ, by Lindner, Konowia 15 pp. 174-175; SEITNER, by Schimitschek, Anz. Schädlingssk. 12 pp. 135-136; SEMENOV-TIAN-SHANSKIĭ, publications during 50 years, by Spaček, 3135, 3137; SHESTAKOV, by Gussakovskii, Rev. Ent. U.R.S.S. 25 1935 pp. 327-328; SOUDKA, by Kratochvíl, Acta Soc. ent. Csl. 33 p. 129; STRAND, works on Hymenoptera, by Spaček Ent. Nachr. 10 pp. 60-68, 151, 158.

NOMENCLATURE AND TAXONOMY.

Opinions of Int. Comm. on Zool. Nomenclature, Mem. Soc. Cubana H.n. 10 pp. 349-350; BERGER, discussion on nomenclature, 230; FERRIS & DUDOROFF, problems in Lepidoptera, 965; GUIGNOT, on types, 1210; HOLIK, use of "minor" "nana" "minuscule," 1442; KEIFER, taxonomy in relation to economic entomology, 1664; LE CERF, nomenclature of aberrations, 1899; OHMACHI, chromosome complements in Grylloidea in relation to taxonomy (Orth.), 2431; PIERCE, position of Strepsiptera, 2621; POCHÉ, the German-

speaking Entomological Nomenclature Commission and the proposals to the International Commission, 2646; SCHENK & McMASTERS, procedure in taxonomy, including reprint of international rules of nomenclature with summaries of opinions, 2952; STILES, notice of possible suspension of rules of nomenclature in certain cases, 3186.

TECHNIQUE: COLLECTING AND PRESERVATION.

ARNOLD, mounting and preparation of insects, 91; BARTHE, transparent "plaquette" for mounting insects, Misc. ent. 37 p. 65; BEHNEY, demonstration apparatus for small insects, 201; BLANCHARD, collection and preservation of Aphids, 296; BROMLEY, a dry killing bottle, Bull. Brooklyn ent. Soc. 31 p. 215; CARR, preparation of transparent specimens, 503; DECARY, method of collecting small insects, 728; DINGLER, organisation and arrangement of a teaching collection for applied zoology, 769; ESSIG, method of preparing dried Aphids for study, 913; HOTTES, methods of collecting and preserving Aphids, 1479; JAKUES, methods of labelling and housing large insect collections, 1581; LADELL, apparatus for separating insects from the soil, 1867; LHOMME, preparation of butterflies of small size, 1931; NEEDHAM, TRAVER & HSU, collecting, preserving and rearing Ephemeroptera, 2347; NETOLITZKY, a collecting sheet, 2351; OLSOUFIEFF, method of preserving insects, 2444, 2445; PAVLOVSKIĭ, collection, preparation, dissection, etc., mosquitos, 2535; PRINGLE, quick method of relaxing large insects, 2696; RUPP, mounting and preservation of Lepidoptera, 2883; SCHEERPELTZ, killing, conservation and preparation of Coleoptera, 2948; SERGENT, preserving eggs of *Anopheles*, 3038; SEVASTOPULO, Heterocera, preservation in India, 3045; STEHLI, study of insects with a lens, 3167; VASSAL, preparation of Microlepidoptera, 3457; VICHET, method of using smoke to collect insects, 3480; VINSON, method of preserving insect collections in the tropics, 3491; WHITING, *Habrobracon* (Hym.), method of preparing specimens for drawing, 3595; WORMSER & HAYES, permanent preservation of insects, 3653; ZÜLLICH, collecting at light, 3718.

TECHNIQUE: BREEDING AND EXPERIMENTAL.

AUSTIN & PITCHER, laboratory methods of rearing *Sciara* & Phoridae, 111; BLAISDELL, rearing of Tenebrionidae (Col.), 288; BRETT, arrangement for preventing larvae spinning their cocoons on top of other cocoons, 378; BRYSON, rearing subterranean insects, 419; COCKAYNE, breeding moths from eggs, 585; FORD, *Wohlfahrtia vigil* (Dipt.), rearing in lab., 1011; GUNN & KENNEDY, apparatus for investigating reactions of land Arthropods to humidity, 1217; JUCCI, *Reticulitermes lucifugus*, method of breeding in glass tubes, 1632; KEY, measurement of total amount of activity in insects, 1690; LEDERER, breeding diurnal Lepidoptera in the Frankfurt Zoo, 1902; LEHAIE, apiculturists' method of increasing size in bees, 1906; MACY, inducing oviposition in diurnal Lepidoptera, 2054; MAGNAN, Cinematograph for studying flight of insects, 2062; PHILLIPP, estimating qualitative and quantitative flight of insects over water areas, 2586; ROEDER, *Mantis religiosa* (Orth.), rearing for experimental purposes, 2822; SEARLS & HARRIS, cellophane insect cages, 2997; SEGAL, breeding and collecting *Chrysops* (Dipt.), 3001; SUN, *Bombyx mori*, experimental breeding technique, 3225; VOELSCHOW, sending living material, 3493; WEYER, rearing mosquitos, 3577; WHITING, *Habrobracon juglandis* (Hym.), use in laboratory, 3592.

TECHNIQUE: ANATOMICAL.

BAYARD, mounting Lepidopterous scales, 188; BAYARD, mounting Lepidopterous genitalia, 189; CAPPE DE BAILLON, examination and fixing of insect eggs, 481; COLAS, extraction of copulatory organ of Coleoptera, 609; CREMER, making anatomical preparations of insects, 665; ELSER, new method for making preparations of Lepidopterous scales, 865; GUBIN, determination of working length of bee's tongue by means of microglossometers, 1197; MARSHAK, making permanent mounts of salivary gland chromosomes, 2118; PAVLOVSKIĬ, STEIN, OLSUF'EV, *Tabanus*, preparation of salivary glands of adult and larva,

2536; RILEY, making caustic potash preparations, 2801; SAMSON, preserving wings and scales of Lepidoptera, 2909; SWAN, Berlese's fluid, its preparation and use as a mounting medium, 3235; VASSAL, simple method of studying neurulation in Microlepidoptera, 3458.

COLLECTIONS.

BOURSIN, labels of the Constant Lepidoptera collection, 348; HERING, Hendl's collection (Dipt.) in Vienna Museum, Mitt. dtsh. ent. Ges. 7 pp. 37-40; HORN & KAHLE, present location of collections containing types, 1475; ROMAN, *Ichneumon* types of Linnaeus in Stockholm Mus., 2825; SHELTON, the Nash Collection, Entomologist 69 pp. 120-123.

MISCELLANEOUS.

BROSSARD, stereoscopic photographs in colour of butterflies and larvae, 394; HELDMANN, harm done to cause of Nature Protection by ill-informed writers, 1317; HOPPING, illustration of insects, 1456; MILNE, device for rapid counting of large numbers of small insects, 2244; NEAVE, mankind and the insect world, 2345.

MORPHOLOGY.**GENERAL ANATOMY.**

Insecta: DA COSTA LIMA, Brazilian insects, 655.—*Coleoptera*: BALTHASAR, Troginae, 161; BLACKWELDER, Staphylinidae, 283; COOK, *Calosoma inquisitor* (Carab.), 641; KASTON, *Hylurgopinus rufipes* (Scolyt.), 1654; MAULIK, Galerucinae, 2141; RENKONEN, *Atheta islandica* (Staph.), 2774; SCHAEFER, *Anthaxia* (Bupr.), 2928; SZÉKESY, comparative anatomy of some boreo-alpine Coleoptera, 3245.—*Hymenoptera*: MÉHELÿ, *Prosoptis* spp. (Apid.), 2158; NÄGELI, *Lygaonematus pini* (Tenth.), 2323; PELTZER, *Phanthus triangulum* (Spheg.), 2553; SERVADEL, *Cladius difformis* (Tenth.), 3040; SERVADEL, *Emphytus cinctus* (Tenth.), 3041; THOMAS, *Hoplocampa brevis*,

(Tenth.), 3310; DE TOLEDO PIZA & PINTO DA FONSECA, *Heterospilus coffeicola* (Bracon.), 3360. — **Lepidoptera**: HEYDEMANN, *Lythria purpuraria*, *purpurata* (Geom.), 1372; MELIS, *Polia pisi* (Noct.), 2171. — **Trichoptera**: HANDLIRSCH & BEIER, 1251. — **Neuroptera**: DAVID, *Osmylus chrysops*, 714; HANDLIRSCH & BEIER, 1250. — **Mecoptera**: HANDLIRSCH & BEIER, 1251. — **Diptera**: GHIDINI, Italian Tabanids, 1106; JOBLING, Streblidae, 1604; REINGARD, *Anopheles hyrcanus*, 2766; REMPEL, *Chironomus hyperboreus*, 2772; VENTURI, *Dizygomyia lateralis* (Agrom.), 3469, *Agromyia mobilis*, 3470; ZUMPT, *Glossina* spp., 3720. — **Siphonaptera**: BEIER, 206. — **Hemiptera**: OUELLET, *Parameus nervosus* (Jassid.), 2474; TAKAHASHI, flattening of body, 3265. — **Thysanoptera**: MELIS, *Taeniothrips*, 2169. — **Mallophaga**: BEIER, 205; WERNECK, *Trichodectes expansus*, 3565. — **Psocoptera**: BADONNEL, *Caecilinus*, 125. — **Orthoptera**: BARBAROSSA, *Gryllotalpa gryllotalpa*, 171; CAMERLENGO, *G. gryllotalpa*, 472; PALADINO, *G. gryllotalpa*, 2481; HUBBELL, *Ceuthophilus* (Gryllac.), 1492; RIGALLEAU, *Ephippiger* spp., 2799; VARRICCHIO, *Dolichopoda palpata*, 3453.

EXOSKELETON.

BYTINSKI-SALZ, chitin plates in Lepidopterous pupae, 467; FREY, cuticula in Chrysididae (Hym.), 1049; MAKI, *Charulides formosanus* (Neur.), skeletal structures, 2068; MORIMOTO, sculpture of elytra in Scarabaeidae (Col.), 2267a; VAYSSIÈRE, *Stictococcus* (Hem.), ornamentation, 3460.

HEAD.

Coleoptera: BLACKBURN, *Silpha americana*, 281; LESNE, *Sphaerius*, 1921; WEIDNER, *Hylotrypes* (Ceram.), 3559. — **Hymenoptera**: LOTMAR, head and brain in one-eyed bees, 2007. — **Mecoptera**: HETRICK, *Panorpa nuptialis*, 1370. — **Diptera**: PAPADAKIS, *Anopheles sacharovi*, *maculipennis*, 2494; SELLKE, capsule in Tipulid larvae, 3022. — **Hemiptera**: PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688. — **Psocoptera**: WEBER, 3547. — **Ephemeroptera**: NEEDHAM, TRAVER & HSU, 2347. — **Orthoptera**: PALADINO, *Gryllotalpa gryllotalpa*, 2481. — **Mallophaga**: QADRI, 2716.

talpa, 2481; GURNEY, *Ceuthophilus brevipes* (Tettig.), 1227. — **Collembola**, **Protura**: HILTON, 1381.

EYES.

Insecta: PORTILLO, structure and function of insect eyes, 2678. — **Coleoptera**: SZÉKESSY, *Pteroloma* (Silph.), 3244. — **Hymenoptera**: ADAN, wasps, 23; LOTMAR, one-eyed bees, 2007; MILLER, histological study of eye of a one-eyed bee, 2235; WHEELER, binary anterior ocelli in ants, 3586; WHITING, *Habrobracon*, variegated eyes, 3594. — **Lepidoptera**: SEOK, ocelli in Rhopalocera, 3037. — **Diptera**: ELTRINGHAM, *Glossina*, 866, Proc. R. Ent. Soc. Lond. (A) 11 p. 115. — **Hemiptera**: PFLUGFELDER, *Lecanium corni* (Coccid.), so-called ocelli, 2579. — **Orthoptera**: ROONWAL, *Schistocerca gregaria* (Acrid.), different types of striped eyes, 2833. — **Mallophaga**: WUNDRIG, 3659.

ANTENNAE.

Hymenoptera: WEILER, Dorylinae (Formic.), 3560; WILL, *Tenthredo opimus*, 3616. — **Diptera**: ALEXANDER, multi-articulate antenna, 34. — **Hemiptera**: SINGH, Aleurodidae, 3078. — **Orthoptera**: CAPPE DE BAILLON, Phasmidae, 482.

MOUTH-PARTS.

Insecta: RAHMAN, gula and labium of mandibulate insects, 2725. — **Coleoptera**: ANDERSON, labium of Coleopterous larvae, 76; BUGNION, *Pheropsophus bimaculatus* (Carab.), 430; MAULIK, Galerucinae, 2141; PU, Hydrophilidae, 2705; REHBERGER, Malacoedermata, 2752; TING, Rhynchophora, 3335. — **Mecoptera**: HETRICK, *Panorpa nuptialis*, 1370. — **Diptera**: DE VOS-DE WILDE, Cyclorhapha, particularly Anthomyiidae, larvae, 760; FULLER, *Scaptia auriflua* (Taban.), 1067; KOHN, labium in Chironomid larvae, 1774; MAYER, *Pterobosca odonatiphila* (Ceratop.), 2149; PARROT, *Phlebotomus* (Psych.), 2516; SELLKE, Tipulid larvae, 3022; SHIPTZINA, *Anopheles*, epipharynx of larvae, 3065. — **Psocoptera**: BADONNEL, hypopharynx, 123; BALL, *Prionoglaris stygia*, 150; WEBER, 3547. — **Orthoptera**: PALADINO, *Gryllotalpa gryllotalpa*, 2481. — **Mallophaga**: QADRI, 2716.

THORAX.

Coleoptera: BLACKBURN, *Silpha americana*, 281.—**Trichoptera:** GOODRICH, *Dicosmoecus atripes*, pupa, 1152.—**Diptera:** GIL COLLADO, *Ariasella*, *Pieltainia* (Empid.), reduction of thorax, 1113.—**Hemiptera:** PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688; LUPO, *Aonidiella* spp. (Coccid), 2026.—**Ephemeroptera:** IDE, *Ecdyonurus venosus*, significance of outgrowths on prothorax, 1525; NEEDHAM, TRAVER & HSU, 2347.—**Orthoptera:** CAMERLENGO, *Gryllotalpa gryllotalpa*, 472; CARPENTIER, thorax and appendages in true and false Gryllotalpids, 502; GURNEY, *Ceuthophilus brevipes* (Tettig.), 1227.

WINGS.

Insecta: MAGNAN, 2063.—**Coleoptera:** DARLINGTON, variation and atrophy of wings of some Carabidae, 707; KÖNIG, *Ptinus tectus*, 1785; PROCHÁZKA, neurulation, Malaco-dermata, 2697; SAALAS, Cerambycidae, venation, 2893.—**Hymenoptera:** OLDROYD & RIBBANDS, *Trichogramma*, trichiation, 2440; ROSS, ancestry and wing venation of Hymenoptera, 2839; SEN, *Pompilus wroughtoni*, anomalies, in wing-structure, 3032; WILL, *Emphytus cinctipes* (Tenth.), variation in venation, 3613.—**Lepidoptera:** BAUS, reduction in wings and presumed sense-organs, 186; CHADWICK, *Archonias* (Pier.), occurrence of a costal vein, 517; GEISSEL, *Ephestia kühniella* (Pyr.), length of wings in in-bred and crossed races, 1097; HENKE, wing pattern in Saturniidae, 1331; HERMAN, 1360; KÜHN & ENGELHARDT, *Abraxas grossulariata* (Geom.), determination of wing pattern, 1835; MACHOTIN, *Operophtera brumata* reduction, 2036; SCHWANWITSCH, symmetry in pattern, Papilionidae, 2937; WARREN, *Erebia*, neurulation, 3539; YŌKI, wing-area and weight in butterflies [in Japanese], 3682.—**Mecoptera:** LIEFTINCK, *Leptopanorpa*, 1950.—**Diptera:** BALI, *Anopheles maculipennis*, transverse nervures, 148; GUIBÉ, *Apterina pedestris* (Borbor.), 1199; MIRÁLYI, *Musca domestica*, 2226; SCHMITZ, reduced wings in Termitoxeniidae, 2971; SELLKE, halteres in Tipulidae, 3022.—**Hemiptera:** GALLIARD, wing coaptations, particularly in *Triatoma*, 1084;

MILLER, *Aphis feminea*, variation in venation, 2237; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688; ZĄCWIŁICHOWSKI, *Aphrophora alni* (Cercop.), innervation and sense-organs, 3686, 3688.—**Psocoptera:** WEBER, 3547.—**Plecoptera:** WILLEY, 3623; ZĄCWIŁICHOWSKI, *Isopteryx tripunctata*, innervation and sense organs, 3687.—**Ephemeroptera:** NEEDHAM, TRAVER & HSU, 2347.—**Orthoptera:** CAMERLENGO, *Gryllotalpa gryllotalpa* (Gryllid.), 472.

LEGS.

Coleoptera: FRANKENBERG, *Dytiscus*, *Acilius*, coupling apparatus, 1029; KEYS, *Atheta sordida*, *Oxyopoda opaca* (Staph.), variation in tarsi, 1694.—**Hymenoptera:** EIDMANN, *Trichogramma minutum*, 855.—**Hemiptera:** COKER, MILLSAPS & RICE, *Rhagovelia flavicincta*, swimming plume and claws, 608; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688.—**Anoplura:** SALFI, *Haematopinus suis*, 2905.—**Psocoptera:** WEBER, 3547.—**Ephemeroptera:** NEEDHAM, TRAVER & HSU, 2347.—**Odonata:** ST. QUENTIN, cleaning apparatus on fore tibia, 2900.—**Orthoptera:** CAMERLENGO, *Gryllotalpa gryllotalpa*, 472.

ABDOMEN.

Coleoptera: BLACKBURN, *Silpha americana*, 281; LESNE, *Sphaerius*, 1921.—**Hymenoptera:** KEIR, mechanism of sawfly terebra (Tenth.), 1667; LOTMAR, one-eyed bees, 2007; MELINOSI, poison apparatus in stinging Hymenoptera, 2169; ROUET, *Vespa crabro*, sting, 2862; SCHLUSCHE, stinging apparatus in Vespidae, 2957.—**Mecoptera:** LIEFTINCK, *Leptopanorpa*, 1950.—**Diptera:** CRAMPTON, post-abdomen in ♂ Cyclorhaphous Dipt., 664.—**Siphonaptera:** WAGNER, reduction in 8th abdominal sternite, 3512.—**Hemiptera:** PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688.—**Mallophaga:** WILSON, *Lipeurus heterographus*, segmentation, 3633.—**Plecoptera:** DESPAX, *Chloroperla*, 758.—**Ephemeroptera:** NEEDHAM, TRAVER & HSU, 2347.—**Orthoptera:** BARBAROSSA, *Gryllotalpa gryllotalpa*, 171; GURNEY, *Ceuthophilus brevipes* (Tettig.), 1227.

SOUND-PRODUCING ORGANS.

HESSE, S. African insects, 1368;
 MARCU, Dytiscidae (Col.), 2112.

SCALES AND HAIRS.

BAYARD, scales in Lepidoptera, 188;
 KOSAROFF, *Japyx* (Thysanura), chaetotaxy of Bulgarian spp., 1800; LE CERF, *Gazera* (Lep. Castn.), androconia, 1897;
 MAHDIHASSAN, *Lakshadia chinensis* (Hem. Coccid.), dorsal spine, 2066;
 WARREN, *Erebia* (Lep.), androconial scales, 3539.

SENSE ORGANS.

Hymenoptera; MÉHELÿ, scent organ in primitive bees, 2158.—Lepidoptera: BAUS, presumed sense-organs in wings, 186; DEBAISIEUX, scolopidia in feet of Lepidoptera, 723; EGGERS, *Calocampa* spp. (Noct.), protective bars in tympanal organs, 845; LUH, Arctiidae (Lep.), skeletal structures of tympanum, 2015; PRÜFFER, *Saturnia pyri*, chemoreceptors in antennae, 2700.—Diptera: DE VOS-DE WILDE, larvae of Cyclorrhapha, particularly Anthomyiidae, 760; EGGERS, halteres and sense-organs in Diptera, 844.—Hemiptera: DEBAISIEUX, pulsatile organs in tibia in Notonectidae, 724; ZAĆWILICHOWSKI, *Aphrophora alni* (Cercop.), sense-organs in wings, 3686, 3688.—Plecoptera: ZAĆWILICHOWSKI, sense-organs in wings, 3687, 3689.—Ephemeroptera: NEEDHAM, TRAVER & HSU, 2347.—Orthoptera: SLIFER, *Melanoplus differentialis* (Acrid.), structure and distribution on body of scoloparia, 3093.

ALIMENTARY SYSTEM.

Insecta: BÖVING, special structures of epipharynx and raster, 355; NEWELL & BAXTER, mid-gut epithelia, 2356.—Coleoptera: CARLETON, *Nebria brevicollis* (Carab.), 486; EVERLY, *Epicaruta cinerea* (Meloid.), 929; LANDIS, *Ceratomegilla fuscilabris* (Coccin.), 1879; PARKIN, *Lyctus* (Col.), 2514; POLL, *Tenebrio molitor*, 2655; THIEL, proventriculus in Coleoptera, 3303.—Hymenoptera: ZACH, honey-bee, 3684.—Trichoptera: GLASGOW, *Hydropsyche colonica*, larva and imago, 1126.—Neuroptera: POLL, *Acanthachlasis baetica* 2659.—Diptera: MAKI, alimentary canals and their appendages

in Syrphidae, 2069; SELLKE, Tipulid larvae, 3022; TOKUNAGA, *Nymphomyia alba*, 3352; ZILCH, *Chironomus*, epithelium in larvae, 3702.—Siphonaptera: WAGNER, *Pulex irritans*, structure of hind-gut, 3516.—Hemiptera: BREakey, *Anasa tristis* (Coreid.) histology, 371; HAMNER, *Solubea pugnax* (Pentat.), 1249; MILLER, *Macrosiphum sanbornii* (Aphid.), digestive epithelium, 2236; PESSON, Coccidae, 2569; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688.—Ephemeroptera: NEEDHAM, TRAVER & HSU, 2347.—Orthoptera: HODGE, *Melanoplus differentialis* (Acrid.), 1406.

RESPIRATORY SYSTEM.

Coleoptera: SUSSKIND, *Stenelmis sulcatus* (Parn.), larva, 3226.—Hymenoptera: DREHER, *Apis mellifica*, 811.—Lepidoptera: GÄBLER, *Achroia grisella*, *Galleria mellonella* (Pylal.), 1074.—Diptera: BURTT, *Atrichopogon trifasciatus* (Ceratopog.), new type of larval respiratory organ, 455; KUSTER, *Odontomyia cincta* (Strat.), variation of of ganglionic tracheae in larvae, 1850; LINDNER, Diptera, 1967; SEURAT, *Trichocladus seurati*, (Chiron.), tracheal apparatus, 3042; TOKUNAGA, *Nymphomyia alba*, 3352.—Hemiptera: PRESSWALLA & GEORGE, water bugs (Hem.), 2687, 2688.—Ephemeroptera: EASTHAM, *Caenis*, sensillae on gills of nymphs, 833; NEEDHAM, TRAVER & HSU, 2347.—Orthoptera: AMOROSO, spiracles, 68; ZEUNER, prothoracic tracheae of Saltatoria, 3699.

REPRODUCTIVE SYSTEM.

Insecta: SNODGRASS, male genitalia, 3108.—Coleoptera: BLACKBURN, *Silpha americana*, 281; BLAISDELL, *Stibia* (Tenebr.), 290; LHOSTE, *Scydmaenidae*, 1932; MCKENZIE, *Anatis* (Coccin.), 2053.—Hymenoptera: MÉHELÿ, copulatory apparatus in primitive bees, 2158; MUKERJEE, *Myrmicaria brunnea* (Formic.) ovaries in worker, 2298; NOBLE, *Eurytoma mellis*, ovipositor, 2377; PUZANOVA-MALYSHEVA, *Syntomaspis eurytoma* sp. n., 2714.—Lepidoptera: BAYARD, *Aricia* group *medon*, specific characters of genital armature (Lycan.), 187, genitalia in Lepidoptera, 189; BERIO, copulatory apparatus, 233; BRANDT, *Lymantria monacha*,

pairing organs, 367; HEYDEMANN, some Geometridae, 1373; KLOTS, *Lycaena*, 1739; OMURA, *Bombyx mori*, structure of testis and intratesticular behaviour of spermatozoa, 2452; PIERCE & METCALFE, clasping organs in Tineidae, 2622; RICHARDS, Erebinæ (Noct.), 2786; ROCCHI, *Zygaena*, 2815; STEMPFER, *Lycaena eleusis*, genitalia, 3178; VERITY, *Aglais urticae*, male genital armature, 3474; WARREN, *Erebia* (Lep.), 3539.—**Trichoptera**: GLASGOW, *Hydropsyche colonica*, ♂, 1126.—**Diptera**: GLEICHAUF, *Drosophila melanogaster*, 1128; HENNIG, copulatory organs: Tanypezidae, 1334, Psychodidae and Asilidae, 1338, Cyclorrhapha, 1339; LACKSCHWITZ, Eriophorinae (Tip.), hypopygia, 1864; LINDNER, Diptera, 1967; PARROT, *Phlebotomus* (Psych.), 2516; PATTON, *Cordylobia*, *Glossina*, *Hypoderma* spp., 2524; PATTON & WAINWRIGHT, Sarcophaginae, 2525; SELLKE, Tipulidae, 3022; YAO & WU, *Anopheles hyrcanus* var. *sinensis*, ♂ hypopygium, 3666; ZUMPT, *Glossina*, 3725.—**Hemiptera**: LARSEN, *Coranus subapterus* (Reduv.), 1887; PAYNE, *Leptocoris trivittatus* (Coreid.), female genitalia, 2540; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688.—**Mallophaga**: QADRI, male genitalia, 2717.—**Psocoptera**: BADONNEL, *Ectopsocus*, gonapophyses, 117; WEBER, 3547.—**Plecoptera**: DESPAX, *Chloroperla*, 758.—**Ephemeroptera**: NEEDHAM, TRAVER & HSU, 2347.—**Odonata**: SCHMIDT, *Epiophlebia superstes*, appendages of basal abdominal sternites in male, 2961.—**Orthoptera**: BARBAROSSA, *Grylloptalgrylotalpa*, 171; GURNEY, *Ceuthophilus brevipes* (Tettig.), 1227; SLIFER & KING, glandular pouches in Cyrtacanthacrinae, 3094.

NERVOUS SYSTEM.

Insecta: TONNER, nervous system of skin, 3365.—**Coleoptera**: JAWEOWSKI, brain, 1584.—**Hymenoptera**: GEJVALL, *Apis mellifera*, size of different brain-centres, 1098; MILLER, histological study of brain of a one-eyed bee, 2235.—KUWANA, *Bombyx mori*, innervation of alimentary canal of larva, 1852.—**Trichoptera**: GLASGOW, *Hydropsyche colonica* (Trichopt.), larva and imago, 1126.—**Neuroptera**: MAKI, *Chauliodes formosanus*, 2068.—**Diptera**: SELLKE, Tipulid larvae, 3022; TOKUNAGA,

Nymphomyia alba, 3352.—**Hemiptera**: GRAICHEN, *Nepa cinerea*, central and sympathetic nervous system, 1169; HANSTRÖM, *Lygaeus equestris*, brain, 1256; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688.—**Psocoptera**: WEBER, 3547.—**Ephemeroptera**: EASTHAM, *Caenis*, sensillae on gills of nymphs, 833; NEEDHAM, TRAVER & HSU, 2347.—**Orthoptera**: TORG, *Elaeochlora viridicata* (Acrid.), nerve terminals in muscles of jumping legs, 1627; OPOLZYNSKA-SEMBRATOWA, *Carausius morosus* (Phasm.), nervous system of heart, 2455.—**Thysanura**, **Collembola**: HILTON 1381.

EXCRETORY SYSTEM.

Insecta: POLL, Malpighian tubes in insects compared with urinary tubes in Vertebrates, 2654.—**Coleoptera**: LANDIS, *Ceratomegilla fuscilabris* (Coccin.), Malpighian tubules, 1879; POLL, *Tenebrio molitor*, Malpighian tubes, 2655.—**Trichoptera**: GLASGOW, *Hydropsyche colonica*, Malpighian tubes and hind gut in larva, 1126.—**Neuroptera**: POLL, *Acanthaclisis baetica*, Malpighian tubes in larva, 2659.—**Diptera**: LINDNER, 1967; MAKI, Malpighian tubes of Syrphids, 2069.—**Siphonaptera**: WAGNER, *Pulex irritans*, structure and development of Malpighian tubes, 3516.—**Hemiptera**: PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), Malpighian tubes, 2688.—**Ephemeroptera**: NEEDHAM, TRAVER & HSU, 2347.—**Dermaptera**: LISON, *Forficula auricularia*, colour of nucleoles in Malpighian tubes, 1988.

CIRCULATORY SYSTEM.

NEEDHAM, TRAVER & HSU, Ephemeroptera, 2347; OPOLZYNSKA-SEMBRATOWA, *Carausius morosus* (Phasm.), anatomy and innervation of heart, 2455; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belostom.), 2688; TZONIS, *Corethra plumicornis* (Culic.), larva, 3397.

HISTOLOGY.

Insecta: NEWELL & BAXTER, histology of mid-gut epithelia, 2356; VANDERVAEL, histology of striated muscle fibres, 3438.—**Coleoptera**: BUSHNELL, *Acanthoscelides obtectus* (Bruch.),

metamorphosis of mid-intestinal epithelium, 457; LUDWIG & ABERCROMBIE, *Popillia japonica* (Rutel.), histology of mid-gut in growing larva, 2014; POLL, *Tenebrio molitor*, histology of intestine and Malpighian tubes, 2655.—**Hemiptera**: BREAKEY, *Anasa tristis*, digestive system, 371; LAWSON, *Macrosiphum solanifolii* (Aphid.), 1893.—**Neuroptera**: POLL, *Acanthaclisis baetica* histology of digestive tract and Malpighian tubes in larva, 2659.—**Orthoptera**: HODGE, *Melanoplus differentialis* (Acrid.), alimentary system, 1406; MALABOTTI, *Carausius* (*Dixippus*) *morus* (Phasmid.), histology of individuals with transplanted heads, 2072.

MYOLOGY.

Insecta: VANDERVAEL, histology of striated muscle fibres, 3438.—**Coleoptera**: THIEL, musculature of proventriculus, 3303.—**Hymenoptera**: SPEICHER & MILLER, *Habrobracon*, myology of antennal movement, 3146.—**Lepidoptera**: MACHOTIN, *Operophtera brumata*, wing muscles, 2336.—**Neuroptera**: MAKI, *Chauliodes formosanus*, 2068.—**Diptera**: CAREY & ZEIT, *Tipula wisconsinensis*, Cohnheim areas, 485; MIHÁLYI, *Musca domestica*, flight muscles, 2226.—**Psocoptera**: WEBER, 3547.—**Ephemeroptera**: NEEDHAM, TRAVER & HSU, 2347.—**Odonata**: TONNER, breathing and swimming muscles, 3364.—**Orthoptera**: JORG, *Elaeochlora viridicincta* (Acrid.), nerve terminals in muscles of jumping legs, 1627.

FAT-BODY.

BONNEVILLE, adipose tissue in termites, 328; PARDI, 2532.

GLANDS.

Coleoptera: COLOMBINI, pygidial glands in Carabidae, 628, 629; PU, in mouthparts of Hydrophilidae, 2705.—**Hymenoptera**: ESPÉRANDEU, venom glands in Vespidae and Apidae, 909; GONTARSKI, *Apis mellifica*, development of wax glands in winter, 1150; SCHLUSCHE, poison glands in Vespidae, 2957; SOUDEK, *Apis mellifica*, pharyngeal glands, 3126; TULLOCH, *Myrmica rubra* (Formic.), metasternal glands, 3383.—**Lepidoptera**: DICKINS, Phycitidae, scent-glands, 765; KURISAKI,

Dendrolimus spectabilis (Lasioc.), silk gland, 1848.—**Trichoptera**: GLASGOW, *Hydropsyche colonica*, silk, salivary and dorsal cephalic glands in larva, 1126.—**Diptera**: BAUER, salivary gland chromosomes in Chironomidae, 184, 185; FROLOVA, *Drosophila* spp., structure of nucleus in salivary glands, 1058, 1059; MAKI, Syrphidae, 2069; MARSHAK, *Drosophila melanogaster*, chromosomes of salivary gland, 2117; METZ, salivary gland chromosomes in Diptera, 2195; PAVLOVSKII, STEIN & OLSUF'EV, *Tabanus* salivary glands and the action of saliva on skin of man, 2536; TINYAKOV, *Dros. funebris*, chromosomes of salivary gland, 3343.—**Hemiptera**: FERRIS & MURDOCK, Pseudococcidae, 966; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belost.), salivary glands, 2688.

PUPAE.

Coleoptera: DENIER, *Trox suberosus*, 1; CHALAUX, *Sitodrepa panicea* (Anob.), 522; FIDLER, British chafer beetles, 967; GOREIL, *Ips perturbatus*, Nat. canad., Quebec 63 p. 98; HAMMER, *Tachypterellus quadrigibbus* (Curc.), 1248; KASTON, *Hylurgopinus rufipes* (Scolyt.), 1654; KUNKE, *Calandra granaria* (Curc.), 1841; SILVEY, *Heterocerus auromicans*, *Bembidion confusum*, *Dyschirius sphaericollis*, *Homophron tessellatum*, *americanum*, *Bledius* sp., 3070; WEIDNER, *Hylotrupes*, 3559.—**Hymenoptera**: NOBLE, *Eurytoma fellis*, 2377; SERVADEI, *Cladius difformis*, 3040, *Emphytus cinctus* (Tenth.), 3041; THORPE, *Encyrtus infelix*, 3318.—**Lepidoptera**: BOURQUIN, *Xanthopastis timais* (Noct.), 347; BRANDT, *Bupalus piniarius*, sexual characters of pupae, 364; CLARK, *Tortrix excessana*, 571, *Rhabdoides cellus* (Hesper.), 573; DUPONT, *Troides amphyrus*, *Papilio doson evemonides*, 825, *Panacra* (Sphing.), 826; GÄBLER, stigmal structure, 1073; GOETZE, *Hemerocampa leucostigma* (Lyman.), 1144; GÓRSKI, *Acentropus niveus* (Pyr.), 1155; HAIG, Nigerian Papilionidae, Pieridae, 1236; HEYDEMANN, *Lythria purpuraria*, *purpurata* (Geom.), 1372; ISHIMURA, *Argynnis paphia paphioides* (Nymph.), *Zephyrus*, Fukuoka 6 pp. 369–371 figs.; LE CERE, Eriocraniidae, 1896; McDUNNOUGH, *Oidematomorphus guttatus* (Pteroph.), 2046; SAALAS, *Incurvaria pectinea*, 2892; SEVASTOPULO, Hesperidae, Indi-

3043.—*Trichoptera*: GELJSKES, *Rhyacophila pubescens*, *Synagapetus dubitans*, 1096a; GOODRICH, *Dicosmoecus atripes*, thorax, 1152.—*Neuroptera*: DAVID, *Osmylus chrysops*, 714; FRANKENBERG, *Chrysopa vulgaris*, 1028.—*Diptera*: BAISAS, *Anopheles*, *Myzorhynchus* and *Neocellia* groups, 131, 132; BESS, *Leschenaultia exul* (Tach.), 263; COHEN, *Phytomyza atricornis*, 607; DE MEILLON, EVANS & LEESON, *Anopheles marshalli*, 743; EDWARDS, *Chionea lutescens* (Tipul.), 840; FULLER, *Scaptia auriflua* (Taban.), 1067; GHIDINI, Italian Tabanids, 1106; GOUIN, Chironomids, 1162; KANGAS, *Dendromyza betulae* sp. n. (Agrom.), 1643; KETTISCH, *Cricotopus trifasciatus* (Chiron.), 1687; KLEIN-KRAUTHM, *Eristalinae*, 1721; LAAKE, CUSHING & PARISH, *Cochliomyia americana* (Calliph.), 1858; MORETTI, *Chironomus* sp., 2266; NIESCHULZ, *Tabanus rubidus*, *striatus*, 2368; PAGAST, Chironomidae, 2478; REMPEL, *Chironomus hyperboreus*, 2772; ROMAN, *Aedes sticticus* (Culic.), 2826; RONNA, *Melaloncha ronnai* (Phor.), 2831; SEEMANN, fossil Psychodid pupae, 3000; SEGAL, *Chrysops* (Taban.), 3001; SELLKE, Tipulidae, 3022; STORK, Anthomyiidae, 3191; THIENEMANN, Orthocladiinae (Chiron.), 3304, *Eukiefferiella* (Chiron.), 3307; TOWNSEND, *Brachycoma sarcophagina* (Metopiid.), 3367; VENKATRAMAN, *Sarcophila cinerea*, 3468; VENTURI, *Dizygomyza lateralis* (Agrom.), 3469, *Agromyza mobilis*, 3470; YAMADA, *Anopheles* spp., Chosen, 3660; ZAVŘEL, Tany-podini (Chironom.), 3695.

LARVAE.

Coleoptera: ANDERSON, labium of larvae, 76; BEERTRAND, a Dryopid, 259, aquatic Coleoptera, 260, 261; BLAIR, *Anthrenocerus australis*, *Attagenus piceus megatoma* (Dermes.), Ent. mon. Mag. 72 pp. 175-177; BOLDORI, Trechini, 317, 318, 320, *Amara* spp. (Carab.), 319; BÖVING, *Plectris aliena* (Melol.), 355; CHALAUX, *Sitodrepa panicea* (Anob.), 522; CHOPARD, *Anthia sexmaculata* (Carab.), 553; COOK, *Calosoma inquisitor* (Carab.), plate, 641; CROS, *Meloe affinis* var. *setosus*, 673; DENIER, *Trox suberosus*, 1; VAN EMDEN, larva between Carabidae and Paussidae, 868, beetle larvae of Belgian caves, 870, *Pogonostoma* sp.

(Cicind.), 869, *Callirrhapis* spp. (Sandal.), 872; FIDLER, British chafer beetles, 967, *Otiorrhynchus* (Curc.) spp., first instar, 968; GARDNER, Indian Anthribidae, 1087, *Cussolenis mutabilis* (Elat.), 1089; GELJSKES, Javanese Helodidae, 1096; GOBEIL, *Ips perturbatus*, Nat. canad., Quebec 63 p. 98; GOLOVYANKO, commoner Lamellicorn larvae of European U.S.S.R., 1147; HAMMER, *Tachypterellus quadrigibbus* (Curc.), 1248; HINTON, *Dryops luridus*, 1396, *Macronychoides unguilatus* (Parn.), 1397; HOFFMANN, *Serica sericea* (Melol.), 1426; JEANNEL, *Anthia* (Carab.), 1587; KASTON, *Hyलगорinus rufipes* (Scolyt.), 1654; KÖNIG, *Pinus tectus*, 1785; KUNIKE, *Calandra granaria* (Curc.), 1841; MADLE, *Aphodius* spp., 2060; MURAYAMA, *Callipogon relictus* (Ceram.), Kontyû 10 pp. 280-290 [in Japanese]; OOSTHUIZEN & SHEPARD, *Tribolium confusum* prothetely, 2454; ÖRSÖ-PÁL, *Meloe* spp., 2468; PAULIAN, *Staphylinus pedator*, 2532; PIERANTONI, *Silvanus surinamensis*, symbiotic organ, 2618; RAYNAUD, various Carabidae, 2739, 2741; RYMER ROBERTS, spiracles in 1st instar, 2890; SHAPIRO, *Ceuthorrhynchus syrites* (Curc.), 3053; SHEPARD, *Cryptolestes ferrugineus* (Cucuj.), 3060; SILVEY, *Heterocerus auromicans*, *Bembidion confusum*, *Dyschirius sphaerocollis*, *Omophron tessellatum*, *americanum*, *Bledius* sp., 3070; STAMM, *Rhipidius pectinicornis*, 3155; URBAN, *Apion meliloti* (Curc.), Ent. Blätt. 32 pp. 105-106; WEIDNER, *Hylotrupes* (Ceram.), 3559; WILLIAMS, Dytiscidae, Hydrophilidae, Hawaii, 3630; ZNOJKO, *Zabrus blapoides*, *Harpalus calceatus* (Carab.), 3709.—*Hymenoptera*: BOYCE, *Ascogaster carpocapsae* (Brac.), 358; FLANDERS, *Coccophagus lycimnia* (Aphelin.), differences between ♂ and ♀, 994; FORSSLUND, *Lygaenematus subarcticus* (Tenth.), 1017; GIORDANI SOIKA, *Melecta luctuosa* (Apid.), primary larva, 1119; GRANDI, some Aculeata, 1170, some Tenthredinids, 1171; HAMILTON, *Apanteles glomeratus* (Brac.), 1244; HOFFMANN, *Arge victorina* and other Chinese Tenthredinids, 1432; HOPPING & LEECH, *Neodiprion tsugae* (Tenth.), 1457; JOSEPH, Chilean Sphegidae, 1628; KOJIMA, *Dicamptus nigropictus*, 1777; KUTTER, *Thripoctenus kutteri*, 1851; MANEVAL, *Anthidium catur-gense* (Apid.), 2090, *Zaglyptus varipes* (Ichn.), *Wesmaelinus sanguinolentus*,

- Cryptochilus affinis* (Pompil.); *Hoplisus latifrons* (Spheg.), *Hedychrum rutilans* (Chrys.), 2094; MARÉCHAL, *Trypoxylon* spp. (Spheg.), 2113; MENOZZI, *Rhopalothrix schmidti* (Formic.), 2181; MICHELL, *Anthidium catagirensse*, *Stelis ornatula*, 2208, *Dioxis cincta*, *Ceratina* spp., *Panurgus calcaratus* (Apid.), 2209; MILES, *Holconeme* spp., 2231, *Emphytus cinctus*, *Blennocampa waldeheimi*, 2232, *Empria* (Tenth.), 2234; NÄGELI, *Lygaconematus pini* (Tenth.), 2232; NOBLE, *Eurytoma fellis*, 2377; PARKER, *Chrysis shanghaiensis*, 2513; PELTERER, *Polistes gallicus*, 2552; PUZANOVA-MALYSHEVA, *Syntomaspis eurytoma*, sp. n., 2714; SEMICHON, *Colletes daviesanus* (Apid.), 3031; SERVADEI, *Cladius difformis*, 3040, *Emphytus cinctus* (Tenth.), 3041; STELTT, *Pamphilus vaser*, *Lygaconematus wesmaeli* (Tenth.), 3207; THOMAS, *Hoplocampa brevis* (Tenth.), 3310; THORPE, *Encyrtus infelix*, 3318.—
- Lepidoptera:** ABBAYES, *Celerio livornica* (Sphing.), 6; BORCHERT, *Achroia grisella* (Pyr.), 330; BOURQUIN, *Xanthopastis timais* (Noct.), 347; BURKILL, *Gonepteryx rhamni* (Pierid.), 448; CLARK, *Tortrix excessana*, 571, *Rhabdoides cellus* (Hesper.), 573; COCKAYNE, *Lampropteryx otagiata*, 584; COMSTOCK, *Erebis odora* (Noct.), 634; COMSTOCK & DAMMERS, *Euchelius elegans* (Arot.), *Erastria dividua*, *Miodera stigmatica*, *Trachea susquea* (Noct.), *Slossonia rubrotincta* (Geom.), 636; DOS PASSOS, *Calephelis borealis*, 792, *Brenthia montinus* (Nymph.), 793; DUPONT, *Troides amphrysus*, *Papilio doson evemonides*, 825; ERMOLAEV, *Semiothisa pumila* (Geom.), 895; GOETZE, *Hemerocampa leucostigma* (Lyman.), 1144; GÓRSKI, *Acentropus niveus* (Pyr.), 1155; HAIG, Nigerian Papilionidae, Pieridae, 1236; HEIN, *Erebia stygne*, 1306; HEYDEMANN, *Lythria purpuraria*, *purpurata* (Geom.), 1372; HOLLAS, *Hylophila prasinana* (Noct.), [concl.], Ent. Anz. 16 pp. 9-11; LANGE, *Eula citrana* (Tortric.), 1885; McDUNNOUGH, *Oidematomorphus guttatus* (Pteroph.), 2046; MARLANI, *Eustaintonia phragmitidella* (Morphid.), 2115; MELIS, *Polia pisi* (Noct.), 2171; NELSON, *Platynota stultana* (Tortr.), 2349; NG, *Cania bilinea* (Limac.), *Syntomis luteifascia*, 2358; POULTON, *Passalactis* (Tin.), Proc. R. ent. Soc. Lond. (A) 11 p. 98; PRZEGENDZA, *Zygaena dorycnii wagneriana* (Lep.), Ent. Rdsch. 53 p. 351; PUZIRNII, *Scotogramma trifolii* (Noct.), 2715; REUSS, *Colias rhamni*, *Anthocharis cardamines* (Pierid.), fifth instars, 2276; RORICH, *Oxytropia orbiculosa* (Noct.), 2836; SAALAS, *Incurvaria pectinea*, 2892; SEITZ, Paraguayan Lepidoptera, 3019; SEVASTOPULO, Hesperidae, India, 3043; STUBENRAUCH, *Erebia christi* (Satyr.), Ent. Rdsch. 53 pp. 521-523, fig.; TSUDA, Japanese aquatic larvae, 3379; WEIDNER, poisonous hairs of some Lepidopterous larvae, 3558; WILTSHIRE, some Syrian Lep., 3634.—
- Trichoptera:** ELKINS, some Minnesota spp., 859; GELSKES, *Rhyacophila pubescens*, *Synagapetus dubitans*, 1098a; LESTAGE, *Micrasena*, 1924; TSUDA, *Kitagamia montana*, *Neoseverinia crassicornis*, 3379, *Apatania* sp., 3380.—
- Neuroptera:** DAVID, *Osmylus chrysops*, 714; FRANKENBERG, *Chrysopa vulgaris*, 1030; NAVÁS, *Palpares hispanus*, 2333; POLL, *Acanthaclisis baetica* (Neur.), urinary apparatus, 2659.—
- Diptera:** BESS, *Leschenaultia exul* (Tach.), 263; BIRULA, *Tanytarsus* spp. (Chiron.), 275; BOVEY, *Oncodes pallipes* (Cyrtid.), 353; BREHM, *Corethra* spp. (Culic.), 375; BRIDAROLLI, *Paraspiniphora signata* (Phorid.), 385; COHEN, *Phytomyza atricornis* (Agrom.), 607; DE MEILLON, EVANS & LEESON, *Anopheles marshalli*, 743; DE VOS-DE WILDE, Cyclorrhapha, particularly Anthomyiidae, 760; ECKSTEIN, exotic Chaoborinae (Culic.), 837; FULLER, *Scaptia auriflua* (Taban.), 1067; GHIDINI, Italian Tabanids, 1106; GOUIN, Chironomids, 1162; HEISS, *Drosophila melanica*, short-tailed larva, 1314; HOPKINS, Ethiopian mosquitos, 1455; KANGAS, *Dendromyza betular* sp. n. (Agrom.), 1643; KETTSCH, *Cricotopus trifasciatus* (Chiron.), 1687; KIEFFER, *Eukiefferiella* (Chiron.), 3307; KNIPLING, *Lucilia*, 1743, *Sarcophaga*, 1744; KLEIN-KRAUTHHEIM, Eristalinae, 1721; KOMP, *Aedes dominici* (Culic.), 1782; KOMP & OSORNO M., *Anopheles boliviensis*, 1783; LAAKE, CUSHING & PARISH, *Cochliomyia americana*, *macellaria* (Calliph.), 1858; LI & WU, Culicines, Hangchow, 1936; MONTSCHADSKY, Russian mosquitos, 2265; MORETTI, *Chironomus* sp., 2266; NIESCHULZ, *Tabanus rubidus*, *striatus*, 2368; PAGAST, *Aedes aegypti*, anal papillae, 2479; PATTON, *Hypoderma* spp., 2524; PEARSE, Chironomids.

Yucatan, 2547; REMPEL, *Chironomus hyperboreus*, 2772; RICE, DATTA & BELL, *Anopheles gigas* var. *baileyi*, Rec. Malar. Surv. Ind. 6 p. 27; ROMAN, *Aedes sticticus*, 2826; RONNA, *Melanolcha ronnai* (Phor.), 2831; ROZEBOOM *Culex rooti*, 2865; SEGAL, *Chrysops* (Taban.), 3001; SELLKE, Tipulidae, 3022; SIRIBAED, pleural hairs of Culicine larvae, 3079; THIENEMANN, Orthocladiinae (Chiron.), 3304; TOWNSEND, *Brachycoma sarcophagina* (Metopiid.), 3367; TZONIS, *Corethra plumicornis* (Culic.), 3397; VAN OYE, *Simulium*, structure of fixing apparatus, 3443; VENKATRAMAN, *Sarcophila cinerea*, 3468; VENTURI, *Dizygomyza lateralis* (Agrom.), 3469, *Agromyza mobilis*, 3470; WU, *Anopheles*, key to 4th instar larvae of Kwangtung Province, 3655; YAMADA, *Anopheles* spp., Chosen, 3660; ZAVŘEL, Chironomids, 3694, 3695; ZONOVA, *Chortophila laticicula* (Anthom.), 3714.—**Siphonaptera**: BEIER, 206; SHARIF, *Nosopsyllus fasciatus*, 3054.—**Hemiptera**: ABRAHAM *Orthotylus marginalis* (Caps.), 18, AITKINS, *Gastrodes abietis* (Lyg.), 30; BONNEMAISON, *Anidiella perniciosus*, *Aspidiotus ostreaeformis* (Cocc.), 327; COTTIER, *Pseudococcus cocotis*, 658; HOFFMANN, *Limnognathus fossarum* (Gerr.), 1433, *Rhagadotarsus kraepelini* (Gerr.), 1434; JOHNSON, *Leptotyphlus rhododendri* (Ting.), 1608; JORDAN, *Mesovelia furcata*, Isis Budissina, Bautzen 13 p. 178 fig.; LINDBERG, *Nysius groenlandicus* (Lygaeid.), 1955; MILLER, *Dasynus piperis* (Coreid.), 2240; SASAKI, *Anoecia karataneii* (Aphid.), 2920; SIMANTON & ANDRE, *Lygaeus kalmii*, 3076; SMITH, *Hyalopterus pruni* (Aphid.), 3100; SOLOMON, *Synaleurodicus hakeae*, *Aleurotrachelus dryandrae* (Aleurod.), 3115; VAYSSIÈRE, *Stictococcus*, 3460.—**Thysanoptera**: ISHIDA, *Elaphothrips* sp., 1540; RUSSO, *Selenothrips rubrocinctus*, 2887; SPEYER, *Aptinothrips rufus*, 3149.—**Psocoptera**: WEBER, 3547.—**Plecoptera**: KOHNO, *Peltoptera* sp., 1775.—**Ephemeroptera**: IMANISHI, *Heptagenia kihada*, 1527; McDUNNOUGH, *Ameletus oregonensis*, *vernalis*, 2047; NEEDHAM, TRAVER & HSU, 2347; STEINBERG, *Baetis* sp. 3169; VAYSSIÈRE, Kenya, 3462.—**Odonata**: BYERS, *Brachymeria grandidi*, 465; KENNEDY, *Gomphaeschna furcillata*, 1679; LIEFTINCK, lesser Sunda Is., 1949; NEEDHAM & FISHER, N. American Libellulines, 2346; PRITCH-

ARD, *Somatochlora ozarkensis*, Ent. News 47 p. 100; SCHMIDT, European *Leucorrhinia* spp., 2958, *Aeschna* spp., 2959, *Gomphus* spp., 2960.—**Orthoptera**: EBNER, *Paracycloptera* (Tettig.), 836.

EGGS.

Coleoptera: DENIER, *Trox suberosus*, 1; BARROS, *Callideriphus laetus* (Ceram.), 175; FIDLER, British chafer beetles, 967; GOBEL, *Ips perturbatus*, Nat. canad., Quebec 63 p. 97; HAMMER, *Tachypterellus quadrigibbus* (Curc.), 1248; HECHT, *Chilocorus bipustulatus* (Coccin.), 1296; KASTON, *Hylurgopinus rufipes* (Scolyt.), 1654; KÖNIG, *Pinus tectus*, 1785; KUNIKE, *Calandra granaria* (Curc.), 1841; WEIDNER, *Hylotrupes* (Ceram.), 3559.—**Hymenoptera**: CUÉNOT, *Paniscus*? *cephalotes* (Ichn.), 681; FLANDERS, *Cocophagus lycimnia* (Aphelin.), differences between ♂ and ♀, 994; HOFFMANN, *Arge victorina* (Tenth.), 1432; HOPPING & LEECH, *Neodiprion tsugae* (Tenth.), 1457; NOBLE, *Eurytoma fellis*, 2377; PUZANOVA-MALYSHEVA, *Syntomaspis eurytomae* sp. n., 2714; SERVADEI, *Cladius difformis*, 3040, *Emphytus cinctus* (Tenth.), 3041; THOMAS, *Hoplocampa brevis* (Tenth.), 3310.—**Lepidoptera**: BOURQUIN, *Xanthopastis timais* (Noct.), 347; CLARK, *Trorix excessana*, 571, *Rhabdoides cellus* (Hesper.), 573; DÖRING, Noctuidae, 789; GOETZE, *Hemerocampa leucostigma* (Lyman.), 1144; HAIG, Nigerian Papilionidae, Pieridae, 1236; LANGE, *Eulia citrana* (Tortr.), 1885; MANUNTA, *Bombyx mori*, yellow pigment of yolk and shell of egg, 2104; MELIS, *Polia pisi* (Noct.), 2171; OCHMANN, photos of Lep. eggs, 2420; PEKING, *Eubolia murinaria*, 2549; SAALAS, *Incurvaria pectinea*, 2892.—**Neuroptera**: DAVID, *Osmylus chrysops*, 714; HANDLIRSCH & BEIER, 1250; HUNGERFORD, *Mantispa interrupta*, 1500.—**Mecoptera**: HANDLIRSCH & BEIER, Mecoptera, Trichoptera, 1251.—**Diptera**: AKALIN, *Anopheles elutus*, 31; BESS, *Leschenaultia exul* (Tach.), 263; BOVEY, *Oncodes pallipes* (Cyrtid.), 353; COHEN, *Phytomyza atricornis* (Agrom.), 607; GHIDINI, Italian Tabanids, 1106; KLEIN-KRAUTHEIM, chorion in Syrphid eggs, 1732; LAAKE, CUSHING & PARISH, *Cochliomyia americana* (Calliph.), 1858; NIESCHULZ, *Tabanus rubidus*, *striatus*,

2368; REMPEL, *Chironomus hyperboreus*, 2772; SEGAL, *Chrysops* (Taban.), 3001; SELLEKE, Tipulidae, 3022; SERGENT, *Anopheles* spp., 3039; TATE & VINCENT, *Culex pipiens*, autogenous egg-rafts, 3277; VENTURI, *Dizygomyza lateralis* (Agrom.), 3469, *Agromyza mobilis*, 3470; WALCH & WALCH-SORGDRAGER, *Anopheles subpictus*, differences in eggs from salt and fresh water breeding-places, 3519; WU, some Chinese *Anopheles* 3656; YAMADA, *Anopheles* spp., Chosen, 3660.—Hemiptera: ABRAHAM, *Orthotylus marginalis* (Caps.), 18; HOFFMANN, *Rhagadotarsus kraepelini* (Gerr.), 1434; JOHNSON, *Leptobyrza rhododendri* (Ting.), 1608; MILLER, *Dasyneus piperis* (Coreid.), 2240; POISSON, Heteroptera, 2647; SASAKI, *Anoecia karataneii* (Aphid.), 2920; SIMANTON & ANDRE, *Lygaeus kalmii*, 3076; SMITH, *Hyalopterus pruni* (Aphid.), 3100; SOLOMON, *Synaleurodicus hakeae*, *Aleurotrachelus dryandrae* (Aleurod.), 3115.—Mallophaga: BEIER, 205.—Psocoptera: MCCLURE, *Ectopsocus californicus*, 2042.—Ephemeroptera: NEEDHAM, TRAVER & HSU, 2347.—Orthoptera: LE FEUVRE, *Phalces longiscaphus*, *Macynia labiata* (Phasm.), 1904; MEISSNER, *Carausius hilaris* (Phasm.), 2164; ROONWAL, *Locusta migratoria migratorioides* (Acrid.), 2832; THOMAS, *Carausius morosus* (Phasm.), 3309.

DEVELOPMENT.

SPERMATOGENESIS.

FUCHSÓWNA & SAUCZYŃSKA, preservation of heterochromosomes during spermatogenesis, 1062; GRASSÉ & BONNEVILLE, *Bellicositermes natalensis* (Isopt.), abnormal spermatogenesis, 1175; JEFFREY, gigantic sperms in Orthoptera, 1600; MULIYLIL, yolk in male germ cells, 2301; NAJERA ANGULO, *Phlebotomus ariasi* (Dipt.), 2325; POISSON, aquatic Hemiptera, 2650; POLUSZYŃSKI, Ephydriidae (Dipt.), 2680; RAICHOUDHURY, *Ephesia kühniella* (Lep.), retardation of spermatogenesis and motility of sperm by high

temperature, 2726; SCOTT, *Micromalthus debilis* (Col.), haploidy and aberrant spermatogenesis, 2992.

OÖGENESIS.

HOWLAND & SONNENBLICK, *Drosophila melanogaster*, regulation in early egg, 1485; KRACZIEWICZ, *Miastor metraloas* (Dipt.), difference between parthenogenetic and sexual oocytes, 1814; LAWSON, *Macrosiphum solanifolii* (Hem. Aphid.), 1893; MER, *Anopheles elutus*, ovary, 2187; NEEDHAM, TRAVER & HSU, 2347; ROONWAL, *Locusta migratoria migratorioides* (Orth.), growth changes of egg, 2832; SCALIZZI, *Bombyx mori*, germinative cells in bivoltine and univoltine races, 2926; SPEICHER, *Habrobracon* (Hym.), 3145; STELLA, *Reticulitermes lucifugus*, *Calotermes flavicollis*, maturation of gonads 3174, *Drosophila innigrans*, 3175; WIGGLESWORTH, *Rhodnius prolixus* (Reduv.), corpus allatum and egg development, 3599.

EMBRYOLOGY.

Insecta: KORSCHOLT, 1799; SEIDEL, physiology of development of embryo, 3009; STROHL, physiological embryology, 3209.—Coleoptera: BRAUER & TAYLOR, organisation in eggs in Bruchids, 369; BUTT, *Otiorrhynchus ligustici* (Curc.), 462; COCKERHAM, *Heteroderes laurenti* (Elat.), time for incubation of eggs, 606; HOFFMANN, *Serica sericea* (Melol.), 1426; KÖNIG, *Ptinus tectus*, 1785; NOSKIEWICZ & POLUSZYŃSKI, polyembryony in Strepsiptera, 2388; STRASBURGER, *Epilachna chrysomelina* × *capensis* (Col.), effect of crossing on egg development, 3200.—Hymenoptera: EIDMANN, *Trichogramma minutum*, 855.—Lepidoptera: DEMYANOVSKIĬ, GAL'TZOVA & ROZHDESTVENSKAYA, *Bombyx mori*, change in active acidity in egg during development, 745; DRUMMOND, *Ephesia kühniella* (Pyr.), germinal layers concerned in formation of alimentary canal and Malpighian tubes, 816; FUKUDA, *Bombyx mori*, oxygen consumption in developing egg, 1065; QUERCI, Papilionidae, 2722; STEINER, *Laphygma exigua* (Noct.), 3171; TURDAKOV, *Bombyx mori*, variation in viability of eggs of different sizes, 3388.—Trichoptera: HANDLIRSCH & BEIER, 1251.—Diptera: LASSMANN, *Melophagus*

ovinus (Hippob.), 1888; SELLEKE, Tipulidae, 3022; STELLA, *Drosophila immigrans*, 3175.—Siphonaptera: BEIER, 206.—Hemiptera: JAMES & HAGER, *Blissus leucopterus*, incubation of egg, 1573; MELLANBY, *Rhodnius prolixus* (Reduv.), later embryology, 2175; NIKLAS, *Pyrhocoris apterus*, 2371.—Thysanoptera: BUHL, *Kakothrips robustus*, 431.—Neuroptera: DAVID, *Osmylus chrysops*, 714; DU BOIS, *Sialis lutaria*, embryonic determination, 818; HANDLIRSCH & BEIER, 1250.—Psocoptera: JENTSCH, *Hyperetes guestphalicus*, embryonic development, 1602; WEBER, 3547.—Ephemeroptera: NEEDHAM, TRAVER & HSU, 2347.—Odonata: KENNEDY, *Gomphaeschna furcillata*, 1679.—Orthoptera: BADEN, *Melanoplus differentialis* (Acrid.), embryology of nervous system, 116; CUÉNOT, coaptation of front legs and head in Phasmids, 682; EVANS, *Melanoplus differentialis* (Acrid.), metabolism in eggs analysed by Röntgen rays, 924; ROONWAL, *Locusta migratoria migratorioides*, early development and new theory of multi-phased gastrulation, 2834; SCHIPPER, *Melanoplus differentialis*, resistance of embryos to hypertonic solutions, 2956; THOMAS, *Carausius morosus* (Phasm.), 3309.

CYTOLOGY.

Insecta: HIRSCHLER, fusom problem and heredity, 1399; HORN, mitochondria of intestinal tract, 1467; METZ, effects of mechanical distortion on the structure of salivary gland chromosomes, 2196; MULIYIL, yolk in male germ cells, 2301; NEWELL & BAXTER, free cell-border in mid-gut epithelia, 2356; PARDI, nuclear origin of albumen granules in cells of fat-bodies, 2502.—Coleoptera: SNYDER, *Tetraopes* spp. (Lamiid.), chromosomes, 3109.—Hymenoptera: DOZORCEVA, *Pteromalus puparum*, morphology of chromosomes, 800; SPEICHER, *Nemeritis canescens* (Ichn.), a typical meiotic division, 3144; SPOTKOV, *Habrobracon juglandis*, centrole in parthenogenetic and fertilised eggs, 3151; TORVIK, *Habrobracon*, chromosomes, 3366.—Neuroptera: NAVILLE & BEAUMONT, chromosomes, 2344.—Diptera: BAUER, salivary gland chromosomes in Chironomidae, 184, 185; BERGER, *Culex pipiens*, multiple chromosome complexes, 227, 228; DOBZHANSKY & TAN, *Drosophila*

pseudo-obscura, *miranda*, chromosome structure, 777; DOBZHANSKY & TAN, *Dros. pseudoobscura*, *miranda*, chromosomes, 778; EVANS, *Lucilia sericata*, hystolysis pupa, 917; FROLOVA, *Drosophila* spp., nucleus in salivary glands, 1058, 1059; GLASS, *Drosophila melanogaster*, factors influencing chromosomal segregation in translocations, 1127; LASSMANN, *Melophagus ovinus*, germ cells, 1888; MARSHAK, *Drosophila melanogaster*, chromosomes of salivary gland, 2117; MATHER, *Dros. melanogaster*, position in crossing over, 2136; METZ, salivary gland chromosomes, 2195; SMITH-STOCKING, *Sciara coprophila*, selective segregation of chromosomes, 3106; STELLA, *Drosophila immigrans*, 3175; STURTEVANT & DOBZHANSKY, *Dros. affinis* group, chromosomes, 3219, *Dros. pseudoobscura*, cytology of sex ratio, 3220; TINYAKOV, *Dros. funebris*, salivary gland chromosomes, 3343; TRAGER, *Aedes aegypti*, cell size and growth in larvae, 3370; WALD, *Dros. simulans*, cytology of claret mutant eggs, 3520.—Hemiptera: MILLER, *Macrosiphum sanbornii* (Aphid.), digestive epithelium, 2236.—Isoptera: BENKERT, *Reticulitermes flavipes*, chromosomes of soldier and king compared, 214; SCATIZZI, pigments of pericardial cells in termites, 2925.—Orthoptera: CARLSON, intergeneric homology of atypical euchromosome in Acrididae, 489; CAROTHERS, components of mitotic spindle in Acrididae, 491; LISON, *Forficula auricularia*, colour of nucleoles in Malpighian tubes, 1988; MAKINO, *Podisma* spp. (Acrid.), spiral structure of chromosomes in meiotic divisions, 2070; OHMACHI, chromosome complements in Gryllodea, 2431, 2432; ROBERTSON, *Paratettix texanus* (Acrid.), cytology of gynandromorph, 2814.

EFFECTS OF TEMPERATURE AND HUMIDITY.

Insecta: AHMAD, influence of constant and alternating temperatures, 29; FLEMION & HARTZELL, effect of low temperature in shortening hibernation period in egg stage, 995; GUARESCHI, effects on pupation, 1195, 1196; KOZHANCHIKOV, insect metabolism at temperatures below zero, 1806; PRZIBRAM, effect of temperature on egg, larval and pupal development, 2704.—Coleoptera: HERFS, *Anthrenus*

fasciatus (Dermeest.), 1347; LUDWIG, *Popillia japonica* (Rutel.), effect of desiccation on survival and metamorphosis, 2013; MENUSAN, *Bruchus obtectus*, rate of growth and relative size in constant temp. and humid., 2185; MIKULSKI, *Tribolium confusum*, development and survival of eggs and pupae in constant and alternating temps., 2227, 2228, 2230; OSTHUIZEN, *Tribolium confusum*, rate of mortality due to high temps. and their effect on fertility, 2453; PRZIBRAM, *Lucanus cervus*, heat producing small males, 2702; STEINER, *Bothynoderes punctiventris* (Curc.), influence of temperature, etc., 3171; VORIS, effect of temp. on length of pupal stage in Staphylinidae, 3497.—Hymenoptera: AHMAD, *Nemeritis canescens*, temps. and rate of dev. at different humidities, 28; GREB, *Habrobracon*, heat producing gynandromorphs, 1176; ULLYETT, *Microplectron fuscipennis*, influence of humidity and temperature, 3408.—Lepidoptera: ARNIM, *Lymantria monacha*, effects of temp., 89; GÖSSWALD, *Sphinx pinastri*, effects on development, 1156; GRISWOLD & CROWELL, *Tineola biselliella* (Lep.), effect of humidity, 1187; KOZHANCHIKOV, *Agrotis*, *Ephestia*, vital thermal optimum, 1809, 1811; QUERCI, *Zerynthia rumina*, effect of temp. on devel., 2719, 2720; SCHEDL, *Portheia dispar* (Lymantr.), influence of climate, etc., on adults and early stages, 2945.—Diptera: CHILD, *Drosophila melanogaster*, effect of temp. on mean bristle numbers, 541; EVANS, *Lucilia sericata*, survival and develop. in all stages, 916; HARNLY, *Dros. melanogaster*, temp. and vestigial wings, 1262; KALISS & GRAUBARD, *Dros. melanogaster*, temperature on oviposition, 1636; LAAKE, CUSHING & PARISH, *Cochliomyia americana* (Calliph.), effect of cold on all stages, 1858; LAVROV, *Drosophila*, effect of high temps. on mutation, 1892; LI & TSUI, *Dros. melanogaster*, effect of high temp. on vestigial wings, 1938; MISSIROLI, *Anopheles*, effects of constant and alternating temps., 2252; PLOUGH & CHILD, *Drosophila*, effect of high temp. on genetically different unhatched pupae, 2644; TATE & VINCENT, *Culex pipiens*, effects of low temps. on all stages, 3277; THEODOR, *Phlebotomus papatasi* (Psych.), relation to temp. and humidity, 3294.—Hemiptera: OHMORI, *Cimex hemipterus*, influence of low

temperatures, 2433; SPEYER, *Psylla mali*, temperature, 3150; WADLEY, *Toxoptera graminum*, temperature, 3505.—Orthoptera: HAMILTON, *Locusta*, *Schistocerca*, *Nomadacris* (Orth. Acrid.), effect of constant and fluctuating humidity and temp., 1245; HUSAIN & AHMAD, *Schistocerca gregaria* (Acrid.), temperature and development, 1503; RUBTZOV, effect of climate on development of Orthoptera in Siberia, 2868.—Thysanoptera: ANDREWARTHA, *Thrips imaginis*, *Haplothrips victoriensis*, influence of temp. on immature stages, 77; WATTS, *Frankliniella tritici*, effect of low temperature, 3544.—Collembola: DAVIS & HARRIS, *Pseudosinella violenta*, effects on rate of development, 718.

EFFECTS OF VARIOUS FACTORS.

Insecta: GUARESCHI, effect on pupation of centrifugal force and ultraviolet rays, 1195, 1196; KOCIAN, effect of electric current on metamorphosis, 1768.—Coleoptera: HERFS, *Anthrenus fasciatus* (Dermeest.), effect of light and food on development, 1347; PARK, *Tribolium confusum*, effects of differentially conditioned flour on fecundity and fertility, 2509; STRASBURGER, *Epilachna chrysomelina* × *capensis* (Coccin.), effect of crossing on egg development, 3200.—Hymenoptera: MARCHAL, *Trichogramma* spp., 2108; NÄGELI, *Lygaeonematus pini* (Tenthr.), 2323; SCHNETTER, effect of tying up eggs on production of dwarf larvae in bees, 2975.—Lepidoptera: GEISSEL, *Ephestia kühniella* (Pyr.), length of development in in-bred and crossed races, 1097; KÜHN & PIEPHO, effect of hormone on pupation, 1838; MULIYIL, effect of feeding and starvation of moth larvae on y-granules in male germ cells, 2301; PLAGGE, *Ephestia kühniella* (Pyr.), effect on eye-colour of transplantation of testes of other species, 2637, *E. kühniella*, effect of A hormones on testes and imaginal eye-colour, 2638; QUERCI, *Pierinae*, effect of food on development, 2720, 2721; STREL'NIKOV, *Loxostege sticticalis* (Pyr.), effect of solar radiation on development, 3202; STROHL & KÖHLER, *Ephestia kühniella* (Pyr.), influence of pleiotropic gene on development in imago, 3210.—Diptera: CHILD, *Dros. melanogaster*, effect of starvation on mean bristle numbers, 540; FRIESEN, *Drosophila* spp., effect of Röntgen rays

on development, 1052, 1054; HESTER & CUNNINGHAM, *Phormia regina* (Calliph.), effects of endocrines, 1369; JONES, *Dros. melanogaster*, somatic segregation causing tumours, 1610; MALOV & FRIESEN, *Dros. melanogaster*, effect of high frequency electric current on metamorphosis, 2078; PANTAZIS, *Aedes* spp., effect of salinity of water on larval development, 2488; PROMPTOV, *Drosophila*, hard ultra-violet rays, causing inherited mutations, 2698; SMITH, *Calliphora erythrocephala*, growth stimulated by feeding larvae on fatigued frog muscle, 3099; TATE & VINCENT, *Culex pipiens*, influence of light on gorging of females, 3277; TIMOFÉEFF-RESSOVSKY, *Dros. melanogaster*, effect of X-rays on production of mutations, 3330; VEILLET, *Drosophila melanogaster*, effect of acetic acid on oviposition and number of eggs, 3464.—**Hemiptera**: GOUNELLE & RAOUL, *Cimex lectularius*, effect of chloropierine on sterilisation in egg, 1163.—**Orthoptera**: CAROTHERS, *Melanoplus differentialis* (Acrid.), abnormal growths produced by X-raying eggs, 490; EVANS, *Melanoplus differentialis*, X-rays causing embryonic abnormalities, 925-927; KERR & EVANS, *Melanoplus differentialis*, *bivittatus*, effect of X-rays, 1681; MELAMPY & MAYNARD, *Blattella germanica*, effects of various foods on development, 2168; RAY, *Melanoplus differentialis* effect of ultra-violet rays on embryos, 2734.

SEX RATIO.

Insecta: BRANDT, change in proportion of sexes, 365.—**Coleoptera**: HERFS, *Anthrenus fasciatus* (Dermest.), 1347.—**Hymenoptera**: STANCATI, *Habrobracon*, effect of X-rays on sex ratio, 3159.—**Diptera**: BONNIER & NORDENSKIÖLD, *Dros. melanogaster*, exceptional sex-ratios due to semi-lethal gene, 329; KLEIN-KRAUTHEIM, *Thaumatomyia notata* (Chlorop.), 1731; L'HÉRITIER & TESSIER, *Dros. melanogaster*, sex ratio in populations in equilibrium, 1929; PHILLIPP, Chironomidae, 2585; STURTEVANT & DOBZHANSKY, *Dros. pseudo-obscura*, cytology of sex ratio, 3220.—**Hemiptera**: BARBER, *Orius insidiosus* (Anthoc.), 172; JORDAN, Corixidae, 1626.—**Thysanoptera**: HARRIS, DRAKE & TATE, *Thrips tabaci*, 1263.

SEX DETERMINATION.

DARLINGTON, *Drosophila miranda*, mechanism of sex determination, 765; WHITING, bees and wasps, 3596.

PARTHENOGENESIS.

HARRIS, DRAKE & TATE, *Thrips tabaci*, 1263; HEPP, *Orygia antiqua* (Lep. Lyman.), 1342; KRACZIEWICZ, *Miastor metraloas* (Dipt.), difference between parthenogenetic and sexual oocytes, 1814; LAWSON, *Macrosiphum solanifolii* (Hem. Aphid.), maturation of parthenogenetic female egg, 1893; MARCHAL, *Trichogramma* spp. (Hym.), 2108; NÄGELI, *Lygaeonematus pini* (Hym. Tenth.), 2323; NELSON, *Platynota stultana* (Lep. Tortr.), 2349; PHILLIPP, Chironomidae, 2585; SCOTT, *Micromalthus debilis* (Col.), somatic haploid parthenogenesis, 2992; SEILER, *Solenobia triquetrella* (Psychid.), mechanics of development in offspring of parthenogenetic ♀ × normal ♂, 3011; TUOMIKOSKI, *Tachydromia* (Dipt. Empid.), 3384; WEBER, Psocoptera, 3547.

VIVIPARITY.

JENTSCH, *Hyperetes guestphalicus* (Psocopt.), ovoviviparity, 1602; FORD, *Wohlfahrtia vigil* (Dipt.), larviposition, 1011; KERRICH, *Polyblastus* (Hym. Ichn.), larviposition, 1684.

PAEDOGENESIS.

ULRICH, *Oligarces paradoxus* (Dipt. Cecid.), 3412, 3413.

REGENERATION.

BEADLE & EPHRUSSI, *Drosophila*, effect of transplantation on eye pigments, 191; BODENSTEIN, 308; LE CAMP, coaptive curve in regenerated femur of hind legs in *Phasmids* an inherited, not a mechanical, character (Orth.), 1895; MEISSNER, *Carausius hylaris* (Orth. Phasm.), leg regeneration, 2164; ŠUSTER, *Carausius morosus*, regeneration of fore-leg after ganglion extirpation, 3227, *Sphodromantis bioculata* (Orth.), regeneration of foreleg after ganglion extirpation, 3228.

METAMORPHOSIS.

Insecta: BODENSTEIN, determination of development of organs, 306; HERIOT,

moulting of insects, 1358; JESCHIKOV, cryptometabolism and direct metamorphosis, 1603; KORSCHULT, 1799; MAGNE DE LA CROIX, 2064; SCOTT, analysis of factors governing the hour of emergence of adults from their pupae, 2995; STEPOE & DORNESCO, periganglion sheath during metamorphosis, 3181; STROHL, 3209; WEYER, moulting and regeneration of epithelium, 3576.—Coleoptera: BUSSMANN, *Tenebrio molitor*, colour development, 458; CHALAU, *Cerambyx cerdo*, development of young imago into adult, 521; COCKERHAM, *Heteroderes laurenti* (Elat.), length of pupal period, 606; HERFS, *Anthrenus fasciatus* (Dermest.), 1347; KÖNIG, *Ptinus tectus*, 1785; LUDWIG & ABERCROMBIE, *Popillia japonica* (Rutel.), histological changes during growth of mid-gut in larva, 2014; RIPPER, *Chaetocnema aridula* (Halt.), 2807; STEINER, *Bothynoderes punctiventris* (Curc.), 3171; VORIS, pupation in Staphylinidae, 3497.—Hymenoptera: DREHER, *Apis mellifica*, development of respiratory system, 811; EIDMANN, *Trichogramma minutum*, larval and pupal stages, 855; JOSEPH, Chilean Sphegidae, 1628; NOBLE, *Eurytoma fellis*, 2377.—Lepidoptera: CLARK, *Rhabdoides cellus* (Hesper.), moulting, 573; COMSTOCK & DAMMERS, *Strymon leda* (Lyc.), Bull. S. Calif. Acad. Sci. 35 p. 6, figs.; FEDOTOV, *Operophtera brumata*, 953; NORDMANN, formation of larval, pupal and imaginal characters in Lepidopterous pupae, 2378; OZAKI, *Bombyx mori*, changes in body constituents during metamorphosis, 2476; QUERCI, European Papilionidae, 2722; RORICH, *Oxytrypia orbiculosa* (Noct.), 2838; STEINER, *Laphygma exigua* (Noct.), 3171; YOKOYAMA, on non-moulting strain of silkworm, 3679.—Trichoptera: GLASGOW, *Hydropsyche colonica*, 1128; HANDLIRSCH & BEIER, 1251.—Neuroptera: DAVID, *Osmylus chrysops*, 714; FRANKENBERG, *Chrysopa vulgaris*, 1028; HANDLIRSCH & BEIER, 1250.—Mecoptera: HANDLIRSCH & BEIER, 1251.—Diptera: AUERBACH, *Dros. melanogaster*, development of legs, wings and halteres in wild type and mutant strains, 108; FRAENKEL, *Calliphora erythrocephala*, mechanism of inflation of body and expansion of wings, 1023; ROBERTSON, *Dros. melanogaster*, morphological changes, 2813; SELLEKE, Tipulidae, 3022.—Hemiptera:

GALLIARD, *Triatoma* (Reduv.), hatching, etc., 1084; ROONWAL, *Dialeurodes dissimilis* (Aleurod.), 2835; SPEYER, *Psylla mali*, 3150; WIGGLESWORTH, *Rhodnius prolixus* (Reduv.), corpus allatum and development, 3599.—Psocoptera: WEBER, 3547.—Ephemeroptera: NEEDHAM, TRAVER & HSU, 2347.—Odonata: CROY, photos of emergence of adult dragonfly, 674; KENNEDY, *Gomphaeschna furcillata*, 1679.—Orthoptera: KEY, *Locusta migratoria migratorioides* (Acrid.), abnormal sixth instar, 1689; KEY & EDNEY, *Locusta migratoria migratorioides*, precocious adults resulting from omission of 5th instar, 1693; KORSAKOFF, *Blepharopsis mendica* (Mant.), moulting, 1796; ZABINSKI, inconstancy of number of moults in certain Blattidae, 3683.

DIAPAUSE.

BODINE, *Melanoplus differentialis* (Acrid.), effect of temperature on diapause in egg, 307; BUXTON, prolonged larval life in an African Stratiomyiid (Dipt.), Proc. R. ent. Soc. Lond. (A) 11 p. 103; HAMILTON, *Locusta*, *Schistocerca*, *Nomadacris* (Orth. Acrid.), 1245; MARCHAL, *Trichogramma* spp. (Hym.), spanandry, 2108; STEINBERG & KAMENSKY, *Loxostege sticticalis* (Lep. Pyral.), 3170; STRELNIKOV, *Loxostege sticticalis* (Lep.), 3205.

GROWTH.

ABERCROMBIE, *Popillia japonica* (Col. Rutel.), cell number and progression factor in larval growth, 17; BERNARD, *Notonecta maculata* (Hem.), changes during larval growth, 240; CLARK & HERSH, *Notonecta undulata* (Hem.), relative growth, 579; DARLINGTON, *Stenomorphus californicus* (Col. Carab.), heterogony, 709; SUMNER, *Tenebrio molitor*, relation of gregarines to growth, 3221; TEISSIER, Dyar's law and growth, 3286; YAMANOÛTI, measurement of growth in Orthoptera, 3661, 3662.

MISCELLANEOUS.

HUXLEY & WOLSKY, developmental-physiological determination of eyes, 1522; KUWANA, *Bombyx mori*, degeneration of muscles in adult, 1853; MARSHALL & STALEY, *Theobaldia subochrea* (Dipt. Culic.), autogenous and

stenogamous characters, *Nature* 137 p. 580; ROZEBOOM, life-cycle of laboratory-bred *Anopheles albimanus*, 2866, 2867; WEYRAUCH, *Dolichovespula* and *Vespa* (Hym. Vespid.), development compared, 3579.

PHYSIOLOGY.

RESPIRATION.

Insecta: KALMUS, oxygen deficiency and narcosis, 1637; KOCIAN, effect of electric current on oxygen consumption in larvae and pupae, 1768; LINDGREN, relation of grain insects' respiration to heat and moisture production and to toxicity of fumigants, 1962; MALOEUF, oxygen consumption in aquatic insects, 2077; TAUCHERT, effect of temperature on respiration, 3282.—**Coleoptera:** PARK, *Tribolium confusum*, oxygen consumption, 2508.—**Hymenoptera:** THORPE, *Encyrtus infelix* (Hym.) *Saissetia* (Hem.) respiratory interrelation, 3318.—**Lepidoptera:** FUKUDA, *Bombyx mori*, oxygen consumption in egg, 1065; GÄBLER, function of stigmas in Lepidopterous pupae, 1073; SQUIRE, pupae of *Brassolis sophorae* and other Lepidopt., 3152.—**Diptera:** EVANS, *Lucilia sericata*, larvae and pupae, 919; FRAENKEL, *Calliphora erythrocephala*, stimulus to air pumping, 1023; HARNISCH, *Chironomus thummi*, primary and secondary oxybiosis of larva, 1261; HOPKINS, mosquito larvae, 1455; SEURAT, *Trichocladus seurati* (Chiron.), 3042.—**Hemiptera:** PRESSWALLA & GEORGE, water bugs, 2687, 2688.—**Ephemeroptera:** EASTHAM, *Leptophlebia marginata*, currents produced by gills of nymphs, 832.—**Odonata:** TONNER, 3364.—**Orthoptera:** BODINE & BOELL, *Melanoplus differentialis* (Acrid.), effect of chemicals on respiration in eggs and isolated embryos, 309-311; BUTLER & INNES, *Locusta migratoria* (Acrid.), respiratory metabolism in sexes, instars and phases, 459; ROBBIE, *Melanoplus differentialis*, effect of cyanide on respiration in egg, 2811; THOMPSON & BODINE, oxygen consumption of grasshopper eggs, 3316

DIGESTION AND NUTRITION.

BERETTA, peritrophic membrane, 258; EVANS, *Lucilia sericata* (Dipt.), enzymes, 919; FRAENKEL, *Calliphora erythrocephala* (Dipt.), sugars and polyhydric alcohols as food, 1022; GALLIARD, *Triatoma*, *Rhodnius* (Hem. Reduv.), effects of nutrition on mating, fertilisation, reproductive organs, 1084; HAYDAK, is wax a necessary constituent of the diet of wax-moth larvae? 1277; MILLER, *Macrosiphum sanbornii* (Hem. Aphid.), function of epithelial cells, 2236; PARKIN, *Lyctus* (Col.), food requirements, 2514; PLATANIA, *Reticulitermes lucifugus* (Isopt.), chemical nature of peritrophic membrane, 2639; SELKE, digestive symbiosis in Tipulid larvae, 3022; THIEL, function of proventriculus in Coleoptera, 3303.

CIRCULATION.

BEUTLER, blood-sugar in bees, 265, 266; GUIGNON, study of blood-circulation in wings of Coleoptera and Orthoptera by means of nicotine, 1205; JAHN, *Melanoplus differentialis* (Acrid.), electrical variations in heart beat, 1560; LINDNER, Diptera, blood and circulation, 1967; MANUNTA, *Bombyx mori*, blood pigment in different races, 2102; SHULL, coagulation of blood of insects, 3067; TAUBER, *Blatta orientalis*, mitosis of circulating cells in haemolymph, 3278, 3279; TAUBER & SNIPES, *Periplaneta americana* (Blatt.), velocity of haemocyte circulation in elytron, 3280; TAUBER & YEAGER, total haemolymph (blood) cell counts of Neur., Col., Lep. & Hym., 3281; TIRELLI, *Saturnia pavonia major* (Lep.), rhythm and mechanism of circulatory inversions during metamorphosis, 3344; TZONIS, *Corethra plumicornis* (Culic.), in larva, 3397; WINOGRADSKAJA, *Anopheles maculipennis messeae*, osmotic pressure of haemolymph, 3636.

REPRODUCTION.

AHMAD, *Ephestia kühniella* (Lep.), *Nemeritis canescens* (Hym.), fecundity of females, 28; ANDERSON, *Habrobracon juglandis*, effects of temperature on fertilisation, 75; BOSTIAN, *Habrobracon juglandis* (Hym.), fecundity of triploid ♀, 340; DANTCHAKOFF, *Drosophila*, sexual mechanism, 702; DANTCHAKOFF & VACHKOVITCHUTÉ, *Drosophila*, immunity to heterologous sexual

hormones, 703; GOBEIL, *Ips perturbatus*, 1131; HAMILTON, *Locusta*, *Schistocerca*, *Nomadacris* (Orth. Acrid.), sexual maturation of adults at different temperatures and humidities, effect of copulation on maturation of females, 1245; NORRIS, *Ephestia kühniella* (Lep. Pyral.), effect of in-breeding on fertility, 2384; *Trogoderma versicolor*, (Col. Dermest.), factors affecting fertility, 2383; OMURA, *Bombyx mori*, artificial insemination, 2451; WEED, *Melanoplus differentialis* (Acrid.), effect of removal of corpora allata on egg-production, 3550; WHITING, *Habrobracon*, reproductive reactions in gynandromorphs, 3593; WIGGLESWORTH, *Rhodnius prolixus* (Reduv.), corpus allatum and reproduction, 3599.

SECRETION, EXTERNAL.

BUONOCORE, *Bombyx mori*, secondary role of sericigene glands, 437; CARTER, *Pseudococcus brevipes* (Hem.), phytotoxic secretion and symbionts, 508; DREHER, *Apis mellifica*, glands in mandibles, 812; GONTARSKI, *Apis mellifica*, wax production by female workers during winter rest, 1150; HEIDT, *Onychiurus armatus*, *Achorutes muscorum* (Collemb.), luminous secretion, 1302; KÖNIG, *Ptinus tectus*, spinning secretion in larvae, 1785; KURISAKI, *Dendrolimus spectabilis* (Lep., Lasioc.), silk secretion, 1848; MALUCELLI, *Bombyx mori*, precocious or late migration of pigments in silk glands, 2079, 2080; MANUNTA, *Bombyx mori*, physiological behaviour of dominant white coloration in cocoons, 2105; PAVLOVSKIĬ, STEIN & OLSUFIEV, *Tabanus* (Dipt.), action of saliva on skin of man, 2536; RUEDIGER, *Philaenus spumarius* (Hem. Cercop.), frothy secretion of larva, 2871; DE LA TORRE-BUENO & AMBROSE, *Thasus gigas* (Hem. Coreid.), protective vapours, Bull. Brooklyn ent. Soc. 31 p. 184.

SECRETION, INTERNAL.

BOUNHIOL, *Bombyx mori*, metamorphosis after removal of corpora allata, 345; HANSTRÖM, hormones in insect head causing contraction of chromatophores in shrimps, 1255; KÜHN, CASPARI & PLAGGE, *Ephestia kühniella* (Pyral.), relation between genes and hormones, 1834; YOKOYAMA, site of secretion of moulting hormone in silkworm, 3679.

EXCRETION.

BROWN, ammonia and uric acid excretion in Muscoid larvae, 396; MILLER, nephrocyte cells and their function in Aphids (Hem.), 2239; PATAY, *Tenebrio molitor* (Col.), excretory function of cryptonephridian part of Malpighian tubes, 2518; POLL, method of coloured injections applied to study of insects excretions, 2656.

NERVOUS SYSTEM.

HARTZELL, nerve cell lesions in *Tibicen pruinosa* paralysed by sting of *Sphecius speciosus*, 1268; TONNER, nervous system of skin, 3365; WIGGLESWORTH, *Rhodnius prolixus* (Reduv.), function of corpus allatum in growth and reproduction, 3599.

SENSES.

ABBOTT, *Creophilus villosus* (Col.), olfactory powers, 13, *Megarhyssa lunator* (Hym. Ichne.), olfactory powers, 14; AUTRUM, perception of sound, 113; DIAKONOFF, *Periplaneta americana* (Orth. Blattid.), analysis of process of reflexes, 761; DOLLEY, *Eristalis tenax* (Dipt. Syrph.), relative sensitivity of ommatidia in various parts of compound eye, 780; HOBSON, *Lucilia sericata*, chemotropism, 1405; KRUMBIEGEL, *Carabus* spp., physiology of senses in geographical races, 1828; KUGLER, olfactory sense in bumble bees, 1831; LICHE, sense of touch in Gerridae (Hem.), 1940; MNINICH, response to sound in Lepidopterous larvae, 2250; MITRA, use of smell in selection of food by ants, 2256, prepotency of stimuli in house-flies, 2257; MOLITOR, colour sense in Sphegids (Hym.), 2263; PORTILLO, relation of structure to function in insect eyes, 2678; PRZIBRAM, *Hydrous piceus* (Hydroph.), function of antennae, 2703; PUMPHREY & RAWDON-SMITH, response of certain receptors to auditory stimuli, 2709; RIPLEY, PETTY & VAN HEERDEN, *Acanthopsyche junodi* (Lep.), gustatory reactions, 2806; TINBERGEN, *Dytiscus*, function of sense-organs of larva and adult, 3333; TISCHLER, perception of form, 3345.

EFFECTS OF TEMPERATURE AND HUMIDITY.

ADAMS, *Thermobia domestica* (Thysanura), reactions to heat, 23;

BRANDT, *Lymantria monacha*, speed of larval movement influenced by temperature, 366; DECKER & ANDRE, *Blissus leucopterus* (Lygaeid.), effect of temperature and moisture on winter mortality in adult, 729; DREYER, *Formica exsectoides* (Hym.), relation of body weight and water content to temperature, 814; EVANS, *Lucilia sericata* (Dipt.), indirect effect through competing spp. of blow-flies, 916; KEY, *Locusta migratoria migratorioides* (Orth. Acrid.), effect of high and low humidity on rate of growth, 1689; KOIDZUMI, *Chaetodacus ferrugineus* (Dipt. Tryp.), fatal low temperature for eggs and larvae, 1776; KOZHANCHIKOV, physiological importance of the sum of temperatures, 1810; KÜHN & HENKE, *Ephestia kühniella* (Pyr.), effect of temperature on colour pattern, 1837; KUNTZE, *Melasoma aenea* (Chrys.), effects of temperature and humidity on colour, 1842; MELLANBY, humidity and metabolism, 2176; SCHULTZ, effect of temperature on colour, 2981; STURDZA, *Formica rufa pratensis* (Hym.), effect of temperature on rate of movement, 3218; TAUCHERT, effect of temperature on respiration, 3282; WULKOFF, *Ephestia kühniella* (Lep. Pyral.), effect of heat and frost on wing pattern, 3658.

EFFECTS OF VARIOUS STIMULI.

BRAUER, *Bruchus quadrimaculatus* (Col.), reaction of eggs to KCN, 368; CROZIER, PINCUS & ZAHL, *Drosophila*, resistance to alcohol, 676; ELLISOR, *Periplaneta americana* (Blatt.), effect of nicotine injections, 862; EVANS, *Lucilia sericata* (Dipt.), 919; GÖSSWALD, *Sphinx pinastri* (Lep.), effects of temperature, light and moisture on development, 1156; HAVAS, *Tenebrio molitor* (Col.), effect of radio-active mud on orientation in larvae, 1275; HOFFMANN, effects of pressure and tactile stimuli on attitude and behaviour, 1431; KOCIAN, effect of electric current on oxygen consumption in larvae and pupae, 1768; L'HÉRITIER, *Dros. melanogaster*, effect of poison in larvae on pigmentation, 1928; MEDVEDEV, *Dros. melanogaster*, effect of cold and irradiation on production of mutations, 2157; SAMSONIYA, *Calandra granaria* (Curc.), effect of carbonates, 2910; SCHEDL, *Porthetria dispar* (Lep. Lymantr.), 2945; SKOBLO, *Loxostege*

sticticalis (Lep.), effect on fecundity of feeding in larvae, 3088; STREL'NIKOV, effect of movement and sunlight on production of warmth, 3204; SWYNERTON, *Glossina*, 3241; TALICE, *Triatoma* spp. (Reduv.), harmful effect on adults of sun rays, 3272; THOMPSON, effect of various ions on rhythmic movements in embryonic Acrididae, 3315; TZONIS, narcosis caused by electric current, 3396; VANDERVAEL, effect of immersion in various liquids on histology of striated muscle fibre, 3438; VEILLET, *Dros. melanogaster*, effect of acetic acid on oviposition, 3464; VERLAINE, *Dixippus morosus* (Phasm.), psychic autotomy, 3476.

EFFECTS OF MUTILATIONS.

BEADLE & EPHRUSSI, *Drosophila* spp. effects of transplantation of various organs, 190; BOUNHIOL, effect on pupation of brain removal in larvae of Lepidoptera, 344; *Bombyx mori*, metamorphosis after removal of corpora allata, 345; BYTINSKI-SALZ, effect of amputation of various organs in Lepidopterous larvae on formation of chitin plates in pupae, 467; DOBZHANSKY & BEADLE, *Dros. pseudoobscura*, effect of transplanted testes, 776; MAUSER, *Carausius morosus* (Orth. Phasmid.), development of transplanted legs, 2144; PLAGGE, *Ephestia kühniella* (Lep. Pyral.), effect of transplantation of slice of imaginal eye between black- and red-eyed races, 2636; WEED, *Melanoplus differentialis* (Acrid.), effect of removal of corpora allata on egg-production, 3550.

VITALITY, LONGEVITY.

ADAMS, *Thermobia domestica*, effect of temperature on longevity, 23; AHMAD, *Nemeritis canescens* (Hym.), longevity of adults, 28; BARBER, *Orius insidiosus* (Hem. Anthoc.), 172; DESHPANDE, *Aleurodes brassicae* (Hem.), 757; GALLIARD, *Triatoma* (Hem. Reduv.), 1084; GEISSEL, *Ephestia kühniella* (Pyr.), vitality in in-bred and crossed races, 1097; GLOVER & CHATTERJEE, *Microbracon hebetor* (Hym.), longevity in laboratory, 1130; GOBEL, *Ips perturbatus*, 1131; GUNN & NOTLEY, *Blatta orientalis*, thermal death-point, 1218; HARRIS, DRAKE & TATE, *Thrips tabaci*, longevity in ♀, 1263; LEESON, *Xenopsylla cheopis*

(Siphonapt.), 1903; LOZINA-LOZINSKII, *Loxostege sticticalis* (Pyr.), cold hardiness in larva, 2008; MANSBRIDGE, *Ephestia kuhniella*, resistance to abnormally high temperatures, 2100; MIKULSKI, *Tribolium confusum* (Tenebr.) effect of temperature on longevity in egg and pupae, 2227, 2229; NASH, *Glossina* spp., maximum temperature and seasonal longevity, 2326; PEARL & MINER, *Acrobasis caryae* (Lep. Pyral.), duration of life, 2542; REY, *Galleria mellonella*, 2779; SKOBLO, *Loxostege sticticalis* (Pyr.), longevity, 3089; SMITH, &c., *Phlebotomus*, longevity, 3104; STROHL & KÖHLER, *Ephestia kuhniella* (Lep. Pyral.), effect of pleiotropic gene on longevity, 3210; SUMNER, *Tenebrio molitor* (Col.), 3221.

CHEMISTRY.

BALLI, *Bombyx mori*, sericine and fibroine in cocoon, 160; BLOUNT, *Psylla buxi* (Hem.), 300; BODINE & BOELL, *Melanoplus differentialis* (Acrid.), tyrosinase in embryo, 308; BUONOCORE, *Bombyx mori*, pigments of blood and silk, 438; BUSSMANN, *Tenebrio molitor* (Col.), chemistry of colouring, 458; CHEN, *Bombyx mori*, tyrosinase, 538; COLE & JAHN, *Melanoplus differentialis* (Acrid.), resistance of egg membranes, 614; DEMYANOVSKII, &c., *Bombyx mori*, effect of food on acidity of haemolymph, 744; EVANS, *Lucilia sericata* (Dipt.), metabolism during metamorphosis, 919; FIESSINGER & GAJDOS, *Galleria mellonella* (Lep.), rich in lipase, 977; FERNANDEZ, *Schistocerca paranensis* (Orth.), 1; FLORKIN, protein content of blood plasma in insects, 1003, uric acid, 1004; FYG, *Apis mellifica*, sub-cutaneous injection of queen bees as a means of study of melanosis, 1072; HELLER, *Desilephila euphorbiae* (Lep.), phosphorus contents of pupa and adult, 1322; JUCCI, carotinoid migration from blood to silk in silkworms, 1630; KHOUVINE, EPHRUSSI & HARNLY, *Dros. melanogaster*, substances concerned in eye pigmentation, 1695; LAKE, *Dros. melanogaster*, eye pigment, 1873; LOMBARDI, *Bombyx mori*, adipose tissue and intestines and their function in absorbing, etc., various pigments, 2000; MACHT, *Magiciana septendecim*, *Melanoplus differentialis* toxic extracts from bodies, 2037; MALOEUF, permeability of outer integument to gases in aquatic insects, 2077;

MANUNTA, *Bombyx mori*, variation in carotin content of silk glands during development, 2103; OZARKI, *Bombyx mori*, mineral contents of prepupae, pupae and sexual difference of prepupal oil, 2475, 2476; PAYNE, *Ephestia kuhniella* (Pyr.), excretory products in larva, 2539; ROOCO, occurrence of allantoin, 2817; SIMONETTI, chlorophylloid pigment in Orthoptera, 3077; STEMPEL, ROMBERG & ULEPS, *Corethra plumicornis* (Dipt. Culic.), radiation from larvae successfully treating plant tumours, 3176; THOMPSON & BODINE, oxygen consumption and rates of dehydration of grasshopper eggs, 3316; VENEROSO, *Bombyx mori*, pigment in egg, 3465; lipolitic activity, 3466; WIGGLESWORTH & GILLET, *Rhodnius prolixus* (Hem.), loss of water during ecdysis, 3600.

MISCELLANEOUS.

ABBOTT, *Necrophorus orbicollis*, toxicity of trimethylamine for, 15; ACQUA, *Bombyx mori*, emission of mitogenetic rays during development of egg, 19; BLISS, effect of arsenic on silkworms, 298; BROWN, laboratory observations on flesh flies and *Melanoplus bivittatus* 395; GICKLHORN, *Corethra plumicornis* (Dipt. Culic.), muscle contraction in larva, 1110; HUSAIN & KESHO DAS BAWEJA, *Schistocerca gregaria* (Orth.), 1506; KOCH & KROGH, absorption of salt by anal tubercles in Dipterous larvae, 1764; KRUMBIEGEL, *Carabus* spp., geographical variation in physiology, 1828, 1829; MAHDIHASSAN, *Lakshadia chinensis* (Hem. Coccid.), function of dorsal spine, 2066; PAGAST, *Aedes aegypti* (Dipt. Culic.), function of anal papillae in absorption of water in larvae, 2479; POLL, *Tenebrio molitor* (Col.), function of hind intestine and Malpighian tubes, 2655; SPEICHER, muscle contraction, 3143; WEED, *Melanoplus differentialis* (Acrid.), non-effect of corpora allata on moulting, 3551; ZIRNGIEBL, function of chitinous tubercles on back of Tenthredinids, 3708.

AETIOLOGY.

EVOLUTION, PHYLOGENY.

Insecta: FOXON, origin and evolution of Arthropods, 1021; IMMS, ancestry

of insects, 1529; JEANNEL, antiquity of insects, 1593; JUST, phylogeny of adaptations, 1634; KRUMBIEGEL, evolution of species, 1827; REYNOLDS, phylogeny of apterism in Apterogota, 2781; TILLYARD, tracing the dawn of life further backwards, 3326.—**Coleoptera**: JEANNEL, evolution of genitalia in cavernicolous *Diaprysius* (Silph.), 1592; LHOSTE, *Mastigus* (Scydmaen.), 1935; D'ORCHY-MONT, phylogeny of Hydrophilidae, 2456, 2464; SAALAS, wing venation of Cerambycidae, 2893.—**Hymenoptera**: BUGBEE, some Eurytomid genera, 429; KINSEY, *Cynips*, evolution of categories higher than species, 1707; MÉHELÿ, primitive bees, 2158; ROSS, ancestry and wing venation of Hymenoptera, 2839; STAT, geological evidence of evolution of social bees, 3164.—**Lepidoptera**: FISCHER, phylogenetic importance of the basal thorn, 983; FORBES, Thyatiridae, 1008; HUTTNER, origin of pattern in Lep., 1521; LAMEERE, Lepidoptera, 1877; SOKOLOV, evolution of markings in Arctiidae, 3111; VERITY, *Aglais urticae*, male genital armature and connection with phylogeny, 3474; WEIDNER, connection between phylogeny and ontogeny, 3557.—**Diptera**: BEQUAERT & CARPENTER, Nemestrinidae, no evolution since Miocene 225; JAMES, Stratiomyidae, 1564; PARROT, *Phlebotomus*, 2515.—**Isoptera**: TILLYARD, descent of termites from cockroaches, 3327.—**Plecoptera**: WILLEY, evolution of wings, 3623.—**Ephemeroptera**: NEEDHAM, TRAVER & HSU, 2347.—**Orthoptera**: LAMEERE, 1876.

GENETICS.*

General: HIRSCHLER, fusom problem and heredity, 1399; KÜHN, genetics and colour pattern (Lep.), 1832; KÜHN, 1833; PICTET, geographical distribution and genetics, 2612, crossing of widely separated geographical races, 2613; PIERANTONI, inherited endosymbiosis, 2620.—**Coleoptera**: KOCH, *Lyctus linearis*, inherited symbiosis, 1759; KUNTZE, *Melasoma aenea* (Chrysom.), 1842; PAULIAN, Lucanidae, genetic nature of some polymorphism, 2534.—**Hymenoptera**: BENKERT,

Habrobracon, chromosome map, 215; DOZORCEVA, *Pteromalus puparum*, sex-linked heredity, 799; TRAJNA, heredity in bees, 3371; WHITING, *Habrobracon*, variegated eyes, 3594, *Habrobracon*, mutations from X-rays, 3597.—**Lepidoptera**: ASTAUROV, *Bombyx mori*, effect of γ -radiation of radium in producing sex-linked lethals, 99, *Bombyx*, artificial parthenogenesis, 100, artificial mutations, 101, 102; BRETT, *Hemero-phila abruptaria* (Geom.), 379; CASPARI, *Ephestia kühniella* (Pyr.), eye colour mutation, 509; EFRIMOVS & RUILOVA, *Bombyx mori*, splitting up of recessive embryonic lethal factors in in-breeding, 843; FEDERLEY, sex-limited hereditary cancer in Lepidopterous larvae, 952; FORD, *Papilio dardanus*, 1010; GIESSEL, *Ephestia kühniella* (Pyr.), 1097; JUCCI, effects of crossing two white races of silkworms, 1631; KAWAGUCHI, *Bombyx mori*, polyploid mutations, 1661; KOGURE, *Bombyx mori*, S-mottled silkworm obtained by exposure to X-rays, 1770; KÜHN, CASPARI & FLAGGE, *Ephestia kühniella* (Pyr.), influence of genes on hormones, 1834; KÜHN & HENKE, *Ephestia kühniella* (Pyr.), sex-linked inheritance with changing markings, 1836, changes in pattern due to temperature and their inheritance, 1837; LOMBARDI, *Bombyx mori*, new crossed races, 2001-2003; FLAGGE, *Ephestia kühniella* (Pyr.), effect of A-hormones on testes and imaginal eye colour, 2638; REBOUILLON, *Bombyx mori*, crossing of races, 2749; SEILER, *Solenobia* spp. (Psychid.), results of pairing parthenogenetic females with males of 2-sexed races, 3010; SIROTKIN, *Bombyx mori*, genetics and amount of silk produced, 3081; SMITH, *Galleria mellonella* (Lep. Pyr.), 3105; STROHL & KÖHLER, *Ephestia kühniella* (Pyr.), influence of pleiotropic gene on colour, vitality and development in imago, 3210, *E. kühniella*, pleiotropy, 3211; UMEYA, *Bombyx mori*, inheritance of ab normal genitalia in ♂, 3414.—**Diptera**: ALTENBURG, *Drosophila*, production of mutations by polar cap method, 65; BEADLE & EPHRUSSI, *Drosophila*, mutant eye pigments affected by transplantation, 191; BOGACHENKO & LOBASHOV, *Dros. melanogaster*, translocations in immature germ cells, 314; BONNIER & NORDENSKIÖLD, *Dros. melanogaster*, semi-lethal sex-linked gene, 329; BUCHMANN & TIMOFÉEFF-RESSOVSKY, *Dros. melanogaster*, mutation rate in female

* See also under Section I, General Zoology.

increased by temperature shock, 426; CLEMENTE, *Drosophila*, lethal effect of homozygous purple and eyeless genes, 582; CSIK, *Drosophila*, effect of genes and temperature on cell-size in wings, 677, 678, effect of collaboration of genes on bristle length, 679; DOBZHANSKY & TAN, *Dros. pseudoobscura*, *miranda*, gene arrangement compared, 778; DUBININ, *Dros. melanogaster*, continuity and discontinuity in structure of hereditary substance, 817; ELOFF, *Dros. melanogaster*, a case of 50 per cent. crossing over, 863; EPHRUSSI & BEADLE, *Dros. melanogaster*, development of eye colour, mutant claret, 891; FRIESEN, *Dros. melanogaster*, crossing-over in males produced by X-raying imago, 1053, 1055, *Drosophila* spp., spermatogonic crossing-over, 1056; GOL'DAT, *Dros. melanogaster*, direct and reverse mutations, 1146; GORDON, *Dros. melanogaster* and *subobscura*, frequency of heterozygosis in wild flies, 1154; GOTTSCHESKI, *Dros. melanogaster*, differences within an allelomorphous series, 1161; HASKINS & ENZMANN, *Dros. melanogaster*, effects of X-rays, 1271; JONES, *Dros. melanogaster*, tumours caused by somatic segregation, 1610; KOLLER, *Dros. pseudoobscura*, structural hybridity, 1778; LAVROV, *Drosophila*, effect of high temperature on mutation, 1892; L'HÉRITIER, *Dros. melanogaster*, differences in pigmentation in different strains due to poison in larvae, 1928; LI, *Dros. melanogaster*, notopleural deficiency, 1937; MAINX, *Drosophila melanogaster*, a new mutation factor, 2067; MATHER, *Dros. melanogaster*, position in crossing-over, 2136; MEDVEDEV, *Dros. melanogaster*, effect of cold and irradiation on production of mutations, 2157; NEUHAUS & SHEKHTMAN, *Dros. melanogaster*, effect of length of X-ray waves on frequency of visible mutations, 2352; NUZHIDIN, *Dros. melanogaster*, genetics of physiology of development, 2393; OLIVER, *Drosophila*, induced infertility and genetics in ♂, 2441; PROMPTOV, *Dros. melanogaster*, inherited mutations caused by hard ultra violet rays, 2698; ROUBAUD, TREILLARD & TOUMANOFF, *Anopheles maculipennis*, crossing of biotypes, 2861; SHAPIRO, *Dros. melanogaster*, germ cell selection, 3052; SMITH-STOCKING, « *Sciara copriphila*, genetics of selective segregation of chromosomes, 3106; STELLA, *Dros.*

immigrans, mutations, 3175; STURTEVANT & DOBZHANSKY, *Dros. pseudoobscura* geographical distribution and cytology of sex ratio, 3220; TIMOFÉEFF-RESSOVSKY, *Dros. melanogaster*, vitality mutations induced by X-rays, 3330; TIMOFÉEFF-RESSOVSKY, *Dros. funebris* and *melanogaster*, mutability compared, 3331; TIMOFÉEFF-RESSOVSKY & DELBRÜCK, *Dros. melanogaster*, mutations and mutability of chromosomes, 3332; TROFIMOV & POSTNIKOVA, *Dros. melanogaster*, effect of genotype on reduction of X-chromosomes, 3375, interaction of non-homologous chromosomes at meiosis, 3376.—Hemiptera: HARLAND, *Dysdercus urichi*, genetic behaviour in a mutant, 1260.—Orthoptera: CUNOT, coaptation of front legs and head in Phasmids an inherited character, 682; DARLINGTON, *Chorthippus parallelus*, *Stauroderus bicolor* (Acrid.), mechanical relationships in crossing-over, 706; FAVRELLE, Gryllidae, Tettigoniidae chromosomal formula, 951; SHPET, phenogenetics of Orthoptera, 3066.

VARIATION.

Insecta: KRUMBIEGEL, geographical variation, 1827.—Coleoptera: DARLINGTON, variation and atrophy of wings in some Carabidae, 707; GAGLIARDI, *Agonum sexpunctatum*, colour variation, 1079; KUNTZE, *Melasoma aenea* (Chrys.), colour variation, 1842; POMINI, *Platycarabus* (Carab.), geographical variation in Italy, 2661; VALENTINE, *Steniridia andrewsi* (Carab.), 3433; ZIMMERMANN, *Eptilachna chryso-melina* (Coccin.), geographical variation, 3706.—Hymenoptera: ALPATOV, *Apis mellifica*, cubital cell of wing in different forms, 64; BEQUAERT, *Polistes carnifex*, colour variation, 223; LAVRECHIN, *Apis mellifica*, 1891; MARCHAL, *Trichogramma* (Chalc.), biological races, 2103; PELTRERA, *Polistes gallicus*, 2552; WILL, *Emphytus cinctipes* (Tenth.), variation in wing venation, 3613.—Lepidoptera: ASTAUROV, *Bombyx mori*, production of artificial mutations, 99; DÖRING, variation in Noctuid eggs, 789; MÜLLER, *Acidalia contiguarina* (Geom.), local variations, 2309; OLIVER, aberrations and deformities in butterflies, 2442; ROUSSEAU-DECELLE, *Morpho hecuba*, *perseus*, 2863; VINCENT, *Catocala* (Noct.), homogeneous variation, 3490; WARNECKE, variation in Macrolepidoptera

of Sylt I., 3533; ZAĆWILICHOWSKI, experimental production of aberrant forms in Lepidoptera by injections of chemicals, 3690.—**Diptera**: DAVIES, *Lucilia sericata*, physiological races, 716; GLEICHAUF, *Dros. melanogaster*, variation in sex organs, 1128; MARTINI, Culicidae, 2126.—**Hemiptera**: MILLER, *Aphis feminea*, variation in wing venation, 2237.—**Plecoptera**: WILLEY, variation in wings, 3623.—**Orthoptera**: FAURE, *Nomadacris septemfasciata* (Acrid.), transformation of phases, 948; ROUBAUD, *Schistocerca*, 2859; ZOLOTAREV, *Locusta migratoria*, 3712, 3713.

COLOUR.

Insecta: CARPENTER, insect coloration and natural science, 494; KÜHN, genetics of colour pattern, 1832; SCHULTZ, effect of temperature on colour, 2981.—**Coleoptera**: BUSSMANN, *Tenebrio molitor*, 458; KUNTZE, *Melasma aenea* (Chrys.), colour variation, 1842.—**Hymenoptera**: FREY, nature and origin of colour in Chrysidae, 1049; GENTIL, origin of iridescence in wings of Ichneumonidae, 1101.—**Lepidoptera**: BRAUN, *Ephestia kühniella* (Pyr.), pattern in pupal wings, 370; BRECHER, *Pieris brassicae*, *Vanessa io*, *urticae* (Nymph.), colour in pupae, 372; HENKE, wing pattern in Saturniids, 1331; HEPF, colour forms in Lepidopterous pupae, 1344; HUTTRER, origin of pattern in Lepidoptera, 1521; KÜHN & ENGELHARDT, *Abraxas grossulariata* (Geom.), determination of wing pattern, 1835; LICHY, origin of colour in Lepidoptera, 1942; SOKOLOV, evolution of markings in Arctiidae, 3111; WULKOPF, *Ephestia kühniella* (Pyr.), effect of heat and frost on wing pattern, 3658.—**Neuroptera**: GENTIL, *Chrysopa perla*, origin of metallic colouring, 1100.—**Diptera**: COCHRANE, *Drosophila pseudo-obscura*, development of eye-colour, 583; EPHRUSSI, CLANCY & BEADLE, *Dros. melanogaster*, effect of lymph on red eye colour, 892; EPHRUSSI & HARNLY, *Dros. melanogaster*, substances in eye pigmentation, 893; FRAENKEL, *Calliphora erythrocephala*, 1023.—**Hemiptera**: GENTIL, *Opisicoetus personatus* (Reduv.), origin of iridescent colour, 1102; HESLOP-HARRISON, Psyllidae, 1365; SIMANTON & ANDRE, *Lygaeus kalmii*, colour markings, 3076.—**Psocoptera**: BADONNEL,

Caecilius, 125.—**Orthoptera**: BRECHER, *Carausius morosus* (Phasmid.), pre-induced colour variation, 373; FAURE, *Nomadacris septemfasciata* (Acrid.), 948; HAMILTON, *Locusta*, *Schistocerca*, *Nomadacris* (Acrid.), colour changes in adults during sexual maturation, 1245; HUSAIN & AHMAD, *Schistocerca gregaria*, influence of temperature on development of black pattern, 1504; HUSAIN & KESHO DAS BAWEJA, *Schistocerca gregaria*, colour changes in desexualised, 1506; HUSAIN & MATHER, *Schistocerca gregaria*, physical exertion and pigmentation, 1508; JANDA, *Dixippus morosus* (Phasm.), colour change in transplanted skin and body fragments, 1572; KEY, *Locusta migratoria migratorioides*, effect of different humidities, 1689; MEISSNER, *Carausius hylaris* (Phasm.), 2164; SIMONETTI, chlorophyllous pigment in Orthoptera, 3077.

MIMICRY, PROTECTIVE COLORATION.

BALAGNY, discussion, 142; BUDDENBROCK, 427; CARPENTER, *Eccoptoptera cupricollis* (Carab.), Proc. R. ent. Soc. Lond. (A) 11 p. 49; CARPENTER, *Pseudacraea eurytus* and its models in W. Uganda, 496, attacks of birds on butterflies, 500, *Brithys pancratii*, aposematic larva distasteful to guinea-fowl, Proc. R. ent. Soc. Lond. (A) 11 p. 51; CARRICK, efficiency of protective adaptations in insects, 504; CHAPPUIS, *Calocampa solidaginis* (Noctuid.), mimicry, 524; COTTAM, insects eaten by Arctic birds and mammals, 656; HEIKERTINGER, criticism of mimicry in butterflies, 1303, 1304, wasp mimicry criticised, 1305; HENNEBERG, protective coloration, 1332; JEANNEL, 1538; KNOWLTON, insect food of lizards, 1745; METZGER, types of concealing coloration and attitudes, 2197; POULTON, 2680, mimicry in Fijian butterflies, 2681; SEITZ, mimicry in Zygaenids (Lep.), 3015; WAIT, *Papilio polymnestor parnida* captured by Paradise flycatcher in Ceylon, Proc. R. ent. Soc. Lond. (A) 11 p. 46; WALLIS, pebble-like Acridid which assumes a scorpion-like appearance, Proc. R. ent. Soc. Lond. (A) 11 p. 47; WHEELER, ants mimicking termites, 3588.

MELANISM.

BRETSCHNEIDER, inherited melanism through in-breeding, 377; GIBBINS,

Anopheles costalis, melanic inland race, Uganda, 1108; GÖNNER, melanism in day-flying Lepidoptera, 1149; HEESE, 1300; MARTIN, Lepidoptera, 2125; URBACH, *Phibalapteryx polygrammata* (Geom.), effect of in-breeding and metallic salts on melanism, 3416.

DIMORPHISM, POLYMORPHISM.

BARROS, *Callideriphus laetus* (Col. Cerambyc.), sexual dimorphism, 175; FLANDERS, *Coccophagus lycimnia* (Hym. Aphelin.), sexual dimorphism in eggs and larvae, 994; MARCHAL, *Trichogramma* spp. (Hym.), dimorphism, micropterism, 2108; PAULIAN, polymorphism in male beetles, 2526; PAULIAN, genetic nature of certain cases of polymorphism in males of Lucanids (Col.), 2534; ROONWAL, *Dialeurodes dissimilis* (Aleurod.), sexual dimorphism, 2835; WARREN, *Erebia* (Lep.), sexual dimorphism, 3539; WEBER, Psocoptera, dimorphism, 3547.

GYNANDROMORPHS, INTERSEXES.

Hymenoptera: BEAUMONT, Apidae, 198; GREB, *Habrobracon*, production of gynandromorphs by high temperatures, 1176; KONTKANEN, *Ancistrocerus parietum* (Vespid.), Ann. Ent. Fenn. 1 1935 p. 59; WHITING, *Habrobracon*, reproductive reactions in gynandromorphs, 3593.—**Lepidoptera:** JORDAN, *Troides* (Lep.), ♀♀ with ♂ coloration, 1624; KOSMINSKI, *Lymantria dispar*, 1801, 1802; MICHEL, intersexes, gynandromorphs, 2205; ROTHCHILD, *Troides victoria-regis*, 2845; RUSSELL, *Argynnis paphia* gynandromorphs, 2886; SCHEDL, *Porthetria dispar* (Lymantr.), 2945; TANAGA, *Papilio thairwanus*, *Huphina nadina*, 3275.—**Diptera:** LINDNER, *Nemotelus notatus* (Stratiom.), 1974; PHILLIPP, Chironomidae, 2585; REICHENSBERGER, *Termitosagma heningsi* (Termitox.), 2758; REMPEL, *Chironomus hyperboreus*, body ♀, genitalia ♂, 2772; SCHMITZ, *Termitoxenia*, 2968.—**Orthoptera:** ROBERTSON, *Paratettix texanus* (Acrid.), morphology and cytology of gynandromorph, 2814.

HYBRIDS.

Coleoptera: RAYNAUD, *Carabus*, 2740.—**Lepidoptera:** AMOT, *Saturnia pavonia* ♂ × *atlantica* ♀, 67;

BOVEY, *Zygaena ephialtes*, crossing expts., 354; DURAND, *Mormonia dilecta* × *Catocala conjuncta* (Noct.), 830; HEIN, *Codonia* hybr. n. *orbialio-cellaria* (Geom.), Z. öst. EntVer. 21 p. 9; KITTELMANN, *Celerio* (Sphing.), new hybrids, 1716; MEYER, *Celerio* (Sphing.), hybrids, 2198; PATIJAUD, *Saturnia pyri* ♀ × *pavonia* ♂, Proc. verb. Soc. linn. Bordeaux 86 1935 pp. 115–117.—**Diptera:** DOBZHANSKY, *Dros. pseudo-obscura*, sterility in hybrids, 775; KERKIS, *Dros. melanogaster* × *simulans*, chromosome conjugation, 1680; KOLLEK, *Dros. pseudo-obscura*, structural hybridity, 1778; WEYER, *Culex pipiens*, *fatigans*, crossing experiments, 3575.

TERATOLOGY.

Coleoptera: CHO, 548; CISKIEWICZ, *Leptura bifasciata*, antenna, 569; DALLAS, *Feronia marginalis* (Carab.), antenna, 697; JUREČEK, *Strangalia aurulenta* (Cerambyc.), Sborn. ent. odd. Nár. Mus. Praze 14 p. 204; KAWECKI, *Aromia moschata* (Cerambyc.), leg, 1663; KEYS, *Atheta sordida*, *Oxyptoda opaca* (Staph.), variation in tarsal segmentation, 1694; PARK, *Tribolium confusum* (Tenebr.), abnormal twisted pupae, 2511; RIEGEL, *Phyllophaga futilis* (Melol.), 7 tarsi, 2796; VENET, *Carabus atrophy* of elytra, 3467.—**Hymenoptera:** KLOIBER, Tenthredinidae, wing venation, 1737; LOTMAR, one-eyed bees, 2007; PICARD, *Podagrion pachymerum* (Chalc.), poecilandy, 2609.—**Lepidoptera:** GOTTHARDT, *Chrysophanus virgaureae* (Lycaen.), abnormal male genitalia, 1160; KITTELMANN, *Sphinx ligustri*, abnormal larva, 1718; ROCCI, *Zygaena maritima transiens*, abnormal wing, Boll. Soc. ent. ital. 68 p. 142 fig.—**Hemiptera:** STICHEL, *Acanthosoma haemorrhoidale* (Pent.), antennae, 3185.—**Orthoptera:** HAMILTON & MILNTHORPE, *Locusta migratoria*, supernumerary ovipositor valves, 1246.

ETHOLOGY.

ECOLOGY.

Insecta: ADAMSON, insects of Marquesas, 25; AUDRAS, fauna of river

débris in France, 106; BERNARD, soil-inhabiting insects of central Pyrenees, 246, 247; CANNON, fauna of upper Walsh river, N. Queensland, 479; CARPENTER & FORD, use of sweep net samples in an ecological survey, 501; CAZALET, fauna of Frémur estuary, 513; CORBET, fauna of soil in Malaya, 644; EBERLE, insects found in snow, E. Prussia, 834; FISCHER, fauna of Swabian Danube valley, 985; HEYWARD & TISSOT, fauna of soil associated with forest fires, 1375; JACOT, fauna of soil, 1554; JAHANDIEZ, fauna of Ile Verte, mouth of Rhone, 1559; KUNTZE, xerothermic fauna of Podolia, Brandenburg, Austria and Switzerland, 1843; LINSLEY & USINGER, insects in foothill regions of California, Mt. Diablo, 1986; McKEOWN, fauna of Tuross R. district, 2040; MAZEK-FIALLA, fauna of steppes of Neusiedler Lake, 2152; MUMFORD, terrestrial and fresh-water fauna of Marquesas Is., 2312; MYERS, nocturnal ecology in climax forest, 2320; PEARSE, fauna of estuary district Beaufort, North Carolina, 2545; PLAUMANN, insects of virgin forest, Brazil, 2640; POLL, fauna of coast of Argelès-sur-Mer, E. Pyrenees, 2658; ROLLER, fauna of the loess wall of S.E. slopes of Bisamberg, Lower Austria, 2823; RZÓSKA, fauna of coasts of Polish lakes, 2891; SHERMAN & PERRY, fauna of Chilcotin plateau, Br. Columbia, 3061; SILVEY, burrowing beach insects of some fresh water lakes, 3070; SOUDEK, insect fauna of forest soil in Czechoslovakia, 3127; WOMERSLEY, fauna of the National Park, S. Australia, 3648.—*Coleoptera*: BLAIR, Coleopterous remains in peat thrown up on E. Anglian shore, 285; BREDDIN, *Bledius* (Staph.), and allies in Rhenish loess districts, 374; COLES & REYMOND, beetles of Iraty forest, Basses-Pyrenees, 610, 611; ERMISCH & LANGER, beetles of Vogtland, Saxony (contd.), 894; FRANZ, Coleopt. fauna of high Alps of Karnia and Venetia, 1034; FRANZ, *Dichotrachelus* (Curc.), E. Alpine spp., 1036; HORION, habitats of beetles of Lower Rhine, 1465; IENIȘTEA, beetles of Sibișelului mts., S. Carpathians, 1526; JARRIGE, factors affecting distribution of various beetles in France, 1582; LARSEN, burrowing beetles on shores of Skallingen, Denmark, 1886; LELEAP, *Carabus*, Forest of Soignes, 1907; PALM & LINDROTH, Klarälven, Sweden, 2485; PAULIAN, ecology of

beetles of Yeu I., Vendée, 2528; ROUBAL, Col. on banks of River Dunajec, Czechoslovakia, 2856; STILLER, beetles of Ofner Mts., Budapest, 3187; SZEKESSY, xerothermic beetles of Tihany peninsula, 3243; TER-MINASYAN, Col. of composite plants in the State steppe reservation Tshapli in Ukraine, 3291; VADON, *Pogonostoma* spp. (Cicind.), 3432; WHELAN, Col. of an original prairie area, E. Nebraska, 3591; ZOLK, Scolytidae, Estonia, 3711.—*Hymenoptera*: BRADLEY, ecological distribution of Hym. in N. and S. America, 362; EIDMANN, *Trichogramma minutum*, 855; EIDMANN, S. Brazilian ants, 856, 857; HELDMANN, bees of Hessian sandy districts, 1316; JACOBSON, ants, E. Baltic high moors, 1551; SKORIKOV, Mutillidae, Centr. Asia, 3090; ULLYETT, *Microplectron fuscipennis*, physical ecology, 3408.—*Lepidoptera*: ABBAYES, ecology of Lep. of Vendée coast, 9; AHMAD, *Ephestia kühniella*, *Nemeritis canescens*, influence of ecol. factors, 28; STERZL, Lepidoptera of upper Ziller valley, 3183; WARNECKE, butterflies, microclimate, 3529; WARNECKE, ecology of Macrolepidoptera of Sylt I., 3533.—*Diptera* BUXTON, *Glossina submorsitans*, *tachinoides*, soils in relation to biology, 463; DANILOVA, *Anopheles maculipennis* in Azov, 700; HOPKINS, breeding-places of mosquitos, Ethiopian Region, 1455; LEGENDRE, *Aedes punctatus*, continental penetration, 1905; LESTAGE, *Liponeura belgica* (Bleph.), habitat, Belgium, 1925; NASH, *Glossina* spp., 2327; PAVLOVSKI, mosquitos, U.S.S.R., 2535; PERFIL'EV & POPOV, *Phlebotomus* spp., Tadjikistan, 2560; PETRISHCHEVA, *Phlebotomus*, Turkomania, 2571; ŞUSTER, Tachinids and Calliphorids of Mt. Ceahlău, Carpathians, 3229; SWYNNERTON, *Glossina* E. Africa, 3241; VICARS-HARRIS, *Glossina swynnertoni* relation to various vegetation types, 3479; ZUMPT, *Glossina* spp., 3720.—*Hemiptera*: ENGEL & HEDICKE, Heteroptera of inland dunes of Bellinchen, Mark Brandenburg, 890; KIRITCHENKO, Coccidae, U.S.S.R., 1708; LINDBERG, halophile and halobiont Hemiptera of North Sea and Baltic, 1961; LUNDBLAD, Swedish Hemiptera, 2023; MÜLLER, Rhynchota, Thuringia, 2305; STRAWINSKI, Hemiptera on trees and shrubs in Poland, 3201.—*Psocoptera*: HOLZAPFEL, Swiss Psocoptera, 1450.—*Ephemero-*

ptera: MACKIEWICZ-GUTOWSKA, ecology in N.-E. Poland, 1939.—**Orthoptera:** JANNONE, Aegean Is., 1574.—**Collembola:** MEL'NICHENKO, periodic appearance on snow, 2178.

POPULATIONS.

Insecta: BERGMANN, effect of meteorological conditions on insect fauna of Thuringia, 232; BELANOVSKIĭ, effect of meteorological conditions on swarming of injurious insects, 207; BOLDT, fluctuations in German fauna, 321; COMON, 630; FLINT, effect of winter temperature in 1935-36 on population in Illinois, 1002; HILLER, fluctuations in populations, 1379; ROEBUCK, field observations, 2820; SEITZ, effect of mild winter on abundance, 3013; SWEZEY, swarming of endemic spp. in Hawaii, 3237.—**Coleoptera:** GOBEL, *Ips perturbatus*, pop. in a single tree, 1131; MACLAGAN & DUNN, *Calandra oryzae* (Curc.), effect of density of population on frequency of pairing and on oviposition, 2041; PARK, *Tribolium confusum*, 2509, 2510, 2512; SCHEDL, bark-beetles, 2944.—**Hymenoptera:** CIŚLIK & KAWECKI, *Aphelinus mali*, swarming in Poland, 588; PICKLES, *Formica fusca*, *Acanthomyops flavus*, *Myrmica ruginodis*, 2610; SALT, *Trichogramma evanescens*, effect of superparasitism on populations, 2907.—**Lepidoptera:** BEREZHKOVA, *Loxostege sticticalis* (Pylal.), swarming in Siberia in 1930-32, 226; HOFFMANN, *Cacoecia cerasivorana* (Tortr.), population study with reference to parasites, 1425; KIEFER, causes of decrease in Lepidoptera, 1696; MEISSNER, *Colias edusa* (Pierid.), swarming in Germany in 1928-29, 2167; MELNICHENKO, *Loxostege sticticalis*, mass flying and migrations, 2177; PICTET, localisation of Lepidopterous populations in valleys, 2611; SCHEDL, *Porthetria dispar* (Lymantr.), dynamics of populations, biotic potential, 2945; SCHIMITSCHEK, *Cacoecia murinana* (Tortr.), 2955; TICHY, periodical appearances of Lepidoptera in Boskovice, Czechoslovakia, 3321; URBACH, *Pseudophia lunaris* (Noct.), Ent. Z. 49 p. 459; WARNECKE, factors contributing to extermination or decline of European Lepidoptera, 3531, 3534.—**Diptera:** BARNES, fluctuations in Cecidomyiidae, 173; EVANS, *Lucilia sericata*, competition between spp. of blow-flies, 916; L'HÉRITIER &

TEISSIER, *Drosophila*, competition among larvae, 1359; KLEIN-KRAUTHHEIM, *Tharmatomyia notata* (Chlorop.), swarming in Germany in 1934, 1731; LLOYD, *Glossina tachinoides*, assessment of population, 1997.—**Hemiptera:** CAMERON, *Adelges cooleyi*, factors controlling populations, 473; DECKER & ANDRE, *Blissus leucopterus* (Lygaeid.), winter mortality in adult, 729; SMIRNOV & POLEZHAEV, *Lepidosaphes ulmi* (Coccid.), effects of overcrowding, 3098.—**Thysanoptera:** HARRIS, DRAKE & TATE, *Thrips tabaci*, effect of climate on abundance, 1263; WATTS, *Frankliniella tritici*, correlation of population with vegetative types, etc., 3544.—**Anoplura:** BUXTON, *Pediculus h. capitis*, studies on populations, 464.—**Orthoptera:** RUBTZOVA, effect of climate on increase of Orthoptera in Siberia, 2868.

HYDROBIOLOGY.

Insecta: BRODSKIĭ, insect fauna of mountain streams, Asia, 389; LUNDBECK, fauna of Alpine lakes, 2019, fauna of Lunzer Lake, Austria, 2020; NICOL, fauna of Loch Bee, South Uist, 2360; PAX & MASCHKE, fauna of springs in Glatz snow-mountains, 2538; RICHARDS, fauna of a small stream at Le Trayas, Var, France, 2792; RUIZ & STUARDO, Chilean insects, 2878; RZÓSKA, fauna of Polish lakes, 2891; SABANEER, NOSAL' & LYASHENKO, insect food of young fishes, 2894; SOKOLOV, aquatic insects of Bukhara and neighbourhood, 3112; TAUSON, fauna of Dikoye L., Russia, 3283; THIENEMANN, fauna of wells, etc., in Garmisch, 3305.—**Coleoptera:** WILLIAMS, Hawaii, 3630; ZAITZEV, aquatic beetles of Donetz basin, 3691.—**Hymenoptera:** RIMSKIĭ-KORSAKOV, aquatic Hym. (chn., Bracon.) in Donetz R., 2802.—**Lepidoptera:** TSUDA, biology of Japanese aquatic Lep., 3379.—**Diptera:** BEHNING, *Chironomus behningi* in Aral Sea, 202; DYSON & LLOYD, *Metriocnemus longitarsus* (Chiron.), distribution of larvae and pupae at various depths in sewage beds, 831; GOETGHEBUER, Ceratopogonids, Chironomids, Belgium, 1136; JAFFUEL, *Trichophthalma* spp. (Nemest.), habits in thermal waters, 1558; LIPINA, Chironomid larvae of Donetz basin, 1987; MAYER, Ceratopogonidae of E. Alpine waters, 2150; SMART, Simuliidae, Perthshire streams,

3095; WOODHILL, *Aedes concolor*, development in various types of water, 3651; ZAVŘEL, Chironomids of streams and lakes in High Tatra, 3694.—**Hemiptera**: IMMS, *Halobates sewelli* sp. n. (Gerrid.), Gulf of Oman, 1528; JACZEWSKI, water-bugs of the Polish East Sea Coast, 1555, aquatic Heteropt., Egypt, 1556; LUNDBLAD, Swedish aquatic Hem., 2023; WALTON, aquatic Hem. of Pembrokehire, 3524.—**Ephemeroptera**: IMANISHI, Japanese torrents 1527; ŠAMAL, Ephemeroptera and Plecoptera of brooks in S. Yugoslavia, 2908.—**Odonata**: WILLIAMS, Hawaii, 3630.

CAVERNICOLOUS.

AUSTEN, *Mormotomyia hirsuta*, gen. et sp. n. (Dipt. Musc.), Kenya, 110; BLAIR, *Tenebrio* sp. n., S. Java, 286; BOLDORI, Carabidae, Cremona, 320; DENIS, Collembola of Antheuil cavern, France, 750; EMDEN, beetle larvae from Belgian Caves, 870; GRIEPENBURG, fauna of Westphalian caves, 1183; HUSSON, fauna of artificial underground cavities in N.E. France, 1510; JEANNEL, *Diaprysius* sp. n., Ardèche, 1592; LERUTH, fauna of caves in Belgium and Dutch Limbourg, 1920; MASCHKE, fauna of caves in Glatz snow-mountains, 2130; PAX, fauna of Regensdorf Tropfstein caves, 2537; SCHEERFELTZ, *Antrosemmotes rottroui* (Col. Staph.), gen. et sp. n., 2947; SILVESTRI, *Tachycampa lepneyi* gen. et sp. n. (Thysanura), Morocco, 3073; SOLLAUD, some endemic cavernicolous forms in Jura, 3113; STAMMER, aquatic insects of caves in Glatz snow-mountains, 3157; SVIRCEV, *Amaurops* sp. n., Herzegovina, 3231; WOLF, list of cavernicolous insects, 3645.

FEEDING HABITS: PHYTOPHAGOUS

Insecta: ADAMSON, food-plants of Marquesan insects, 25; D'ARAÚJO E SILVA, food-plants of insects in Brazil, 87; BRUES, evidences of attack by beetle larvae and ants in fossil wood, 410; DA COSTA LIMA, insects on plants in Brazil, III, catalogue, 652; DAVIAULT, insects associated with birch in Quebec Prov., 713; NUNBERG, key to insect pests of forests, 2392; PAINTER, food plants and their resistance to attack, 2480; SHERMAN & PERRY, insects and their plant associations in

Chilcotin plateau, Br. Columbia, 3061; VENTURI, insect fauna of Graminaeae Italy, 3470; OTERO, in WOLCOTT, host-plant index of insects of Porto Rico, 3644.—**Coleoptera**: BETTINGER, *Nanophyes sahlbergi* (Curc.), food-plant *Elatine hexandra*, 264; CHAGNON, list of beetles found in *Polyporus betulinus*, 518; COCKERHAM, *Heteroderes laurenti* (Elat.), 606; DICHTL, *Deporaus betulae* (Curc.), different curves eaten in leaves, 764; EMEL'ANOV, PRAVDIN, KUZINA, LISITZUINA, *Sphenoptera faveola* (Col.) producing flow of resin from *Chondrilla*, 874; HORION, food plants of Coleoptera of Lower Rhine, 1405; IONESCU, beetles associated with beech in Sinaia, Rumania, 1536; LINSLEY, feeding habits of some Cerambycids, 1984; MARCU, *Sclerophaedon* spp. (Chrysom.), 2111; MURAYAMA, *Callipogon relictus* (Prion.) (in Japanese), Kontyû 10 pp. 280-290; PEARSE ET AL., *Passalus cornutus*, 2548; PICARD, *Galerucella nymphaeae*, allotrophy, Bull. Soc. ent. Fr. 41 p. 45; ZACHER, food-plants of Bruchids, 3685.—**Hymenoptera**: BENSON, *Tenthredopsis carbonaria* (Tenth.), Ent. mon. Mag. 72 p. 208; MILES, *Empria* (Tenth.), 2234.—**Lepidoptera**: AUB, *Chamaepora euphorbiae* (Noct.), Ent. Rdsch. 53 p. 388; DOCTERS VAN LEEUWEN, *Papilio machaon*, new food-plant, Ent. Ber. 9 p. 264 fig.; HAIG, food-plants of Nigerian Papilionidae, Pieridae, 1236; MANSKI, food-plants of butterflies, N. Queensland, 2101; O'BYRNE, *Euphydryas phaeton* (Nymph.), food-plants, 2419; POULTON, *Euploea* spp., feeding-habits, Solomon Is., Proc. R. ent. Soc. Lond. (A) 11 p. 94; SCHEDL, *Porthetria dispar* (Lymantr.), food-plants European Asia, North Africa, U.S.A., 2945; STEINER, *Laphygma exigua* (Noct.), food-plants, 3171.—**Diptera**: SÉGUY, list of Diptera living on *Hordeum*, 3007.—**Hemiptera**: BALL, food-plants of some U.S.A. Jassidae, 152, 155, 158; BARBER, *Orius insidiosus* (Anthoc.), 172; DESHPANDE, *Aleurodes brassicae* 757; MAHDIHASSAN, food-plants of lac insects, 2065; MIMÉUR, additions to plant list of Moroccan Aphids, 2246; MÜLLER, on mistletoe in N. Thuringia, 2307; MUNRO & FOUCHÉ, Coccidae and food-plants, S. Africa, 2314; SMITH, *Hyalopterus pruni* (Aphid.), food-plants, 3100; TAKAHASHI, Formosan Psyllidae, 3254.—**Thysanoptera**: BUHL,

Kakothrips robustus, food-plants, 431; NEWMAN, food-plants of thrips in S.W. Australia, 2357; SAKIMURA, Hawaiian thrips, 2901.—Orthoptera: MEISSNER, *Carausius hilaris* (Phasm.), food-plants, 2164.

LEAF-MINERS.

Insecta: BERGER, leaf-mining insects in Saxony, 229; BUHR, Mecklenburg leaf-miners, 432; DOBREANU, Sinaia, Rumania, 774; HENDEL, food-plants of Palaearctic Agromyzidae, 1328; HERING, Centr. and N. Europe, 1348, Spain, 1352; RYDÉN, Swedish leaf-miners, iv, 2889; SKALA, Dipt., Col., Hym., mining plants, Upper Austria, 3086; TOLL, *Nepticula* (Lep. Tin.), food-plants, 3361.

GALLS.

ALFIERI, *Baris arctithorax*, *Hypera portulacae* (Col. Curc.) on *Portulaca*, 43; BAUDYŠ, Bohemia, 180, Moravia and Silesia, 181, Yugoslavia, 182; BERGER, Saxony, 229; BRACKEN, oak-galls of Devon, 361; BURKILL, gall records for 1935, Britain, 449; CAMERON, *Adelges cooleyi*, Britain, 473; FELT, relation of insects and plants in gall production, 954; HOUARD, Cecidological collection of the Paris Natural History Museum, 1480; JOHNSON, *Leptobyrza rhododendri* (Hem. Ting.), egg gall, 1608; LUDWIG, Siegen district, Westphalia, 2012; MANI, Psyllidae in India, 2095; Cecidomyiids in India, 2097; NOBLE, *Eurytoma fellis* (Hym.), 2377; NOURY, *Haplodiplosis equestris* (Cecid.), 2389; PERERECZKO-BAUMANOWA, Oszmiana, Poland, 2558; RUEDIGER, Cynipid galls on roses (Hym.), 2872; VERRIER, Cecidology in mountainous regions, 3478; VIMMER, Cecidomyiidae, Czechoslovakia, 3489; WEIN, Thuringia, 3561.

INSECTS AND FLOWERS.

ALFKEN, bees visiting flowers, Germany, 44; KUGLER, plants visited by bumble bees, 1831; MA, flower-visiting habits of certain bees in E. China, 2031; NORRIS, *Heteroneura* (Lep.), 2385; SKOVGAARD, pollination of red clover by bumble bees in Denmark, 3091; VALLE, pollination of clover by *Bombus* spp., 3436.

FEEDING HABITS: PREDACIOUS.

Insecta: RUEDIGER, insects preying on other insects, 2873.—Coleoptera: COOK, *Calosoma inquisitor* (Carab.), 641.—Hymenoptera: CROS, *Tachysphex fluctuatus*, 672; HICKS, *Tracheloides hicksi* (Spheg.), hunting ants, 1377; IWATA, *Methoca* (Thynn.), 1542; MINKIEWICZ, prey of Pompilids, Poland, 2249.—Neuroptera: DAVID, *Osmylus chrysops*, 714.—Diptera: BARANOV, Calliphorid fly preying on termites 170; BROMLEY, Asilids feeding on bumblebees in New England, 393; EVANS, *Lucilia sericata*, larvae, 919; PETRISHCHEVA, *Phlebotomus*, hosts in Turkomania, 2571; SELLKE, cannibalism in Tipulid larvae, 3022.—Hemiptera: GARBOWSKI, Asopid larvae (Pent.), 1086.—Odonata: HOBBY, dragonflies and their prey, 1404.—Orthoptera: MEISSNER, *Carausius hilaris* (Phasm.), cannibalism, 2164.

FEEDING HABITS: MISCELLANEOUS.

DENIER, *Trox suberosus*, eating locusts' eggs, 1; BRUES, aberrant feeding and its bearing on development of specialised food habits, 413; FRANKENBERG, *Chrysopa vulgaris*, occasionally feeding on man, 1030; FROST, HERMS & HOSKINS, *Theobaldia incidens* (Culic.), nutritional requirements of larva, 1060; HANDLIRSCH & BEIER, Trichoptera, 1251; HERFS, *Anthrenus fasciatus* (Col. Dermest.), 1347; HUSAIN & MATHUR, *Schistocera gregaria* (Orth. Acrid.), why locusts eat wool, 1507; LIEFTINCK, *Leptopanorpa* (Mecopt.), 1950; MCCLURE, *Ectopsocus californicus* (Psocopt.), 2042; ÖRÖSI-PÁL, *Meloë variegatus*, 2468; SLACK, Trichoptera larvae, 3092; VAN OYE, *Simulium* (Dipt.), method of feeding in larva, 3443; VORIS, Staphylinidae (Col.), 3497; WILLIAMS, *Oxybelus*, *Belomicrus*, 3628.

PHENOLOGY.

Insecta: BERGMANN, in Thuringia in 1934, 232; GRIMES, in Ireland in 1935, 1186; GUNTON, phenological records in 1935, Proc. R. ent. Soc. Lond. 10 pp. 94-95; SMITH & KELLY, in Kansas in 1934, 3103; TUTEWOHL, insects flying at electric lights of Berlin in March-October, 1933-35, 3394; Coleoptera:

COOK, *Calosoma inquisitor* (Carab.), no. of generations, 641; MEISSNER, *Melolontha* spp., in Germany in 1936, 2166. — **Hymenoptera**: FRIEDRICHS, phenology of Ichneumon parasites of *Panolis flammea*, 1050; GRASSÉ, *Torymus auratus* (Chalc.), swarming, 1174. — **Lepidoptera**: ABBAYES, *Acherontia atropos* (Lep. Sping.), second brood in Bretagne, 10; ADAMCZEWSKI, near Warsaw 1934, 22; DURAND, *Polyommatus coridon*, W. France, 829; FRÉMONT, in Gironde in 1934, 1046; HODGSON, *Polygonia c-album* (Nymph.), appearances in Hertfordshire in 1919-34, Trans. Hert. nat. Hist. Soc., Watford 20 no. 2 pp. 43-46; KAUTZ, *Pieris bryoniae*, 1660; KOEHN, Faroe Is., 1934, 1769; LIU, *Schoenobius incertellus* (Pyr.), spring brood larvae, 1991; MICHEL, in Czechoslovakia in 1935, 2203; MOUTERDE, Geometridae collected in winter, Bull. Soc. linn. Lyon (N.S.) 5 p. 141; SCHNEIDER, in Württemberg in 1935, 2974; SCHREIER, swarming of Lepidoptera in Germany, 2976; WARREN, *Erebia*, flight period, 3539. — **Diptera**: BRUCE & KNIPLING, seasonal appearance and relative abundance of flies attracted to baited traps, 404; NASH, *Glossina* spp., N. Nigeria, 2326; SCHWARDT, *Tabanus*, Arkansas, 2988. — **Hemiptera**: CAMERON *Adelges cooleyi*, 473; PFALER, Lygaeidae, Finland, 2577.

SOCIAL LIFE.

BALFOUR-BROWNE, evolution of social life in insects, 146; GRASSÉ, *Torymus auratus* (Hym.), separate aggregation of sexes, 1174; HASE, *Polybia atra* (Hym.), 1269; POULTON, assemblies of Coccinellids in N. Uganda, 2682; WEYRAUCH, *Dolichovespula* and *Vespa* (Hym. Vespidae), social life compared, 3579.

BEE LIFE.

BOYER, embalming enemies in hive, 359; FRANZ, distance of flight, 1033; GWIN, production of wax scales and comb building, 1234; HICKS, nesting habits of some Canadian bees, 1376; MALYSHEV, nesting habits of solitary bees, 2081; MÉHELIŠ, primitive bees, 2158; MOLITOR, return to nest in solitary bees, 2264; ÖRÖSI-PÁL, melanosis in honeybee, 2469; RAU, biology

of solitary and social bees of St. Louis, 2730; SKOVGAARD, Danish bumblebees, 3091.

ANT LIFE.

ADLERSPARRE, association of ants and birds, 27; EIDMANN, *Atta sexdens*, 856, 857; GOETSCH, co-operation, 1139, 1140, biology and distribution in Gulf of Naples, 1141; HASHIMOTO, *Atta sexdens* in Brazil, 1270; HÖLDOBLER, colony-founding, 1446; MITRA, selection of food, 2256; MOLITOR, return to nest, 2264; PARK, *Formica ulkei*, beetles associated with, 2511; PICKLES, *Formica fusca*, *Acanthomyops flavus*, *Myrmica ruginodis*, 2610; RAU, biology of ants of St. Louis, 2729; STÄGER, *Formica rufo-pratensis*, 3154; STUMPER, human and ant activities compared, 3217; WEBER, *Myrmica*, origin of mixed colonies, 3545, *Myrmicinae*, 3546; WESSON, *Strumigenys pergandei*, feeding habits, 3571.

MYRMECOPHILY.

BORGMEIER, Phoridae and Staphylinid, S. America, 335, 336; BRUES, new Phorid (Dipt.), U.S.A., 409; HUSTACHE & BRUCH, new Curculionid, 1520; PARK, Coleoptera living with *Formica ulkei*, 2508; REICHENSPERGER, ants and termite guests, 2757; SCHEER-FELTZ, Staphylinidae (Col.), from nests of *Atta sexdens* in Brazil, 2946.

TERMITE LIFE; TERMITOPHILY.

BOUCOMONT, Acanthocerinae (Col.), Costa Rica, 342; COLETTE, termitaria in Upper Pleistocene in Stanley Pool, Belgian Congo, 615; GOETSCH, 1142, 1143; HEGH, 1301; MOUTIA, Mauritius, 2293; REICHENSPERGER, termitophily, 2759; SNYDER, Our enemy the Termite, 3110; WHEELER, ants living with and preying on termites, 3588.

SYMBIOSIS.

ADAMS, *Thermobia domestica* (Thysanura), internal symbionts, 23; BERNHAUER, Staphylinidae in 'marmots' nests, 252; BODE, bacterial symbionts in Blattidae (Orth.), 304; CARTER, *Pseudococcus brevipes* (Hem.), symbionts and phytotoxic secretion, 508; COLLART, Diptera in wasps' nests, 617

GETZEL, *Icerya purchasi* (Coccid.), new symbiont, 1104; ICHIJÔ, *Barathra brassicae* (Lep.), intestinal flora of normal larvae, 1524; KOCH, *Lyctus linearis*, 1758, 1759; KOCH, *Oryzaephilus surinamensis* (Cucuj.), 1759; PALM, Coleoptera in birds' nests, 2484; PIERANTONI, physiological symbiosis in xylophagous termites and in their intestinal flagellates, 2619, inherited endosymbiosis, 2620; STAMMER, *Bromius obscurus* (Eumolp.) symbiotic with *Cassida* spp., 3158; SUMNER, *Tenebrio molitor*, relation of gregarines to growth and longevity, 3224; WAGNER, Siphonaptera in moles' nests, 3513.

INSTINCTS, TROPISMS.

BEAUMONT, instinct and intelligence in insects, 197; WARDLE, 3528; WEYRAUCH, orientation to dark surfaces, 3582; WILLIAMS, influence of moonlight on certain nocturnal insects, particularly Noctuidae (Lep.), 3624.—Coleoptera: HAVAS, *Tenebrio molitor*, orientation in larvae affected by radioactive mud, 1275; LICHE, Dermestidae, phototaxis, attraction to food, reaction to temperature, 1939; SYLVEST, *Meligethes aeneus*, chromotaxis, 3242.—Hymenoptera: BERLAND, orientation in Hym., 237; GOETSCH, orientation in ants and termites, 1140; HASE, *Polybia atra* orientation to nest, 1269; IWATA, *Methoca* (Thynn.), stinging habits, 1542; DE LÉPINEY, *Eumenes maxillosus*, "education" instinct, 1918; MOLITOR, return to nest in solitary bees, wasps and ants, 2264; PIÉRON, sense of time in bees, 2623; POULTON, fossorial wasps' attempts to find nest, Proc. R. ent. Soc. Lond. 10 pp. 86–88; SAZ, predacious Hymenoptera, 2924; STÄGER, *Formica rufa-pratensis*, 3154; STARCKE, *Lasius alienus* (Form.), 3161; VERLAINE, analysis of prey, 3477; WEYRAUCH, *Lasius fuliginosus* (Formic.), phototaxis, anemotaxis, 3583.—Lepidoptera: FINKE, *Argynnis paphia* (Nymph.), activity in sun and in shadow, 981; HUNDETMARK, *Lymantria monacha*, orientation to light, colour, etc., 1498; LATTE, *Aglais urticae* (Nymph.), attracted to lamp-light after hibernation, 1890; LIU, *Schoenobius incertellus* (Pyr.), 1991; MANSKI, attraction to food-plants in butterflies, 2101; RICHER, *Cnethocampa pityocampa*, processionary larvae,

2793.—Diptera: BOHN, Chironomids, reaction to light of larvae, 316; BROWN & HALL, *Drosophila melanogaster*, directive effect of white and coloured lights on eye mutants, 397; FORD, *Wohlfahrtia vigil* (Sarcoph.), reactions to heat and light, 1011; LLOYD & TURNER, *Metriocnemus longitarsus* (Chiron.), response of larvae to gravity and light due to physiological change, 1998; PINCHIN & ANDERSON, Tipulinae, time of flight and proportion of sexes, 2624; REUTER, *Anopheles maculipennis*, stimulus for biting, 2778; SELKE, tropisms in Tipulid larvae, 3022; VEILLET, *Dros. melanogaster*, attraction to acetic acid, 3464.—Hemiptera: DESHPANDE, *Aleurodes brassicae*, phototropism, 757; GARBOWSKI, orientation in Asopid larvae (Pent.), 1086; KOBAYASHI, *Dysdercus megalopygus*, chemotropism, 1757; MACIUCĂ, *Pyrhocoris apterus*, orientation, 2038; STICHEL, Heteroptera attracted to light, 3185.—Thysanoptera: WATTS, *Frankliniella tritici*, 3544.—Orthoptera: CAPPE DE BAILLON, response of antennae to heat, light and chemicals in Phasmids, 482; HUSAIN & BHATIA, *Schistocerca gregaria*, factors determining movement of vermiform larvae, 1505; STRELNIKOV, *Locusta migratoria*, effect of solar radiation and micro-climate on body temperature and behaviour of larvae, 3206.

MOVEMENTS, ATTITUDES.

BRANDT, *Lymantria monacha*, speed of larval movements, 366; BOVEY, *Oncodes pallipes* (Dipt. Cyrtid.), progression in larvae, 353; DAVID, *Osmylus chrysops* (Neur.), rotary movement in larvae, 714; EASTHAM, *Leptophlebia marginata* (Ephem.), rhythmic movement of gills in nymphs, 832; FABER, Oedipodinae (Acrid.), movement and sound production, 933; HOFFMANN, effects of pressure and tactile stimuli on attitude and behaviour, 1431; HOPKINS, locomotion of mosquito larva, 1455; KALMUS, *Corethra* (Dipt.), movements of larvae and pupae to remain in a given depth of water, 1638; KEY, *Locusta m. migratorioides*, locomotor activity, 1690, 1691; LICHE, Dermestidae, catalepsy, 1939; MCCLURE, *Ectopsocus californicus* (Psocopt.), spinning dance, 2042; OEVERMANN, maintenance of balance in water bugs, 2423; RUEDIGER,

athletic powers in insects, 2874; STEINIGER, *Nepa cinerea* (Hem.), catalepsy, 3172; STURDZA, *Formica rufa* effect of temperature on movement, 3218; TONNER, co-ordination of breathing and swimming in Odonata, 3364; VAN OYE, *Simulium* (Dipt.), movement in larva, 3443; WEYRAUCH, internodal progression, 3578.

FLIGHT.

FRANZ, distance of flight in bees, 1033; GORDON, *Locusta*, counter-clockwise flight in swarms, 1153; GUIGNON, influence of sunlight on flight in diurnal Lepidoptera, 1206; HOLLICK, *Muscina stabulans* (Dipt.), 1447; ISELY, stridulation during flight in American Acrididae, 1539; MAGNAN, wing structure and flight in insects, 2063; MIHÁLYI, mechanics of flight in *Musca domestica*, 2226; PHILLIPP, method for qualitative and quantitative estimation of flight of insects, 2586; JACQUET, *Culex pipiens* (Dipt.), extent of flight, 2827; WENZEL, capacity and manner of flight in Lepidoptera, 3563.

MIGRATION.

Insecta: DANNREUTHER, migration records, Britain, 1935, 1936, 701; FLETCHER, England, 997; FRASER, *Aeshna mixta* (Odon.), in 1935, J. Soc. Br. Ent. 1 p. 117; GRANT, records of migrating insects, British Isles, 1931-35, 1172, 1173; KNIGHT, records of southern insects moving northward during drought years 1930 and 1934, 1742; WILLIAMS, collected records, iii, 3625.—*Coleoptera*: DE BRUNIER, *Bledius crassicolis*, *Dyschirius intermedius*, associated migration, Rev. franç. Ent. 3 p. 117.—*Lepidoptera*: BRACKEN, *Polygonia c-album* (Nymph.), gradual migration from Devon into Cornwall during 1925-34, 360; CAMPBELL, migrant Lepidoptera in Barra, Outer Hebrides, in 1936, Scot. Nat. no. 222 pp. 173-175; FLETCHER, marked migrant butterflies, Ent. Rec. 48 pp. 105-106; GARRETT, migrant Lep. in 1936 in N.E. England, 1091; LHOMME, Lepidoptera, 1930; MELNICHENKO, *Loxostege sticticalis* prognosis of migrations, 2177; MUSPRATT, Lepidoptera, 2318, 2319; SCHREITER, Argentine Sphingidae, 2977; STREL'NIKOV, *Loxostege sticticalis* (Pyr.), 3203.—*Hemiptera*: HUSAIN, TREHAN & VERMA, *Bemisia*

gossypiperda (Aleurod.), 1509; JORDAN, Corixidae, swarming, 1626.—*Odonata*: BIRD & DENNING, *Libellula quadrimaculata*, Canad. Ent. 68 p. 283.

HIBERNATION, AESTIVATION.

Insecta: HEMION & HADZELL, effect of low temperature on length of hibernation period in eggs, 995; HOLMQUIST, hibernation in forests, 1449.—*Coleoptera*: COCKERHAM, *Heteroderes laurenti* (Elat.), 606; COOK, *Calosoma inquisitor* (Carab.), 641; EVANS, *Micraspis sedecimpunctata* (Coccin.), 918; GOBEIL, *Ips perturbatus* (Scolyt.), 1131; HAMMER, *Tachypterellus quadrigibbus* (Curc.), 1248; MEISSNER, Coccinellidae in Germany, 2165; WONG & CHIN, *Colaphellus bowringi* (Chrysom.), Ent. & Phytopath. 4 p. 574 (in Chinese).—*Hymenoptera*: HELDMANN, *Polistes gallica* (Vespid.), several females hibernating in the same nest, 1318.—*Lepidoptera*: HEESE, *Pyrameis atalanta* (Nymph.), 1299; SAALAS, *Incurvaria pectinea*, 2892; SEITZ, *Pyrameis atalanta*, 3016; SHANNON, *Nymphalis polychloros*, in Greece, 3049; STEINER, *Laphygma exigua* (Noct.), 3171; URBACH, *Phibalapteryx polygrammata* (Geom.), 3417.—*Neuroptera*: DAVID, *Osmylus chrysops*, 714.—*Diptera*: BIRYUKOV, malaria mosquitos of Charkow, 277; FENG, mosquitos in China, 958; KLEIN-KRAUTHEIM, *Thaumatomyia notata* (Chlorop.), 1731; VAN DEN BRUEL, *Napomyza lateralis* (Agrom.), 3437.—*Hemiptera*: JOURDAN, *Eurygaster austriaca*, 1629.—*Orthoptera*: *Ectobius* (Blatt.), J. Soc. Br. Ent. 1 p. 146.

LUMINOSITY.

HEIDT, *Onychiurus armatus*, *Achorutes muscorum* (Collem.), 1302; STAMMER, luminous insects in Silesia, 3156.

SOUND PRODUCTION.

FABER, Oedipodinae (Orth. Acrid.), 933; FLETCHER, stridulation, Proc. R. ent. Soc. Lond. (A) 11 p. 68; GOTTFRIED, song of periodical cicada, 1157; ISELY, flight stridulation in American Acrididae, 1539; JOBLING, *Parnassius mnemosyne* (Lep.), 1605; RIGALLEAU, *Ephippiger* spp. (Orth.), song, 2799; WEBER, Psocoptera, 3547.

SEX RELATIONS.

Insecta: ROUBAUD, need of flight before mating in Pterygote insects, 2858.—**Coleoptera:** VORIS, pairing in Staphylinidae, 3497.—**Hymenoptera:** FATTIG, *Mutilla briaxus*, unusual mating, Ent. News 47 p. 50; MÉHELÿ, pairing in primitive bees, 2158.—**Lepidoptera:** BETTS, pairing in Papilionidae, Amat. Papill. 8 pp. 122–123; FABRI, *Saturnia pyri*, 934; PITMAN, *Taeniocampa gothica* pairing with *stabilis* (Noct.), J. Soc. Br. Ent. 1 p. 169; PLOCH, *Dendrolimus pini* ♂ (Lasioec.), pairing with *Odontotia sieversi* ♀ (Notodon.), 1717; STEINER, *Laphygma exigua* (Noct.), 3171; WILLIAMSON, *Precis almana* (Nymph.), courtship, 3632.—**Trichoptera:** HANDLIRSCH & BEIER, pairing, 1251.—**Neuroptera:** DAVID, *Osmylus chrysops*, pairing, 714; HANDLIRSCH & BEIER, pairing in Neuroptera, 1250; HUNGERFORD, *Mantispa interrupta*, mating, 1500.—**Mecoptera:** HANDLIRSCH & BEIER, pairing, 1251.—**Diptera:** COHEN, *Phytomyza atricornis*, 607; LINDNER, Diptera, 1967; SELKE, pairing in Tipulids, 3022.—**Siphonaptera:** BEIER, pairing, 206.—**Hemiptera:** ABRAHAM, *Orthotylus marginalis* (Caps.), 18; DESHPANDE, *Aleuodes brassicae*, mating, 757; GALLIARD, *Triatoma*, *Rhodnius* (Reduv.), mating, 1084; LARSEN, *Coranus subapterus* (Reduv.), 1887; SMITH, *Hyalopterus pruni* (Aphid.), 3100.—**Isoptera:** CARPENTER, courtship of termites, 497.—**Orthoptera:** CASSAB, *Gryllotalpa gryllotalpa*, pairing, 510; FABER, Oedipodinae (Acrid.), courtship and pairing, 933; FAVRELLE, *Eugaster nigripes* (Tettig.), mating, 950; KARSAKOFF, *Iris deserti* (Mant.), rôle of colour in courtship, 1653; RIGALLEAU, *Ephippiger* spp., courting and mating, 2799.

OVIPOSITION.

Coleoptera: FAGNIEZ, *Sitaris solieri* (Meloid.), 938; HAMMER, *Tachypterellus quadrigibbus* (Curc.), 1248; HOFFMANN, *Serica sericea* (Melol.), 1426; KATÔ, *Anthonomus bisignatus* (Curc.), 1658; MACLAGAN & DUNN, *Calandra oryzae* (Curc.), 2041; SHEPPARD, *Cryptolestes ferrugineus* (Cucuj.), 3060; VORIS, Staphylinidae, 3497; WEIDNER, *Hylotrupes* (Ceram.), 3559; WILLIAMS, two water beetles that lay their eggs

in the egg-masses of a frog, 3629.—**Hymenoptera:** CUÉNOT, *Pariscus* ? *cephalotes* (Ichn.), 681; GLOVER & CHATTERJEE, *Microbracon hebetor*, direct and indirect oviposition, 1130; HOFFMANN, *Arge victorina* (Tenth.), 1432; HOPPING & LEECH, *Neodiprion tsugae* (Tenth.), 1457; MILES, *Holcocene* spp., *Empria* sp. (Tenth.), 2231, 2234; NÄGELI, *Lygaeonematus pini* (Tenth.), 2323; NOBLE, *Eurytoma fellis*, 2377; PARKER, *Chrysis shanghaiensis*, 2513.—**Lepidoptera:** MICHEL, *Papilio machaon*, 2206; NELSON, *Platynota stultana* (Tortr.), 2349; RORICH, *Oxytrypia orbiculosa* (Noct.), 2836; SCHIMITSCHKE, *Cacoccia murinana* (Tortr.), 2955; STEINER, *Laphygma exigua* (Noct.), 3171.—**Trichoptera:** HANDLIRSCH & BEIER, 1251.—**Neuroptera:** DAVID, *Osmylus chrysops*, 714; HANDLIRSCH & BEIER, Neuroptera, 1250; HUNGERFORD, *Mantispa interrupta*, 1500.—**Mecoptera:** HANDLIRSCH & BEIER, 1251.—**Diptera:** KALISS & GRAUBARD, *Drosophila melanogaster*, effects of temperature, 1636; SEGAL, *Chrysops* (Taban.), 3001; VAN DEN BRUEL, *Napomyza lateralis*, 3437; VEILLET, *Dros. melanogaster*, 3464.—**Siphonaptera:** BEIER, 206.—**Hemiptera:** BARBER, *Orius insidiosus* (Anthoc.), 172; DESHPANDE, *Aleuodes brassicae*, 757; GALLIARD, *Rhodnius*, *Triatoma* (Reduv.), 1083, 1084; JOURDAN, *Eurygaster austriaca*, 1629; SWAIN, *Phlepsius decorus* (Jass.), 3232, *Oncometopia undata* (Jass.), 3233; WALTON, *Notonecta*, 3526.

PARENTAL CARE.

BURMEISTER, dung beetles, 452; CURRAN, protection of eggs, 687; HOFFMANN, care of broods in bugs, 1435; JAMES & HAGER, *Blissus leucopterus* (Lyg.), incubation of eggs, 1573; MALYSHEV, solitary bees, 2081; SEITZ, protection of eggs by anal wool in Lepidoptera, 3018.

NESTS.

Hymenoptera: ARTURO, *Polistes gallicus* abnormal nest, 98; BEQUAERT, *Vespa tropica*, *affinis*, 224; BRUCH, *Polybia scutellaris*, 406; BUGBEE, *Polistes fuscatus*, unusual nesting colony, 428; CLARK & SANDHOUSE, *Odynerus tempiferus*, 576; CROS, *Anthophora romandii*, 671; EIDMANN, *Atta sexdens*

(Form.), 857; ESAKI, *Melipona atomella*, 899; FATTIG, *Trypoxylon politiforme*, 946; FITZGERALD, *Trypoxylon*, 991; GOETSCH, ants of Gulf of Naples, 1141; HASE, *Polybia atra*, 1269; HAVERHORST, *Megachile centuncularis*, 1276; HELDMAN, *Polistes gallica* (Vespid.), 1315, 1318, Apidae, nests in sand, 1316; IWATA, *Methoca* spp. n. (Thynn.), 1542; JACOBY, *Atta*, growth of nests in 1st year of formation, 1552; JEANNEL, *Chalicodoma* sp., 1589; MA, some E. Chinese bees, 2031; MCCLURE, *Vespa maculata*, winter inhabitants of nest, 2043; MALYSHEV, solitary bees, 2081; MANEVAL, *Anthidium caturgenae* (Apid.), 2090; MARÉCHAL, *Trypoxylon* spp. (Spheg.), 2133; MAZEK-FIALLA, *Sceliphron destillatorius* (Spheg.), 2153; MINKIEWICZ, Pompilidae, 2249; NEILSEN, Aculeate Hymenoptera, 2366; PICKLES, *Formica fusca*, *Acanthomyops flavus*, *Myrmica ruginodis*, 2610; PIEL, *Astutus boops*, 2617; SANDEMAN, *Vespa vulgaris germanica*, 2911; SITOWSKI, *Megachile maritima*, 3082; STÄGER, ants in Alps, 3153; VERLAINE, nest architecture of bees and wasps compared, 3475; WALRECHT, some remarkable nests of bees and wasps, 3523; WEYRAUCH, *Vespa germanica vulgaris*, material and structure of nests, 3580, habits of wasps in heating, etc., of nests, 3581; WILL, *Sphecius speciosus*, nests in ground, Virginia, 3617; WILLEM, nest architecture of bees, 3618.

LARVAL CASES, COCOONS.

Coleoptera: KÖNIG, *Pinus tectus*, cocoons, 1785.—**Hymenoptera:** HOPPING & LEECH, *Neodiprion tsugae* (Tenth.), 1457; MARÉCHAL, *Trypoxylon* spp. (Spheg.), 2113; NIELSEN, *Homonotus sanguinolentus* (Pomp.), 2365; THOMAS, *Hoplocampa brevis* (Tenth.), 3310.—**Lepidoptera:** CLARK, *Rhabdoides cellus* (Hesp.), larval shelters and cocoons, 573; TANAKA, *Cnidocampa flavescens* (Limaec.), cocoon, 3274.—**Trichoptera:** BOGA, larval cases of Trichoptera of L. Balaton, 313; HANDBERSCH & BEIER, larval cases, 1251.—**Neuroptera:** FRANKENBERG, *Chrysopa vulgaris*, cocoon, 1028.—**Diptera:** KOHN, larval cases of Chironomids, 1774.

PARASITISM.

AHMAD, *Nemeritis canescens* (Hym.), host-parasite balance, 28; BOESE,

effect of animal parasitism on insect organism, 312; CARRIKER, Mallophagous parasites of Tinamidae, 505; CLAUSEN, insect parasitism and biological control, 580; CRISTOBAL, parasites of *Laspeyresia molesta*, Argentina, 667; DONER, multi-, superparasitism, thelyotoky of parasites of *Coleophora pruniella*, 782; EICHLER, *Carnus hemapterus*, hosts, 854; FERRIERE, *Leucoptera* (Lep.), African parasites (Hym.), 962; FLANDERS, *Trichogramma* (Hym.), influence of host on size and prolificacy, 992, *Coccophagus* spp. (Hym. Encyrt.), males parasitic on Hymenopterous larvae only, females only on Hemipterous nymphs or adults, 993; JOHANSSON, *Contarinia tritici*, *Clinodiplosis mosellana* (Dipt.), parasites, 1607; MARCHAL, *Trichogramma*, 2108; MEIER, list of hosts and their Ichneumonid parasites, U.R.S.S., 2160; PEARSE ET AL., *Passalus cornutus*, parasites and commensals, 2548; SALT, *Trichogramma evanescens*, effect of superparasitism, 2907; SCHEDL, *Porthetria dispar* (Lep. Lymantr.), parasites, 2945; SWEETMAN, biological control of insects, 3236; ULYETT, *Microplectron fuscipennis* (Hym. Chalc.), host selection, 3409.

GENERAL BIONOMICS.

Coleoptera: ARA, *Dineutes orientalis* (Gyr.), life-history, 86; BEIER, *Ochthebius quadricollis steinbühleri* (Hydroph.), Anz. Akad. Wiss. Wien 72 1935 pp. 17-19; BONDAR, Brazilian Bruchidae, 324; BROWNE, some Malayan Scolytidae, 403; DE BRUNIER, *Amara strenua* (Carab.), Rev. franç. Ent. 3 p. 54; BUCHKA, *Aegosoma scabricorne* (Prion.), 425; BURGEON, some Passalidae, 447; CHEN, *Rodolia rufopilosa* (Coccin.), 533; COMAS, *Kisanthobia ariasi* (Bupr.), Bull. Soc. ent. Fr. 41 p. 217; CROS, *Julodis onopordi* (Bupr.), 670; CÜRTEN, some Lucanidae, 689; DIMITRIU, *Epicometis hirta* (Ceton.), 768; EMMEL, *Crioceris lilii*, Natur u. Volk 66 p. 424 figs.; EVERBY, some Carabidae, Ohio, 928; FAGNIEZ, some French Tychiini (Curc.), 937; FRANCK, *Ceuthorrhynchus* spp., 1026; GOBEIL, *Ips perturbatus* (Scolyt.), 1131, Nat. canad. 63 pp. 98-103; GOOD, *Tribolium*, 1151; HOFFMANN, *Strigoderma arboricola* (Rutel.), 1420, *Pelidnota punctata* (Rutel.), J. Kans. ent. Soc. 9 p. 103; KNECHTEL &

MANOLACHE, *Lema melanopa*, 1741; KONTKANEN, *Phalacrus substriatus*, 1795; LIU & FAN, *Calomycterus* sp. (Curc.) (in Chinese), 1994; LIU *Rhaphidopalpa femoralis* (Galer.) (in Chinese), 1995; LÜHMANN, *Lochmaea capreae* (Galer.), 2016; MANOLACHE, *Lema melanopa* (Cricoc.), Bul. Soc. Nat. Roman. 4 1933 pp. 17-18, *Cassida viridis* op. cit. 9 p. 34; MICHEL, *Scolytus carpini*, Rev. sci. Bourbon. 1935 1935 pp. 41-43; MORÈRE, *Baris analis* (Curc.), Rev. franç. Ent. 2 p. 204; OLSOUFIEFF, *Pogonostoma* (Cicind.), habits of larvae, Madagascar, 2446; PERRET, *Epilachna chrysomelina* (Coccin.), 2564; REICHERT, *Agrilus sexguttatus* (Bupr.), 2761; TSUNETO, *Dineutes orientalis* (Gyrin.) (in Japanese), 3381, *Rhantus pulverosus* (Dytisc.) (in Japanese), Kontyû 10 pp. 226-232; URBAN, *Apion meliloti* (Curc.), Ent. Bl. 32 p. 105; VAN DER VECHT, *Apoderus clavatus* (Curc.), 3439. — **Hymenoptera:** BISCHOFF, *Pseudogonolus hahni* (Trigon.), habits, 280; BONNAMOUR, *Podagrion pachymerum* (Torym.), 326; BOYCE, *Asco-gaster carpocapsae* (Brac.), 358; CHOPARD, *Rielia manticida* (Scelion.), biology, Rev. franç. Ent. 3 p. 237; CLARK & SANDHOUSE, *Odynerus tempiferus* (Vesp.), habits, 576; EIDMANN, *Trichogramma minutum*, 855; FORSSLUND, *Lygaeonematus subarcticus* (Tenth.), 1018; GLOVER & CHATTERJEE, *Microbracon hebetor*, 1130; GRANDI, Tenthredinid larvae, 1171; HAMILTON, *Apanteles glomeratus* (Brac.) 1244; HASE, *Polybia atra*, 1269; HO, *Neosyrista similis* (Tenth.), 1400; HOFFMANN, *Arge victorina* (Tenth.), 1432; HOPPING & LEECH, *Neodiprion tsugae*, 1457; KOJIMA, *Dicamptus nigropictus* (Ich.), 1777; KUTTER, *Thripoctenus kutteri* (Euloph.), 1851; MARCHAL, *Trichogramma caceciae*, flavum, evanescens, 2103; MICHELI, *Ceratina* spp., *Dioxis* (Apid.), 2209; MILES, *Holcocneme* 4 spp., 2231, *Emphytus cinctus*, *Blennocampa waldeheimi*, 2232, *Empria tridens*, abdominalis (Tenth.), 2234; MUKERJI & BHUYA, *Chaetostricha mukerji*, 2299; NOBLE, *Eurytoma fellis*, 2377; PELTZER, *Philanthus triangulum* (Spheg.), 2553; SCHWERTFEGER, *Diprion sertifer* (Tenth.), 2990; SERVADEI, *Cladius difformis*, 3040, *Emphytus cinctus* (Tenth.), 3041; STRITT, *Fenusella glaucopis* (Tenth.), 3208; THORPE,

Encyrtus infelix, 3318; DE TOLEDO PIZA & PINTO DA FONSECA, *Heterospilus coffeicola* (Brac.), 3360; VARSHALOVICH, *Systole coriandri* (Euryt.), 3454. — **Lepidoptera:** ALBERTI, *Lithostege griseata, farinata* (Geom.), Ent. Z. 50 pp. 340-344; ALIN, Manchurian Lep., 57; BEREZHKOY, *Loxostege sticticalis* (Pyr.), Siberia, 226; BOURQUIN, *Cecidia excoecariae* (Pyr.), 346; BOY, *Morpho* spp., Amazonas, 357; BUSCH, *Papilio* spp., 456; BUTOVITSCH, *Evetria buoliana* (Tortr.), 460; CARPENTER, *Megathymus stephensi*, *Yucca navajo* (Hesp.), 495; CASTLE RUSSELL, *Lysandra coridon syngrapha* (Lyc.), Entomologist 69 pp. 77-80; CHEN, LOH & WANG, *Cacocia asiatica*, 534, *Adoxophyes fasciata* (Tortr.), Hangchow, 534; CHU, *Theophila mandarina* (Bombyc.), 560; CLARK, *Tortrix excessana*, 571; COCKAYNE, *Lampropteryx otregiata* (Geom.), 584; *Agrotis ypsilon* (Noct.), Ent. Rec. 48 pp. 2-4; COMSTOCK & DAMMERS, some Californian butterflies and moths, 635; CRISTOBAL, *Cydia molesta* (Tortr.), Argentina, 667; CÜRTEEN, *Catocala fraxini* (Noct.), Ent. Z. 50 p. 177; DECARY, *Argema mittrei* (Saturn.), 727; DOS PASSOS, *Calephelis borealis* (Erycin.), 792; DUPONT, *Panacra* spp. (Sphing.), Java, 825; FRYER & EDELSTEN, *Myelois neophanes* (Pyr.), Entomologist 69 p. 223; ERMOLAEV, *Semiothisa pumila* (Geom.), 895; FAYARD, *Acrolepia assectella* (Tineid.), Bull. Soc. Sci. nat. Rouen (7) 68-69 1934 pp. 17-22; FIGUEROA, *Arctopoda maculosa* (Tineid.), Rev. chil. H.n. 40 pp. 220-223 figs.; FORD, *Melissoblaetes bipunctatus* (Pyr.), Ent. Rec. 48 p. 93; FRANSSEN, *Carea subtilis* (Noct.), Ent. Med. Ned.-Ind. 2 p. 66 fig.; FRIEDMANN, *Panthea coenobita* (Noct.), Ent. Z. 50 pp. 145-147; GOETZE, *Hemerocampa leucostigma* (Lymantr.), 1144; GÓRSKI, *Acentropus niveus* (Pyr.), 1155; GRAAF BENTINCK, Microlepidoptera, Holland, 1166; GRAHAM, *Brahmaea wallichii*, 1168; GREMMINGER, *Chrysophanus dispar rutilus* (Lyc.), Ent. Z. 50 p. 6; GUDER, *Lemonia taraxaci*, 1198; GUILLOT, *Heptalus lupulinus*, Rev. sci. Bourbon., Moulins 1935 p. 55; HANSON & WEBSTER, *Laspeyresia nigricana* (Tortr.), 1254; HRESE, *Minoa murinata* (Geom.), Ent. Z. 49 p. 519; HEINÄNEN, Psychidae, 1307; HERZIG, *Colias*

- croceus* (Pier.), 1362; HOFFMANN, Saturniidae, 1428; HOLIK, *Zygaena olivieri*, Ent. Rdsch. 53 pp. 506-509, *Z. punctum*, op. cit. 54 pp. 39-40, *Z. punctum*, *contaminei*, *sarpedon*, Amat. Papill. 8 pp. 138-142, *Syngrapha interrogationis* (Noct.), Lambillionea 36 pp. 205-211; HOLLAS, *Argynnis selenae* (Nymph.), Ent. Rdsch. 53 pp. 334-339, *Hylophila prasinana* (Noct.), Ent. Anz. 16 pp. 9-11; HUNTER, *Hypolimnas misippus* (Nymph.), 1502; JÜNGLING, *Melitaea britomartis* (Nymph.), Ent. Z. 50 p. 216; KAUTZ, *Pieris bryoniae*, 1660; KOZULINA & RUDAKOVA, *Bradyrrhoa gilveolella* (Pyr.), 1813; LANGE, *Eulia citrana* (Tortr.), 1885; LIEU, *Paradoxecia pili* (Aeger.), 1953; LIU, *Agrotis ypsilon* (Noct.), Hangchow, 1993; LUMMA, *Lygris associata*, *pyropata*, *prunata* (Geom.), 2018; LUNAK, *Eupithecia egenaria* (Geom.), Z. öst. EntVer. 21 pp. 15-17; LUNT, *Papilio demoleus*, 2024; LUTZ, *Malacosoma americana* (Lasioc.), 2029; MARTEN, *Ocnogyna latreillei* (Arct.), Ent. Z. 49 pp. 465-466; MAZION, *Deilephila elpenor* (Sphing.), *Arctia caja*, Saône-et-Loire, 2155; MELIS, *Polia pisi* (Noct.), 2171, *Barathra brassicae* (Noct.), 2172; MICHEL, *Gonepteryx rhamni* (Pier.), 2207; NELSON, *Platynota stultana* (Tortr.), 2349; NESTLER, *Acidalia emarginata* (Geom.), Ent. Rdsch. 53 pp. 238-240 figs.; NG, *Porthesia scintillans* (Lymant.), Lingnan Sci. J. 15 p. 483 figs.; NIELSEN, *Scythropia crataegella* (Tineid.), Ent. Medd. 19 pp. 417-420 figs.; O'BYRNE, *Euphydryas phaeton* (Nymph.), 2419; PARAMONOV, *Zeuzera pyrina* (Cossid.), 2499; PEARL & MINER, *Acrobasis caryae* (Pyr.), 2542; PENG, *Papilio polytes*, Hwangyen, China, 2557; POPOFF, *Pyrausta nubilalis* (Pyr.), 2671; PUZIRNŪ, *Scotogramma trifolii* (Noct.), 2715; REED, *Castnia eudemia*, Rev. chil. H.n. 39 p. 267; REUSS, *Gonepteryx rhamni* (Pier.), 2776; RORICH, *Oxytrypia orbiculosa* (Noct.), 2836; SAALAS, *Incurvaria pectinea* (Tineid.), 2892; SCHEDL, *Porthetria dispar* (Lymant.), 2945; SCHMITSCHEK, *Cacocia murinana* (Tortr.), 2955; SCHREITER, Sphingidae, Argentina, 2977; SEITZ, *Pyrameis atalanta* (Nymph.), Ent. Z. 49 pp. 543-545; SKOBLO, *Loxostege sticticalis* (Pyr.), 3088, 3089; STEEG, various, 3166; STEINER, *Laphygma exigua* (Noct.), 3171; STREL'NIKOV, *Loxostege sticticalis* (Pyr.), 3202, 3203; TRONČEK, *Coenonympha iphis* (Satyr.), 3377; URBACH, *Oxytrypia orbiculosa* (Noct.), Ent. Z. 50 p. 20; VALLE, butterflies of Finland, 3434; WARNECKE, *Chrysophanus dispar* (Lyc.), 3534, *Polygonia c-album* (Nymph.), Ent. Z. 50 pp. 71-72 figs.; WENZEL, *Callimorpha dominula* (Arct.), 3562; WIGHTMAN, *Cucullia gnaphalii* (Noct.), Ent. Rec. 48 p. 129. — **Diptera**: BARANOFF, *Simulium columbacense*, Yugoslavia, 168; CHAGNON, *Agromyza affinis*, Nat. canad., Quebec 63 p. 92; DA COSTA LIMA, *Beskia cornuta* (Tach.), O Campo, June 1935 pp. 21-22 figs.; CUTHBERTSON, habits of some S. Rhodesian Diptera, 692; FRAENKEL, *Calliphora erythrocephala*, 1023; FRANSSEN, *Termitoxeniidae*, 1031; FUJIMATSU, *Rhabdophaga rosaria* (Cecid.), 1064; GALLARD, *Ctenogyna bicolor* (Tipul.), 1082; GROZDANIĆ, *Phora incrassata*, 1192; HERING, *Euribia dzieduszyckii*, *cuspidata*, 1353, *Hydromyza livens*, *Noctea pupillata* (Tryp.), 1357; LEPSI, *Culicidae* of Kishineff, 1919; LINDQUIST, *Phlebotomus diabolicus*, 1976; MAHAN, *Microdon violaceus* (Syrph.), Chile, Rev. chil. H.n. 39 pp. 288-291 figs.; MISSIROLI, *Anopheles plumbeus*, 2252; OKADA, *Bolitophila disjuncta*, *Bolitophilella cinerea* (Mycet.) (in Japanese), 2437; PORTER, *Braulta coeca*, Chile, 2676; RONNA, *Sarcophaga surrubea*, Brazil, 2831; SMITH, ETC., *Phlebotomus* (Dipt.), breeding sites, 3104; TARNANI, *Hypoderma bovis* (Oestr.), 3276. — **Siphonaptera**: SHARIF, *Nosopsyllus fasciatus*, 3054. — **Hemiptera**: ABRAHAM, *Orthotylus marginalis* (Capsid.), 18; AITKINS, *Gastrodes abietis* (Lygaeid.), 30; BARBER, *Orius insidiosus* (Anthocor.), 172; CAMERON, *Adelges cooleyi* (Aphid.), 473; DESHPANDE, *Aleurodes brassicae*, 757; GALLIARD, *Triatoma* (Reduv.), 1034; GILLIATT, *Phenacoccus auris* (Coccid.), Canad. Ent. 68 p. 133; HESLOP-HARRISON, British Psyllids, 1365; HOFFMANN, *Limnogonus fossarum*, *Rhagadotarsus kraepelini* (Gerr.), 1433, 1434; HUSAIN, TREHAN & VERMA, *Bemisia gossypiperda* (Aleur.), 1509; JOHNSON, *Leptobyrsa rhododendri* (Tingid.), 1608; JOURDAN, *Eurygaster austriaca* (Pentat.), 1629; MACIUCĂ, *Pyrrhocoris apterus*, 2038; MEISEL, *Hydrometra stagnorum*, 2163; MILLER, *Dasyneus*

piperis (Coreid.), 2240; PENG, *Iceya purchasi* (Coccid.), Hangchow, 2556; PETTIERBRIDGE & MELLOR, *Bravicornyne brassicae* (Aphid.), 2570; VON PEALLEN, Lygaeidae, 2577; PRESSWALLA & GEORGE, *Sphaerodema rusticum* (Belost.), 2688; ROBA, *Rhizococcus coffeae* (Coccid.), 2810; RUDAKOVA, *Neomargarodes* (Coccid.), 2870; SIMANTON & ANDRE, *Lygaeus kalnii*, 3076; SMITH, *Hyalopterus pruni*, (Aphid.), 3100; SWAIN, *Phlepsius decorus* (Jassid.), 3232, *Oncomekopia undata* (Jassid.), 3233; TAKAHASHI, *Pseudococcus comstocki* (Coccid.), 3266; VLASOV, *Holotrichius bergrothi* (Roduv.), 3492; VOGEL, *Tibicen haematodes* (Cicad.), 3495; WERNZ, *Nabis myrmecoides*, Arb. physiol. angew. Ent. Berl. 3 p. 25.—**Thysanoptera**: BUHL, *Kukothrips robustus*, 431; HARRIS, DRAKE & TATE, *Thrips tabaci*, 1263; MELIS, *Taeniothrips*, Italian spp., 2169; OETTINGEN, various, 2422; RUSSO, *Selenothrips rubrocinctus*, 2887; WATTS, *Frankliniella tritici*, 3544.—**Mallophaga**: BEIER, German spp., 205.—**Psocoptera**: WEBER, German spp., 3547.—**Ephemeroptera**: BULDOVSKII, *Anagenesia paradoxa* (in Russian), 435; SPEITH, *Ephemera simulans*, 3147.—**Odonata**: FRASER, *Aeshna cyanea*, J. Soc. Br. Ent. 1 p. 116; PRENN, *Somatochlora arctica, alpestris*, Anz. Akad. Wiss. Wien 72 1935 p. 51; PRITCHARD, *Somatochlora ozarkensis*, Ent. News 47 pp. 99-101; SOLODOVNIKOV, Donetz R., 3144.—**Orthoptera**: FERNANDEZ, *Schistocerca puranensis* (Acrid.), 1; FAVRELLE, *Eugaster nigripes* (Tettig.), 950; FRAPPA, *Nomadacris septemfasciata* (Acrid.), Madagascar, 1037; LE FEUVRE, *Macynia labiata* (Phasm.), 1904; SOONG, *Ceracris kiangsu* (Acrid.), 3125.—**Thysanura**: ADAMS, *Thermobia domestica*, 23.

MISCELLANEOUS.

COTTAM, insects eaten by Arctic birds and mammals, 656.—**Mallophaga**: BEIER, 205.—**Psocoptera**: MCCLURE, *Ectopsocus californicus*, 2042; WEBER, 3547.—**Ephemeroptera**: NEEDHAM, TRAYER & HSU, 2347.—**Orthoptera**: BERNARD, *Ameles* (Mant.), 242; RIGALLEAU, *Ephippiger* spp. (Tettig.), 2799; ROONWAL, *Locusta m. migratorioides* (Acrid.), 2832.—**Collembola**: DAVIS & HARRIS, *Pseudosinella violenta*, 718.

GEOGRAPHY OR FAUNISTIC.

In this section references are given to all species recorded from Arctic or characteristic island faunas, but in other divisions reference is made only to papers dealing with monographs or revisions or giving information of faunistic value.

GENERAL.

AMSEL, capacity for flight of no importance in distribution, 69; COLETTE, *termitaria* in Upper Pleistocene, Belgian Congo, 615; COTTE, *Deilephila livornica* (Lep. Spang.) and Riley's Law, 657; FRANZ, xerothermic faunistic element in Europe and its Quaternary history, 1035; KNIGHT, effects of drought on movement of fauna, 1742; KRUMBHOGEL, geographical physiological variation, 1827-1829; PIOTET, effects of cultivation on fauna, 2611; relation of zoogeography to genetics, 2612; SCHULTZ, xerothermic Lepidoptera, 2980; WARNECKE, microclimate and the distribution of Lepidoptera, 3529, 3536, bearing of ecology on zoogeography, 3532.

THE WORLD.

Coleoptera: BORCHMANN, Lagriidae, catalogue, 331; CSIKI, Calandrinae, Cossoninae (Curc.), catalogue, 680; DALLA TORRE & VAN EMDEN, Brachyderinae, i (Curc.), catalogue, 698; KLIMA, Cholinae, Tachygoninae, Antiarrhinae, Ulomascinae, Epipedinae, Pyropinae (Curc.), catalogue, 1734; KOCH, *Cafius* (Staph.), key, 1762; LONA, Otiorrhynchinae, i (Curc.), catalogue, 2004; D'OROHYMONT, *Coelostoma* (Hydroph.), non-American spp., revision, 2463; SCHENKLING & MARSHALL, Prionomerinae, Aterpinae, Analaetinae, Haplonychinae, Omophorinae, (Curc.), catalogue, 2953.—**Hymenoptera**: HEDIOKE, Tiphidae, catalogue, 1297.—**Lepidoptera**: BRYK, Zygaenidae, ii, catalogue, 416; DRAESKE, Lycaenidae, i, catalogue, 801; PROUT, Geometridae, revision, 2699; SCHÜSSLER, Syssphingidae, Oxytenidae, Ceroophanidae, catalogue, 2983; SEITZ, distribution of Syntomidae, 3017; SHEPARD, Pyrginae iv, Euschemoninae, Trapezitinae (Hesper.), catalogue, 3059.—**Trichoptera**: MOSELY, Triplectidinae revision, 2282.—**Diptera**: HENNIG,

Acalypttratae, distribution, 1337; JOB-LING, genera of Streblinae, 1604.—**Hemiptera**: METCALF, Cixiidae, catalogue, 2193; Mallophaga: EICHLER, distribution, 853.—**Isoptera**: EMERSON, distribution, 875.—**Orthoptera**: ZEUNER, Tympanophorinae (Tettig.), 3698, 3700.

ARCTIC, ANTARCTIC.

Insecta: LONGSTAFF, insects on N.W. Greenland and E. Baffinland, 2006.—**Coleoptera**: LINDROTH, Pjeske-aure, Swedish Lapland, 1978; RENKONEN, *Stenus* spp. n., (Staph.), Finland, 2773.—**Hymenoptera**: FRIESE, Apidae, N.-E. Greenland, list, 1051; WALLEY, some Braconidae, 3522.—**Lepidoptera**: LINGONBLAD, new Lepidoptera abb., Lapland, 1979.—**Trichoptera**: MARTYNOV, Arctic Russia, 2127.—**Diptera**: BIRULA, *Tanytarsus* (Chiron.), Arctic Russia, 275; ENDERLEIN, *Psilozia* gen. et sp. n. (Simul.), W. Greenland, 886; LACKSCHWITZ, *Trichocera* sp. n. Spitsbergen, 1862, *Tipula* spp., 1866.—**Hemiptera**: LINDBERG, *Nysius groenlandicus* (Hem. Lygaeid.), N.-E. Greenland, 1955.—**Ephemeroptera**: McDUNOUGH, *Baetis* sp. n., Baffin I., 2044.—**Orthoptera**: HEBARD, U.S.A., 1288.—**Collembola**: BROWN, Lapland, 398, W. Spitsbergen, 399; DAVIES, Grimsey I., N. Iceland, 715; LINNANIEMI, Spitzbergen, 1981, N.-E. Greenland, list, 1982.

INSULAR, including NEW ZEALAND.

Austral Is. **Coleoptera**: ZIMMERMAN, *Eremonyx* sp. n. (Curc.), 3705.

Azores. **Coleoptera**: HUSTACHE, *Pseudechinosoma* gen. et sp. n. (Curc.), 1515.—**Hymenoptera**: DONISTHORPE, Formicidae, 785; BENOIST, BERLAND, BLÜTTGEN, 217.—**Lepidoptera**: ESAKI, *Oeneis* sp. n. (Satyr.), 897.—**Diptera**: SÉGUY, 3005.—**Hemiptera**: BERNARD, Heteroptera, 241.

Banks I. **Hymenoptera**: CHEESMAN, *Nototrachys* sp. n. (Ichn.), 531.

Canary Is. **Coleoptera**: JEANNEL, Trechinae, 1591; KORSCHESKY, *Novius* spp. n. (Coccin.), 1797; UYTENBOOGAART, list and spp. n., 3430.—**Lepidoptera**: NORDMAN & REBEL, list, 2379; REBEL, *Pionea* sp. n. (Pyril.), 2379.—**Hemiptera**: LINDBERG, Cicadinae, list and genn. et spp. n., 1958,

1959.—**Neuroptera**: ESBEN-PETERSEN, 902; KLINGSTEDT, *Ahlersia* sp. n., 1736.—**Diptera**: FREY ET AL., revision, 1048.—**Odonata**: VALLE, 3435.—**Orthoptera**: WILLEMSE, list of known spp., 3622.

Cape Verde Is. **Coleoptera**: ALLUAUD, 61.—**Orthoptera**: CHOPARD, 558.

Caroline Is. **Coleoptera**: KRIESCHE, *Dihammus* sp. n. (Lamiid.), 1819.—**Hemiptera**: ESAKI, Cicadidae, 898.

Christmas I. **Hymenoptera**: DONISTHORPE, *Camponotus* sp. n. (Form.), 783.—**Hemiptera**: IZZARD, 1545.

D'Entrecasteaux Is. **Lepidoptera**: ROTHSCHILD, *Asura* sp. n., 2846, *Zygaenosia* sp. n., Goodenough I., 2847.

Fiji Is. **Coleoptera**: OEBENBERGER, *Paraleptodema* gen. et sp. n. (Bupr.), 2394; ZIMMERMAN, *Orochlesis* spp. n. (Curc.), 3704.—**Hymenoptera**: FULLAWAY, *Opius* sp. n. (Ichn.), 1066.—**Trichoptera**: BANKS, spp. n., 166.—**Diptera**: JOBLING, *Nycteribosca* sp. n. (Strebl.), 1606.—**Hemiptera**: CORBETT, *Dialeurodes* sp. n., 647.

Galapagos Is. **Coleoptera**: HINTON, *Ataenius* sp. n. (Aphod.), 1386.

Hawaiian Is. **Insecta**: SWEZEY, fauna of *Freyrcinetia arborea*, 3239, records of immigrant insects for 1935, 3240; WILLIAMS, **Coleoptera**, **Odonata**, biology, 3630.—**Coleoptera**: PERKINS, *Disenochus* sp. n. (Carab.), Ent. mon. Mag. 72 p. 177.—**Hymenoptera**: COMPERE, *Eretmocerus* sp. n. (Aphelin.), 633; DOZIER, *Anagrus* sp. n. (Mymar.), 798.—**Hemiptera**: USINGER, *Geocoris* (Lyg.), 3423, additional records of Heteroptera, 3422.—**Thysanoptera**: MOULTON, new spp., 2291.

Madeira. **Diptera**: LACKSCHWITZ, *Tipula* sp. and var. n., 1865.

Marianne Is. **Insecta**: SWEZEY, preliminary report on an entomological survey of Guam, 3238.

Marquesas Is. **Insecta**: ADAMSON, 25; MUMFORD, 2312.—**Coleoptera**: PERKINS, *Proterhinus* sp. n., Ent. mon. Mag. 72 p. 221.

New Caledonia. **Coleoptera**: BRITTON, *Xanthophaea* sp. n. (Carab.), Ent. mon. Mag. 72 p. 222 fig.; SPAETH,

Isopedhispa gen. et sp. n. (Hisp.), 3142.—**Lepidoptera**: MEYRICK, *Atteva* sp. n. (Tin.), 2199.—**Hemiptera**: LUND-BLAD, *Rhagovelia* sp. n., 2021.

New Hebrides. **Coleoptera**: BRYANT, new Chrysomelidae (s.l.), 414; BREUNING, *Olenecamptus* sp. n. (Ceram.), 380; KLEINE, *Schizotrachelus* sp. n. (Brenth.), 1724.—**Hymenoptera**: CHEESMAN, new spp., 531.—**Lepidoptera**: REICH, *Neochera* sp. n. (Arct.), 2756.—**Neuroptera**: KIMMINS, list, 1699.—**Ephemeroptera**: KIMMINS, *Oloëon* sp. n., 1699.—**Odonata**: KIMMINS, list, 1699.

New Zealand. **Coleoptera**: VOSS, Scoloterini (Curc.), 3499.—**Hymenoptera**: COCKERELL, *Paracolletes* spp. n. (Apid.), 594.—**Lepidoptera**: MEYRICK, new Tineids, Tortricids, 2201.—**Diptera**: BARNES, *Stephodiopsis* sp. n. (Cecid.), 174.—**Collembola**: WOMERSLEY, 3649.

Oceania, generally. **Hymenoptera**: FOUTS, Serphoidea, Bethyridae, Ante-onidae, check list, 1020.

Polynesia. **Isoptera**: LIGHT & ZIMMERMAN, 1954.

Palau (Pelew) Is. **Coleoptera**: KRESCHKE, *Dihammus* sp. n. (Lamiid.), 1819.

St. Helena. **Orthoptera**: UVAROV, *Phaneracra* gen. et sp. n. (Tettig.), 3426.

Samoa. **Lepidoptera**: MEYRICK, *Capua* sp. n. (Tortr.), 2199.

Society Is. **Coleoptera**: ZIMMERMAN, *Orochlesis* spp. n. (Curc.), Tahiti, Raiatea, 3704.—**Lepidoptera**: MEYRICK, *Dryanassa* gen. et sp. n. (Tin.), Tahiti, 2199.

PALAEARCTIC REGION, collectively.

Coleoptera: BALTHASAR, Troginae, monograph, 161; BINAGHI, *Scopaeus* (Staph.), 272; BOLLOW, Parnidae, revision, 323; COOK, *Calosoma inquisitor* (Carab.), distribution, 641; GSCHWENDTNER, Colymbetinae (Dytis.), monograph, 1193; HEBERDEY, *Notoxus* (Anthic.), revision, 1293; HEYROVSKÝ, *Cornumutilla quadrivittata* (Ceram.), distribution, 1374; HOFFMANN, *Bagous*, subgen. *Parabagous*, key, 1414; JED-

LIŮKA, *Dolichus* (Carab.), key, 1596; KIRSHCHENBLAT, *Onthophagus* (Copr.), revision, 1710; MANDL, *Cicindela hybrida* group, revision, 2087; OBENBERGER, *Janthe* (Bupr.), key, 2404; OGLOBLIN, Galerucinae, U.R.S.S., revision, 2425; PLAVILSTSHIKOV, Cerambycidae, U.R.S.S., 2641; REIKHARDT, Opatrinae (Tenebr.), revision, U.S.S.R., 2764, *Pedinus* (Tenebr.), U.S.S.R., 2765; SCHEERPELTZ, *Edaphus* (Staph.), 2949; SEMENOV - TIAN - SHANSKIĬ, *Prionus*, key, distribution, 3025; SEMENOV-TIAN-SHANSKIĬ & MEVVEDEV, Lethrini (Scarab.), U.R.S.S., revision, 3028; SPAČEK, *Prionus coriarius*, distribution, 3134; STARK, *Hylesinus* (Scolyt.), U.S.S.R., revision, 3162; THÉRY, *Capnodis* (Bupr.), catalogue, 3301; ZIMMERMANN & GSCHWENDTNER, Dytiscidae, monograph, 3703; ZUMPT, *Sharpia* (Curc.), revision, 3722, *Lepyrrus* (Curc.), revision, 3724.—**Hymenoptera**: GUSSAKOVSKIĬ, *Trypoxylon* (Spheg.), revision, 1232; MEIER, Ichneumonidae, U.R.S.S., revision, 2159, 2160; NOSKIEWICZ, *Colletes* (Apid.), revision, 2387; TELENGA, Braconidae, U.S.S.R., revision, 3287.—**Lepidoptera**: AMSEL, *Iso-phricitis* (Tineid.), revision, 72; DRAUDT, Agrotinae (Euxoinae), suppl., 809; ELLER, *Papilio machaon*, distribution of races, 860; MÜLLER, *Acidalia contiguaria* (Geom.), distribution of local forms, 2309.—**Diptera**: CZERNY, Chamaemyiidae, revision, 694; ENGEL, Bombyliidae, revision, 888; GOETGHEBUER, Chironomidae, revision, 1134; HENDEL, Agromyzidae, revision, conclusion, 1328; KRÖBER, *Haematopota* (Taban.), key, 1821, Conopidae, catalogue, key, 1822; LINDNER, Stratiomyiidae, revision, 1968; PARAMONOV, *Anthrax* (Bombyl.), revision, 2496; SACK, Cyrtidae, revision, 2898.—**Siphonaptera**: IOFF, Ceratophyllinae, revision, 1535.—**Hemiptera**: HORVÁTH, *Bagrada* (Pentat.), monograph, 1476; JACZEWSKI, *Sigara* list of spp. of subgen. *Anticorixa* (Corix.), 1557; KIRITCHENKO, Coccidae, U.S.S.R., 1708; SCHMIDT, *Sehirus* (Cydn.), key, 2964.—**Dermaptera**: BEI-BIENKO, U.R.S.S., monograph, 203; SEMENOV-TIAN-SHANSKIĬ, U.R.S.S., 3023.

EUROPE, collectively.

Coleoptera: BREUNING, *Carabus*, monograph, pt. 6, 382.—**Hymenoptera**:

SCHMIEDEKNECHT, Ophioninae (Ichn.), 2965.—**Lepidoptera**: ABBAYES, *Hylophila fiorii* (Noct.), distribution, 12; WARREN, *Erebia*, monograph, 3539.—**Diptera**: EICHLER, *Carnus hemapterus* (Borbor.), 854.

NORTH EUROPE AND SIBERIA.

Insecta: FINDAL, Läsö I., Denmark, 979; HELLÉN, Finland in 1931–33, 1320.—**Coleoptera**: MÄÄR & VOORE, Scolytids, Estonia, 2035; MUNSTER, *Olophrum* (Staph.), 2315; PALM, *Hypocyptus* spp. (Staph.), Scandinavia, list, 2482, *Astenus* (Staph.), Sweden, 2483; WEST, Denmark, 3572.—**Hymenoptera**: HELLÉN, Ichneumoninae, Finland, 1321; NIEMELA, *Megachile* (Apid.), Finland, revision, 2367; RUZSKÍ, ants, Transbaikalia, 2888.—**Lepidoptera**: HOFFMEYER, moths new to Denmark, 1437, Flora og Fauna 1935, p. 122; LEMPKE, Macrolepidoptera, Holland, catalogue, 1913; LINGONBLAD, Finnish Lepidoptera, ii, 1980; NORDSTRÖM, &c., Swedish butterflies, 2380; VALLE, butterflies, Finland, 3434; WARNECKE, Macrolepidoptera, Sylt I., 3533.—**Trichoptera**: FORSSLUND, N. Norway, list, 1015.—**Neuroptera**: ESSEN-PETERSEN, Bornholm, Neuropteroid orders, additions, 903.—**Diptera**: FREY, Empididae, Micropezidae, Lauxaniidae, Chloropidae, Kamtchatka, 1047; LACKSCHWITZ, Tipulidae, N. Norway, list, 1863; PEUS, Dixidae, 2572; RINGDAHL, Scopeumatidae, Sweden, revision, 2803; TIENSUU, *Erinna*, Finland, 3323; TUOMIKOSKI, Clusiidae, Finland, 3385; *Trichina*, *Bicellaria* (Empid.), Finland, revision, 3386.—**Hemiptera**: RECLAIRE, Heteroptera, Holland, 2750.—**Thysanoptera**: DOEKSEN, Holland, 779; HUKKINEN, Finland, 1495.—**Plecoptera**: NAVÁS, N.W. China, 2331.—**Ephemeroptera**: TIENSUU, new spp. and genn., Finland, 3322.—**Odonata**: ESSEN-PETERSEN, Sønderjylland, 905.—**Orthoptera**: ESSEN-PETERSEN, Bornholm, Orthoptera, additions, 903; PRINCIS, Lettland, 2695.

BRITISH ISLES.

Insecta: FORREST ET AL., Barra, Outer Hebrides, 1012; HALLETT, Glamorgan, list, 1241.—**Coleoptera**: BALFOUR-BROWNE, aquatic Coleoptera of Somerset, 147; HESLOP-HARRISON, Outer Hebrides, 1364; JEFFERY, Isle

of Wight (contd.), 1601; TOMLIN, Glamorgan, additions, 3363.—**Hymenoptera**: MILES, *Hoplocampa* (Tenth.), revision, 2233.—**Lepidoptera**: BAISS & PRIORSON, Macrolepidoptera, Marlborough district, 133; DONOVAN, Macrolepidoptera, Ireland, catalogue, 788; DOWDESWELL, Cara I. (west of Mull), 795; NEWCOMBE, methods of dissemination of spp. with discontinuous distribution, 2355; TURNER, additions to Tutt's list of Noctuidae (contd.), 3391.—**Diptera**: PATTON & WAINWRIGHT, Sarcophaginae, 2525; PUGH, Shropshire, additions, 2707; THOMPSON, Hippocidae, Nycteribiidae, list, 3313.—**Hemiptera**: HESLOP-HARRISON, Psyllidae, Outer Hebrides, 1363; ROEBUCK, Heteroptera, Lincolnshire, 2821.—**Neuroptera**: KILLINGTON, monograph, 1697.—**Plecoptera**: KIMMINS, *Chloroperla*, list, 1702.—**Orthoptera**: BURR, British grasshoppers and their allies, 453; Collembola: BAGNALL, Tullbergiinae, revision, 127.

FRANCE.

Coleoptera: HOULBERT, Armorican Dytiscidae (part), list, 1481; HOULBERT & BARTHE, Lucanidae, catalogue, 1482; MAZETIER, Calvados, Normandy, list (contd.), 2154; PAULIAN, Yeu I., Vendée, list, 2528; SCHAEFER, *Anthaxia* (Bupr.), revision, 2928; SCHERDLIN, Vosges Mts. and district, list, 2954; TEILLARD DE CHARDIN, Auvergne, list, 3284, 3285.—**Hymenoptera**: DE BEAUMONT, *Tachysphex* (Spheg.), 199.—**Lepidoptera**: LE MARCHAND, *Lithocolletis* (Tin.), key, 1903; PRAVIEL, spp. new to Alpes Maritimes, 2684.—**Trichoptera**: BERLAND & MOSELY, catalogue, 238.—**Hemiptera**: POISSON, Corixidae, key, 2649; RIBAUT, Typhlocybidae, monogr., 2782.—**Psocoptera**: BADONNEL, revision, 120.—**Odonata**: EUSÉBIO, Auvergne, keys, 915.—**Orthoptera**: LIENHART, local list, 1952.

CENTRAL AND EASTERN EUROPE.

Insecta: KNECHTEL & IONESCU, Snake Is., E. Rumania, 1740; PONGRÁČZ, Hungarian insect fauna, 2662; STROHM, Kaiserstuhl, list, 3212; WARNECKE, number of species of each order in Germany, 3530.—**Coleoptera**: FAGEL, *Ophonus* (Carab.), Belgium, revision, 935; ERMISCH & LANGER, Vogtland, Saxony, list (contd.), 894;

FAGEL & GUILLEAUME, Belgium, additions to catalogue, 936; FRANZ, *Dichotrichelus* (Curc.), E. Alpine spp., revision, 1036; KINEL, *Halipilus* spp., Poland, key, 1704; MINCKWITZ & HÄNEL, Borkum I., 2247; PFEFFER, Scolytidae, Bulgaria, 2578; SHAPIRO, Curculionidae, Kharkov region, list, 3051; TER-MINASYAN, *Anthonomus*, *Furcipes* (Curc.), U.S.S.R., 3290; VON DER TRAPPEN, Württemberg (conold.), 3372; WAGNER, Ceuthorrhynchinae, Central Europe, 3508.—**Hymenoptera**: CRÈVECOEUR & MARÉCHAL, Belgium, catalogue, 666; CONSTANTINEANU, Ophioninae (Ich.), Rumania, list (contd.), 640; DROGOSZEWSKI, Aculeata, new to Central Poland, 815; KARAVAJEV, Formicidae, Ukraine, 1648; NOSKIEWICZ, Podolia, 1932-35, 2386.—**Lepidoptera**: HOUWALT, spp. new to Poland, Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. 9 1935 pp. 307-313; LOCAL LISTS:—Germany 387, 471, 969, 1167, 2134, 2710; Bohemia 2204; Carinthia 3319; Poland 20, 1817, 2828; Ukraine 2410, 2413, 3133.—**Diptera**: ENDERLEIN, Central Europe, keys, 876; KARL, Brachycera, Pomerania, 1651; KOMÁREK, Blepharoceridae, distribution in Balkans, 1780; KRATOCHVIL, *Chionea* (Tipul.), Czechoslovakia, 1815; ŠUSTER, Tachinidae of Dobruja, list, 3230.—**Siphonaptera**: WAGNER, keys, 3509.—**Hemiptera**: GULDE, Heteroptera, Central Europe, revision (contd.), 1215, 1216; SIROTININA, aquatic Hemiptera of Donetz R., 3080.—**Thysanoptera**: KÉLER, Poland, catalogue, 1671.—**Psocoptera**: HOLZAPFEL, Switzerland, list, 1450.—**Orthoptera**: GROCHOWSKA, Poland, local list, 1188; JORDAN, Oberlausitz, Germany, local list, 1625.—**Apterygota**: KEL'SHTEIN, Collemb., N. Danube basin, 1673, Apterygota, Kharkov, 1674.

SOUTH EUROPE.

Coleoptera: FUENTE Y MORALES, Spain and Balearic Is., catalogue, additions, 1063; KANTARDZHEVA-MINKOVA, Prioninae, Cerambycinae, Bulgaria, keys, 1647; MÜLLER, *Anophthalmus* (Carab.), S. Alps revision, 2302; D'ORCHYMONT, *Hydraena* (Hydroph.), Iberian Peninsula, revision, 2462; POMINI, *Platycarabus* (Carab.), Italy, geographical variation, 2661,—

Hymenoptera: ATANASSOR, Formicidae, Bulgaria, ii, 103; DELLA BEFFA, Formicidae, Piedmont, 732; HAUPT, Pompilidae, Italy, ii, 1274.—**Lepidoptera**: BURESCH & TULESCHKOW, horizontal distribution in Bulgaria, 440; DELLA BEFFA, Tortricidae, Piedmont, 733; PEAKE, *Melanargia* (Satyr.), 2541; TULESCHKOW, spp. new to Bulgaria, 3382; WATTISON, Noctuidae, Portugal, 3543.—**Trichoptera**: RADOVANOVIC, Balkans, 2724.—**Diptera**: GHIDINI, Tabanidae, Italy, revision, 1106; GIL COLLADO, blood-sucking Dipt., Spain, 1112; JACENTKOVSKY, Muscidae, Bulgaria, 1548; PAPADAKIS, *Phlebotomus* (Psych.), Greece, 2492; SHANNON & HADJINICOLAOU, Tabanidae, Greece, list, 3050.—**Hemiptera**: BALACHOWSKY, Spain, list, 136; POISSON, aquatic Hemiptera of Balkans, 2648.—**Plecoptera**: DESPAX, *Chloroperla*, Pyrenees, revision, 758.

MEDITERRANEAN ISLANDS.

Insecta: WERNER, Aegean Is., 3567.—**Hymenoptera**: MENOZZI, Formicidae, Italian Aegean Is., 2183.—**Lepidoptera**: REBEL, Aegean Is., 2742, Dodecanese, 2742, 2743.—**Diptera**: PAPADAKIS, *Anopheles*, Crete, 2493.—**Dermaptera**: MENOZZI, Rhodes and Scarpunto I., 2184.—**Orthoptera**: JANNONE, Aegean Is., 1574; WERNER, Dodecanese, list, 3568, Cyprus, 3569.

CAUCASUS, WEST AND CENTRAL ASIA.

Coleoptera: GRIDELLI, Tenebrionidae and Staphylinidae, Karakoram, list, 1179; NETOLITZKY, Bembidiini (Carab.), Karakoram Mts., 2350; SCHEIBE et al., Hindu Kush, 2950; SCHMIDT, *Aphodius* spp., distribution, Palestine, Centr. Asia, 2962.—**Hymenoptera**: GUSSAKOVSKI, Sphecoidea, Vespoidea, Tadjikistan, 1230; POPOV, Apidae, Tadjikistan, 2664; SKORIKOV, Mutillidae, Centr. Asia, revision, 3090.—**Diptera**: KLIGLER & MER, *Anopheles*, Syria, distribution, 1733; PETRISHCHEVA, *Phlebotomus*, distribution, Turkomenia, 2571.—**Hemiptera**: BORKHSENIUS, Coccidae, Caucasus, 338; KUZNETZOV, Orgeriidae, Centr. Asia, 1856; ZAKHVATKIN, Cicadina of Yemen, Arabia, list, 3692.—**Orthoptera**: MIRAM, Tadjikistan, 2251; SHCHELKANOVITZEV, Black Sea coast, 3056; UVAROV, Arabia, 3427.

NORTH AFRICA.

Coleoptera: KOCH, Staphylinidae, Egypt, Sinai, 1762; NORMAND, Tunisia, catalogue, 2381; DE PEYERIMHOFF, *Saprinus* (Hist.), 2574, *Nebria* (Carab.), 2575, Tibesti, 2576; SCHATZMAYR, Carabidae, Egypt, Sinai, 2932.—**Hymenoptera:** RUNGS, some Moroccan spp., 2882; SANTSCHI, Formicidae, Tibesti, 2917.—**Lepidoptera:** LE CERF, Tibesti, list, 1900; ZERNY, Morocco, 3693.—**Diptera:** SALEM, *Sarcophaga*, Egypt, 2906; SÉGUY, Tibesti, 3008; SENEVET, Culicidae, Algeria, 3033.—**Neuroptera:** NAVÁS, Barbary, 2333, Tibesti, 2336.—**Hemiptera:** JACZEWSKI, Aquatic Heteropt., Egypt, 1556.—**Odonata:** NIELSEN, Fezzan, Libya, 2362.—**Isoptera:** SCORTECCI, Fezzan, 2991.—**Orthoptera:** BOLIVAR, Ifni, 322; CHOPARD, *Hololampra*, Algeria, key, 554, Tibesti, 555; SALFI, Fezzan, Libya, 2903, 2904.

AFRICA.

Coleoptera: BURGEON, Carabidae, Belgian Congo, ii, catalogue, 442, *Catascopus* (Carab.), E. and W. Africa, 443, *Cylas* (Curc.), Belgian Congo, 446; HUSTACHE, Curculionidae from Angola, 1516; JEANNEL, Trechinae, Perigoninae, E. Africa, revision, 1585; KLEINE, Brenthidae, Belgian Congo, 1722; MARSHALL, Curculionidae from Mozambique, 2119; OBENBERGER, *Yanthe* (Bupr.), Ethiopia, 2405; D'ORCHY-MONT, Hydrophilidae, Kalahari, list, 2458; THÉRY, *Julodis* (Bupr.), Southern Africa, 3293.—**Hymenoptera:** ARNOLD, Pompilidae, revision, v, vi, 90; COCKERELL, *Allodapula* (Apid.), revision, 587; GIORDANI SOIKA, Vespidae, from Mozambique, 1115, *Ancistrocerus* (Vesp.), revision, 1121, 1122; NIXON, Teleasinae (Scelion.), revision, 2373.—**Lepidoptera:** DEBAUCHE, *Euchromia* (Syntom.), revision, 725; GAEDE, Noctuidae, revision, 1077; STEMPFER, *Syntarucus*, revision, 3477; VAN SOMEREN, Butterflies of Kenya and Uganda, suppl. to Vol. i, 3444; VAN SON, Rhopalocera, Kalahari, list, 3446.—**Trichoptera:** LESTAGE, 1924.—**Diptera:** DE MEILLON, S. African Ceratopogonidae, 742; GIBBINS, Simuliidae, Congo, 1107, Simuliidae, Uganda, 1109; GIL COLLADO, Culicidae, Fernando Po, 1114; HESSE, Bombyliidae, Kalahari, list, 1367

PATTON, *Musca*, revision of Ethiopian spp., 2524; SWYNNERTON, *Glossina*, E. Africa, 3241.—**Siphonaptera:** JORDAN, Angola, 1322.—**Hemiptera:** MUNRO & FOUCHÉ, Coccidae and food-plants, list, S. Africa, 2314; POISSON, aquatic Hemiptera, L. Rudolf, 2652; VAYS-SIÈRE, *Stictococcus* (Coccid.), distribution, 3460.—**Isoptera:** HARRIS, Tanganyika, list, 1265.—**Odonata:** LONGFIELD, lists of spp. collected, 2005; NIELSEN, Italian E. Africa, 2364; RIS & SCHMIDT, *Pseudagrion*, revision, 2808.—**Orthoptera:** CHOPARD, Mozambique, 549; KEY, *Paracinema*, revision, 1692; PAOLI, *Spalacomimus*, *Bradyopisthius* (Tettig.), 2489.—**Dermoptera:** REHN, distributional notes, 2753; *Hemimerus*, revision, 2754.—**Collembola:** DENIS, Mozambique, 753.

MADAGASCAR AND MASCARENE IS.

MADAGASCAR.

Coleoptera: ALLUAUD, new Carabidae, 59, 60; BORCHMANN, new Lagridae, 331; HORN, Cicindelidae, catalogue, 1468; OBENBERGER, *Evimantius* sp. n. (Bupr.), 2394; OLSOUFIEFF, Cicindelidae, revision, 2443; D'ORCHY-MONT, *Coelostoma* sp. n. (Hydrophil.), 2433; PAULIAN, Scarabaeidae, keys and spp. n., 2529; PIC, spp. n., 2604, 2607; REICHENSBERGER, *Paussus* spp. n., 2760; SPAETH, *Chiridopsis* sp. n. (Cassid.), 3139; THÉRY, *Entomogaster* sp. n. (Bupres.), Rev. suisse Zool. 43 p. 697.—**Hymenoptera:** BRÜTHGEN, *Eupetersia* spp. n. (Apid.), 302; BRADLEY, *Campsomeris* spp. n. (Scoliid.), 363; FERRIÈRE, *Anastatoidea* sp. n. (Eupel.), 959; SEYRIG, *Meta-coelus* sp. n. (Ichneum.), 3048; WILKINSON, *Apanteles* sp. n. (Brac.), 3608.—**Lepidoptera:** COLLENETTE, new Lymantriidae, 623.—**Trichoptera:** NAVÁS, new spp., 2339; MOSELY, *Dipseudopsis* sp. n., 2277.—**Diptera:** LINDNER, Stratiomyiidae, 1970; VILLENEUVE, *Paratricyclea* sp. n. (Tachin.), 3484.—**Neuroptera:** NAVÁS, new spp., 2339.—**Thysanoptera:** BAGNALL, genn. et spp. n., 128.—**Psocoptera:** BADONNEL, spp. n., 118.—**Ephemeroptera:** NAVÁS, new spp., 2339.—**Orthoptera:** KEY, *Paracinema* sp. n. (Acrid.), 1692.

MAURITIUS.

Coleoptera: CAMERON, new Staphylinidae, 474; JORDAN, Anthribidae,

revision, 1613; PIC, *Bruchus seminarius* var. n., 2592, *Anteriscus* sp. et var. n. (Cryptoceph.), 2607.—**Hemiptera**: MAMET, new Coccids, 2082, 2803.—**Isoptera**: MOUTIA, 2293.

SEYCHELLES.

Hemiptera: LUNDBLAD, *Rhagovelia* sp. n., 2021.

INDO-AUSTRALIAN REGION, collectively.

Coleoptera: HEBERDEY, *Tomoderus* (Anthic.), revision, 1292; ZIMMERMAN, *Orochlesis* (Cure.), revision, 3704.

ASIA, TROPICAL AND EASTERN.

Insecta: MASAKI, various islands of Korea, 2129a.—**Coleoptera**: ANDREWES, *Drypta*, *Desera* (Carab.), India, keys, 79; CHEN, Chrysomelinae, China, Indo-China, Japan, catalogue, 535–537; CHŪJŌ, Mordellidae, Rhipiphoridae, Formosa, catalogue, 563, 564, Halticinae, Japan, revision, 565; FALKENSTRÖM, Halipilidae, Dytiscidae, Gyrinidae, W. and C. China, 943; FLEUTIAUX, Elateridae from Fr. Indo-China, 1000; GOECKE, *Donacia*, key, 1133; HINCKS, Passalidae, Borneo, 1382; KAMIYA, Dytiscidae, Staphylinidae, Dermestidae, Hydrophilidae, Jehol, 1640; KANŌ, Cicindelidae, Carabidae, Cerambycidae, Jehol, 1646; KISHIDA, Telephoridae, Jehol, list, 1713; KŌNO, Clavicornia, Kuriles, 1791, Silphidae, Cleridae, Meloidae, Jehol, 1794; KURENZOV, zoo-geography of Scolytidae of Ussuri, 1847; LIU, Phytophaga, China, catalogue, 1992; MATSUMURA, *Caccobius*, Japan, key, 2140; MAULIK, Galerucinae, India, revision, 2141; MIWA, Buprestidae, Tenebrionidae, Jehol, 2260; MIWA & YOSHIDA, Coccinellidae, Japan, list, 2231; MURAYAMA, Scolytidae, Honshu and Kiushu, 2316; OCHS, Gyrinidae, China, 2421; OGLOBLIN, Galerucinae, U.R.S.S., revision, 2425; PAULIAN, *Aphodius* (*Trichonotulus*), India, key, 2533; PAVILSTSHIKOV, Cerambycidae, U.R.S.S., 2641; REIKHARDT, Opatrinae (Tenebr.), U.S.S.R., revision, 2764; TOMIURA, Kwantung Prov. China, list, 3362.—**Hymenoptera**: LIU, Vespidae, catalogue, China, 1989; MEIER, Ichneumonidae, U.R.S.S., revision, 2159, 2160; REINIG, bumble bees, Manchukuo, list, 2767; TAKEUCHI,

Tenthredinoidea, Saghalien, Japan, 3267; TELENGA, Braconidae, U.S.S.R., revision, 3287; UCHIDA, Ichneumonidae, Kuriles, 3400; YASUMATSU, *Pison* (Trypox.), key, Japan, China and Ussuri Region, 3668, *Colletes*, Japan, China, list, 3671, Ampulicidae, Japan, 3673.—**Lepidoptera**: DJAKONOV, *Caberini* (Geom.), revision, Amur-Ussuri Region, 771; KISHIDA & NAKAMURA, Japan, list, 1714; MELL, *Catocala*, China, 2174; NIKITIN, Manchuria, distribution, 2370; WATARI, northern limits of Japanese Lycaenidae, 3540.—**Trichoptera**: KUWAYAMA, Kuriles, 1854; MOSLEY, revision, 2280.—**Diptera**: HO, *Sarcophaga*, Hainan I., list, 1401; MORISHITA, *Anopheles*, Formosa, 2269, 2270; OKADA, Mycetophilidae, Japan, 2436; PURI, *Anopheles*, additional records 1931–35, India, 2711; RAYNAL, *Phlebotomus* (Psych.), N. Indo-China, 2737; ROUBAUD, *Anopheles*, Far East, 2857; TOKUNAGA, *Cricotopus*, *Corynoneura* (Chiron.), Japan, 3354; TREILLARD, *Anopheles*, key, 3373.—**Siphonaptera**: LIU, China, catalogue, 1990; OHMORI, Formosa, 2434.—**Hemiptera**: LINDBERG, Heteroptera, N.W. China, 1956; PRUTHI, Jassidae, India, 2701; TSENG & TAO, Aphidae, China, list, 3378; YANG, Tesseratomidae (Pent.), China, revision, 3664.—**Plecoptera**: WU, China, 3654.—**Ephemeroptera**: HSU, China, 1489; ULMER, China, list, 3411.—**Odonata**: FRASER, Odonata, India, Burma, Ceylon, iii, 1038.—**Orthoptera**: CHOPARD, Gryllids, China, 556, Tridactylidae, Gryllidae, Ceylon, 559; TINKHAM, Hupeh and Kiangsi, 3337.—**Dermoptera**: BEI-BIENKO, U.S.S.R., 203; SEMENOV-TIAN-SHANSKIĬ, U.S.S.R., 3023.

ASIATIC ARCHIPELAGO.

Coleoptera: BERNHAUER, new Javan Staphylinidae, 249; BORCHMANN, new Lagriidae, Philippines, 331; BREUNING, new Cerambycidae, 380; CAMERON, Staphylinidae, Java, 476, 478, Sumatra, 477; DOVER, Cicindelidae, Singapore, key, 794; EGGERS, new Scolytidae, Java, 850; GÜNTHER, *Omotermus* (Curc.), key, 1224, *Sphenocorynus* sp. n. (Curc.), Philippines, 1226; HINTON, Parnidae, Borneo, 1388; JEDLIČKA, new Carabidae, Philippines, 1599, Acta Soc. ent. Čsl. 33 pp. 3, 17, 24, 25, 29, 66, 69, 92, 100, 103, 118, 135; JORDAN, new Anthribidae, Java, Sumatra,

Philippines, Malay Peninsula, Borneo, 1618; MADER, new Endomychidae, Philippines, Borneo, 2058; OBENBERGER, *Agrilus* spp. n. (Bupr.), Philippines, 2398; D'ORCHYMONT, *Coelostoma* spp. n. (Hydroph.), Java, Borneo, 2463; PAULIAN, *Paraphytus* (Copr.), distribution, key, 2530; PIC, spp. n., Sumatra, Java, Borneo, Mindanao, Basilan I., 2592, 2607; RAY, Mordellidae, Philippines, list, 2733; SCHEDL, Scolytidae, Platypodidae, Philippines, 2937, 2941; VAN ZWALUWENBURG, Elateridae, Philippines, 3448.—**Hymenoptera**: COMPERE, *Timberlakiella* gen. et sp. n. (Aphel.), Philippines, 633.—**Lepidoptera**: CORBET & PENDLEBURY, *Amathusia*, Malaya, revision, 646; DUPONT, *Panacra* (Sphing.), 826; IZUKA, butterflies, Philippines, annotated list, 1544; ROTHSCHILD, *Asura luzonica* subsp. n., Philippines, 2846; TALBOT, new Rhopalocera, Philippines, 3271.—**Diptera**: ALEXANDER, new Tipulidae, Java, Bali, Flores, Timor, 42; BAISAS, *Anopheles*, Philippines, iv., 131; BRUES, new Phoridae, Mindanao, 411; ENDERLEIN, new Tachinidae, Philippines, Celebes, 887; HENNIG, *Campylocera* sp. n. (Pyrgot.), Philippines, 1333; KING & BAISAS, *Anopheles cristatus* and *leucosphyrus* var. n., Philippines, 1706; DEL ROSARIO, Psychodinae, Philippines, 2838; RUSSELL & BAISAS, *Anopheles*, key to Philippine adults, 2885.—**Hemiptera**: FUNKHOUSER, new Membracids, Sunda Is., Celebes, 1070; LUNDBLAD, *Rhagovelia* sp. n., 2021; YANG, *Compastes* sp. n. (Pent.), Java, 3663.—**Odonata**: COWLEY *Drepanosticta* spp. n., Philippines, 663; KIMMINS, Sarawak, 1701; LIEFTINCK, Sunda Is., list, 1949.—**Thysanoptera**: MOULTON, Philippines, 2289, 2290.—**Mecoptera**: LIEFTINCK, *Leptopanorpa*, revision, Malaya, 1950.—**Orthoptera**: GÜNTHER, Phasmodae, Centr. Borneo, 1220, Celebes, 1223; HANITSCH, Blattidae, Buru, 1252; WILLEMSE, *Perakia* (Acrid.), key, 3621.

PAPUAN SUB-REGION, collectively.

Coleoptera: SCHÜRHOFF, *Pocillopharis* (Ceton.), revision, 2982.—**Diptera**: HULL, Syrphidae, check-list, 1496.

ARU Is.

Hymenoptera: CHEESMAN, *Goryphus* sp. n. (Ichneum.), 530.

BISMARCK ARCHIPELAGO.

Coleoptera: SPAETH, *Plesispa* sp. n. (Hisp.), Admiralty Is., 3142.—**Lepidoptera**: MEYRICK, *Cymorhiza* sp. n. (Pyr.), Witu I., 2199; ROTHSCHILD, *Chionaema*, *Asura*, *Caprimima* spp. n., N. Britain, N. Ireland, 2846.—**Diptera**: BARANOV, *Zenillia* sp. n. (Tach.), New Britain, 169; ENDERLEIN, new Tachinidae, New Britain, New Ireland, 887.

LOUISIADE ARCHIPELAGO.

Coleoptera: BREUNING, *Rosenbergia* sp. n. (Ceram.), Ferguson I., 380.

MOLUCCAS.

Coleoptera: BREUNING, *Dihammus* sp. n. (Ceram.), Ternate I., 380; MAULIK, *Oxycephala* sp. n. (Hisp.), 2143; UHMANN, *Oxycephala* sp. n. (Hisp.), Misol I., 3142.—**Hymenoptera**: CHEESMAN, *Gotra* sp. n. (Ichneum.), Misol I., 530.—**Diptera**: ENDERLEIN, *Hega* gen. et sp. n. (Tachin.), Batjan I., 887.

NEW GUINEA.

Coleoptera: BORCHMANN, new Lagriidae, 331; BREUNING, new Cerambycidae, 380; HEBERDEY, *Tomoderus* sp. n. (Anthic.), 1292; JORDAN, *Oxyconus* gen. et sp. n. (Anthrib.), 1618; KRIESCHE, *Dihammus solatus* subsp. n. (Lamid.), 1819; LESNE, *Minthea* sp. n., 1922; MADER, *Spondotriplax* spp. n. (Erotyl.), 2058; OBENBERGER, *Haplotrinchus* sp. n. (Bupr.), 2394; OHAUS, *Anomala* spp. n. (Rutel.), 2426, 2429; PIC, *Aclytia* sp. n. (Telephor.), 2593; SCHEDL, new Platypodidae, 2937, *Scolytus* sp. n., 2939; SPAETH, new Hispidae, 3142.—**Hymenoptera**: CHEESMAN, new Ichneumonidae, 530; DONISTHORPE, new Formicidae, 783; WILKINSON, *Microgaster* sp. n. (Brac.), 3608.—**Lepidoptera**: NIEPELT, *Coscinocera hercules* f. n. (Saturn.), Ent. Z. 49 p. 559; RÖBER, *Mynes* sp. n. (Nymph.), 2812; ROTHSCHILD, *Zygaenosia* sp. n., 2847, *Caprimima* spp. n. (Arct.), 2848.—**Diptera**: ALEXANDER, Tipulidae, 38, 39; ENDERLEIN, new spp., 877, 878, 886, 887; MACFIE, *Forcipomyia* sp. n. (Ceratop.), 2051.—**Hemiptera**: BLÖTE, new Coreidae, 301; LUNDBLAD, *Rhagovelia* spp. n., 2021.—**Orthoptera**: GÜNTHER, new Phasmodae and Acrididae, 1225; WILLEMSE, *Kapaoria* sp. n. (Acrid.), 3621.

SOLOMON IS.

Coleoptera: KRIESCHE, *Dihammus* spp. n. (Lamiid.), Bougainville I., 1819; MADER, *Encymon* sp. n. (Endomych.), 2058; SPAETH, *Mettriona* spp. n. (Cassid.), 3140; VAN ZWALUWENBURG, new Elateridae, 3447.—**Hymenoptera:** CHEESMAN, new Ichneumonidae, 530; COCKERELL, Apidae, 604; WILLIAMS, Larridae, 3627.—**Lepidoptera:** MEYRICK, new Tineidae, Tortricidae, 2199; ROTHSCHILD, *Zygaenosia* sp. n., St. Mathias I., 2847.—**Diptera:** ALEXANDER, *Nephrotoma* sp. n. (Tipul.), Bougainville I., 688; BARANOV, new Tachinidae, 169; CURRAN, ALEXANDER, CRESSON, new spp., 688.—**Hemiptera:** LEVER, *Amblypelta* sp. n. (Coreid.), 1927.

AUSTRALIA.

Coleoptera: BORCHMANN, new Lagriidae, 331; BREUNING, new Cerambycidae, 380; CARTER, new spp., 506; CARTER & ZECK, new Parnidae, 507; DEANE, *Hydrobius* sp. n. (Hydroph.), 720; HORN, *Prothyma* sp. n. (Cicind.), 1472; LEA, new Curculionidae, 1894; MARSHALL, new Curculionidae, 2124; OBENBERGER, new Buprestidae, 2394, 2398; ZIMMERMAN, *Orochlesis* sp. n. (Curc.), Queensland, 3704.—**Hymenoptera:** CHEESMAN, new Ichneumonidae, 530; CLARK, *Rhytidoponera* (Formic.), revision, 578; COMPER, new Aphelinidae, 633; RAYMENT, Apoidea of Rottnest I., 2735, *Halictus* sp. n. (Apid.), 2736; TURNER, *Paragia* sp. n. (Masar.), 3392, new Sphegids, 3393; WHEELER, ants of Rottnest I., 3584, *Froggattella* (Formic.), revision, 3585.—**Lepidoptera:** MEYRICK, *Astaropola* gen. et sp. n. (Tin.), *Hednota* spp. n. (Pyr.), 2200; TINDALE, Hepialidae, revision, iii, 3334; TURNER, Oecophoridae, revision, v, 3389, new genn. and spp., 3390.—**Trichoptera:** MOSELY, revision and new spp., 2281, 2282.—**Diptera:** DUDA, *Acletoxenus* sp. n. (Drosoph.), 819; ENDERLEIN, *Chelocnetha* gen. et sp. n. (Simul.), 886, new Tachinidae, 887; HULL, Syrphidae, check-list, 1496; MALLOCH, spp. n., 2076.—**Siphonaptera:** JORDAN, new fleas, 1623; ROTHSCHILD, new spp., 2850; WAGNER, *Echidnophaga* sp. n., 3514.—**Hemiptera:** CORBETT, *Trialeurodes* sp. n., 647; EVANS, *Nysius* sp. n.

(Lygaeid.), 922, Bythoscopinidae (Jass.), 923; FUNKHOUSER, new Membracids, 1070; HUDSON, *Melampsalta* sp. n., 1494; PAOLI, *Empoasca* spp. n. (Jass.), 2491; SOLOMON, *Synaleurodicus* gen. et sp. n., *Aleurotrachelus* sp. n. (Aleurid.), 3115.—**Thysanoptera:** MOULTON, gen. et spp. n., 2284.—**Embioptera:** DAVIS, 717.—**Ephemeroptera:** TILLYARD, Tasmania, monograph, 3329; SJÖSTEDT, Acridioidea, monograph (contd.), 3084; ZEUNER, *Tympanophora* sp. n. (Tettig.), 3698.—**Collembola:** WOMERSLEY, new spp., 3647.—**Protura:** WOMERSLEY, *Acerentulus* sp. n., 3646.

AMERICA, collectively.

Coleoptera: DENIER, Meloidae, catalogue, 746, 747; FIEDLER, *Piazurus* (Curc.), key, 972, 973.—**Lepidoptera:** D'ALMEIDA, *Terias* (Pier.), revision, 63; DRAUDT, Noctuidae, suppl., 809; GAEDE, Epipleminidae, Cymatophoridae, Psychidae, Thyrididae, revision, 1077; PROUT, Geometridae, catalogue, 2699; ZUKOWSKY, Aegeriidae, 3716.—**Hemiptera:** DRAKE & POOR, genera of Tingidae, 807; NEIVA & LENT, Triatomidae, list, 2348.—**Mallophaga:** WERNECK, found on mammals, 3566.

NORTH AMERICA.

Coleoptera: BLACKWELDER, *Tachyporus* (Staph.), revision, 282; BLAISDELL, *Stibia* (Tenebr.), revision, 290; BOHART, *Stylops*, 315; BROWN, *Ludius* (Elat.), 401; BRUCK, Hylesinae (Scolyt.), revision, 408; BUCHANAN, *Lepidophorus* (Curc.), key, 420, *Panscopus* (Curc.), key, 424; CANOVA, Lepturini, Oregon, annotated list, 480; CHAGNON, Quebec, revision, 519, 520; HOPPING, *Macropogon*, revision, 1458; *Trigonurus* (Staph.), distribution, Bull. Brooklyn ent. Soc. 31 p. 65; VORIS, *Philonthus cruentatus* (Staph.), spread in N. America, 3498.—**Hymenoptera:** BRIMLEY, Pompilidae, N. Carolina, revision, 386; COLE, Formicidae, Idaho, annotated list, 612; MICKEL, *Dasyntilla* (Mutill.), key, 2222; MITCHELL, *Megachile* (Apid.), revision iv, 2253; MUESEBECK, Euphorinae (Brac.), revision, 2294; PHILLIPS, *Harmolita* (Chalc.), revision, 2587; ROSS, *Empria* (Tenthr.), 2841, *Fenusa*, key, 2842; SANDHOUSE, *Agapostemon* (Apid.), revision, 2914; SMITH, *Ponera* (Formic.), 3101; SMITH, Formicids, Texas, list, 3102; SMULYAN,

Perilampus, revision, 3107.—**Lepidoptera**: HALL, occurrence of unusual *Rhopalocera* in Indiana in 1929–1932, 1240; RICHARDS, *Bulia*, key, 2784.—**Trichoptera**: MILNE, revision, iii, 2243.—**Neuroptera**: CARPENTER, Raphidioidea, revision, 492.—**Diptera**: ALEXANDER, Tipulidae of New England (4th suppl. list), 36; BROMLEY, *Diognites* (Asil.), key, 391, Asilidae, Ohio, additions, 392; HENNIG, Tylidae, revision, 1336; HUCKETT, Coenosiinae and Limnophorine genera (Anthem.), revision, 1493; JAMES, *Odontomyia* (Strat.), revision, 1563, Geosarginae, (Strat.), revision, 1566, Stratiomyidae, Utah, Colorado, revision, 1567; DEL ROSARIO, *Psychoda*, revision, 2837; SABROSKY, *Oscinella*, *Madiza* (Chlorop.), synopsis, 2895, *Chloropisca*, review of spp., 2896; TWINN, Simuliidae, E. Canada, 3395; WILCOX & MARTIN, *Cyrtopogon* (Asil.), review, 3606.—**Siphonaptera**: SPENCER, Br. Columbia, check list, 3148; WAGNER, Br. Columbia, 3511.—**Hemiptera**: DEAY & GOULD, Gerridae, Indiana, revision, 721; DELONG, *Elymana* (Jass.), 734; PALMER, Aphidae, Colorado, additions and corrections, 2487; USINGER, Aradidae, 3421.—**Isoptera**: PACKARD, *Reticulitermes flavipes*, distribution, 2477.—**Ephemeroptera**: NEEDHAM, TRAYER & HSU, 2347.—**Orthoptera**: HEBARD, N. Dakota, 1289, *Arethaea* (Tettig.), revision, 1291; HUBBELL, *Ceuthophilus* (Gryllac.), revision, 1492; KNOTSON & JAKES, Iowa, list, 1756; SEVERIN, South Dakota records, 3046; STEHR, Minnesota records, 3168.

TROPICAL AMERICA.

Coleoptera: FIEDLER, *Chalcodermus*, key, 970; MADER, *Nitio*, key, 2057.

CENTRAL AMERICA.

Lepidoptera: HOFFMANN, geographical relations of Mexican Lep., 1421.

ANTILLES.

Insecta: WOLCOTT, Insectae borinquenses, annotated check-list, Porto Rico, 3644.—**Coleoptera**: BIERIG, *Stammoderus*, *Stilicus* spp. n. (Staph.), 270; BUCHANAN, *Calandra* spp. n., *Panophtalmus* gen. et spp. n. (Curc.), Cuba, 421; DARLINGTON, new Carabidae, Haiti, *Colpodes*, Greater Antilles, key, 710, new Parnidae, Haiti,

Cuba, 711; FISHER, new Buprestids, Cerambycids, Sp hindid, Cuba, 987, 988; HINTON, *Lapethus* sp. n. (Colyd.), Cuba, 1394; HORN, *Cicindela viridiflavescens* subsp. n., Haiti, 1472.—**Hymenoptera**: SANTSCHI, *Rogeria* spp. n. (Form.), Cuba, 2918; WHEELER, ants, Haiti, 3587.—**Lepidoptera**: BATES, *Calisto* (Satyr.), Greater Antilles, revision, 177; CLARK, new Sphingidae, Jamaica, Cuba, 577; HALL, butterflies, St. Kitts, 1239.—**Diptera**: CURRAN, *Allograptu* sp. n. (Syrphid.), Cuba, 686; FLUKE, *Xanthandrus* sp. n. (Syrph.), Cuba, 1005; KUMM, *Hippelates*, *Oscinella* (Chlorop.), Jamaica, 1840; MALLOCH, *Scenetes cardini*, gen. et sp. n. (Musc.), Cuba, 2075; SENEVET, Culicidae, Martinique, 3034.—**Hemiptera**: DOZIER, *Haitiana* gen. et sp. n. (Fulg.), Haiti, 796; DRAKE & HARRIS, *Microvelia* sp. n. (Veliid.), Grenada I., 805; OMAN, *Krisna* sp. n. (Jass.), Porto Rico, 2447, *Empoasca* sp. n. (Jassid.), Porto Rico, 2448.—**Thysanoptera**: MOULTON, *Frankliniella* sp. n., Cuba, 2286; RUSSO, Dominican Republic, 2887.

SOUTH AMERICA.

Insecta: DA COSTA LIMA, Brazil, 655; URETA, Aysen, Chile, 3419.—**Coleoptera**: FIEDLER, *Cryptacrus* (Curc.), 971, *Collabismus* (Curc.), 974; OLAVE, Buprestidae, Chile, revision, 2439; PORTER, Prioninae, Chile, revision, 2674.—**Hymenoptera**: RUIZ, Pompilidae, Chile, revision, 2876.—**Lepidoptera**: HAYWARD, *Actinote* (Nymph.), Argentina, revision, 1282, *Pyrrhopyginae* (Hesp.), Argentina, revision, 1284; KOHLER, *Satyridae*, Argentina, revision, 1772; LICHY, *Erycinidae* new to Venezuela, Bol. Soc. venez. Ci. nat. 3 pp. 204–209, 2 figs.; SHELTON, butterflies, Tobago, 3057; URETA, *Plusia*, Chile, 3420.—**Diptera**: BEQUAERT, Hippoboscidae, Chile, 222; FRAGA, Tabanidae of Chile, 1024; HENNIG, Tethinidae, distribution, 1335; LANE, Culicidae, Matto Grosso, 1883.—**Hemiptera**: DE CARLO, aquatic and semi-aquatic Hemiptera, Chile, catalogue, 488; NIÑO, Triatomidae, Argentina, 2372; OMAN, *Xerophloea* (Jass.), 2450.—**Mallophaga**: CARRIKER, revision, 535.—**Odonata**: BORROR, *Oligoclada*, revision, 339.—**Orthoptera**: LIEBERMANN, *Prionolopha*, *Diedronotus*, *Elaeochlora*, *Chromacris* (Acrid.), revision, Argentina, 1943.

III.—SYSTEMATIC.

GENERAL.

New species of insects from Japan described during 1935, [ANON.] *Ins. mats.* 10 pp. 163-173.

Insects injurious to cultivated plants, BALACHOWSKY & MESNIL *Les Insectes nuis. plantes cult.* II pp. 1141-1921 & xi, 368 figs.

Insects new to Canada, CHAGNON *Nat. canad.* 63 pp. 164-166.

Insects of French Oceania, CHEESMAN *Islands near the Sun* 1927 pp. 229-232.

Third catalogue of insects on plants in Brazil, DA COSTA LIMA *Rio de Janeiro* 460 & iv pp.

Classification, morphology and biology of Brazilian insects [contd.], DA COSTA LIMA *O Campo* 1936 no. 1 pp. 14-19; no. 3 pp. 17-23; no. 4 pp. 12-16; no. 5 pp. 17-21; no. 6 pp. 18-25; no. 7 pp. 33-41; no. 9 pp. 15-25; no. 10 pp. 11-24, 53; no. 11 pp. 8-17; no. 12 pp. 10-17, 76 figs.

Forest Insects, DOANE, VAN DYKE, CHAMBERLAIN & BURKE London, McGraw-Hill Pub. Col. Ltd. 1936 xii + 463 pp. 234 figs.

Insect fauna of Zhiguli, DMITRIEV *Rev. Ent. U.R.S.S.* 25 1935 pp. 254-264.

Lepidoptera, Hymenoptera, Diptera and Orthoptera of Bulgaria, DRENOVSKI *Mitt. bulg. ent. Ges. Sofia* 9 pp. 237-256, 1 pl.

Records of insects of Kita-Daitojima, Borodino group, I, ESAKI *Mushi* 9 pp. 40-43.

Insects of Barra, Outer Hebrides, FORREST ET AL. *Proc. R. phys. Soc. Edinb.* 22 pp. 241-298, 1 map.

Insects new to Finland 1931-1933, HELLÉN *Notul. ent.* 16 pp. 43-63.

Illustrated keys to leaf-mining insects of Centr. and N. Europe, HERING *Die Blatt-Minen* . . . Lief. 2 pp. 113-336, 4 pls. 174 figs.

Insect fauna of S.W. Africa, JORDAN *Novit. zool.* 40 pp. 17-62, 6 pls. 3 maps.

Entomological excursion in S. Bogutsch district of Woronesch, KONAKOV & ONISIMOVA *Ber. Ges. Wiss. Wrb. Erforsch. Wronesch* 1 (2) 1931 54 & [6] pp.

Classification of insects, LAMEERE *C.R. Congr. Sci. nat. Bruxelles* 1930 1930 pp. 793-795.

Insect fauna of various islands of Korea, MASAKI *Kontyû* 10 pp. 251-274.

List of insects collected at St. Laurent d'Andenay, NIDIAULT *Bull. Soc. H.n. Creusot* 3 1935 pp. 59-62.

Key to most important pests of forests, NUNBERG *Inst. Rech. Forêts dominiales* 1935 288 pp. 359 figs.

Notes on Armorican insect fauna, PESSON *Bull. Soc. sci. Bretagne* 12 pp. 192-195, 1 fig., 13 pp. 83-89.

Resumé of the Swedish entomological Expedition to Kamtchatka 1920-1922, SJÖSTEDT *Ark. Zool.* 28A 1935 no. 7, 19 pp.

Annotated list and geographical characteristics of insects of Kaiserstuhl, Upper Rhine, STROHM *Der Kaiserstuhl* 1933 pp. 285-366, 384-401, 50 figs.

The biological control of insects with a chapter on weed control, SWEETMAN *Ithaca, N. York, Comstock Pub. Co.* 1936 xii + 461 pp. 142 figs.

Tentative list of insects of Hunan Province, I, WANG *Ent. & Phytopath.* 4 pp. 382-389, 404-409.

General Entomology, WARDLE *Philadelphia, Blakiston's & Son & Co.* 1936 vii + 311 pp. 96 figs.

Insect fauna of Tomsk region, WNUKOWSKY *Konowia* 15 pp. 113-128.

Bibliography and list of cavernicolous insects, WOLF *Anim. cavern. cat.* 1935 1 pp. 49-64; 2 pp. 97-224; 3 pp. 225-464; 1936 2 pp. 225-456; 3 pp. 465-720.

"Insecta borquinenses" a revised annotated check-list of the insects of Porto Rico, with a host plant index by J. L. Otero, WOLCOTT *J. Agric. Univ. P.R.* 20 pp. 1-627 & [3] figs.

COLEOPTERA.

Coleoptera of Cape Verde Is., ALLUAUD *Rev. franç. Ent.* 3 pp. 123-134, 2 figs.

Comparative study of labium of Coleopterous larvae, ANDERSON Smithson. misc. Coll. **95** no. 13, 29 pp. 8 pls.

Aquatic Coleoptera of N. & S. Somersetshire, BALFOUR-BROWNE Trans. Soc. Br. Ent. **3** pp. 129-153.

Aquatic Coleoptera of Mid-Lancashire, BALFOUR-BROWNE Ent. mon. Mag. **72** pp. 249-251.

Coleoptera of Keller district, BARTOSZYNSKI Polsk. Pismo ent. **13** pp. 118-122, 1 chart.

Biology of Canadian beetles, BEAULNE Nat. canad. **63** pp. 158-164.

Rare beetles of Moselle, BERTRAND Bull. Soc. Hist. nat. Moselle (3) **10** 1935 pp. 301-305.

Capture and rearing of larvae of aquatic Coleoptera, BERTRAND Ann. Soc. ent. Fr. **105** pp. 213-238, 1 pl. 44 figs.

Coleoptera of Quebec Province, CHAGNON Nat. canad. **63** pp. 104-112, 201, etc. 37 figs.

List of unrecorded carrion beetles from Korea, CHô Kontyû **10** pp. 155-158.

Additions to catalogue of Belgian Coleoptera, DERENNE & FAGEL Bull. Ann. Soc. ent. Belg. **76** pp. 65-66.

Preliminary list of Coleoptera of Windsor Forest, DONISTHORPE Ent. mon. Mag. **72** pp. 210-267.

Coleoptera new to Seine maritime, DUPREZ Bull. Soc. Sci. nat. Rouen (7) **68-69** 1934 pp. 64-66, 96-97, 105-107, 118-119, 129-131.

List and notes on Suffolk beetles, ELLIOTT Trans. Suffolk Nat. Soc. **3** pp. 121-128.

Additions to catalogue of Belgian Coleoptera, FAGEL & GUILLEAUME Bull. Ann. Soc. ent. Belg. **76** pp. 199-201, 265-269.

Coleoptera of Georgia, II, III, FATTIG Ent. News **47** pp. 15-20, 233-238.

On the beetles of the German coast, FRANCK Ent. Bl. **32** pp. 261-266.

Coleopterous fauna of the Karnischen and Venetian Alps, FRANZ Kol. Rdsch. **22** pp. 230-251.

Catalogue of Coleoptera, Spain and Balearic Is. (contd.), FUENTE Y MORALES Bol. Soc. ent. Esp. **18** pp. 53-68.

Notes on Germar's "Nachträge zu Ahrens Monographie der Rohrkäfer 1811," GÖBCKE Ent. Bl. **32** pp. 103-105.

Additions to catalogue of Belgian Coleoptera, GUILLEAUME Bull. Ann. Soc. ent. Belg. **76** pp. 313-318.

On Danish Coleoptera, HANSEN Ent. Medd. **19** pp. 423-442, 5 figs.

Notes on Finnish Coleoptera, XIV, HELLEN Notul. ent. **16** pp. 33-38.

Water-beetles of the Rhine Province, HORION Decheniana **91** 1935 pp. 178-186.

Studies on German beetles, I, HORION Ent. Bl. **32** pp. 199-206.

Beetle fauna of Rhine Province, Suppl. XVII, HORION ET AL. Ent. Bl. **32** pp. 233-252.

Notes on recently rediscovered Coleoptera in Rumania, HORMUZAKI Ent. Rdsch. **53** pp. 501-506.

Notes on Swedish Coleoptera in Horion "Nachtrag zu Reitter, Fauna Germanica," JANSSON Ent. Bl. **32** pp. 211-220, 1 fig.

Coleoptera of Jämtland, Sweden, JANSSON & PALM Ent. Tidskr. **57** pp. 180-192.

Distributional notes on Utah Coleoptera, II, KNOWLTON J. Kans. ent. Soc. **9** pp. 107-111.

Heteromera of Kurile Is., II, Kôno Ins. mats. **10** pp. 104-106.

Clavicornia of the Kuriles, Kôno Ins. mats. **10** pp. 148-153.

List of Coleoptera from Shibuya and Setagaya, Tokyo, KIJIME Ent. World **4** pp. 868-875.

Annotated list of beetles from Shikoku, Japan, KUSANAGI Ent. World **4** pp. 297-329.

On the Swedish Coleoptera, LINDBERG Notul. ent. **16** pp. 110-122.

Coleopterous fauna of Pjeskejaure in Swedish Lapland, LINDROTH Ark. Zool. **28A** 1935 no. 8, 60 pp. 3 figs.

Water beetles of Bukovina, MARCU Festschr. 60. Geburtst. E. Strand **1** pp. 629-637.

Annotated list of Coleoptera of Calvados, Normandy [contd.], MAZETIER Bull. Soc. linn. Normandie (8) 8 Trav. orig. pp. 121-128.

Additions and corrections to catalogue of French Coleoptera by Sainte-Claire Deville, MÉQUIGNON Bull. Soc. ent. Fr. 41 pp. 210-213.

Coleoptera from Amami Is., MIWA Trans. Kansai ent. Soc. no. 6 1935 pp. 11-30, 2 pls.

List of Coleoptera on Mt. Kongo, Korea, MOCHIZUKI Kontyû 10 pp. 207-213.

List of Coleoptera from Gunzan, Chosen, MORITA Ent. World 4 pp. 852-862.

Catalogue of Coleoptera of Tunisia, NORMAND Bull. Soc. H.n. Afr. N. 27 pp. 81-100.

A study of Palpicornia, d'ORCHY-MONT C.R. Congr. Sci. nat. Bruxelles 1930 1930 pp. 850-855.

List of Palpicornia collected in Spain and Morocco, d'ORCHY-MONT Comment. biol. 5 1935 no. 1 20 pp. 9 figs.

Coleopterous fauna of Klarälven, Sweden, PALM & LINDROTH Ark. Zool. 28A no. 19, 42 pp. 7 figs.

List, composition, evolution and ecology of Coleoptera of Yeu I., Vendée, PAULIAN Bull. Soc. Sci. nat. Ouest (5) 4 1935 pp. 99-150.

Fourteenth addition to supplement of "Coleoptera Neerlandica III," RECLAIRE & VAN DER WIEL Ent. Ber. 9 pp. 228-239.

Some Coleoptera from Indo-China, REYMOND Misc. Ent. 37 pp. 1-4.

Coleoptera of Lesser Carpathians, ROUBAL Ent. Rdsch. 54 pp. 33-36.

Analytical Coleopterous notes, SEMENOV-TIAN-SHANSKIĖ Rev. Ent. U.R.S.S. 25 1935 pp. 271-281.

Notes on Mälselv Coleoptera, STRAND Norsk ent. Tidsskr. 4 pp. 106-109.

Continuation of list of boreoalpine Coleoptera, SZEKESSY Mat. Term. Ért. 54 pp. 918-922.

List of Coleoptera on Oze and Oku-Nikkô (1), TAKAGI Kontyû 10 pp. 189-206.

Coleoptera of Auvergne, TEILHARD DE CHARDIN Bull. Soc. H.n. Auvergne 3 1923 21 1933; Rev. Sci. nat. Auvergne 1 1935 pp. 111-113.

Coleoptera of Gironde, TEMPÈRE Proc.-verb. Soc. linn. Bordeaux 86 1935 pp. 82-101.

Coleoptera of the neighbourhood of Przemyśl, TRELLA Polsk. Pismo ent. 13 pp. 85-97, 4 figs.

Coleoptera of Canaries and Madeira in Mus. Pietro Rossi, UYTENBOOGAART Pubbl. Mus. ent. Pietro Rossi 1.

List of Coleoptera varr. in Isle of Wight, WEST Proc. I. o. W. n.H. Soc. 2 pp. 476-482.

Danish Coleoptera, III, WEST Ent. Medd. 19 pp. 452-464.

Biology of water-loving Coleoptera in Hawaii, WILLIAMS Proc. Hawaii. ent. Soc. 9 pp. 236-273 figs.

CICINDELIDAE.

Key to Cicindelidae of Singapore I., DOVER Malayan Nat. 2 1928 pp. 39-42, 1 pl.

Catalogue of Cicindelidae of Madagascar, HORN Mém. Acad. Malgache 20 1934 pp. 1-30, 23 figs.

Cicindelids of Br. Guiana, HORN Boll. Soc. ent. ital. 63 p. 143, 1 fig.

Cicindelidae of Rhodesia, HORN Boll. Soc. ent. ital. 63 p. 144.

Cicindelidae of Omo, HORN Mém. Mus. H.n. Paris 4 pp. 133-135.

Cicindelidae of Jehol, KANÔ Rep. First sci. Exped. Manchoukuo (5) 1 pt. x art. 38, 6 pp. 3 pls.

Cicindelidae of Nebraska, MESERVE Ent. News 47 pp. 270-275.

Revision and biology of Cicindelidae of Madagascar, OLSOUFIEFF Mém. Acad. malgache 20 1934 pp. 31-76, 1 map, 3 pls. 27 figs.

Cicindela serieguttata sp. n. Madagascar p. 28 fig., HORN Mém. Acad. malgache 20 1934.—*C. disjuncta* var. n. *nigrita* p. 60; *equestris* subspp. n. *interrupta*, *albosinuata* p. 64; *rugicollis* var. n. *humeralis* p. 66, Madagascar figs., OLSOUFIEFF Mém. Acad. malgache 20 1934.—*C. viridiflavescens* subspp. n. *originalis* Haiti p. 23, HORN Ent. Bl. 32.—*C. flexuosa* ab. n. *benoitii* Egypt p. 64, LOTTE Misc. ent. 37.—*C. plutonica*

characters p. 123 (with *subsp. n. leachi* California p. 124), CAZIER Pan-Pacific Ent. 12.—*C. lunulata* var. *bogdanovi* n. n. for *lunulata* F.-W. nec F. p. 138, LUČNIK Folia zool. hydrobiol. 9.—*C. gallica* ab. n. *posticejuncta* Italy p. 21, PIC Echange 52.—*C. soluta* & rr. pp. 117–119 figs., MANDL Kol. Rdsch. 22.—*C.* revision of *hybrida* group, Palaearctic pp. 5–32, rr. n. *iberica*, *lusitanica*, *majalis* p. 7, *pseudoriparia* p. 8 Palaearctic; *coerulea* r. n. *selengensis* Selengatal p. 12; *maritima* r. n. *kirgisica* Russia p. 28 figs., MANDL Arb. morph. taxon. Ent. Berl. 3.

Grandopronotalia subgen. n. see *Prothyma*.

Odontochila hamulipennis sp. n. Columbia p. 76 fig., HORN Rev. chil. H.n. 37 1933.

Pogonostoma gladiator sp. n. Madagascar p. 21 fig., HORN Mém. Acad. malgache 20 1934.

Prepusa ventralis subsp. n. *obscuriventris* Amazon p. 77, HORN Rev. chil. H.n. 37 1933.

Prothyma pseudotrimaculata p. 22, *centropunctata* p. 23, *speculifera* p. 27 spp. n.; *flagellicornis* subsp. n. *rectipennis* p. 21; *viridicyanea* subspp. n. *natalia* p. 23, *subtilevelutina* p. 24; *biguttula* subspp. n. *tricolorata*, *marginemaculata* p. 25, Madagascar figs., HORN Mém. Acad. malgache 20 1934.—*P. Walterhornia* subgen. n. p. 50, OLSOUFIEFF t.c.—*P. (Grandopronotalia* subgen. n.) *browni* sp. n. N.W. Australia p. 22 fig., HORN Ent. Bl. 32.

Walterhornia subgen. n. see *Prothyma*.

CARABIDAE.

Carabidae of forest of Rennes, ABBAYES Bull. Soc. sci. Bretagne 9 1932 pp. 24–25.

Carabidae of Moselle, BERNARD Bull. Soc. Hist. nat. Moselle (3) 10 1935 pp. 267–270.

Catalogue of Carabidae of Belgian Congo, II, BURGEON Ann. Mus. Congo Belge, Zool. (3) Sect. ii 2.

Variation and atrophy of flying wings of some Carabid beetles, DARLINGTON Ann. ent. Soc. Amer. 29 pp. 136–179, 3 pls.

Classification of Carabini and Harpalinae piliferae, van EMDEN Ent. Bl. 32 pp. 12–17, 41–52, 11 figs.

Carabidae of Jehol, KANÔ Rep. First sci. Exped. Manchoukuo (5) 1 pt. x art. 39, 7 pp. 1 pl.

Synonymy of Carabidae, V, LUČNIK Acta Soc. ent. Cech. 33 pp. 176–177.

Carabidae of Anapa, Caucasus, LUČNIK Folia zool. hydrobiol. 9 pp. 138–142.

Some Carabids from the Pyrenees, PUISSEUR Misc. ent. 37 pp. 109–111.

Types of Australian Platysmatini in Castelnau's collection at Genoa Museum, STRANEO Ann. Mus. Genova 59 pp. 246–259.

Abacetus aleši sp. n. Luzon p. 51, JEDLIČKA Ent. NachrBl. 10.—*A. furax* sp. n. Java p. 314 (10) 17; *antiquus* Dej. (= *placidulus* Wlk.) p. 65 (10) 18, ANDREWES Ann. Mag. n.H.

Acupalpus nesophilus, *rhombotus* spp. n. Java p. 219, ANDREWES Treubia 15.—*A. congoensis* p. 297, *kivuensis*, *fenestratus* p. 298, *schoutedeni* p. 300, *ruwenzoricus* p. 301, *motoensis* p. 302, *overlaeti*, *bequaerti* p. 203, spp. n. Belgian Congo, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Agonum laetificum sp. n. Haiti p. 200, DARLINGTON Psyche 42 1935.—*A. sexpunctatum* chromatic variation pp. 138–140, GAGLIARDI Boll. Soc. ent. ital. 67 1935.—*A. kikuyu* p. 78, *alluaudi* (with subsp. n. *ericarum*) p. 80, *cratericola*, *chappuisi* p. 81, *marakwetianum* p. 82, *hyporobium*, *elgonense* p. 83, *brunneipenne* p. 84, *babaulti* p. 86, *sculptipenne*, *kitaleanum* p. 87, spp. n. Kenya figs., BURGEON Miss. scient. Omo 2 1935.

Allocota aërata see *Physodera cupreomicans*.

Amara gattefossei p. 66, *liouvillei* p. 67, *notha* p. 69, spp. n. Grand Atlas, ANTOINE Bull. Soc. Sci. nat. Maroc 16.—*A. kodymi* p. 4, *tockocœnsis* p. 5, spp. n. Prague, JEDLIČKA Acta Soc. ent. Čsl. 33.—*A. tartariae* Bates (= *kličkai* Jedl.) p. 64, ANDREWES Ann. Mag. n. H. (10) 18.

Amblystomus levantinus subsp. n. *laevistriatus* Egypt p. 70, SCHATZMAYR Pubbl. Mus. ent. Pietro Rossi 1.—*A. sloanei* n. n. for *convexus* Sloane nec Macl. p. 64, ANDREWES Ann. Mag. n.H. (10) 18.

Amolops see *Amolopsa*.

Amolopsa n. n. for *Amolops* Tschit. nec Cope p. 168, STRAND Folia zool. hydrobiol. 9.

Anatrichis nigra sp. n. Manila p. 29, JEDLIČKA Acta Soc. ent. Čsl. 33.

Anchotrechus cabrerai sp. n. Canaries p. 14 figs., JEANNEL Rev. franç. Ent. 3.

Ancus cariniceps sp. n. Java p. 212, ANDREWES Treubia 15.

Anillus olisipensis sp. n. Portugal p. 327, SCHATZMAYR Pubbl. Mus. ent. Pietro Rossi 1.

Anisodactylus uelensis p. 269, colmanti p. 270, kapangae, overlaeti p. 273 spp. n.; *moestus* subsp. n. *bicoloripes* p. 271 Belgian Congo figs., BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Anoncopeucus abyssinicus Abyssinia p. 208, *bayeri* Kenya, *congoensis* Belgian Congo p. 210, spp. n., BURGEON Bull. Ann. Soc. ent. Belg. 76.

Anophthalmus revision pp. 183–225 *scopolii* subsp. n. *matariurensis* p. 193; *hirtus* subsp. n. *confusus* p. 216; *micklitzi* subsp. n. *sontiacus* p. 221 N. Italy figs., MÜLLER Atti Mus. Stor. nat. Trieste 12 1935.

Anoplogenus philippinus sp. n. Manila p. 17, JEDLIČKA Acta Soc. ent. Čsl. 33.—*A. seyrigi* sp. n.; *madagascariensis* subsp. n. *borealis* p. 5 Madagascar, ALLUAUD Afra no. 12.

Anthraxus similis var. n. *littoreus* France p. 23, JACQUET Misc. ent. 37.—*A. coloratus* p. 100, *punctatus* p. 135, spp. n. Manila, JEDLIČKA Acta Soc. ent. Čsl. 33.

Apenes apterus Jamaica p. 209, *ovalis* Haiti p. 210, spp. n., DARLINGTON Psyche 42 1935.—*A. ovipennis* sp. n. Argentina p. 300, LIEBKE Rev. Ent. Rio de J. 6.

Aphaon bischoffinus sp. n. p. 168; *latifianus* ab. n. *nigripes* p. 168; *malissorum* ab. n. *munella* p. 169 Balkans, JEDLIČKA Acta Soc. ent. Cech. 33.

Apristus arrowi sp. n. Mindanao p. 3, JEDLIČKA t.c.

Apseudonemus gen. n., *catalai* sp. n. Madagascar p. 4, ALLUAUD Afra no. 11.

Ardistomis alticola sp. n. Haiti p. 173, DARLINGTON Psyche 42 1935.

Arctaeoncus subgen. n. see *Lachnophorus*.

Argutor tarsalis morphology p. 59, PATER Misc. ent. 37.

Arhytinus piceus, *irideus*, *philippinus* p. 54, *minimus* p. 55, spp. n. Philippines, JEDLIČKA Ent. NachrBl. 10.

Aulacoryssus pulchellus subsp. n. *luteoapicalis*, *pallidior* Belgian Congo p. 292, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Azinotoma maynei sp. n. Belgian Congo p. 277, BURGEON t.c.

Axylosius subgen. n. see *Lachnophorus*.

Badister caviceps sp. n. Java p. 312, ANDREWES Ann. Mag. n.H. (10) 17.

Bembidion (*Bembidium*) *andreae* subsp. n. *albanicum* Albania p. 152, MÜLLER Boll. Soc. ent. ital. 67 1935.—*B. decorum* distribution & rr. p. 21; *saxatile* rr. p. 125, MEYER Ent. Bl. 32.—*B. liparum* n. n. for *lissonotum* Andr. nec Bates p. 64, ANDREWES Ann. Mag. n.H. (10) 18.—*B. genei* subsp. n. *vseteckai* Syria p. 153, MARAN Acta Soc. ent. Cech. 33.—*B. sutschanense* sp. n. Ussuri p. 163, JEDLIČKA t.c.—*B. pygmaeum* subsp. *bilunulatum* f. n. *caeruleoviridis* Czechoslovakia p. 197, ROUBAL Sborn. ent. odd. Nár. Mus. Praze 14.—*B. discordans* p. 89, *irregularare* p. 90, *sillemi* p. 92, *caporiaccoi* p. 99, (*Thaumatoperphus* subgen. n.) *ajmonis* p. 95, spp. n.; *gagates* subsp. n. *sindicum* p. 97, Karakorum fig., NETOLITZKY Atti Mus. Stor. nat. Trieste 12 1935.—*B. niloticum* ab. n. *immaculatum* p. 44; *callosum* subsp. n. *moses* p. 48, SCHATZMAYR Pubbl. Mus. ent. Pietro Rossi 1.

Brachinus dryas n. n. for *stenomus* Andr. nec Chaud. p. 65, ANDREWES Ann. Mag. n.H. (10) 18.

Bradybaenus puncticollis sp. n. Belgian Congo p. 275, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Bradycellus key, catalogue of Belgian spp. pp. 67–68, FÄGEL Bull. Ann. Soc. ent. Belg. 76.—*B. selleanus* sp. n. Haiti p. 204, DARLINGTON Psyche 42 1935.

Brososoma baldense genitalia p. 228; *pasubianum* p. 229, *relictum* p. 230 spp. n. Alps figs., WIESSMÄNDL Kol. Rdsch. 21.

Calathus ravisinii sp. n. Albania p. 152, MÜLLER Boll. Soc. ent. ital. 57 1935.

Calleida turrialbae Costa Rica p. 128, *feana*, *cupreolimbata* Argentina p. 301, spp. n., LIEBKE Rev. Ent. Rio de J. 6.

Callistomimus trichos sp. n. Java p. 215, ANDREWES Treubia 15.—*C. pernix* sp. n. Ceylon p. 203, ANDREWES Spolia zeylan. 19.—*C. vadoni* sp. n. Madagascar p. 3, ALLUAUD Afr. no. 11.

Carabus monograph pt. 6 pp. 1123–1360, *violaceus* abb. n. *europae*, *pseudopurpurascens* p. 1244, *uriensis* p. 1248, *pedemontanensis* p. 1253, *styriensis* p. 1257; *v. neesi* ab. n. *bunderi* p. 1258; *croaticus* ab. n. *leonhardiana* p. 1289; *stroganowi* ab. n. *tiedemanni* p. 1305; *spinolae* ab. n. *singanensis* p. 1348, Europe, BREUNING Bestimm.-Tab. europ. Col. Heft 109 1935.—*C. Rhenish* spp. pp. 171–176, HENSELER Decheniana 92 1935.—*C. problematicus* subsp. n. *alluaudi* France p. 18, COLAS Misc. ent. 37.—*C. solieri* subsp. n. *bonneti* S. France p. 178 fig., COLAS Bull. Soc. ent. Fr. 41.—*C. punctato-auratus* rr. p. 25–27, var. n. *bouisseti* France p. 37, BARTHE Misc. ent. 37.—*C. punctato-auratus* var. *kricheldorfii* (= *andronensis*) p. 58, VENET t.c.—*C. violaceus* var. n. *ottonis* Norway p. 20, CSIKI Rovart. Lap., Budapest 16 1909.—*C. obsoletus* subsp. n. *tippmanni* Carpathians p. 325; *cavernosus* subsp. n. *sterbai* Balkans p. 326, BREUNING Festschr. E. Strand 1.

Catascopus African spp. pp. 77–81 figs., BURGEON Bull. Ann. Soc. ent. Belg. 76.

Ceroglossus gloriosus ab. n. *debilicostis* p. 74; *chilensis* var. n. *victoriensis* p. 75 Chile, DALLAS Rev. chil. H.n. 37 1933.—*C. chilensis* variation p. 155, RUIZ PEREIRA Comun. Mus. Concepción 1 1936 no. 8.

Chlaeminus kedirensis sp. n. Java p. 220, ANDREWES Treubia 15.—*C. tetrastictus* sp. n. Java p. 313, ANDREWES Ann. Mag. n.H. (10) 17.

Chlaenius louwerensii sp. n. Java p. 311, ANDREWES t.c.—*C. aeneocephalus* subsp. n. *judaus* Syria, abb. n. *subgracilis* Trans-Caucasia p. 63, *viridiceps* Rome, *camarguensis* Camargue p. 64, PUEL Misc. Ent. 37.—*C. jamaicae* sp. n. Jamaica p. 201, DARLINGTON Psyche 42 1935.—*C. philemon* sp. n. Java p. 216, ANDREWES Treubia 15.

Chrysocarabus solieri French rr. pp. 271–272, var. n. *vesubiensis* France p. 272, PONCETON & REYMOND Bull. Soc. ent. Fr. 40.

Clivina ephippiata varr. n. *picina* p. 211, *flavida* p. 212 Java, ANDREWES Treubia 15.—*C. kochi*, *tutancamon* spp. n. Egypt p. 30, SCHATZMAYER Pubb. Mus. ent. Pietro Rossi 1.—*C. ateuiches* sp. n. Java p. 308, ANDREWES Ann. Mag. n.H. (10) 17.

Colliuris cyanauges sp. n. Semarang p. 315, ANDREWES t.c.—*C. bruchi* sp. n. Argentina p. 300, LIEBKE Rev. Ent. Rio de J. 6.

Colpodes key to Greater Antillean spp. p. 182, *faber* p. 185, *subovalis* p. 186, *punctus* p. 195, *bruesi* p. 196, *latelytra* p. 199 Jamaica, *agonellus* p. 187, *pavens*, *marcus* p. 188, *wolla* p. 189, *amone* p. 190, *christophe* p. 191, *cychrinus*, *subcordens* p. 192, *tipoto* p. 193, *constricticeps* p. 194, *visitor* p. 196, *altifluminis* p. 198 Haiti, *baragua* Cuba p. 197, spp. n., DARLINGTON Psyche 42 1935.—*C. falli* sp. n. Arizona p. 152, DARLINGTON Bull. Brooklyn ent. Soc. 31.—*C.* key p. 48, *aequatus*, *picescens* p. 49, *piceoniger*, *depressus*, *minor* p. 50, *bembidioides* p. 51, spp. n. Japan, JEDLIČKA Acta Soc. ent. Čsl. 33.—*C. overbecki* p. 269, *gracilipennis* p. 271, *dilatipennis* p. 275, *wegeneri* p. 276 spp. n.; *modiglianii* subsp. n. *hexagonus* p. 270; *nigellus* subsp. n. *laticeps* p. 273 Java, van EMDEN Arb. morph. tax. Ent. Berl. 3.

Coptodera posticula p. 7, *seyrigi*, *hova* p. 8, *chloroptera* p. 9, *lampra* p. 10, spp. n. Madagascar figs., ALLUAUD Afr. no. 12.

Coptolobus ater sp. n. Ceylon p. 201, ANDREWES Spolia zeylan. 19.

Cosmodiscus rufolimbatus sp. n. Mindanao p. 103, JEDLIČKA Acta Soc. ent. Čsl. 33.

Cteatus gen. n. p. 301, *bruchi* sp. n. Argentina p. 302, LIEBKE Rev. Ent. Rio de J. 6.

Cymindis rhaticus sp. n. Grand Atlas p. 70, ANTOINE Bull. Soc. Sci. nat. Maroc 16.—*C. chaoyangensis* sp. n. Jehol p. 6 fig., KANÔ First sci. Exp. Manchoukuo (5) 1 pt. x art. 39.

Deltomerus paradoxus subsp. n. *korabensis* Albania p. 108 figs., MÜLLER Ent. NachrBl. 10.—*D. stenomus* sp. n. Sikkim p. 61, ANDREWES Ann. Mag. n.H. (10) 18.

Desera key to Indian spp. p. 136, ANDREWES Proc. R. ent. Soc. Lond. (B) 5.

Diatypus ruwenzoricus, *kivuensis* spp. n. Belgian Congo p. 268, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Dichirotrichus punicus subsp. n. *aegyptiacus* Egypt p. 80, SCHATZMAYER Pubb. Mus. ent. Pietro Rossi 1.

Dicranoncus ganodes sp. n. Java p. 221, ANDREWES Treubia 15.—*D. ravus* sp. n. Ceylon p. 205, ANDREWES Spolia zeylan. 19.

Diplochila laevigotoides sp. n. Manila p. 92, JEDLIČKA Acta Soc. ent. Čsl. 33.

Dischissus formaster sp. n. Java p. 216, ANDREWES Treubia 15.

Disenochus munroi sp. n. Hawaii p. 177, PERKINS Ent. mon. Mag. 72.

Dolichus key to Palaearctic spp., *rufithorax* (with *ab. n. pictus*) Szetchuan, *coreicus* Korea p. 31 spp. n.; *viduus abb. n. triangularis*, *brunneipennis* Yunnan; *phaeopus ab. n. limbatus* Szetchuan p. 32, JEDLIČKA Acta Soc. ent. Čsl. 33.

Drypta key to Indian spp. p. 134, *aetheria* Assam p. 135, *cyanopa* Bengal p. 136, spp. n., ANDREWES Proc. R. Ent. Soc. Lond. (B) 5.

Duvallius groubei sp. n. Morocco p. 234 figs., ANTOINE Bull. Soc. Sci. nat. Maroc 15.—*D. microphthalmus* subsp. n. *humi* Czechoslovakia p. 196, ROUBAL Rev. franç. Ent. 2.—*D. philippensis*, *pruinosis* Greece, Macedonia p. 231, *dolops* Greece p. 232, spp. n. figs., JEANNEL op. cit. 3.—*D. cartolarii* sp. n. Italy p. 173 figs., POMINI Boll. Soc. ent. ital. 68.—*D. regis-zogui* p. 46, *bischoffi* p. 48, spp. n. S. Albania figs., MESCHNIGG Kol. Rdsch. 22.

Dyschirius numidicus subsp. n. *heyrovskyi* Syria p. 153, MARAN Acta Soc. ent. Cech. 33.—*D. heinrichi* p. 32, *aida* p. 34 spp. n.; *minutus* subsp. n. *aegyptiacus* p. 33 Egypt, SCHATZMAYER Pubb. Mus. ent. Pietro Rossi 1.—*D. laeviceps* sp. n. Java p. 212, ANDREWES Treubia 15.—*D. arotus* p. 1, *opistholius* p. 2, spp. n. Madagascar, ALLUAUD Afra no. 11.—*D. rugifrons* Java p. 309 (10) 18, *stellula* United Provinces p. 59 (10) 18, spp. n., ANDREWES Ann. Mag. n.H.

Dyschromus tiburonicus sp. n. Haiti p. 179, DARLINGTON Psyche 42 1935.

Elaphrus lapponicus var. n. *violaceus* no locality p. 176, LUČNIK Acta Soc. ent. Cech. 33.

Epikastea gen. n., *limonae* sp. n. Costa Rica p. 125, LIEBKE Rev. Ent. Rio de J. 6.

Erephognathus margarithrix sp. n. Madagascar p. 12; *caerulescens* Fairm. (= *Glycia xiphogenius* All.), ALLUAUD Afra no. 11.

Ethira gen. n. p. 62, *cometes* sp. n. Kashmir p. 63, ANDREWES Ann. Mag. n.H. (10) 18.

Eucarus haitianus sp. n. Haiti p. 210, DARLINGTON Psyche 42 1935.

Euleptus jeanneli Kenya p. 88, *virens* Abyssinia p. 89, spp. n. fig., BURGEON Miss. sci. Omo 2 1935.

Eunostus (*Xantheunostus* subgen. n.) *chappuisi* sp. n. Ivory Coast p. 17 figs., ALLUAUD Afra no. 11.

Eurygnathella n. n. for *Eurygnathus* Woll. nec Agass. p. 168, STRAND Folia zool. hydrobiol. 9.

Eurygnathus see *Eurygnathella*.

Eurythoracana n. n. for *Eurythorax* Tschit. nec Cope p. 168, STRAND Folia zool. hydrobiol. 9.

Eurythorax see *Eurythoracana*.

Feronia spinicollis morphology pp. 213–217 figs., JEANNEL Livre jubil. Bouvier 1936.

Galerita montana sp. n. Haiti p. 211 DARLINGTON Psyche 42 1935.

Glycia xiphogenius see *Erephognathus caerulescens*.

Haptoderus of France sep. pp. 81–86 *pusillus* subsp. n. *hustacheianus* France sep. p. 82; *amoenus* subsp. n. *arizonensis* Haute-Pyrenees sep. p. 83, PUEL Misc. ent. 37.

Harpalus (*Nesarpax* subgen. n.) p. 125, ALLUAUD Rev. franç. ent. 3.—*H. massarti* sp. n. Belgian Congo p. 274, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.—*H. tardus* var. n. *jacqueti* High Alps p. 58, PUEL Bull. Soc. linn. Lyon (n.s.) 5.—*H.* revision of group *distinguendus* sep. pp. 69–74, PUEL Misc. ent. 37.

Helenaea torre-tasso morphology p. 298 fig., KOCH Bull. Soc. ent. Egypte 20.

Hexagonia castanea sp. n. Philippines p. 55, JEDLIČKA Ent. NachrBl. 10.

Holocoleus melanopus sp. n. Ceylon p. 204, ANDREWES Spolia zeylan. 19.

Holoprizus putzeysi see *Salcedia*.

Holosoma bottcheri sp. n. Mindanao p. 51, JEDLIČKA Ent. NachrBl. 10.

Homophron tessellatum p. 687, americanum p. 691 larvae, pupae figs., SILVEY Pap. Mich. Acad. Sci. 21.—See also *Omophron*.

Hoplodactylella n. n. for *Hoplodactylus* Chaud. nec Fitz. p. 168, STRAND Folia zool. hydrobiol. 9.

Hoplodactylus see *Hoplodactylella*.

Hyparpalus conviva var. n. *nigripes* p. 283, *colmanti* p. 284, *lululensis* p. 287, *congoanus*, *tshibindensis* p. 289, *clivnoides* p. 290, *bequaerti* p. 291 spp. n. Belgian Congo, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Lachnophorus keys to subgen. & spp. (*Aretaeonius*, *Azylosius* subgen. n.) p. 461, *gibbosus* p. 464, *integer* p. 465 Peru, *sabanillae* Colombia, Ecuador, *azureus* Brazil p. 466, *marginatus* Venezuela p. 467, *steinbachi* Bolivia p. 468, spp. n., LIEBKE Rev. Ent. Rio de J. 6.

Laemostenus aegyptiacus sp. n. Egypt p. 88, SCHATZMAYR Pubb. Mus. ent. Pietro Rossi 1.

Lampropogonus subgen. n. see *Pogonus*.

Lebia haitiana p. 205, *nigrita* p. 206, *gibba* p. 207, spp. n. Haiti, DARLINGTON Psyche 42 1935.—*L. leucaspis* sp. n. Ceylon p. 209, ANDREWES Spolia zeylan. 19.—*L. decorsei*, *atsima* p. 8, *seyrigi* p. 9, *omoxantha*, *mirana* p. 10, *tanala*, *vadoni* p. 11, spp. n. Madagascar figs., ALLUAUD Afr. no. 11.—*L. reventazonica*, *hexasticta* Costa Rica p. 127, *bruchii* p. 302 spp. n.; *striata* var. n. *tincta*, *castanea* Argentina p. 303, LIEBKE Rev. Ent. Rio de J. 6.

Leistus rufomarginatus near Paris p. 288, DU BRUNIER Bull. Soc. ent. Fr. 40.—*L. chalcites* sp. n. Sikkim p. 55, ANDREWES Ann. Mag. n.H. (10) 18.

Lesticus planicollis Dej. (= *himalayicus* Redt.) p. 65, ANDREWES t.c.—

L. overbecki p. 277, *brevilabris* p. 279, spp. n. Java, VAN EMDEN Arb. morph. tax. Ent. Berl. 3.

Lia clavata var. n. *cordobana* Argentina p. 304, LIEBKE Rev. Ent. Rio de J. 6.

Licinus lindbergi sp. n. Morocco p. 138, ANTOINE Bull. Soc. ent. Fr. 41.

Limnastes (*Limnastinus* subgen. n.) *sinaiticus* sp. n. Sinai p. 53, SCHATZMAYR Pubb. Mus. ent. Pietro Rossi 1.

Limnastinus subgen. n. see *Limnastes*.

Lophidius sericeus sp. n. Belgian Congo p. 309, BURGEON Ann. Mus. Congo Belge Zool. (3) sect. ii 2.

Loxandrus mutans sp. n. Haiti p. 180, DARLINGTON Psyche 42 1935.

Madecassa apicalis p. 5, *spinipennis*, *spinosa* p. 6, spp. n. Madagascar, ALLUAUD Afr. no. 12.

Mallopelmus gen. n. p. 13, *dactyleuryoides*, *abacetoides* Madagascar, *obesus* Gabun, Kamerun p. 15, *guineensis* Spanish Guinea, *dirotoides*, *strangulatus* Kamerun, *semlikianus* Belgian Congo p. 16, spp. n., ALLUAUD Afr. no. 11.

Mastax louwerensi, *humilis* spp. n. Java p. 223, ANDREWES Treubia 15.

Metabletus bifasciatus, *andrewesi* p. 24, *arrowi*, *philippinus* p. 25, spp. n. Philippines, JEDLIČKA Acta Soc. ent. Čsl. 33.

Microcosmodes n. n. for *Microcosmus* Chaud. nec Heller p. 169, STRAND Folia zool. hydrobiol. 9.

Microcosmus marakwetianus p. 139, *cheranganensis* p. 140, spp. n. Kenya, BURGEON Mém. Mus. H.n. Paris 4.—See *Microcosmodes*.

Microlestes ater sp. n. Java p. 317, ANDREWES Ann. Mag. n.H. (10) 17.

Microus sphaeridioides sp. n. Belgian Congo p. 306, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Molops winklerianus sp. n.; *apfelbecki* subsp. n. *visitorensis* p. 103; *curtulus* subsp. n. *corallipes*; *parnassicola* subsp. n. *weiratheri* p. 105, *valonensis*; *spartanus* subsp. n. *cephallenicus*; *dilatatus* subsp. n. *angulicollis* p. 105; *austriacus* subsp. n. *truncato-dentatus* p. 106 Balkans, MÜLLER Ent. NachrBl. 10.

Morphocarabus monilis morphology, discussed pp. 206-211 fig., HENSELER Ent. Bl. 32.

Nannotrechus psidicus sp. n. Asia Minor p. 230 fig., JEANNEL Rev. franç. Ent. 3.

Nebria N. African spp. pp. 319-325, key p. 321, DE PEYERIMHOFF Bull. Soc. H. n. Afr. N. 27.—*N. zayula* Tibet p. 56, *rasa* Sikkim p. 47, spp. n., ANDREWES Ann. Mag. n.H. (10) 18.—*N. lafresnayi* r. n. *schulleri* Pyrenees p. 11; corrected to *l. schuleri* p. 58, JACQUET Bull. Soc. linn. Lyon (n.s.) 5.

Neohaptoderus key to Chinese spp. p. 52, *komalus*, *jurečki* p. 53, *orestes* p. 54, spp. n. China, JEDLIČKA Ent. Nachr. Bl. 10.

Neotrechus bischoffi sp. n. N. Albania p. 44 fig., MESCHNIGG Kol. Rdsch. 22.—*N. dalmatinus* subsp. n. *pretneri* Montenegro p. 226; *lonae* subsp. *atavus* notes p. 227, subsp. n. *shkodrensis* Skutari p. 228 figs., SCHIEBEL Kol. Rdsch. 22.

Nesarpax subgen. n. see *Harpalus*.

Omophron limbatum morphology sep. pp. 34-37, RAYNAUD Misc. Ent. 37.—*O. (Phrator)* geographical distribution pp. 37-38, ALLUAUD C.R. Soc. Biogéogr. 12 1935.—See also *Homophron*.

Omphreoides distinctus sp. n. Madagascar p. 3, ALLUAUD Afra no. 11.

Oodes decorsei sp. n. Madagascar p. 2, ALLUAUD Afra no. 11.—*O. infimus* sp. n. Java p. 218, ANDREWES Treubia 15.—*O. aleksi* sp. n. Luzon p. 66, JEDLIČKA Acta Soc. ent. Čsl. 33.

Ophonus revision of Belgian spp. pp. 131-141, key p. 132 figs., FAGEL Bull. Ann. Soc. ent. Belg. 76.

Orthogonius lieftincki sp. n. Java p. 222, ANDREWES Treubia 15.

Pachytrachelus gerardi sp. n. Belgian Congo p. 304 fig., BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Patrobis excavatus var. n. *danihelkai* Carpathians p. 177, MARAN Acta Soc. ent. Cech. 33.

Pentagonica flavipes subsp. n. *picipes* Greater Antilles (except Cuba) p. 211, DARLINGTON Psyche 42 1935.

Pephrica gen. n., *trimaculata* sp. n. Madagascar p. 6, ALLUAUD Afra no. 11.

Pericalus undatus var. n. *signatus* Philippines p. 25, JEDLIČKA Acta Soc. ent. Čsl. 33.

Perigona obscurata, *prasina* p. 1, *bembidioides*, *heterodera* p. 2, *plesia* p. 3, spp. n. Madagascar, ALLUAUD Afra no. 12.—*P. rubida* sp. n. Java p. 211, ANDREWES Treubia 15.

Perigonillus gen. n. p. 70, *endogaeus* sp. n. Mt. Elgon p. 72 figs., JEANNEL Miss. sci. Omo 2 1935.

Perileptus shakletoni sp. n. Kenya p. 30; *africanus* subsp. n. *aethiopicus* Abyssinia p. 31 fig., JEANNEL t.c.—*P. dentifer* Haiti, Porto Rico p. 177, *minutus* Jamaica, Haiti p. 178, spp. n., DARLINGTON Psyche 42 1935.

Peronomerus xanthopus sp. n. Java p. 217, ANDREWES Treubia 15.

Pheropsophus dilatatus sp. n. Ashanti p. 212, BURGEON Bull. Ann. Soc. ent. Belg. 76.

Phloeoxena montana sp. n. Haiti p. 208, DARLINGTON Psyche 42 1935.

Physodera cupreomicans Oberth. (= *Allocota aërata* Bates) p. 65, ANDREWES Ann. Mag. n.H. (10) 18.

Planetes minimus sp. n. Luzon p. 69, JEDLIČKA Acta Soc. ent. Čsl. 33.

Platycarabus creutzeri, *depressus* morphology and distribution compared pp. 64-66, POMINI Atti Soc. ital. Sci. nat. 75.

Platymetopus major p. 279, *quadrinotatus*, *rectangularis* p. 280, spp. n. Belgian Congo, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Platynus asper sp. n. Yunnan p. 17, JEDLIČKA Acta Soc. ent. Čsl. 33.

Platysma Palaearctic spp. pp. 145-157, key p. 150, *mulleri* Korea p. 152, *extensoides* Albania p. 155 figs., STRANEO Ann. Mus. Genova 59.

Platytarus compsus sp. n. Java p. 31, ANDREWES Ann. Mag. n.H. (10) 17.

Plocamotrechus unisetosus p. 36, *chappuisi* p. 38, *kinangopinus* p. 37, *altipeta* p. 40, spp. n. Kenya figs., JEANNEL Miss. sci. Omo 2 1935.

Poecilothais madecassa sp. n. Madagascar p. 7, ALLUAUD Afra no. 11.

Pogonodaptus rostratus sp. n. Haiti p. 204, DARLINGTON Psyche 42 1935.

Pogonus (*Lampropogonus* subgen. n.)
pueli China p. 267, *turkestanicus*
 Turkestan p. 268 spp. n.; *meridionalis*
 ab. n. *indebitus* Camargue p. 267,
 LUČNIK Rev. Ent. U.R.S.S. 25 1935.

Pseudaptinus marginicollis subsp. n.
fumipes Haiti p. 212, DARLINGTON
 Psyche 42 1935.—*P. schmidtii*, never-
 manni spp. n. Costa Rica p. 126,
 LIEBKE Rev. Ent. Rio de J. 6.

Pseudodiachipteryx gen. n. p. 277,
expansipennis sp. n. Belgian Congo
 p. 278, BURGEON Ann. Mus. Congo Belge
 Zool. (3) Sect. ii 2.

Pseudomorpha caribbeana sp. n. Haiti
 p. 214, DARLINGTON Psyche 42 1935.

Psilus validus sp. n. Ceylon p. 202,
 ANDREWES Spolia zeylan. 19.

Pterostichus barlensis p. 98, *euxinus*
 p. 100, spp. n. Asia Minor, STRANEO
 Boll. Soc. ent. ital. 67 1935.—*P.*
latifianus subsp. n. *strupii* Albania
 p. 156, MÜLLER t.c.—*P. koyi* var. n.
brutius Abruzzi p. 61, STRANEO Mem.
 Soc. ent. ital. 14 1935.—*P. andreinii*
 var. n. *alzonae* Italy p. 64, BINAGHI
 t.c.—*P. arizonicus* re-description p. 150
 fig., DARLINGTON Bull. Brooklyn Ent.
 Soc. 31.—*P. tuberculo-femoratus* p. 701,
ecarinatus p. 702, *infernalis* p. 705,
idahoensis p. 706, spp. n. U.S.A., HATCH
 Ann. ent. Soc. Amer. 29.—*P. arrowi*
 Yunnan p. 133, *tachongi* China p. 156,
 spp. n., JEDLIČKA Acta Soc. ent. Csl. 33.

Reicheia usslaubi subsp. n. *picena*
 p. 51; *minima*, *pennina* spp. n. p. 53
 Italy figs., BINAGHI Boll. Soc. ent. ital.
 68.

Risophilus oryctus, *trigonus* p. 207,
levipennis p. 208, spp. n. Ceylon,
 ANDREWES Spolia zeylan. 19.

Salcedia miranda Andr. from *Zelma*;
putzeysi Oberth. from *Holoprizus* p. 64,
 ANDREWES Ann. Mag. n.H. (10) 18.

Scaphinotus review of subgen.
Nomaretus pp. 37–43, key p. 39, *liebecki*
 sp. n. Texas p. 40 figs., VAN DYKE Bull.
 Brooklyn ent. Soc. 31.

Scarites sinaiticus sp. n. Sinai p. 28,
 SCHATZMAYR Pubbl. Mus. ent. Pietro
 Rossi 1.—*S. trachydermon* sp. n. Assam
 Frontier p. 58, ANDREWES Ann. Mag.
 n.H. (10) 18.—*S. jeanneli* p. 93, *alluaudi*
 p. 94, *elgonensis* p. 95 spp. n.; *hutchinsi*
 subsp. n. *marakwetensis* p. 96 Kenya
 figs., BÄNNINGER Miss. sci. Omo 2 1935.

Scotodipnus tismanae S.W. Car-
 pathians, *meschniggi* Greece spp. n. p.
 232, WINKLER Kol. Rdsch. 21.—*S.* key
 to spp. of subgen. *Scotodipnus* p. 81,
glaber subsp. n. *hypocrita* Italy p. 90
 figs., BINAGHI Boll. Soc. ent. ital. 68.—
S. menozzii sp. n. Rhode I. p. 327,
 SCHATZMAYR Pubbl. Mus. ent. Pietro
 Rossi 1.

Selenophorus flavilabris subsp. n.
cubanus Cuba p. 203, DARLINGTON
 Psyche 42 1935.

Siagona insulana sp. n. Java p. 307,
 ANDREWES Ann. Mag. n.H. (10) 17.

Siopelus crassicornis p. 294, *maynei*
 p. 295, spp. n. Belgian Congo, BURGEON
 Ann. Mus. Congo Belge Zool. (3) Sect. ii
 2.

Somoplatus fusciceps p. 307 (with
 subsp. n. *septentrionalis*), *elongatus*,
multisetosus p. 308 (with var. n.
kuntzeni) p. 309, spp. n. Belgian Congo
 figs., BURGEON t.c.

Sphaerotachys Muell. (= *Trepano-*
tachys All.) p. 20, ALLUAUD Afra no. 11.

Stenidia bicolor sp. n. Madagascar
 p. 7, ALLUAUD Afra no. 12.

Steniridia ecological rr. discussed
 p. 223; *andrewsi* subsp. n. *nantahalae*
 p. 228, *saludae* p. 229, *barksdalei* p. 230
 N. Carolina figs., VALENTINE J. Elisha
 Mitchell sci. Soc. 52.

Stenocrepis palustris sp. n. Jamaica
 p. 202, DARLINGTON Psyche 42 1935.

Stenomorphus characters p. 33, key
 p. 36, *penicillatus* p. 36, *sinaloae* Mexico,
alius Venezuela p. 37, *brasilensis*
 Brazil p. 38 spp. n.; *californicus* hetero-
 gony p. 39 figs., DARLINGTON Pan-
 Pacific Ent. 12.

Steropus madidus varr. *concinus* sep.
 p. 44, *validus* p. 46 larvae, RAYNAUD
 Misc. Ent. 37.

Tachys noctis p. 174, *tritax* p. 175
 Haiti, *carib* Haiti, Cuba, Jamaica,
 Porto Rico p. 176, *trechulus* Jamaica
 p. 177, spp. n., DARLINGTON Psyche 42
 1935.—*T. octostriatus* sp. n. Karakorum
 p. 100, NETOLITZKY Atti Mus. Stor.
 nat. Trieste 12 1935.—*T. sinaiticus*
 sp. n. Sinai p. 55, SCHATZMAYR Pubbl.
 Mus. ent. Pietro Rossi 1.—*T. venustus*
 p. 213, *lembodes* p. 214, spp. n. Java,
 ANDREWES Treubia 15.—*T. leptaulax*
 p. 3, *hydraenoides*, *granum*, *pachys* p. 4,
 spp. n. Madagascar, ALLUAUD Afra no.

12.—*T. prionotus* p. 310, *particula* p. 311, spp. n. Java, ANDREWES Ann. Mag. n.H. (10) 17.—*T. termiticola* sp. n. Java p. 188, ANDREWES Natuurh. Maandbl. 25.

Tapinopterus aetolicus subsp. n. *tomoriensis* Albania p. 153, MÜLLER Boll. Soc. ent. ital. 67 1935.—*T. kaufmanni* rr. n. *transsylvanicus* Transsylvania p. 103, *winkleri* Serbia, Bulgaria p. 104, *schuberti* Balkans p. 106 figs., MANDL Mitt. naturw. Inst. Sofia 9.—*T. extensoides* Albania, *cyrrilli* Greece spp. n. p. 169, JEDLIČKA Acta Soc. ent. Cech. 33.—*T. bischoffi* sp. n. N. Albania p. 106, MÜLLER Ent. Nachr.-Bl. 10.

Tetragonoderus bayeri p. 310, *kuntzeni* p. 312, spp. n. Belgian Congo, BURGEON Ann. Mus. Congo Belge Zool. (3) Sect. ii 2.

Thaumatoperphus subgen. n. see *Bembidion*.

Trechosis aberdarensis sp. n. Kenya p. 41 figs., JEANNEL Miss. sci. Omo 2 1935.

Trechus elgonicus subsp. n. *heous*, *lobelium* p. 44; *amblyus* p. 47, *stenderus* p. 48, *chappuisi* p. 50, *arambourgi* (with subsp. n. *fairbairni*) p. 51, *oodes* p. 56, *strongylus* p. 57, *enoplus* p. 58, *amblygonus* p. 59, *metrius* p. 60, *phaeoceris* p. 61, *promeces* p. 62, *cryobius* p. 63, *lampros* p. 64, *compsus*, *nannus* p. 66, *oligophthalmus* p. 68, spp. n. Mt. Elgon figs., JEANNEL t.c.—*T. glacialis* subsp. n. *neglectus* Trentino pp. 179–182 figs., GHIDINI Studi trentini, Trento 16 1935.—*T. perissus* sp. n. Sikkim p. 60, ANDREWES Ann. Mag. n.H. (10) 18.—*T. rotundipennis* subsp. n. *cordicollis*, *scheerpeltzi* Europe; *beieri* sp. n. Greece p. 234; key to spp. of subgen. *Speonesiotes*, *septentrionalis*, *koritoensis* Herzegovina spp. n. p. 235, fig., WINKLER Kol. Rdsch. 21.—*T. gallorites* p. 206, *culminicola* p. 207, *scotti* p. 208, *chillanicus* p. 210, spp. n. Abyssinia 2; *flavolimbatus* subsp. n. *ferrariae* p. 4; *flavocinctus* subsp. n. *gomeræ* p. 5; *nytteboogaarti* p. 7, *laureticola* p. 12 spp. n.; *felix* subsp. n. *tahodiensis* p. 10, *antonii* p. 11 Canaries 3 figs., JEANNEL Rev. Franç. Ent.

Trepanotachys see *Sphaerotachys*.

Trichocellus strandi sp. n. Caucasus p. 140, LUČNIK Folia zool. hydrobiol. 9.

Trichotichnus knauthi subsp. n. *carniolicus* p. 3, *mangartensis* Julian Alps; *rimanus* sp. n. Pontine Alps p. 4; *laevicollis* subsp. n. *carpathicus* Carpathians p. 8, *lewisi* Japan p. 9, *obtusicollis* p. 14, *curtipennis* p. 15, *zabriziformis* p. 17, *denticollis* p. 18, *cordaticollis* p. 19, *hedini* spp. n. China; *tschitscherini* n. n. for *vicinus* Tsch. 1906 nec 1897, SCHAUBERGER Kol. Rdsch. 22.—*T. philippinus* sp. n. Philippines p. 118, JEDLIČKA Acta Soc. ent. Čsl. 33.

Typhlonestra gen. n. p. 73, *elgonensis* sp. n. Mt. Elgon p. 75 figs., JEANNEL Miss. sci. Omo 2 1935.

Xantheunostus subgen. n. see *Eunos-tus*.

Xanthophaea satanas sp. n. New Caledonia p. 222 figs., BRITTON Ent. mon. Mag. 72.

Xenodus mediocris sp. n. Ceylon p. 205, ANDREWES Spolia zeylan. 19.

Zabrus borisi sp. n. Greece p. 252, BREIT Kol. Rdsch. 22.—*Z. bischoffi* sp. n. Albania p. 107, MÜLLER Ent. Nachr.-Bl. 10.

Zelma miranda see *Salcedia*.

Zuphium haitianum sp. n. Haiti p. 213, DARLINGTON Psyche 42 1935.—*Z. trigemme* sp. n. Java p. 316, ANDREWES Ann. Mag. n.H. (10) 17.—*Z. olens* subsp. n. *kochi* Egypt p. 106, SCHATZMAYR Pubbl. Mus. ent. Pietro Rossi 1.

PAUSSIDAE.

Cerapterus quadrimaculatus notes p. 45, LIEFTINCK Ent. Med. Ned.-Ind. 2.

Paussus alluaudi p. 200, *jeanneli* p. 201, *solidus* p. 202, *seyrigi* p. 203, *adiunctus* p. 204, spp. n. Madagascar figs., REICHENSPERGER Rev. franç. Ent. 3.

HALIPLIDAE.

Haliplus key to Polish spp. pp. 32–35 figs., KINEL Arch. Tow. nauk. Lwów (3) 2 1922.—*H.* list of and discussion of British spp. pp. 71–77, BALFOUR-BROWNE Ent. mon. Mag. 72.—*H. bierigi*, *nannus* p. 115, *carinatus* p. 116 Cuba, *arrowi* India, *exsecratus* Natal, Mashonaland p. 117, spp. n., GUIGNOT Bull. Soc. ent. Fr. 41.—*H. emmerichi* sp. n. Szetschuan p. 79, FALKENSTRÖM Lingnan Sci. J. 15.—*H. tumidus* Lec. (= *signatus* Sharp) p. 154, DARLINGTON Pub. Carnegie Inst. Wash. 457.

Peltodytes list and discussion of British spp. pp. 68-70, BALFOUR-BROWNE Ent. mon. Mag. 72.

DYTISCIDAE.

List of British Hygrobiidae, BALFOUR-BROWNE Ent. mon. Mag. 72 p. 31.

Dytiscidae of Valencia, CORELLA Butl. Inst. catal. H.n. 35 1935 pp. 82-91.

Monograph of Palaearctic Colymbetinae, GSCHWENDTNER Kol. Rdsch. 22 pp. 61-80.

List, with keys, of Armorican Dytiscidae, HOULBERT Bull. Soc. sci. Bretagne 11 1934 hors sér. 147 pp. 116 figs.

Dytiscidae of Jehol, KAMIYA Rep. First sci. Exped. Manchoukuo (5) 1 pt. x art. 40, 11 pp. 1 col. pl.

Revision of Palaearctic Colymbetinae, ZIMMERMANN & GSCHWENDTNER Kol. Rdsch. 22 pp. 81-102.

Agabus (*Parasternus*, *Nebriogabus* subgen. n. p. 187), key to subgen. p. 188, *dispositus* sp. n. Boreal America p. 189, GUIGNOT Bull. Soc. ent. Fr. 41. —*A. brunneus* Japan, *jeholensis* Manchoukuo spp. n. p. 8 figs., KAMIYA First sci. Exp. Manchoukuo (5) 1 pt. x art. 40. —*A. kokoosson* p. 8, *kansouis* p. 9 spp. n. China figs., FENG Peking n.H. Bull. 11.

Bidessus licenti p. 3, *trassearti* p. 4, spp. n. China figs., FENG t.c. —*B. vitchumwii* sp. n. Belgian Congo p. 18, GSCHWENDTNER Rev. Zool. Bot. afr. 29. —*B. Sharp* type *unistriatus* F., list of British spp. p. 29, BALFOUR-BROWNE Ent. mon. Mag. 72.

Clypeodytes americanus p. 144, *rugulosus* p. 146, spp. n. Mexico figs., GUIGNOT Rev. franç. Ent. 3.

Coelambus trilineatus p. 6, *distinctus* p. 7, spp. n. China figs., FENG Peking n.H. Bull. 11.

Colymbetes magnus sp. n. China p. 12 figs., FENG t.c.

Colymbinectes gen. n., *ater* sp. n. Szetschuan p. 97 figs., FALKENSTRÖM Lingnan Sci. J. 15.

Cybister szechwanensis p. 238, *laevis* p. 243, spp. n. China figs., FALKENSTRÖM Lingnan Sci. J. 15. —*C. blôtei* sp. n. Borneo p. 73, GUIGNOT Zool. Meded. 19.

—*C. kansou* sp. n. China p. 13 fig., FENG Peking n.H. Bull. 11.

Deronectes of Poland pp. 198-214, *airumilus* subsp. n. *rybinskii* Poland p. 199 figs., KINEL Polsk. Pismo ent. 13. —*D. emmerichi* sp. n. Szetschuan p. 88 figs., FALKENSTRÖM Lingnan Sci. J. 15.

Dytiscus distantus sp. n. Manchuria, Mongolia p. 14, FENG Peking n.H. Bull. 11.

Gaurodytes mucronatus p. 89, *friedrichi* p. 91, *granulatus* p. 95, spp. n. Szetschuan figs., FALKENSTRÖM Lingnan Sci. J. 15.

Hemibidessus plaumanni sp. n. S. Brazil p. 19, GSCHWENDTNER Rev. Zool. Bot. afr. 29.

Hydaticus fengi sp. n. China p. 237, FALKENSTRÖM Lingnan Sci. J. 15.

Hydrocanthus jeanneli Ethiopia, Kenya p. 11, *vadoni* Kamerun, *carbonarius* Haute-Volta p. 12, spp. n. figs., GUIGNOT Bull. Soc. ent. Fr. 41. —*H. deyrollei* see *Renotus*.

Hydroporus nigrita ab. n. *strandii* Bukovina p. 634, MARCU Festschr. E. Strand 1. —*H. intermixtus* Wlk. (= *indicus* Sharp) p. 130, BALFOUR-BROWNE Ent. mon. Mag. 72.

Hydrovatus Mots. type *castaneus* Mots. p. 28, BALFOUR-BROWNE t.c.

Hyphydrus discussed p. 29, BALFOUR-BROWNE t.c. —*H. pieli* sp. n. China p. 133 fig., GUIGNOT Notes Ent. chin., Mus. Heude 3. —*H. orientalis* characters p. 81; *detectus* sp. n. Szetschuan p. 87 figs., FALKENSTRÖM Lingnan Sci. J. 15.

Ilybius intermediatus sp. n. China p. 10 fig., FENG Peking n.H. Bull. 11.

Laccophilus uniformis sp. n. China p. 1 fig., FENG t.c.

Nebriogabus subgen. n. see *Agabus*.

Oreodytes Seidl. type *borealis* Gyll. (= *davisi* Curt.) p. 77, BALFOUR-BROWNE Ent. mon. Mag. 72.

Parasternus subgen. n. see *Agabus*.

Renotus gen. n. for *Hydrocanthus deyrollei* Sharp p. 11, GUIGNOT Bull. Soc. ent. Fr. 41.

Rhantiss friedrichi p. 227, *chinensis* p. 228, *aequimarginatus* p. 232, spp. n. China figs., FALKENSTRÖM Lingnan Sci. J. 15.

Synchortus desaegeri sp. n. Tanganyika p. 17, GSCHWENDTNER Rev. Zool. Bot. afr. 29.

GYRINIDAE.

Gyrinidae of Valencia, CORELLA Butll. Inst. catal. H.n. 35 1935 p. 91.

Gyrinids of China, OCHS Festschr. E. Strand 1 pp. 601-613.

Aulonogyrus British spp. p. 98, BALFOUR-BROWNE Ent. mon. Mag. 72.

Gyrinus japonicus life-history pp. 302-312 [in Japanese] figs., TSUNETO Kontyû 10.—*G.* discussion, British spp. pp. 99-108, BALFOUR-BROWNE Ent. mon. Mag. 72.

Orectochilus British spp. p. 108, BALFOUR-BROWNE t.c.—*O. chalcus* p. 605, *assequens* p. 607, *mimicus*, *minusculus* p. 608 China, *grandipes* p. 607, *strandii* p. 610 Tonkin, spp. n., OCHS Festschr. E. Strand 1.—*O. emmerichi* sp. n. China p. 245, FALKENSTRÖM Lingnan Sci. J. 15.

Porrorrhynchus marginatus morphology p. 42 fig., LIEFTINCK Ent. Med. Ned.-Ind. 2.

STAPHYLINIDAE.

Some morphological notes on Staphylinids, BRUCH Rev. chil. H.n. 40 pp. 92-95, 6 figs.

Staphylinidae from Sumatra, CAMERON Tijdschr. Ent. 79 pp. 1-24.

Staphylinidae from Java, CAMERON Tijdschr. Ent. 79 pp. 25-54.

Staphylinidae collected in Karakorum, GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935 pp. 69-85, 4 figs.

Staphylinidae of Egypt & Sinai, KOCH Pubb. Mus. ent. Pietro Rossi 1 pp. 115-232, 12 figs.

Staphylinidae of Tripolitania, KOCH Boll. Soc. ent. ital. 68 pp. 74-76.

Acanthocnemidonia subgen. n. see Zygas.

Aleochara renatae sp. n. Egypt p. 230, KOCH Pubb. Mus. ent. Pietro Rossi 1.—*A. lewisia* p. 324, *peninsulæ* p. 325, spp. n. Japan, BERNHAUER t.c.—*A. overlaeti*, *parvicollis*, *pseudolaticollis* spp. n. Belgian Congo p. 27, BERNHAUER Rev. Zool. Bot. afr. 29.—*A. gridelli* Albania, *transcaspica* Transcaspia p. 57, *bang-haasi* China spp. n.; *verna* subsp. n. *brundini* Lapland p. 58,

BERNHAEUER Kol. Rdsch. 22.—*A. gratiosa* sp. n. Sumatra p. 23, CAMERON Tijdschr. Ent. 79.

Amarochara jacobsoni sp. n. Sumatra p. 22, CAMERON Tijdschr. Ent. 79.

Amaurodera montanella sp. n. Sarawak p. 215, BERNHAUER Proc. R. ent. Soc. Lond. (B.) 5.

Amblyopinus revision pp. 58-65 figs., DA COSTA LIMA Mem. Inst. Oswaldo Cruz 31.

Amphichroum albanicum sp. n. Albania p. 237, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Anepiroleuronia gedyei sp. n. Kenya p. 328, BERNHAUER Ann. Mag. n.H. (10) 18.

Anomognathus coloratus p. 11, *gracilis* p. 12, spp. n. Sumatra, CAMERON Tijdschr. Ent. 79.

Anophthalmodonia subgen. n. see Zygas.

Antrosemnotes gen. n. (Aleocharinini) p. 238, *rottroui* sp. n. Morocco p. 245 figs., SCHEERPELTZ Bull. Soc. Sci. nat. Maroc 15.

Aphaenostemmus testaceus characters p. 332, KOCH Bull. Soc. ent. Egypte 20.

Apteranillus championi sp. n. Tangier p. 54, BERNHAUER Kol. Rdsch. 22.

Astenus Swedish spp. pp. 75-83, *longelytratus* sp. n. Sweden p. 79, PALM Ent. Tidskr. 57.—*A. pulchellus* ab. n. *schovenhorstensis* Holland p. 231, RECLAIRE & VAN DER WIEL Ent. Ber. 9.—*A. kochi* sp. n. Tangier p. 241, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*A. bimaculatus* subsp. n. *cinguliventris* Egypt p. 152, KOCH t.c.—*A. gracilentus* ab. n. *javanus* Java p. 183, CAMERON Proc. R. ent. Soc. Lond. (B) 5.—*A. drescheri* sp. n. Java p. 44, CAMERON Tijdschr. Ent. 79.

Astilbus jacobsoni, *antennalis* spp. n. Sumatra p. 18, CAMERON t.c.

Atheta nigrituloides, *lativagans* spp. n. Sumatra p. 15, CAMERON t.c.—*A. attophila* p. 505 (*Attatheta* subgen. n. p. 507) *anisophthalma* p. 510, *attobia* p. 515, *atticola* p. 517, spp. n. Brazil figs., SCHEERPELTZ Arch. Naturgesch. (N.F.) 5.—*A. islandica* morphology pp. 115-120 figs., RENKONEN Ann. ent. fenn. 2.—*A. bernhaueriana* sp. n. Sinai p. 213; *fungi* subsp. n. *deserta* Egypt p. 223, KOCH Pubb. Mus. ent. Pietro

Rossi 1.—*A. macerrima* Bosnia, *styriaca* Steiermark p. 247, *hoyosi* p. 248, *kaiseri* p. 250, *leederi* p. 251, *scheerpeltzi* p. 313 Austria, *winkleri* Germany, Poland p. 312, (*Suensonia* subgen. n.) *obsolete-punctata* Japan p. 314, *azorica* Azores p. 315, *lysholmi* Norway, *franzi* Burgenland p. 316, *bouringi* China p. 317, *perparca* Asia Minor p. 318, *angulipennis* China p. 319, *torre-tassoi* Baikal p. 320, spp. n., BERNHAUER t.c.—*A. fungi* subsp. n. *kaschmirensis* Kashmir p. 87, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.—*A. pahangensis*, *verecunda* spp. n. Malaya p. 51, CAMERON J. F.M.S. Mus. 13.—*A. quadricornis* sp. n. Belgian Congo p. 27, BERNHAUER Rev. Zool. Bot. afr. 29.—*A. reissi* sp. n. Austria p. 41, BENICK Kol. Rdsch. 22.—*A. minarzi* Austria p. 51, *hummleriana* Italy, *abnormalis* Transcasopia p. 52, *balcanica* Albania, *subvilis* China p. 53, spp. n., BERNHAUER t.c.

Attatheta subgen. n. see *Atheta*.

Autalia minuta sp. n. Sumatra p. 13, CAMERON Tijdschr. ent. 79.

Belonuchus obscuricornis sp. n. Belgian Congo p. 23, BERNHAUER Rev. Zool. Bot. afr. 29.

Bledius spp. of *pallipes* group pp. 8–9, BENICK Ent. Bl. 32.—*B.* notes on some Italian spp. pp. 55–62, *paradoxus* sp. n. Italy p. 60 figs., GRIDELLI Boll. Soc. ent. ital. 68.—*B. strictus* re-description p. 238; *rectangulus* subsp. n. *tenenbaumi* Poland p. 239; *japonicus* sp. n. Japan p. 305, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*B. fraternus* sp. n. Malaya p. 40, CAMERON J. F.M.S. Mus. 13.

Blépharrhymenus meschniggi sp. n. Sierra Nevada p. 55, BERNHAUER Kol. Rdsch. 22.

Cajius key p. 178, *xantholoma* subsp. n. *heroopoliticus* Egypt p. 169; *Pseudoremus* subgen. n. p. 175; *sabulosus* ab. n. *postseriatulus* Australia p. 179; *quadri-impressus* ab. n. *expuncticollis* N. Zealand p. 180; *nudus* ab. n. *sharpi* Vancouver p. 182, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Cameronium gen. n. for *Phytosus obockianus* Fauv. p. 202 figs., KOCH t.c.

Charichirus meridionalis, *primaevalis* p. 51, *adjacens* p. 52 spp. n. Java, CAMERON Tijdschr. Ent. 79.

Coenonica malayana, *pendleburyi* spp. n. Malaya p. 50, CAMERON J. F.M.S. Mus. 13.—*C. sumatrensis* p. 8, *parvula*, *rufa* p. 9, *rugosa*, *bolitocharoides* p. 10, spp. n. Sumatra, CAMERON Tijdschr. Ent. 79.

Compsoglossa sumatrensis sp. n. Sumatra p. 20, CAMERON t.c.

Cordylaspis key p. 502, SCHEERPELTZ Arch. Naturgesch. (N.F.) 5.

Cryptobium nobile sp. n. Arabia p. 243, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*C. submarginatum* sp. n. Java p. 54, CAMERON Tijdschr. Ent. 79.

Ctenomastax pharaonum subsp. n. *microthorax* Sinai p. 149, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Dianous malayanus sp. n. Malaya p. 42, CAMERON J. F.M.S. Mus. 13.

Diastota aelana sp. n. Belgian Congo p. 25, BERNHAUER Rev. Zool. Bot. afr. 29.

Dolicoon indicum subsp. n. *javanum* Java, Celebes, Malaya p. 183, CAMERON Proc. R. ent. Soc. Lond. (B) 5.

Domene javana sp. n. Java p. 52, CAMERON Tijdschr. Ent. 79.

Dromacamatus spinifer sp. n. Costa Rica p. 233 fig., REICHENSPERGER Rev. Ent. Rio de J. 6.

Ecitotropis gen. n. p. 297, *carinata* sp. n. Brazil p. 298 figs., BORGMIEIER t.c.

Edaphus Gangl. (= *Rhenanus* Wüsth. from Pselaphidae) p. 9, HOLDHAUS Ent. Bl. 32.—*E. W.* Palaearctic spp. pp. 189–225, *kaufmanni* Fiume p. 190, *blühweissi* Bozen 210, spp. n. figs., SCHEERPELTZ Kol. Rdsch. 22.

Edrabi revision pp. 65–67, DA COSTA LIMA Mem. Inst. Oswaldo Cruz 31.

Eidmannotherium gen. n. p. 520, *attarum* sp. n. Brazil p. 525 fig., SCHEERPELTZ Arch. Naturgesch. (N.F.) 5.

Eleusis brachycephala sp. n. Java p. 171, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.—*E. javana* p. 25, *drescheri* p. 26, spp. n. Java, CAMERON Tijdschr. Ent. 79.

Euphania boiteli sp. n. Tunis p. 163, NORMAND Bull. Soc. H.n. afr. N. 27.

Eusteniamorpha jacobsoni p. 1, *sumatrensis* p. 2, spp. n. Sumatra, CAMERON Tijdschr. Ent. 79.

Falagria differens, *jacobsoni*, *laeta* spp. n. Sumatra p. 14, CAMERON t.c.—*F. transcaspica* sp. n. Transcaspia p. 50, BERNHAUER Kol. Rdsch. 22.—*F. nilotica* sp. n. Egypt p. 209, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Gabrius gagliardii sp. n. Italy p. 153 figs., GRIDELLI Boll. Soc. ent. ital. 68.—*G. ajmonis* p. 80, *caporiaccoi* p. 81, spp. n. Karakorum figs., GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.

Geodromicus suenisoni sp. n. Japan p. 304, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Geomitopsis grosclaudei sp. n. Tunis p. 163, NORMAND Bull. Soc. H.n. Afr. N. 27.

Gyrophæna koreana Korea p. 309, *tsushimana* Japan p. 310, spp. n., BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*G. sumatrensis* sp. n. Sumatra p. 2, CAMERON Tijdschr. Ent. 79.—*G. tropica* p. 47, *malayana*, *pendleburyi*, *antennata* p. 48, *selangorensis* p. 49, spp. n. Malaya, CAMERON J. F.M.S. Mus. 13.

Hesperus pendleburyi sp. n. Pahang p. 45, CAMERON t.c.—*H. hobbyi* sp. n. Sarawak p. 214, BERNHAUER Proc. R. ent. Soc. Lond. (B) 5.—*H. eidmanni* sp. n. Brazil p. 484; key to Nearctic and Neotropical spp. p. 487 fig., SCHEERPELTZ Arch. Naturgesch. (N.F.) 5.

Heterothops eidmanni sp. n. Brazil p. 502 fig., SCHEERPELTZ t.c.

Holosus navicularis p. 28, *javanus*, *drescheri* p. 29, spp. n. Java, CAMERON Tijdschr. Ent. 79.

Holotrochus javanus sp. n. Java p. 34, CAMERON t.c.—*H. lineatocollis* sp. n. Mauritius p. 202, CAMERON Ent. mon. Mag. 72.

Homalodonia subgen. n. see Zyrras.

Hylodesina gen. n. p. 215, *moorei* sp. n. Sarawak p. 216, BERNHAUER Proc. R. ent. Soc. Lond. (B) 5.

Hypocyrtus torre-tassoï sp. n. Palestine p. 244, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*H.* annotated list of Scandinavian spp. pp. 1–38; *suecicus* Sweden, *nitidus* Denmark spp. n. p. 26 figs., PALM Göteborgs vetensk. Samh. Handl. (5) B 4 1935.

Irmaria parva sp. n. Sumatra p. 23, CAMERON Tijdschr. Ent. 79.

Isothoracodonia subgen. n. see Zyrras.

Jacobsonia gen. n. p. 16, *malayana* sp. n. Sumatra p. 17, CAMERON Tijdschr. Ent. 79.

Jearneliusa gen. n. (Aleocharinae) p. 216, *chappuisi* (type) p. 217, *arambourgi* p. 218, spp. n. Kenya figs., BERNHAUER Rev. franç. Ent. 2.

Labidoculex gen. n. p. 234, *fragilis* sp. n. Brazil p. 236 fig., REICHENSPERGER Rev. Ent. Rio de J. 6.

Lathrobium apogeuum sp. n. N. Africa p. 191 fig., NORMAND Rev. franç. Ent. 2.—*L. macellum* subsp. n. *peyerimhoffi* Egypt p. 156, KOCH Pubb. Mus. ent. Pietro Rossi 1.—*L. densum* sp. n. Japan p. 307, BERNHAUER t.c.—*L. solarii* p. 131, *caprai* p. 133, spp. n. Italy figs., KOCH Boll. Soc. ent. ital. 68.

Leptacinus intermedius sp. n. England p. 269, DONISTHORPE Ent. mon. Mag. 72.

Leptusa kochiana S. Italy, *abchasica* Abkhasia p. 245, *kaiserana* p. 310, *leederi* p. 311 Nassfeld, spp. n., BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Lesteva albanica sp. n. Albania p. 304, BERNHAUER t.c.

Leucocraspedum dilutum subsp. n. *javanum* Java p. 174, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.

Lispinus subpunctipennis sp. n. Java p. 182, CAMERON Proc. R. ent. Soc. Lond. (B) 5.—*L. propinquus*, *vinsoni* spp. n. Mauritius p. 201, CAMERON Ent. mon. Mag. 72.—*L. drescheri* sp. n. Java p. 29, CAMERON Tijdschr. Ent. 79.

Lithocharis preangeranus, *vexans* spp. n. Java p. 50, CAMERON t.c.

Lomechusa straneoï sp. n. Italy p. 19, KOCH Boll. Soc. ent. ital. 68.—*L. ganglbaueri* (with subsp. n. *uralensis*) Siberia, *suenisoni* Japan, spp. n. p. 323, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Medon vitalei sp. n. Sicily p. 306, BERNHAUER t.c.—*M. drescheri* p. 47, *javanicus*, *humerosus* p. 48, *aberrans* p. 49, spp. n. Java, CAMERON Tijdschr. Ent. 79.

Meotica williamsi sp. n. England p. 55, BERNHAUER Kol. Rdsch. 22.

Metolinus distinctus sp. n. Johore p. 43, CAMERON J. F.M.S. Mus. 13.

Mimeciton gigas sp. n. Costa Rica p. 231, REICHENSBERGER Rev. Ent. Rio de J. 6.

Mimomalota sororcula p. 4, *ignobilis*, *insigniventris*, *ventralis* p. 5, *jacobsoni*, *sumatrensis*, *peraffinis*, *nigropicea* p. 6, *persimilis*, *minuta* p. 7, spp. n. Sumatra, CAMERON Tijdschr. Ent. 79.

Mimophites borgmeieri p. 238, *tenellus* p. 239, spp. n. Costa Rica figs., REICHENSBERGER Rev. Ent. Rio de J. 6.

Myrmecopora bernhaueri sp. n. Sinai p. 210, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Nazeris suenisoni sp. n. Japan p. 306, BERNHAUER t.c.—*N. bernhaueri* sp. n. Tunisia p. 382, NORMAND Bull. Soc. H. n. Afr. N. 57.

Neomalota jacobsoni p. 7, *sumatrensis*, *brevicollis* p. 8, spp. n. Sumatra, CAMERON Tijdschr. Ent. 79.

Neoprocirrus gen. n., *drescheri* sp. n. Java p. 42, CAMERON t.c.

Ocalea globulicollis sp. n. Asia Minor p. 54, BERNHAUER Kol. Rdsch. 22.

Ocyplanus (*Pseudocyplanus* subgen. n.) *overlaeti* sp. n. Belgian Congo p. 26, BERNHAUER Rev. Zool. Bot. afr. 29.

Ocyusa albanica S. Albania p. 251, *oechlaneri* N. Tirol p. 252, *vaulogeri* Algiers p. 324, spp. n., BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*O. quadrisulcata* p. 87, *ajmonis* p. 88 spp. n. Kashmir, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.

Oedichirus excellens ab. n. *nigripennis* Java p. 183, CAMERON Proc. R. ent. Soc. Lond. (B) 5.

Oligota glaberrima p. 45, *infumata* p. 46, spp. n. Malaya, CAMERON J. F.M.S. Mus. 13.

Olophrum Northern spp. pp. 97–102, MUNSTER Norsk ent. Tidsskr. 4.

Oncoparia gen. n. (*Oxytelinae*) p. 212, *parasita* sp. n. Kenya p. 213 fig., BERNHAUER Rev. franç. Ent. 2.

Ontholestes louwerensi sp. n. Java p. 183, CAMERON Proc. R. ent. Soc. Lond. (B) 5.

Orphnebius terminalis sp. n. Malaya p. 52, CAMERON J. F.M.S. Mus. 13.—*O. ophthalmicus* sp. n. Sumatra p. 19, CAMERON Tijdschr. Ent. 79.

Osorius carinifrons, *malabarensis* p. 35, *fraterculus*, *discalis*, *toxopei* p. 36,

spp. n. Java, CAMERON t.c.—*O. malayanus*, *selangorensis* spp. n. Malaya p. 41, CAMERON J. F.M.S. Mus. 13.—*O. marshalli* sp. n. Kenya p. 324, BERNHAUER Ann. Mag. n.H. (10) 18.

Oxypoda opaciventris sp. n. Sinai p. 226; *magnicollis* subsp. n. *aegyptiaca* Algiers, Egypt p. 227, KOCH Pubb. Mus. ent. Pietro Rossi 1.—*O. wankai* sp. n. Macedonia p. 253, BERNHAUER, t.c.—*O. elbana* Elba, *schatzmayri* Tripoli, *leonhardi* Kephallenia spp. n. p. 56, BERNHAUER Kol. Rdsch. 22.

Oxyporus pendleburyi (with varr. n. *intermedius*, *atratus*) sp. n. Pahang p. 41, CAMERON J. F.M.S. Mus. 13.—*O. preangeranus*, *javanus* p. 37, *drescheri*, *funereus* p. 38, *punctipennis*, *thoracicus* p. 39, *cylindricollis* p. 40, spp. n. Java, CAMERON Tijdschr. Ent. 79.

Oxytelopsis lucidula sp. n. Java p. 30, CAMERON t.c.

Oxytelus drescheri, *javanus* spp. n. Java p. 32, CAMERON t.c.—*O. vinsoni* sp. n. Mauritius p. 201, CAMERON Ent. mon. Mag. 72.—*O. rhinoceros*, *strigosiceps* p. 261, *monardi* p. 262, spp. n. Angola, BERNHAUER Novit. zool. 39.—*O. herculis* sp. n. Hungary p. 237, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*O. minarzi* sp. n. Austria p. 185 fig., BERNHAUER Kol. Rdsch. 22.—*O. elephantulus* p. 321, *elephantis* p. 322, *gedyei* p. 323, spp. n. Kenya, BERNHAUER Ann. Mag. n.H. (10) 18.—*O. kalisi* sp. n. Java p. 172, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.

Pachycorynus grandiceps sp. n. Java p. 172, BERNHAUER t.c.—*P. selangorensis* p. 43, *fragilis* p. 44, spp. n. Malaya, CAMERON J. F.M.S. Mus. 13.—*P. quadriceps* sp. n. Mauritius p. 202, CAMERON Ent. mon. Mag. 72.

Paederus angustipennis Japan, *coelestinus* p. 240, *arabicus* p. 241 Arabia, spp. n., BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*P. alutipennis*, *drescheri* spp. n. Java p. 43, CAMERON Tijdschr. Ent. 79.—*P. angolensis* p. 262, *monardi* p. 263, spp. n. Angola, BERNHAUER Novit. zool. 39.

Paracyphea atra sp. n. Mauritius p. 203, CAMERON Ent. mon. Mag. 72.

Paragonus bryanti sp. n. Java p. 33, CAMERON Tijdschr. Ent. 79.

Paroplandria gen. n. p. 21, *typica* sp. n. Sumatra p. 22, CAMERON t.c.

Pelto donia subgen. n. see *Zyras*.

Philonthus spp. morphology pp. 147-153 figs., GRIDELLI Boll. Soc. ent. ital. 68.—*P. jeholensis* sp. n. Jehol p. 5 fig., KAMIYA Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 41.—*P. kessleri* n. n. for *multipunctatus* Blatch. nec Nordm. p. 256, BLATCHLEY Ent. News 47.—*P. rufoflavus* sp. n. Selangor p. 44, CAMERON J. F.M.S. Mus. 13.—*P. madianus* sp. n. Angola p. 263, BERNHAUER Novit. zool. 39.—*P. duodecimpunctatus* subsp. n. *kapanganus*; *overlaetianus* sp. n. Belgian Congo p. 22, BERNHAUER Rev. Zool. Bot. afr. 29.—*P. dubiosus* p. 324, *parciventrtris*, *flavicauda* p. 325, spp. n. Kenya, BERNHAUER Ann. Mag. n. H. (10) 18.—*P. nigriventris* morphology p. 39 figs., JANSSON Notul. ent. 16.—*P. pseudojaponicus* Japan p. 307, *seishinensis* Manchuria p. 308, spp. n., BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Phyllodrepa hummleri sp. n. Bosnia p. 303, BERNHAUER t.c.

Phytosus obockianus see *Cameronium*.

Pinophilus drescheri p. 40, *proximatus*, *praengeranus*, *rufoferrugineus* p. 41, spp. n. Java, CAMERON Tijdschr. Ent. 79.

Placusa sumatrensis sp. n. Sumatra p. 12, CAMERON t.c.

Plagiusa rugosa sp. n. Sumatra p. 3, CAMERON t.c.

Planeustomus lucens p. 233, *perroti* p. 234, spp. n. Barbary figs., DE PEYERIMHOFF Bull. Soc. ent. Fr. 41.

Platystethus cornutus ab. n. *nigripennis* Karakorum p. 72, GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.—*P. javanus* sp. n. Java p. 33, CAMERON Tijdschr. Ent. 79.

Priochirus drescheri, *fraterculus* spp. n. Java p. 27, CAMERON t.c.—*P. malayanus* sp. n. Malaya p. 40, CAMERON J. F.M.S. Mus. 13.

Pseudobrachida bicolor sp. n. Selangor p. 49, CAMERON t.c.

Pseudocyplanus subgen. n. see *Ocyplanus*.

Pseudophilonthus atricollis sp. n. Belgian Congo p. 21, BERNHAUER Rev. Zool. Bot. afr. 29.

Pseudoremus subgen. n. see *Cafius*.

Quedius paganettii sp. n. Albania p. 308, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*Q. molochinus* discussed p. 94, LHOSTE Misc. ent. 37.

Scariphæus erichsoni sp. n. Brazil p. 532; key p. 539, SCHEERPELTZ Arch. Naturgesch. (N.F.) 5.

Scimbalium intermedium sp. n. Selangor p. 43, CAMERON J. F.M.S. Mus. 13.—*S. javanicum* sp. n. Java p. 53, CAMERON Tijdschr. Ent. 79.

Scopæus javanus sp. n. Java p. 52, CAMERON t.c.—*S.* revision pp. 84-115, key p. 85, *gracilis* subsp. n. *ciculus* Palermo p. 92; *ampliatius* p. 95, *brevicuspis*, *furcatus* p. 102, *lanceolatus* p. 105 Italy, *cordifer* Algeria p. 97, *hispanicus* Spain p. 98, *gladifer* Rumania p. 105, *mitratus* Tunisia p. 106 spp. n.; *microphærus* subsp. n. *championi* Italy p. 103 figs., BINAGHI Mem. Soc. ent. ital. 14 1935.

Sipalia philea sp. n. N. Africa p. 193. NORMAND Rev. franç. Ent. 2.—*S. taygetana* Taygetos p. 50, *meschniggiana* Morea p. 51, spp. n., BERNHAUER Kol. Rdsch. 22.—*S. paganettiana* Bosnia p. 246, *albanica* Albania p. 312, spp. BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Stamnoderus incarenatus p. 140, *caribæus* p. 141, *truncatus* p. 142 Cuba, *bipustulatus* Panama p. 143, spp. n. figs., BIERIG Mem. Soc. Cubana H.n. 10.

Staphylinus lefevrei, *evansi* p. 23, *chrysis*, *iridiventrtris*, *methnerianus* p. 24, spp. n. Belgian Congo, BERNHAUER Rev. Zool. Bot. afr. 29.—*S. javanus* p. 173, *kalisi* p. 174, spp. n. Java, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.—*S. globulifer* in E. Canada p. 116, CHAGNON Canad. Ent. 68.—*S. pedator* larva p. 101 figs., PAULIAN Misc. ent. 37.—*S. ater* subsp. n. *aegyptiacus* Egypt p. 194 figs., KOCH Pubb. Mus. ent. Pietro Rossi 1.

Stenus nagasakianus Japan p. 239, *metkovichensis* Dalmatia p. 305, spp. n., BERNHAUER t.c.—*S. caporiaccoi* sp. n. Kashmir p. 86, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.—*S. louwerensi* sp. n. Java p. 183, CAMERON Proc. R. ent. Soc. Lond. (B) 5; *S. confusoides* p. 27, *distans* p. 30, spp. n. Finland 1 1935; *confusoides* note;

linnaniemii n. n. for *distans* Renk. nec Sharp p. 179 2, RENKONEN Ann. ent. fenn.

Sternotropa selangorensis p. 46, *flavicornis* p. 47, spp. n. Malaya, CAMERON J. F.M.S. Mus. 13.—*S. rufa* sp. n. Sumatra p. 3, CAMERON Tijdschr. Ent. 79.

Stilicoderus drescheri, *brunneipennis* p. 45, *parvus*, *magniceps* p. 46, spp. n. Java, CAMERON t.c.

Stilicus femoratus var. n. *dampfi* Mexico p. 137; *coprophilus* sp. n. Cuba p. 138 figs., BIERIG Mem. Soc. Cubana H. n. 10.—*S. caporiaccoi* sp. n. Kashmir p. 87, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.—*S. paradoxus* sp. n. Himalayas p. 242, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.

Suensonia subgen. n. see *Atheta*.

Synecitonides gen. n. p. 236, *phasma* sp. n. Costa Rica p. 237 fig., REICHENSPERGER Rev. Ent. Rio de J. 6.

Tachinoplesius gen. n. p. 326, *turneri* sp. n. Kenya p. 327, BERNHAUER Ann. Mag. n.H. (10) 18.

Tachyporus revision of N. American spp. pp. 39–54, key p. 42, *rulomus* p. 44, *tehamae* p. 45, *stejnegeri* p. 47, *synderi*, *temacus* p. 49, *oregonus* p. 51, *arizonicus*, *alleni* p. 53 spp. n. U.S.A., BLACKWELDER Proc. U.S. nat. Mus. 84 no. 3001.

Tachyusa feriali subsp. n. *rabinovitchi* Sardinia, Sinai p. 212, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Termitodonia subgen. n. see *Zyras*.

Tetrallus angolensis Angola, *densiventris* S. Africa spp. n. p. 267, BERNHAUER Novit. zool. 39.

Thamiaraea gridellii sp. n. Java p. 175, BERNHAUER Atti Mus. Stor. nat. Trieste 12 1935.

Thinocharis malayana sp. n. Malaya p. 42, CAMERON J. F.M.S. Mus. 13.

Thoracochirus minutus sp. n. Java p. 28, CAMERON Tijdschr. Ent. 79.

Thoracoproprius denticollis sp. n. Java p. 34, CAMERON t.c.

Thyrecephalus diversiceps sp. n. Belgian Congo p. 21, BERNHAUER Rev. Zool. Bot. afr. 29.

Tinotus eidmanni sp. n. Brazil p. 528 fig., SCHEERPELTZ Arch. Naturgesch. (N.F.) 5.

Torre-tassoella gen. n., *testacea* sp. n. Egypt p. 126, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Trogophloeus javanicus sp. n. Java p. 30, CAMERON Tijdschr. Ent. 79.—*T. javanus* sp. n. Java p. 182, CAMERON Proc. R. ent. Soc. Lond. (B) 5.—*T. desertus* sp. n. p. 136; *schneideri* subsp. n. *aegyptiacus* p. 140 Egypt, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Xylodromus sassuchini (with subsp. n. *obscurellus*), *uralensis* spp. n. Russia p. 252, KIRSCHENBLATT Rev. Microbiol. Epidémiol. Parasit. 15.

Zyras jacobsoni p. 19, *difficilis* p. 20, spp. n. Sumatra, CAMERON Tijdschr. Ent. 79.—*Z. (Isothoracodonia) subgen. n.* p. 328) *crassicornis* p. 319, *curtithorax*, *gedyei* p. 330, *dentatus* p. 331, *aequicollis* p. 332, (*Homalodonia* subgen. n.) *kenyae* p. 333, *gedyeanus* p. 334, *kakumeganus* p. 335, *pelleyi* p. 336 Kenya, *hunti* Uganda p. 333, spp. n., BERNHAUER Ann. Mag. n.H. (10) 18.—*Z. (Peltodonia) subgen. n.* p. 320), *bodemeyeri* sp. n. Asia Minor p. 321, BERNHAUER Pubb. Mus. ent. Pietro Rossi 1.—*Z. luimbalensis* p. 263, *pallescent* p. 264, *arrowi*, (*Acantho-nemidonia* subgen. n.) *miricauda* p. 265, (*Anophthalmodonia* subgen. n.) *jordani* p. 266, spp. n. Angola, BERNHAUER Novit. zool. 39.—*Z. neptunus* sp. n. Selangor p. 53, CAMERON J. F.M.S. Mus. 13.—*Z. soror* p. 183, (*Termitodonia* subgen. n.) *flavus* p. 184, spp. n. Java, CAMERON Proc. R. ent. Soc. Lond. (B) 5.

PSELAPHIDAE.

Amaurops novaki sp. n. Herzegovina p. 34, SVIRCEV Kol. Rdsch. 22.

Archiclaviger gen. n. p. 66, *overbecki* sp. n. Java p. 67 fig., HELLER Tijdschr. Ent. 79.

Atlapsenius eidmanni sp. n. Brazil p. 241 fig., REICHENSPERGER Rev. Ent. Rio de J. 6.

Claviger bartoni sp. n. Taygetos Mts. p. 26, MAÑAN Acta Soc. ent. Csl. 33.

Curculionellus divisifrons sp. n. Java p. 67 fig., HELLER Tijdschr. Ent. 79.

Rhenanus see *Edaphus* (Staphylinidae).

SCYDMAENIDAE.

Scydmaenidae of Abyssinia, LHOSTE Ann. Mag. n.H. (10) 18 pp. 610–619, 11 figs.

Cephennium minutissimum near Paris p. 79, LESNE Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) 4.

Etelea n. n. for *Microtherium* Petri 1908 nec Meyer 1865 p. 13, CSIKI Rovart. Lap., Budapest 16 1909.

Euconnus liberiae Liberia p. 254, *titschacki* Natal p. 255, spp. n. figs., LHOSTE Rev. franç. Ent. 2.—*E. djemensis* p. 614, *cooperi* p. 615, *foveatus* p. 617, *scotti* p. 618, spp. n. Abyssinia figs., LHOSTE Ann. Mag. n.H. (10) 18.

Mastigus phylogeny pp. 190–199, *biimpressus* Zululand p. 193, *vulgaris* Natal p. 194, *grandis* p. 195, *capensis* p. 196 Cape Province, spp. n. figs., LHOSTE Rev. franç. Ent. 3.

Microtherium Petri see *Etelea*.

Scydmaenus fortensis Natal, *pilifer* E. Africa, spp. n. p. 252 figs., LHOSTE Rev. franç. Ent. 2.—*S. nitidicollis*, *scotti* spp. n. Abyssinia p. 611 fig., LHOSTE Ann. Mag. n. H. (10) 18.

SILPHIDAE (LEPTINIDAE, CATOPOCHROTIDAE).

Silphidae of Nebraska, MESERVE Ent. News 47 pp. 132–134.

Catopochrotides gen. n. (also as *Calopochrotides*) *termitophilus* sp. n. Turkmenia p. 693 figs., KIZERITZKII & REIKHARDT Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Catopsomorphus marani sp. n. Bulgaria p. 72, ROUBAL Acta Soc. ent. Csl. 33.

Ceuthophyes bischoffi sp. n. Albania p. 62, MÜLLER Boll. Soc. ent. ital. 68.

Choleva solaris new to France p. 55, COMON Bull. Soc. Sci. hist. nat. Yonne, Auxerre 88 1935.

Diaprysius serullazi subsp. n. *jolyi*; *gezei* sp. n. Ardèche p. 63 figs., JEANNEL Rev. franç. Ent. 3.

Pteroloma ocelli p. 48–49, SZÉKESSY Ann. Mus. hungar. 30.

Silpha americana external anatomy pp. 284–299 figs., BLACKBURN Ohio J. Sci. 36.

LIODIDAE.

Agathidium kincaidi p. 39, *varipunctatum* p. 40, spp. n. U.S.A., HATCH J. N.Y. ent. Soc. 44.

Anisotoma interstitialis sp. n. U.S.A. p. 38, HATCH t.c.

Hydnobius kiseri, *lobatus* p. 35, *femoratus* p. 36, spp. n. U.S.A., HATCH t.c.

Leiodes serripes sp. n. U.S.A. p. 37, HATCH t.c.—*L. nitida* f. n. *ješátkoi* Czechoslovakia p. 15, ROUBAL Acta Soc. ent. Csl. 33.

SPHAERIIDAE.

Sphaerius morphology pp. 241–247, key to Old World spp. p. 247, *coomani*, *tessellatus*, *obsoletus*, *perlaevis*, *favosus*, *cribratus* spp. n. Tonkin figs., LESNE Livre jubil. Bouvier 1936.

HISTERIDAE.

Abraeus controversus sp. n. (with var. n. *connexus* p. 221) Tonkin p. 220 figs., DE COOMAN Rev. franç. Ent. 2.

Asolenus perfidus sp. n. Natal p. 31, REIKHARDT Proc. R. ent. Soc. Lond. (B.) 5.

Bacanius (*Mullerister* subgen. n. p. 137) *tonkinensis* sp. n. Tonkin p. 135, key p. 138, DE COOMAN Mus. Heude, Notes Ent. chin. 3.

Carcinops vicaria sp. n. Tonkin p. 221 fig., DE COOMAN Rev. franç. Ent. 2.

Convivister gen. n. p. 224, *nevermanni* sp. n. Costa Rica p. 225, REICHENSBERGER Rev. Ent. Rio de J. 6.

Cossyphodister gen. n. p. 227, *schwarzmaieri* sp. n. Brazil p. 228 figs., REICHENSBERGER t.c.

Diplostix volvulus sp. n. Uganda p. 33 fig., REIKHARDT Proc. R. ent. Soc. Lond. (B) 5.

Exaesiopus grossipes subsp. n. *berberus* N. Africa p. 227, DE PEYERIMHOFF Bull. Soc. ent. Égypte 20.

Hippenlister plaumanni sp. n. Brazil p. 226, REICHENSBERGER Rev. Ent. Rio de J. 6.

Hister aenigmaticus sp. n. U.S.A. p. 267, key to American spp. of subgen. *Paralister* p. 268, WENZEL Canad. Ent. 68.

Isomalus seeversi sp. n. Kansas p. 266, WENZEL t.c.

Liopygus cinctisternus sp. n. Tonkin p. 79 fig., DE COOMAN Bull. Soc. ent. Fr. 41.

Mullerister subgen. n. see *Bacanius*.

Nicotikis sumatrana Bickh. (= *beatula* Lewis, *liopygoformis* Desb.) p. 292, DE COOMAN Bull. Soc. ent. Fr. 41.

Niponius polinae sp. n. Malacca p. 34, REIKHARDT Proc. R. ent. Soc. Lond. (B) 5.

Orphistes gen. n., *femoralis* sp. n. E. Africa p. 32, REIKHARDT t.c.

Paromalus fossisternus sp. n. Sarawak p. 1 fig., DE COOMAN t.c.

Philothis alsiosus sp. n. N. Africa p. 219 figs., DE PEYERIMHOFF Bull. Soc. ent. Egypte 20.

Saprinus classification p. 213, *sphingis* sp. n. Egypt p. 221 figs., DE PEYERIMHOFF t.c.—*S.* spp. in Gironde pp. 123–124, TEMPÈRE Proc.-verb. Soc. linn. Bordeaux 86 1935.

Tribalus horni further description p. 223, DE COOMAN Rev. franç. Ent. 2.

NITIDULIDAE.

Brachypterolus cylindricus sp. n. Tunisia p. 82, NORMAND Bull. Soc. H.n. Afr. N. 27.

CUCUJIDAE.

Corrections to Cucujid catalogue "Col. Cat., pt. 109 1930," NEVERMANN Ent. Bl. 32 pp. 195–199.

Ancistria tenera sp. n. Java p. 65 fig., GÜNTHER Tijdschr. Ent. 79.

Cyprogenia see *Obenbergerodes*.

Hymaea paralella sp. n. Australia p. 98, CARTER Proc. Linn. Soc. N.S.W. 61.

Obenbergerodes n. n. for *Cyprogenia Baudi* nec Agass. p. 168, STRAND Folia zool. hydrobiol. 9.

Prostomis elburica var. n. *strandii* Caucasus p. 58, ROUBAL Festschr. E. Strand 1.

COLYDIIDAE.

(including DISCOLOMIDAE).

Acolobicus Sharp (= *Ditaphrus* Sharp) p. 62, HINTON Rev. Ent. Rio de J. 6.

Acropis denticulata sp. n. Panama p. 77, HINTON t.c.

Asynchita granulata Say p. 59, *rugulosa* Guér. p. 60 from *Synchita*, HINTON t.c.

Aulonium cylindricum sp. n. Costa Rica p. 55, HINTON t.c.

Bitoma parvula Guatemala p. 63, *sublata* Panama p. 64, spp. n., HINTON t.c.

Bothrideres excavaticollis sp. n. Mexico p. 96, HINTON t.c.

Colydium latum Costa Rica p. 49, *bicariniipenne* Argentina p. 51, *clypeale* Bolivia p. 52, spp. n., HINTON t.c.

Ditaphrus see *Acolobicus*.

Ethelema sobrina Sharp (= *gracilis* Arrow) p. 77, HINTON t.c.

Eucicones uniformis sp. n. Panama p. 66, HINTON t.c.

Langelandia hypogea sp. n. Algeria p. 93, NORMAND Bull. Soc. H.n. Afr. N. 27.

Lapethus Cas. (= *Lytopeplus* Sharp) p. 185, *cubanus* Cuba p. 186, *lateralis* Brazil p. 187 spp. n., HINTON Ent. News 47.

Lobogestoria characters p. 128 figs., HINTON Ent. mon. Mag. 72.

Lytopeplus see *Lapethus*.

Microsicus parvula Guér. (= *setosus* Sharp) p. 61, HINTON Rev. Ent. Rio de J. 6.

Neotrichus nevermanni sp. n. Costa Rica p. 60, HINTON t.c.

Phloeonemus haroldi ♂ p. 67 figs., HINTON t.c.

Phreatus immsi sp. n. Costa Rica p. 79, HINTON t.c.

Prolyctus Zimm. distinct gen. p. 95, HINTON t.c.

Pycnomerus antennalis p. 70, *sexualis* p. 71, *nevermanni* p. 73, spp. n. Costa Rica figs., HINTON t.c.

Sosylus cursorius Pasc. (= *simplex* Sharp); *duplicatus* Pasc. (= *centralis* Sharp) p. 81; *chapini* Panama p. 82, *nevermanni* p. 84, *latsinus* p. 87 Costa Rica, *signatus* Mexico p. 89, *sulcicollis* Br. Guiana p. 92, spp. n., HINTON t.c.

Synchita dubia sp. n. Panama p. 58, HINTON t.c.—*S. granulata*, *rugulosa* see *Asynchita*.

CRYPTOPHAGIDAE.

Coniophthalma gen. n. for *Henoticus germanicus* Reitt. p. 70 figs., KANGAS Ann. Ent. Fenn. 2.

Cryptophagus distinguendus, umbratus characters p. 10, COMON Misc. ent. 37.

Henoticus germanicus see *Coniophthalma*.

LANGURIIDAE.

Anadastus amamiensis sp. n. p. 17 [in Japanese] fig., MIWA Trans. Kansai ent. Soc. no. 6 1935.

Dasydactylus plaumanni sp. n. S. Brazil p. 100, MADER Ent. Rdsch. 54.

Labidolanguria montana sp. n. Formosa p. 411, MIWA & CHÛJÔ Trans. n.H. Soc. Formosa 26.

Languriomorpha kunashiriana sp. n. Kuriles p. 150, KONO Ins. mats. 10.

Pachylanguria oshimana sp. n. Amami Is. p. 17 [in Japanese] fig., MIWA Trans. Kansai ent. Soc. no. 6 1935.

EROTYLIDAE.

Apetus linodesmoides sp. n. Kamerun p. 123, DELKESKAMP Rev. Zool. Bot. Afr. 29.

Aulacochilus issikii sp. n. Formosa p. 311, CHÛJÔ Trans. n.H. Soc. Formosa 26.

Brechmotriplax see *Zythonia*.

Episcapha tapferi sp. n. Formosa p. 112, MADER Ent. Rdsch. 54.

Linodesmus revision of African spp. p. 105, *quellii* (with subspp. n. *quellii* p. 112, *rubrifrons* p. 113), *rubripes* p. 118, *semiannulatus*, *flavidulus*, *conjungens* p. 119, spp. n. Africa figs., DELKESKAMP Rev. Zool. Bot. Afr. 29.

Megalodacne asahinai, okunii spp. n. Formosa p. 212, CHÛJÔ Trans. n.H. Soc. Formosa 26.

Plagiopisthen angustus sp. n. Belgian Congo p. 124, DELKESKAMP Rev. Zool. Bot. afr. 29.

Rhynchotritoma gen. n., *divisa* (type) N. Rhodesia p. 255, *uniformis* Angola p. 256, spp. n., ARROW Novit. zool. 39.

Spondotriplax jucunda p. 113, *reiden-spiesi* p. 114, spp. n. New Guinea, MADER Ent. Rdsch. 54.

Thallis jucundus sp. n. Kenya p. 253, ARROW Novit. zool. 39.

Trichotritoma gen. n., *leo* sp. n. N.-W. Rhodesia p. 254, ARROW t.c.

Tritoma lateripunctata sp. n. (with ab. n. 4-punctata) Kansu p. 113, MADER

Ent. Rdsch. 54.—*T. shirakii* p. 213, *taiwana* p. 214, spp. n. Formosa, CHÛJÔ Trans. n.H. Soc. Formosa 26.

Zythonia Westw. (= *Brechmotriplax* Eichelb.) p. 253, ARROW Novit. zool. 39.

ENDOMYCHIDAE.

Beccaria overbecki sp. n. Java p. 72, GÜNTHER Tijdschr. Ent. 79.

Caenomychus key p. 99, MADER Ent. Rdsch. 54.

Cremnoides schwabi p. 25, *pilifer* spp. n. Peru; key p. 26, MADER Ent. Anz. 16.

Danae jucunda Abyssinia, *microdera*, Sudan p. 374, *calcarata* Cape Province p. 375, spp. n., ARROW Ann. Mag. n.H. (10) 18.

Encymon schwarzbaueri Solomon Is. p. 62, *neugebaueri* Philippines spp. n.; *violaceus* subsp. n. *cupreatus* Borneo p. 63, MADER Ent. Rdsch. 54.—*E. mediojunctus* see *Eucteanus*.

Endomychus jurečeki sp. n. E. Siberia p. 69; key p. 97, MADER Ent. Rdsch. 54.

Eucteanus mediojunctus Pic from *Encymon* p. 64; ab. n. *disjunctus* no locality p. 65, MADER t.c.

Eumorphus staudingeri sp. n. Philippines p. 61, MADER t.c.

Mimolithophilus costatus sp. n. Cape Province p. 377, ARROW Ann. Mag. n.H. (10) 18.

Mycetina turneri Natal p. 376, *gedyei* Kenya p. 377 spp. n., ARROW t.c.

Pleganophorus bispinosus biology pp 137-139, DORN Ent. Bl. 32.

Sphaerosoma subglabrum ab. n. *punctulatum* Tunisia p. 94, NORMAND Bull. Soc. H.n. Afr. N. 27.

Stenotarsus semifasciatus p. 7, *amazonicus* p. 8, *malleri*, *minimus*, *atricollis* p. 9 Brazil, *testaceicornis* Peru, *boliviensis*, *minor* p. 8, *clavicornis*, *minutissimus* p. 10 Bolivia, *caracasensis* Venezuela p. 9, spp. n., PIC Mél. exot.-ent. 67.—*S. buchgraber* sp. n. Kamerun p. 65, MADER Ent. Rdsch. 54.

COCCINELLIDAE.

Armorican Coccinellidae, ABBAYES Bull. Soc. sci. Bretagne 9 1932 pp. 26-27; 12 pp. 183-184.

List of Japanese Coccinellidae, MIWA & YOSHIDA Ent. World Tokyo 3 1935 no. 22 pp. 31-53.

Coccinellidae of Jehol, YUASA Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 43, 19 pp. 1 col. pl. 15 figs.

Adalia bipunctata ab. n. *ursulae* Germany p. 359 fig., MEISSNER Ent. Rdsch. 53.

Anatis anatomy, revision of American spp. pp. 263-272 figs., MCKENZIE Univ. Calif. Pub. Ent. 6.

Coccinella 11-punctata ab. n. *horaria* Ireland p. 30, O'MAHONY Irish Nat. J., Dublin 6.

Cryptognatha signata sp. n. Paraguay, Argentina p. 299, KORSCHESKY Arb. morph. tax. Ent. Berl. 3.

Epilachna chrysomelina geographical variation pp. 527-537 figs., ZIMMERMANN Z. induct. Abstamm- u. Vererb- Lehre 71.

Novius conicollis p. 1, *canariensis* p. 2, spp. n. Canary Is. figs., KORSCHESKY Comment. biol. 6 1935 no. 3.

Paracoelopterus gen. n. p. 97, *rufinus* sp. n. Tunisia p. 98 figs., NORMAND Bull. Soc. H.n. Afr. 27.

Pharoscyrnus eichleri, *priesneri* spp. n. Egypt p. 26, key p. 27, MADER Bull. Soc. ent. Egypte 20.—P. 10-plagiatus subsp. n. *grancanariensis* Canary Is. p. 8, UYTENBOOGAART Comment. biol. 6 1935 no. 2.

Scymnus oblongus sp. n. Tunisia p. 95, NORMAND Bull. Soc. H.n. Afr. N. 27.

DERMESTIDAE.

Falsocryptorhopalum gen. n. p. 1, *impressum* sp. n. Brazil p. 2, PIC Mél. exot. ent. 67.

Hemirhopalum testaceipes sp. n. Brazil p. 2, PIC t.c.

Trogoderma apicale sp. n.; *thoracicum* varr. n. *bicoloripes*, *obscurum* Brazil p. 1, PIC t.c.

PARNIDAE (DRYOPIDAE).

Palaearectic Dryopidae, BOLLOW Ent. Bl. 32 pp. 1-7, 52 etc. 6 figs.

Dryopidae from Borneo, HINTON Ann. Mag. n.H. (10) 18 pp. 89-109, 204-224, 12 figs.

Cylloepus marshalli sp. n. Borneo p. 220 figs., HINTON Ann. Mag. n.H. (10) 16.—*C. blairi* sp. n. Mexico p. 1; *confusus* n. n. for *sharpi* Zaitz. nec Grouv. p. 54; *grouvellei* n. n. for

granosus Grouv. 1896 nec 1888; *granosus* Grouv., *flavipes* Gr., *gounellei* Gr., *subsulcatus* Gr., *sulcatus* Gr. from *Elmis* p. 55 figs., HINTON Ent. mon. Mag. 72.—*C. germaini* see *Elsianus*.

Dryopomorphus gen. n. p. 165, *extraneus* sp. n. Japan p. 166 figs., HINTON Entomologist 69.

Dryops luridus biology pp. 67-78 figs., HINTON Trans. Soc. Br. Ent. 3.—*D. punctatellus* Turkestan p. 56, *doderi* Italy, Morocco p. 156, *similaris* Germany p. 191 spp. n.; *gracilis* subsp. n. *discretus* Tunis p. 156 figs., BOLLOW Ent. Bl. 32.

Elmis prothoracica n. n. for *chiloensis* Champ. nec *chilensis* Germ. p. 56, HINTON Ent. mon. Mag. 72.—*E. granosa*, *flavipes*, *gounellei*, *subsulcata*, *sulcata* see *Cylloepus*; *simplex* see *Xenelmoides*.

Elsianus salti sp. n. Brazil p. 283 fig., HINTON Entomologist 69.—*E. germaini* Grouv. from *Cylloepus* p. 56, HINTON Ent. mon. Mag. 72.—*E. immsi* p. 418, *tarsalis* p. 419 Costa Rica, *sandersoni* p. 420, *striatoides* p. 422 Mexico, *clypeatus* Trinidad p. 424, spp. n. figs., HINTON Trans. R. ent. Soc. Lond. 85.

Helichus confusus sp. n. Mexico p. 415 figs., HINTON t.c.—*H. Er.* (= *Pachyparnus* Fairm.) p. 54, HINTON Ent. mon. Mag. 72.—*H. gressitti* sp. n. Formosa p. 164, HINTON Entomologist 69.

Helmis haitiana p. 80, *lahottensis* p. 81, spp. n. Haiti figs., DARLINGTON Psyche 43.

Heterelmis pubipes p. 285, *limnoides* p. 288, spp. n. Brazil figs., HINTON Entomologist 69.

Macronychoides re-description, *ungulatus* larva p. 429 figs., HINTON Trans. R. ent. Soc. Lond. 85.

Macronychus simplex sp. n. Malaya p. 433 figs., HINTON t.c.

Narpus Cas. in *Elminae* p. 57, re-description p. 58, HINTON Ent. mon. Mag. 72.

Neelmis further description p. 5, HINTON t.c.—*N. longulus* sp. n. Mexico p. 426 fig., HINTON Trans. R. ent. Soc. Lond. 85.

Normandia see *Riolus*.

Notriolus davidsoni, *setosus* p. 156, *taylori* p. 157, spp. n. Australia figs., CARTER & ZECK Aust. Zool. 8.

Pachyparnus see *Helichus*.

Pelonomus obscurus gracilipes Chev. (= *rufescens* Cas.); *picipes* Oliv. (= *palpalis* Sharp) p. 77, DARLINGTON Psyche 43.

Phanocerus helmoides sp. n. Haiti p. 74 fig., DARLINGTON t.c.

Pheneps gen. n., *gracilis* (type) p. 67, *cubanus* p. 68 spp. n. Cuba figs., DARLINGTON t.c.

Potamophilinus gravastellus sp. n. Borneo p. 216 figs., HINTON Ann. Mag. n.H. (10) 18.

Psephenoides japonicus sp. n. Japan p. 9 figs., MASUDA Trans. Kansai ent. Soc. no. 6 1935.

Psephenops Grouv. (= *Xexanchorinus* Grouv.) p. 69, *smithi* Grouv. (= *latus* Grouv.) p. 70; *maculicollis* Colombia p. 71, *haitianus* Haiti p. 72, spp. n., DARLINGTON Psyche 43.

Riolus Muls. (= *Normandia* Pic) p. 57, HINTON Ent. mon. Mag. 72.

Simsonia re-description p. 428 fig., HINTON Trans. R. ent. Soc. Lond. 85.—*S. tonnoiri*, *allmani* spp. n. N.S. Wales p. 158 figs., CARTER & ZECK Aust. Zool. 8.

Sostea crassa p. 90, *punctiventris* p. 93, *cyanea* p. 95, *thoracica* p. 98, *fusca* p. 100, *insolita* p. 103, *parva* p. 107, *scottianus* p. 204, *vicina* p. 207, *hobbyi* p. 210, *confusa* p. 213, spp. n. Borneo figs., HINTON Ann. Mag. n.H. (10) 18.

Sosteamorphus gen. n. p. 416, *verrucatus* sp. n. Chile p. 417, HINTON Trans. R. ent. Soc. Lond. 85.

Stenelmis nevermanni sp. n. Costa Rica p. 424 figs., HINTON t.c.—*S. sauteri* sp. n. Formosa p. 122, KONO Arb. morph. tax. Ent. Berl. 3.—*S. semifumosus* sp. n. Borneo p. 218 fig., HINTON Ann. Mag. n.H. (10) 18.

Throscinus aethiops sp. n. Haiti p. 75 fig., DARLINGTON Psyche 43.

Xenelmis gen. n. type *bufo* Sharp p. 427 figs., HINTON Trans. R. ent. Soc. Lond. 85.

Xenelmoides gen. n. type *Elmis simplex* Darlington p. 5 fig., HINTON Ent. mon. Mag. 72.

Xexanchorinus see *Psephenops*.

GEORYSSIDAE.

Georyssus formosanus sp. n. Formosa p. 53, KÔNO Arb. morph. taxon. Ent. Berl. 3.

CYATHOCERIDAE.

Lepiceridae n. n. for Cyathoceridae, HINTON Ann. Mag. n.H. (10) 17 p. 473.

HETEROCERIDAE.

Heterocerus schatzmayri sp. n. Tunis p. 233 fig., MAMITZA Pubbl. Mus. ent. Pietro Rossi 1.

HYDROPHILIDAE.

Hydrophilidae of Kalahari, d'ORCHY-MONT Ann. Transv. Mus. 17 pp. 109–116, 1 pl.

Hydrophilidae of Jehol, KAMIYA Rep. First sci. Exp. Manchukuo (5) 1 pt. x art. 45, 5 pp. 1 col. pl.

Amphiops phallicus sp. n. Bechuana-land p. 114, d'ORCHY-MONT Ann. Transv. Mus. 17.

Anacaena laevis sp. n. N. India p. 257 figs., d'ORCHY-MONT Livre jubil. Bouvier 1936.

Berosus kalahariensis sp. n. Kalahari p. 115, d'ORCHY-MONT Ann. Transv. Mus. 17.—*B. cuspidatus* Er. (= *bispinosus* Boh. = *cuspidatus* Boh.) p. 27; *numidicus* Kuw. (= *bispinosus* Knisch nec Boh.) p. 28, d'ORCHY-MONT Bull. Mus. H.n. Belg. 12 no. 23.

Coelostoma revision of non-American spp. pp. 1–38; *orbiculare* subsp. n. *syriacum* Syria p. 9; *rutarum* p. 16, *aethiopicum* p. 26 Belgian Congo, *fallaciosum* p. 19, *subditum* p. 20, *waterstradti* p. 29 Borneo, *picturatum* Uganda p. 23, *vividum* Java p. 28, *rhompea* p. 31, *conradsi* p. 33 Tanganyika, *lesnei* Mozambique p. 32, *moqueyrsi* Gabon p. 34, *insolitum* Madagascar p. 35, *subtile* Zanzibar p. 37, spp. n. figs., d'ORCHY-MONT op. cit. (2) 7.

Cyphostethus see *Pristoternus*.

Enochrus synonymy pp. 11–26, d'ORCHY-MONT Bull. Mus. H.n. Belg. 12 no. 23.—*E. kishidai* sp. n. Manchoukuo p. 4 fig., KAMIYA Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 45.

Haenydra see *Hydraena*.

Helochaeres key to African spp.; *bohemani* p. 111, *blaesius*, *phallicus*, *structus*, *subtilis* p. 112, spp. n. Kalahari figs., d'ORCHYMONT Ann. Transv. Mus. 17.—*H. melanophthalmus* synonymy and distribution discussed p. 1; *mentinotus* Kuwert (= *melanophthalmus* Kuwert nec Muls. = *squalidus* Sharp) p. 6; *abbreviatus* F. from *Hydrophilus* (= *Philhydrus pallidus* Cast. = *oculatus* Sharp = *pallidus* d'Orchym.); *obscurus* Müll. (= *fulvus* Fourc. = *griseus* F. = *bicolor* F.) from *Hydrophilus* p. 10 figs., d'ORCHYMONT Bull. Mus. H.n. Belg. 12 no. 23.

Hydraena revision of spp. of Iberian Peninsula pp. 1–48 figs.; *servilia* p. 20, *corinna* p. 23, *affusa* p. 27, *bolivari* p. 32, *capta* p. 34, *iberica* p. 40 spp. n.; *riparia* f. n. *brachymera* p. 37 Spain figs., d'ORCHYMONT op. cit. (2) 6.—*H.* phylogeny pp. 61–66; subgen. *Haenydra* Rey a suggested nomen conservandum pl 67 figs., d'ORCHYMONT Mém. Mus. H.n. Belg. (2) 3.—*H. grandis*, *armipes*, *sternalis*, *pulchella* synonymy pp. 115–119, d'ORCHYMONT Bull. Ann. Soc. ent. Belg. 76.—*H. exasperata* sp. n. Portugal p. 1 fig., d'ORCHYMONT Comment. biol. 5 1935 no. 1.

Hydrobius barretti sp. n. N.S. Wales p. 206 figs., DEANE Vict. Nat. 52.

Hydrophilus abbreviatus, *bicolor*, *fulvus*, *griseus*, *obscurus* see *Helochaeres*.

Laccobius morphology of some spp. pp. 425–438 figs., d'ORCHYMONT Bull. Ann. Soc. ent. Belg. 76.—*L. simulatrix* subsp. n. *sculptus* Morocco p. 17, d'ORCHYMONT Comment. Biol. 5 1935 no. 1.

Limnebius nitidus Marsham (= *gerhardti* Heyd.) p. 12, d'ORCHYMONT t.c.—*L. kwangtungensis* sp. n. China p. 149 figs., PU Peking n.H. Bull. 11.

Ochthebius atriceps Fairm. (= *clathratus* Guill.), *exaratus* Muls. (= *acutangulus* Guill.) p. 5, d'ORCHYMONT Comment. biol. 5 1935 no. 1.

Philhydrus pallidus see *Helochaeres*.

Pristoternus n. n. for *Cyphostethus* d'Orch. nec Fieb. (Hem.) p. 311, d'ORCHYMONT Bull. Ann. Soc. ent. Belg. 76.

HELODIDAE (CYPHONIDAE).

Cyphon pendleburyi, *sulcatipenne* spp. n. Malaya p. 167, PIC J. F.M.S. Mus. 13.—*C. plaumanni* sp. n. Brazil p. 20,

PIC Echange 51.—*C.* key p. 300; *elgonensis* sp. n.; *alluaudi* var. n. *subjunctus* p. 299; *innotatus* var. n. *notatus*; *diversicolor* var. n. *similaris* p. 300 Kenya, PIC Miss. sci. Omo 2 1935.

Elodes chobauti var. n. *innotatithorax* Tunisia p. 13, PIC Echange 51 1935.

Eubrianax tonkineus sp. n. Tonkin p. 16, PIC t.c.

Macrocyphon incostatum sp. n. Perak p. 167, PIC J. F.M.S. Mus. 13.

Ora multipicta sp. n. Kenya p. 301, PIC Miss. sci. Omo 2 1935.

Prionocyphon serricornis abb. n. *unimaculatus*, *junctus* Libanon Mts. p. 13, PIC Echange 51 1935.

Ptilodactyla prolongaticollis (with var. n. *hendersoni*) sp. n. Pahang p. 169, PIC J. F.M.S. Mus. 13.

Scirtes curtelineatus, *seimundi* p. 168, *bistrinotatus* p. 169, spp. n. Malaya, PIC t.c.—*S. atripennis* sp. n. Kenya p. 302, PIC Miss. sci. Omo 2 1935.

DASCILLIDAE.

Dascillus aprutianus sp. n. Italy p. 137, DEPOLI Boll. Soc. ent. ital. 68.

Epilichas nigrinus sp. n. Australia p. 99, CARTER Proc. Linn. Soc. N.S.W. 61.

Macropogon revision pp. 45–48, key p. 45, *sequoiae* sp. n. California p. 46; *testaceipennis* Mots. (= *rubricollis* Pic, *cribricollis* Brown) p. 47, HOPPING Pan-Pacific Ent. 12.

SPHINDIDAE.

Eurysphindus bicolor sp. n. Cuba p. 201, FISHER Mem. Soc. Cubana H.n. 10.

CEBRIONIDAE.

Cebrio cyrenaicus p. 148, *krügeri* (with var. n. *gridellii*) p. 149, *wohlberedti* p. 150, spp. n. Cyrenaica, PIC Atti Stor. Mus. nat. Trieste 12 1935.

RHIPICERIDAE (SANDALIDAE).

Callirrhapis incerta sp. n. p. 151; *robusta* subsp. n. *indica* p. 154 India, VAN EMDEN Ind. For. Rec. 2.

CIIDAE.

Key to Palaearctic Ciidae, ROUBAL Festschr. E. Strand 1 p. 57.

Cis savilli sp. n. England p. 220, DONISTHORPE Ent. mon. Mag. 72.

Ennearthron (*Knablia* subgen. n. p. 53), ROUBAL Festschr. E. Strand 1.

Knablia subgen. n. see *Ennearthron*.

BOSTRYCHIDAE.

Synonymy of some Bostrychids, CHÛJÔ Trans. n.H. Soc. Formosa 26 pp. 408-409.

Catonistes gen. n. p. 137, *antennalis* sp. n. Selangor p. 138, fig., LESNE Bull. Soc. ent. Fr. 41.

Enneadesmus of Mozambique pp. 55-62, *crassispina* p. 56, *masculinus* p. 57, *mariae* p. 58, spp. n. Mozambique figs., LESNE Rev. franç. Ent. 3.

Rhizoperthodes gen. n., *anguinus* sp. n. Malaya p. 134 fig., LESNE Bull. Soc. ent. Fr. 41.

Sinoxylon mangiferae sp. n. Formosa p. 407, CHÛJÔ Trans. n.H. Soc. Formosa 26.—*S. lycturum* sp. n. Burma p. 136 fig., LESNE Bull. Soc. ent. Fr. 41.

Xylogenes indicola sp. n. India p. 136 fig., LESNE t.c.

LYCTIDAE.

Lyctoderma ambiguum sp. n. India p. 133 figs., LESNE Bull. Soc. ent. Fr. 41.

Lyctoxtylon convictor p. 132, *beesonianum* p. 133, spp. n. India figs., LESNE t.c.

Minthea humericosta sp. n. New Guinea p. 131, LESNE t.c.

ANOBIIDAE (ASPIDIPOREIDAE).

Caenocara oakleyi p. 241, *maculatum*, *insulanum* p. 242, spp. n., FISHER J. Agric. Univ. P.R. 20.

Catorama insulicola sp. n. Porto Rico p. 240, FISHER t.c.

Clada bicolor sp. n. Malaya p. 54, PIC J. F. M.S. Mus. 13.—*C. flabellicornis* sp. n. Belgian Congo p. 34, PIC Rev. Zool. Bot. afr. 29.

Cryptorama densipunctatum sp. n. Porto Rico p. 240, FISHER in WOLCOTT J. Agric. Univ. P. R. 20.

Falsogastrallus pendleburyi sp. n. Malaya p. 54, PIC J. F. M.S. Mus. 13.

Flabellomesothus gen. n., *duboisii* sp. n. Belgian Congo p. 419, PIC Rev. Zool. Bot. Afr. 28.

Lasioderma seydeli sp. n. Belgian Congo p. 419, PIC t.c.

Petalium puertoricensis sp. n. Porto Rico p. 239, FISHER J. Agric. Univ. P.R. 20.

Protheca flavitarsis sp. n. Porto Rico p. 241, FISHER t.c.

Ptilinus elongatus, *testaceus* spp. n. Malaya p. 55, PIC J. F. M.S. Mus. 13.

Sitodrepa panicea morphology pp. 90-96 figs., CHALAUZ Bull. Soc. sci. Bretagne 13.

Trichodesma oakleyi sp. n. Porto Rico p. 238, FISHER J. Agric. Univ. P.R. 20.

PTINIDAE.

Casapus wollastoni sp. n. Canary Is. p. 9, UYTENBOOGAART Comment. biol. 6 1935 no. 2.

Piarus chevalieri sp. n. Cape Verde Is. p. 132, PIC Rev. franç. Ent. 3.

Ptinus jeanneli, *ocularis* p. 213, *gracilicornis* p. 214, spp. n. Kenya, PIC t.c.—*P. tectus* biology, morphology pp. 556-599 figs., KONIG Z. wiss. Zool. 148.

Sphaericus densepunctatus sp. n. Brazil p. 131, PIC Arb. morph. tax. Ent. Berl. 3.

LYMEXYLOPIDAE.

Attractocerus blairi sp. n. India p. 181, GARDNER Proc. R. ent. Soc. Lond. (B) 5.—*A. mirabilis* sp. n. Formosa p. 457 fig., MIWA Trans. n.H. Soc. Formosa 25 1935.

Hylecoetus formosanus sp. n. Formosa p. 456 fig., MIWA t.c.

Melittomma albitarsis sp. n. Bengal p. 154, BLAIR Ent. mon. Mag. 72.—*M. ruficollis* Brazil p. 2, *abdominale* Peru, *submarginatum* Congo spp. n.; *lateritium* varr. n. *ruficollis*, *binotatum* Guiana p. 3, PIC Mél. exot.-ent. 67.

CLERIDAE.

Anthicoclerus conradsi sp. n. p. 126 (with var. n. *obscurus* p. 127) Tanganyika, PIC Bull. Soc. zool. Fr. 61.

Aphelochroa bachelieri sp. n. Ivory Coast p. 214, PIC Bull. Soc. ent. Fr. 41.

Aulicus key p. 250, *humeralis* p. 252, *bicinctus* p. 255 California, *semifasciatus* Mexico p. 254 spp. n.; *terrestris* biology p. 257, figs., LINSLEY Univ. Calif. Pub. Ent. 6.

Clerus lateoluteus p. 3, *malleri*, *bicon-junctus* p. 4, *luteoapicalis* p. 6 Brazil, *peruvianus* Peru p. 4, *clermonti* p. 5, *atroterculatus* p. 6 Bolivia, *wagneri* Argentina p. 5, *spp. n.*, PIC Mél. exot.-ent. 67.

Corynetes coeruleus DeG. (= *meridionalis* Obenb.); *obenbergeri* *sp. n.* (= *coeruleus* auct. nec DeG.) p. 42, JANSSON Notul. ent. 16.

Goyasanum *gen. n.*, *ruficollis* *sp. n.* Brazil p. 7, PIC Mél. exot.-ent. 67.

Lesneoclerus *gen. n.*, *neocleroides* *sp. n.* Bolivia p. 210 figs., CORPORAAL Rev. franç. Ent. 3.

Opetiopalpus bicoloriventris *sp. n.* Cape Verde Is. p. 132, PIC t.c.

Opilo barbarus *abb. n.* maroccanus Morocco, *cedri* Algeria p. 21, PIC Echange 52.

Orthrius pieli *sp. n.* China p. 15, PIC Notes Ent. chinoise, Mus. Heude 3.

Parathaneroclerus *gen. n.*, *triimpressus* *sp. n.* Brazil p. 20, PIC Echange 51.

Pelonium multinotatum, *tuberculatum*, *lateapicale*, *atrinotatum* (with *var. n. separatum*, *junctum* p. 101) *spp. n.* Argentina, PIC Rev. Soc. ent. argent. 7 1935.—*P. viride* (with *var. n. semi-marginatum*), *plumanni* *spp. n.* Brazil p. 20, PIC Echange 51.

Picoclerus *gen. n.* type *ater* PIC p. 59 fig., CORPORAAL Rev. franç. Ent. 3.

Platynoptera testaceiceps *sp. n.* Brazil p. 6, PIC Mél. exot.-ent. 67.

Spinoza vanderwieli Borneo p. 206, *oberthürri* p. 207, *confusefasciata* p. 208 Sumatra, *spp. n.* figs., CORPORAAL Rev. franç. Ent. 3.

Thanasimus moutoni *sp. n.* Shanghai p. 3, PIC Echange 51 hors-texte.

MELYRIDAE (MALACHIIDAE).

Apalochrus notatithorax *sp. n.* Astrakhan p. 2, PIC Echange 51 hors-texte.—*A. longehirsutus*, *chappuisi* *spp. n.* Kenya p. 297, PIC Miss. sci. Omo 2 1935.

Attalus lutatus *ab. n. latenotatus* Egypt p. 11, PIC Echange 51 1935.—*A. rubroapicalis*, *curticornis*, *reductus* (with *var. n. reductissimus*) *spp. n.* Morocco; *tenietensis* *ab. n. postlimbatus* Algeria p. 1, PIC Echange 51 hors-texte.

Cephaloncus torre-tassoi *sp. n.* Tripoli p. 375, WITTMER Livre Jubil. Bouvier 1936.

Cyrtosus annulipes, *viridescens* *spp. n.*; *rufifrons* *ab. n. curtelineatus* Morocco p. 2, PIC Echange 51 hors-texte.

Haplocnemus strandi *sp. n.* Bukovina p. 518, MARCU Festschr. E. Strand 1.

Hypebaeus peyerimhoffi *Ab. (= alferii* Pic); *laterinodosus* *sp. n.* Sinai p. 153, WITTMER Bull. Soc. ent. Egypte 20.

Listrus minimus p. 184, *gentryi* p. 185, *coalingensis* p. 187, *spp. n.* U.S.A. figs., BLAISDELL Pan-Pacific Ent. 12.

Malachius krugeri *sp. n.* Cyrenaica p. 147, PIC Atti Mus. Stor. nat. Trieste 12 1935.—*M. atlasicus* *abb. n. purpureipennis*, *purpureotinctus* Morocco p. 2, PIC Echange 51 hors-texte.

Mixis bilineatithorax *sp. n.* Kenya p. 296, PIC Miss. sci. Omo 2 1935.

Pseudocolotes arambourgi *sp. n.* S. Abyssinia p. 295, PIC t.c.

Troglops alferianus ♂ p. 152, WITTMER Bull. Soc. ent. Egypte 20.

DASYTIDAE.

Danacaea cervina *var. n. diversipes* Macedonia p. 3, PIC Ent. Anz. 16.—*D. jeanneli* *sp. n.* Kenya p. 294, PIC Miss. sci. Omo 2 1935.

Dasytes subcinctus *var. n. insubcinctus* Mt. Elgon p. 295, PIC t.c.—*D. fouqueti* *sp. n.* Senegal p. 16, PIC Echange 51 1935.—*D. microps* *sp. n.* Albania p. 154, MÜLLER Boll. Soc. ent. ital. 67 1935.

Haplocnemus fortispunctatus, *bicoloratus* Morocco, *viridescens* Archa *spp. n.* p. 15, PIC Echange 51 1935.

TELEPHORIDAE (CANTHARIDAE).

Cantharidae of Jehol, KISHIDA Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 46 21 pp. 2 col. pls.

Aclytia testaceiceps *sp. n.* New Guinea p. 3, PIC Ent. Anz. 16.

Apteromalthinus luteus *sp. n.* Morocco p. 13, PIC Echange 51 1935.

Cantharis perpallens p. 179, *mimus* p. 182, *greeni* p. 183 *spp. n.* U.S.A.; *lecontei* *n. n.* for *collaris* Lec. p. 180; *mollis* *n. n.* for *pusillus* Lec. 1881 nec 1851 p. 182, FALL Pan-Pacific Ent. 12.—*C. testaceohumeralis* *sp. n.* Yunnan p. 1, PIC Ent. Anz. 16.—*C. marocana*

var. n. semiobliterata; *maura var. n. curtekumeralis*; *lateralis var. n. andrei* Morocco p. 13, PIC Echange 51 1935.—*C. pendleburyi sp. n.* Malaya p. 56, PIC J. F.M.S. Mus. 13.

Chauliognathus subacuminatus sp. n. Paraguay p. 2, PIC Ent. Anz. 16.

Discodon albocincticollis sp. n. Costa Rica p. 131, PIC Arb. morph. tax. Ent. Berl. 3.

Ichthyurus testaceipennis sp. n. Malaya p. 58, PIC J. F.M.S. Mus. 13.

Lucernuta pekinensis see *Pyrocoelia*.

Malthinus axillaris ab. n. nigrithorax Rhode I. p. 677, subsp. *n. damascenus* Syria; *pici* (with *ab. n. nigrinus*) Jericho, *axillaroides* Transjordan p. 678 *spp. n.*, WITTMER Mitt. schweiz. ent. Ges. 16.

Malthodes reducta, brevipigis, truncatopigis, binoticollis spp. n. Morocco p. 14, PIC Echange 51 1935.

Microichthyurus basipennis sp. n. Malaya p. 57, PIC J. F.M.S. Mus. 13.

Podabrus alpinus f. n. apicenigra Czechoslovakia p. 197, ROUBAL Sborn. ent. odd. Nár. Mus. Praha 14.

Pyrocoelia list and distribution of known *spp. p.* 14, *pekinensis* Gorh. from *Lucernuta* p. 16; *kanamarui sp. n.* Kwantung p. 18 figs., KISHIDA Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 46.

Rhagonycha theryi Morocco p. 13, *subnoticeps spp. n.*; *hesperica var. n. kochi* Spain p. 11, PIC Echange 51 1935.

Silidius atritarsis var. n. testaceipennis Mt. Elgon p. 293, PIC Miss. sci. Omo 2 1935.

Silis longeincisa sp. n. Malaya p. 55, PIC J. F.M.S. Mus. 13.—*S. inapicipennis sp. n.* Brazil p. 2, PIC Ent. Anz. 16.

Themus flavoscutellaris sp. n. India p. 1, PIC t.c.

Trypherus pendleburyi sp. n. Malaya p. 57, PIC J. F.M.S. Mus. 13.

LYCIDAE.

Adoceta stabilis sp. n. Kenya p. 111 figs., KLEINE Miss. sci. Omo 2 1935.

Bulenides longiareolatus sp. n. Java p. 132, KLEINE Arb. morph. tax. Ent. Berl. 3.

Calochromus pudens p. 138, *drescheri, malignus p.* 139, *spp. n.* Java figs., KLEINE t.c.—*C. sanguineopilosis sp. n.* Pahang p. 131 fig., KLEINE J. F.M.S. Mus. 13.

Cautires jeanneli sp. n. Kenya p. 106 figs., KLEINE Miss. sci. Omo 2 1935.

Chuzenjanus see *Xylobanellus*.

Cladophorus see *Spačekia*.

Dihammatus lentus p. 137, *rarus p.* 138, *spp. n.* Java figs., KLEINE Arb. morph. tax. Ent. Berl. 3.

Dilophotes aequalis sp. n. Java p. 140 figs., KLEINE t.c.

Ditoneces nigrostriatus sp. n. Java p. 136 figs., KLEINE t.c.—*D. repens sp. n.* Pahang p. 129 fig., KLEINE J. F.M.S. Mus. 13.

Flabellodilophotes longeflabellatus sp. n. Pahang p. 131 fig., KLEINE t.c.

Libnetis incanus sp. n. Pahang p. 130 fig., KLEINE t.c.—*L. pertenuis, transversithorax spp. n.* Java p. 137 figs., KLEINE Arb. morph. tax. Ent. Berl. 3.

Lycostomus afghan sp. n. Himalayas p. 180 fig., KLEINE t.c.—*L. koreanus* Korea, Stötzneri Szetschuan, *spp. n.* p. 13 figs., KLEINE Lingnan Sci. J. 15.

Lycus subspinosus p. 103, *stolidus p.* 104, *serratulicornis p.* 105, *spp. n.* Kenya figs., KLEINE Miss. sci. Omo 2 1935.—*L. postlimbatus, semilunaris p.* 328, *sinuateapicalis, kapanganus spp. n.*; *longipes var. n. minor p.* 329 Belgian Congo, PIC Rev. Zool. Bot. afr. 28.

Merolycus dilatatus sp. n. Belgian Congo p. 227 figs., KLEINE t.c.

Metanoeus impexus sp. n. Pahang p. 127, KLEINE J. F.M.S. Mus. 13.

Planeteros flavoapicalis sp. n. Kenya p. 109 figs., KLEINE Miss. sci. Omo 2 1935.

Platerodritus apicalis sp. n. Malaya p. 56, PIC J. F.M.S. Mus. 13.

Plateros koreanus Korea p. 263, *flavomarginatus* China p. 264, *spp. n.* figs., KLEINE Lingnan Sci. J. 15.—*P. reduncus, rusticus, dolosus p.* 135, *vespertilio, fragilis p.* 136, *spp. n.* Java figs., KLEINE Arb. morph. tax. Ent. Berl. 3.—*P. pahanganus sp. n.* Pahang p. 128 fig., KLEINE J. F.M.S. Mus. 13.

Spačekia n. n. for *Cladophorus* Guér. nec Gray p. 168, STRAND Folia zool. hydrobiol. 9.

Tricholus ignotus sp. n. Java p. 133, KLEINE Arb. morph. tax. Ent. Berl. 3.

Xylobanellus Kleine (= *Chuzenjianus* Kono) p. 264, KLEINE Lingnan Sci. J. 15.

Xylobanus popularis p. 132, *tenuis*, *siccus* p. 133, spp. n. Java figs., KLEINE Arb. morph. tax. Ent. Berl. 3.—*X. chappuisi* sp. n. Kenya p. 108 figs., KLEINE Miss. sci. Omo 2 1935.—*X. burgeoni* sp. n. Belgian Congo p. 227 figs., KLEINE Rev. Zool. Bot. afr. 28.

LAMPYRIDAE (PHENGODIDAE).

Calyptocephalus perroudi sp. n. Venezuela p. 126, PIC Bull. Soc. zool. Fr. 61.

Lampyrus gridellii sp. n. Cyrenaica p. 147, PIC Atti Mus. Stor. nat. Trieste 12 1935.

Ototreta testaceolineata sp. n. Malaya p. 57, PIC J. F.M.S. Mus. 13.

EUCNEMIDAE

(MELASIDAE, CEROPHYTIDAE).

Dictyeucnemis niveus see *Hemiopsida*.

Dorsifornax epimeralis sp. n. Singapore, Penang p. 187, FLEUTIAUX Proc. R. ent. Soc. Lond. (B) 5.

Echthrogaster re-description p. 188, FLEUTIAUX t.c.

Hemiopsida niveus Lea from *Dictyeucnemis* p. 188, FLEUTIAUX t.c.

Languiroschythron stevensi sp. n. Nepal-Sikkim Frontier p. 187, FLEUTIAUX t.c.

ELATERIDAE

(PHYLLOCERIDAE, DICRONYCHIDAE).

Elaterids of Gorjkij region, ESTER, BERG Rev. Ent. U.R.S.S. 25 1935 pp. 223-228.

Elateridae of French Indo-China, FLEUTIAUX Ann. Soc. ent. Fr. 105 pp. 279-300, 1 pl.

Elaterids of Bulgaria, ROUBAL Mitt. naturw. Inst. Sofia 9 pp. 57-67.

Elaterids of the Philippines, VAN ZWALUWENBURG Philipp. J. Sci. 59 pp. 393-432.

Actenicerus jeanvoinei sp. n. Tonkin p. 280, FLEUTIAUX Ann. Soc. ent. Fr. 105.

Adelocera occidentalis Cand. from Lacon; *cylindriciformis* p. 198, aber-

darensis p. 199, *basalis* p. 200 spp. n. Kenya figs., FLEUTIAUX Miss. sci. Omo 2 1935.

Adrastus limbatus f. n. *ferruginicolor* Czechoslovakia p. 198, ROUBAL Sborn. ent. odd. Nár. Mus. Praha 14.

Aeoloderma chappuisi, *numerosa* p. 206, *aethiopica* Abyssinia, *arambourgi* Kenya p. 207, *somalina* Ital. Somaliland p. 208, spp. n. fig., FLEUTIAUX Miss. sci. Omo 2 1935.

Aeoloides jeanneli sp. n. Abyssinia; *spissus* Cand. from *Heteroderes* p. 209 fig., FLEUTIAUX t.c.

Aeolus litoris sp. n. Porto Rico p. 213, WOLCOTT J. Agric. Univ. P.R. 20.

Agrypnus proximus Abyssinia p. 194, *confusus* Kenya p. 195, spp. n. fig., FLEUTIAUX Miss. sci. Omo 2 1935.

Anchastus malaita sp. n. Solomon Is. p. 375, VAN ZWALUWENBURG Ann. Mag. n.H. (10) 17.—*A. fischeri* n. n. for *militaris* Fleut. nec Cand. p. 417, VAN ZWALUWENBURG Philipp. J. Sci. 59.

Anischinae subfam. n. p. 292, FLEUTIAUX Ann. Soc. ent. Fr. 105.

Aphanobius niger p. 298, *parallelus*, *antennatus* p. 299, spp. n. Laos, FLEUTIAUX t.c.

Blauta falli sp. n. Florida p. 251, BROWN Canad. Ent. 68.

Cardiophorus bureschi p. 66, *mařani* p. 67, spp. n. Bulgaria, ROUBAL Mitt. naturw. Inst. Sofia 9.—*C. obsoletus* (= *variatus* Fleut.); *chappuisi* p. 212, *commissus*, *ocularis* p. 213, *subvariatus* p. 214 Kenya, *disjunctus* Abyssinia p. 212, *gerstaeckeri* Tanganyika p. 213, spp. n.; FLEUTIAUX Miss. sci. Omo 2 1935.—*C. dilutus*, *catulus*, *jocosus*, *angularis* see *Craspedostethus*; *tanensis* see *Tropidiplus*.

Corymbites cambodiensis see *Thacana*.

Craspedostethus dilutus Erichs., *catulus* Cand., *jocosus* Cand. p. 215, *angularis* Cand. p. 216 from *Cardiophorus* fig., FLEUTIAUX Miss. sci. Omo 2 1935.

Dioxypterus montanus sp. n. Solomon Is. p. 369, VAN ZWALUWENBURG Ann. Mag. n.H. (10) 17.

Eanus striatipennis sp. n. Canada p. 248, BROWN Canad. Ent. 68.

Elater lepidotus see *Meristhus*.

Eupsephus gen. n., *dilaticollis* (type) Kenya p. 204, *bisulcatus* Tanganyika p. 205, spp. n. fig., FLEUTIAUX Miss. sci. Omo 2 1935.

Hemicleus jeanneli Kenya p. 196, *chappuisi* Abyssinia p. 197, spp. n. figs., FLEUTIAUX t.c.

Heteroderes flavonotatus Boh. from *Oophorus* (= *H. flavonotatus* Cand.) p. 208, FLEUTIAUX t.c.—*H. spissus* see *Aeoloides*.

Hypnoidus flavosignatus sp. n. Java p. 68, fig., HELLER Tijdschr. Ent. 79.—*H. kourili* sp. n. Bulgaria p. 65, ROUBAL Mitt. naturw. Inst. Sofia 9.

Ischiodontus pedestris see *Propsephus*.

Lacon occidentalis see *Adelocera*.

Ludius revision of American spp. pp. 11–20, 99–107, 177–187, *funereus* p. 16, *viduus* p. 103, *callidus* p. 135, *watsoni* p. 179, *bipunctatus* p. 180, *pudicus* p. 183 Canada, *blanditus* p. 13, *sexguttatus* p. 14, *deceptor* p. 16, *inutilis* p. 136, *californicus*, *candidus* p. 186, *pallidipes* p. 185 U.S.A. spp. n.; *propola* subsp. n. *columbianus* Canada p. 185; *glavicus* Germ. (= *similissimus* Mots.) p. 135 figs., BROWN Canad. Ent. 68.

Megapenthes patrizii, *ferrarii* spp. n. Ital. Somaliland p. 210, FLEUTIAUX Miss. sci. Omo 2 1935.

Meristhus lepidotus P. de B. from *Elater* p. 198, FLEUTIAUX t.c.

Neopristilophus dissimilis p. 283, *confusus* p. 284, spp. n. Cochinchina, FLEUTIAUX Ann. Soc. ent. Fr. 105.

Neotrichophorus longicornis, *capensis* p. 296, *hoabinhanus* p. 297, spp. n. Tonkin, FLEUTIAUX t.c.—*N. philippii* sp. n. Mindanao p. 426, VAN ZWALUWENBURG Philipp. J. Sci. 59.

Nyctor gen. n. p. 102, *expallidus* sp. n. Turkmenia p. 103, SEMENOV-TIAN-SHANSKIĬ & PJATAKOVA Acta Soc. ent. Csl. 33.

Nyctorini tribe n. p. 101, SEMENOV-TIAN-SHANSKIĬ & PJATAKOVA t.c.

Olophoeus antennalis Fleut., *mutatus* Fl., *maculatus* Schwarz from *Psephus* p. 202; *elgonensis* Kenya, *gerstaeckeri* Tanganyika, spp. n. p. 203 fig., FLEUTIAUX Miss. sci. Omo 2 1935.

Oophorus flavonotatus see *Heteroderes*.

Paracardiophorus elgonensis sp. n. Kenya p. 214, FLEUTIAUX Miss. sci. Omo 2 1935.

Penia costipennis p. 288, *apicalis*, *bicolor* p. 289, *villosa*, *intermedia* p. 290, *cinctipennis* p. 291 Tonkin, *pallida* Annam p. 290, *dorsalis*, *nigriceps* Laos p. 291, spp. n., FLEUTIAUX Ann. Soc. ent. Fr. 105.

Propsephus elimatus Cand. type in place of *beniniensis* Cand. p. 201; *anoplischoides* Fleut. from *Psephus*; *pedestris* Gerst. from *Ischiodontus* p. 204, FLEUTIAUX Miss. sci. Omo 2 1935.

Psephus anoplischoides see *Propsephus*; *P. antennalis*, *mutatus*, *maculatus* see *Olophoeus*.

Pyrophorus bellamyi sp. n. Hawaii p. 231, VAN ZWALUWENBURG Proc. Hawaii. ent. Soc. 9.

Rymcobites gen. n., *singularis* sp. n. Laos p. 282, FLEUTIAUX Ann. Soc. ent. Fr. 105.

Senodonia jeanvoinei sp. n. Tonkin p. 286, FLEUTIAUX t.c.

Sphenomerus melanesiensis sp. n. Solomon Is. p. 371 fig., VAN ZWALUWENBURG Ann. Mag. n.H. (10) 17.

Thacana gen. n. for *Corymbites cambodiensis* Fleut. p. 282, FLEUTIAUX Ann. Soc. ent. Fr. 105.

Tropidiplus tanensis Fleut. from *Cardiophorus*; *turkanus* p. 216, *rugatus* p. 217, spp. n. Kenya, FLEUTIAUX Miss. sci. Omo 2 1935.

BUPRESTIDAE.

History, classification and characteristics of Buprestids, OLAVE Rev. chil. H.n. 39 pp. 51–55.

Revision of Chilean Buprestidae, OLAVE Rev. chil. H.n. 39 pp. 349–376 2 pls. 3 figs.

Notes on Buprestidae of Catalunya, ESPAÑOL Butll. Inst. catal. H.n. 35 1935 pp. 102–104.

Buprestidae of Jehol, Kôno Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 50, 5 pp. 2 pls.

Achardella strandi sp. n. Argentina p. 128, OBENBERGER Festschr. E. Strand 1.

Acmaeodera strandinella sp. n. E. Africa p. 100; *bistriguttata* abb. n. *tetrastigma*, *hexastigma*, *octostigma* p. 101,

embrik-strandella, *enneastigma*, *conjunctella*, *praeconjuncta*; *xantholaenia* var. *n. posticeirrorata* p. 102; *virgo* abb. *n. transvaalicola* p. 103, *benguelensis* p. 104 S. Africa, OBENBERGER t.c.—*A. bipunctata* subsp. *n. obenbergeri* (with ab. *n. medioconfluens*) Corsica p. 5; *degener* subsp. *multipunctata* ab. *n. magdalenae* France p. 6, SCHAEFER Misc. ent. 37.—*A. uvaldensis* sp. *n.* Texas p. 73, KNULL Ent. News 47.—*A. discoidea* var. *n. théryi* Algeria p. 213, Pro Bull. Soc. ent. Fr. 41.—*A. mauricei* Obenb. emended to *mauritii* p. 60; *ocellata* var. *n. hauseri* Persia p. 118; *abeillei* Obb. discussed p. 119 fig., THÉRY t.c.—*A. plavilščikovi* Transcaspia p. 46, *alesi* Algeria p. 74, *nubica* Nubia p. 185, spp. *n.*, OBENBERGER Acta Soc. ent. Čsl. 33.

Actenodes embrik-strandi sp. *n.* Haiti p. 138, OBENBERGER Festschr. E. Strand 1.

Afrabothris gen. *n.* for *Buprestis nigrita* Ol. p. 38, THÉRY Rev. Ent. Rio de J. 6.

Agrilus miwai *n. n.* for *myrmido* Kerr. Arch. Natg. Oct. 1912 nec Sarawak Mus. J. Feb. 1912; *occidentalis* Esch. (= *nitidus* Kerr.) p. 61; *pooli* sp. *n.* Siberia p. 120, THÉRY Bull. Soc. ent. Fr. 41.—*A. roscidus*, *prasinus* characters p. 7; *roberti* ab. *n. confusus*; *betuleti* ab. *n. schuleri*; *obscuricollis* ab. *n. coelestina* France p. 117, SCHAEFER Misc. ent. 37.—*A. perlisensis* p. 174, *karakae* p. 176, spp. *n.* Malaya, FISHER J. F.M.S. Mus. 13.—*A. pollax* p. 156, *addagallensis* p. 157, *exoletus* p. 158, *apaturus* p. 159, *amhar* p. 160, *abyssiniae* p. 161, *argodi*, *silvestrii* p. 162, spp. *n.* Abyssinia, OBENBERGER Boll. Soc. ent. ital. 67 1935.—*A. confusus*, *amphiarus* p. 33, *discicolliformis* p. 35, *compitalis* p. 40, *capulus*, *conjectus* p. 41 Philippines, *bestiola* p. 33, *mysolensis* p. 36, *queenslandiae* Australia, *milo* p. 34, *quadristigmula* p. 40, *amplificator* p. 41, *lemur*, *legatus* (also Sumatra) p. 43 Borneo, *amulius* p. 35, *miwai*, *feretrius* p. 37, *cardaces* p. 38 Formosa, *penangensis* Penang p. 36, *belides* Sarawak p. 37, *bacchaes* Tonkin p. 39, *irritator* Tennasserim p. 39, *legitimus* Malaya, *mimnermus* Perak p. 42, *poëta* (with subsp. *n. barmensis* Burma) India p. 44 spp. *n.*; *coelestis* var. *n. leniens* Flores p. 36; *mashukulumbo* *n. n.* for *mashunus* Obenb. nec Pér.; *aenescens* var. *n. n.* for *aenecens* Kerr. nec Schil.; *amabili-*

color *n. n.* for *amabilis* Kerr. nec C. & G.; *binominatus* var. *carminicolor* *n. n.* for var. *carmineus* Kerr. nec Dug.; *madegassicus* *n. n.* for *madegassus* Obenb. nec Fairm.; *monstrum* *n. n.* for *monstrum* Obenb. 1935 nec 1931; *sesostrinus* *n. n.* for *sesostris* Obenb. nec Fish. p. 91; *cupido* Obenb. 1924 (= *cupido* Obenb. 1935); *rarior* Obenb. 1923 (= *rarior* Obenb. 1935); *roscidus* var. *tuleškovii* *n. n.* for var. *adonis* Obenb. nec Deyr.; *iruvimensis* *n. n.* for *congolanus* Kerr. 1909 nec 1898; *fisherellus* *n. n.* for *costipennis* Fish. nec Kerr.; *barkerellus* *n. n.* for *barkeri* Obenb. 1935 nec 1931; *horniellus* *n. n.* for *horni* Théry nec Kerr. p. 92; *mongolorum* p. 104, *malji* p. 116 Mongolia, *čerskii* Ussuri etc. p. 104, *semiryeciae*, *unguiculosus* p. 105, *kušakieviči* p. 107, *aridosus* p. 111, *alashanensis*, *przewalskii* p. 112, *candidiventris*, *ieunulus* p. 113 Central Asia, *obručevi* p. 106, *planefasciatus* p. 115 Siberia, *armenus* Caucasus, *morawitzi* Djarkent p. 106, *pseudosericans* Russia p. 107, *puzsiae* Hungary p. 108, *gregori* Morocco p. 109, *kratochvili* Formosa p. 110, *hofferi* Rumelia, *kuldjensis* Kuldja p. 111, *tifisicus* Tiflis, *ukrainensis* Saratov p. 114, *hypericiformis* Caucasus p. 115, *yunnanicola* Yunnan p. 116, *assamensis*, *lacroixi*, *lukeši* Assam p. 117 spp. *n.*; *syrdarjensis* var. *n. herzi* Transcaspia etc. p. 105; *pekinensis* var. *n. aureosplendens* Manchuria, subsp. *n. boreooccidentalis* Transbaicalia p. 107; *sericans* varr. *n. nigridorsis*, *sareptanus* p. 109, *auripubis*; *zigzag* varr. *n. poltavensis*, *neglectulus* Russia; *roscidus* var. *n. satunini* Tiflis p. 110; *hyperici* var. *n. pseudohyperici* Ciscaucasia p. 111; *ecarinatus* var. *n. wulffi* Transbaicalia p. 113; *subfasciatellus* *n. n.* for *subfasciatus* Gory nec Mén.; *occidenticola* *n. n.* for *occidentalis* Kerr. nec Uhl.; *mundulus* *n. n.* for *mundus* Kerr. nec Ab.; *parvusculus* *n. n.* for *parvus* Waterh. nec Saund.; *minutulus* *n. n.* for *minutus* Fisher nec Har.; *arizonicus* *n. n.* for *strigicollis* Fall nec Rey p. 139; *quadrisignatus* subsp. *n. kinoshitae*; *beppuensis*, *daimio* p. 140, *vodaki* p. 141 spp. *n.* Japan, OBENBERGER Acta Soc. ent. Čsl. 33.—*A. strandelinus* sp. *n.* Brazil p. 140, OBENBERGER Festschr. E. Strand 1.

Alyssoderus rex var. *n. strandinus*; *albiventris* var. *n. embrikiellus* S. Africa p. 139, OBENBERGER t.c.

Anilara subimpressa sp. n. W. Australia p. 104, CARTER Proc. Linn. Soc. N.S. Wales 61.

Anthaxia revision of French spp. pp. 301-354, morphology, biology pp. 304-336, figs., SCHAEFER Ann. Soc. ent. Fr. 105.—*A. viridifrons* abb. n. *basicyanea* U.S.A., *embrikaria* Canada, U.S.A.; *cyanella* ab. n. *rossi*; *quercata* ab. n. *floridana* p. 134; *van-dykeana*, *embrik-strandella* p. 135, *serripennis* p. 136 U.S.A. spp. n., OBENBERGER Festschr. E. Strand 1.—*A. scheibei* sp. n. Himalayas p. 188 fig., THÉRY Arb. morph. tax. Ent. Berl. 3.—*A. nitidula* ab. n. *vesubiensis*; *sepulchralis* ab. n. *subalpina* Maritime Alps p. 6; *istriana*, *nigro-jubata* morphology, new to France pp. 19-22; *istriana* morphology p. 61, *istriana* ab. n. *impubescens* Basses Alps; *helvetica* ab. n. *glabrocyanea* Savoie; *nigrojubata* ab. n. *demuthi* Smyrna; *quadripunctata* ab. n. *veneti* Hautes-Alpes p. 117, SCHAEFER Misc. ent. 37.

Armenosoma strandi sp. n. Transvaal p. 126, OBENBERGER Festschr. E. Strand 1.

Astracrus splendens var. n. *embrikiellus* N.S. Wales p. 132, OBENBERGER t.c.

Brachys coelestis see *Cylindromorphoides*.

Buprestis nigrita see *Afrabothris*.

Callimicra embrikina sp. n. Brazil p. 141, OBENBERGER Festschr. E. Strand 1.

Capnodis catalogue p. 219, *tenebricosa* f. n. *perrini* Siberia, key p. 222, THÉRY Bull. Soc. ent. Fr. 41.

Chalcogenia embrikiella sp. n. Transvaal p. 133, OBENBERGER Festschr. E. Strand 1.

Chalcophora japonica ab. n. *scutellata* Japan p. 119, THÉRY Bull. Soc. ent. Fr. 41.—*C. mariana* ab. n. *smaragdina* Italy p. 238; *intermedia* subsp. n. *fagniezii* France p. 239 figs., SCHAEFER t.c.

Chalcophorella stigmatica subsp. n. *balkanica* Balkans, var. n. *smoliki* Asia Minor; *fabricii* var. n. *stigmaticoides* Greece, Dalmatia p. 175, OBENBERGER Acta Soc. ent. Cech. 33.

Chalcoplia strandi sp. n. S. Africa p. 127, OBENBERGER Festschr. E. Strand 1.

Chalcopocila ornata subsp. *elegans* var. n. *strandii* Chile p. 123, OBENBERGER t.c.

Chloricalla gratiosa var. *octosticta* Obenb. a nom. nud.; var. n. *impunctata* no locality p. 60, THÉRY Bull. Soc. ent. Fr. 41.

Chrysaspina viridipennis var. n. *strandinella* Belgian Congo p. 108, OBENBERGER Festschr. E. Strand 1.

Chrysobothris chrysostigma var. *patkiewiczii* n. n. for var. *uralensis* Obenb. (no. 3 nec no. 2 1935) p. 30; *tsushimae* sp. n. Japan p. 71, OBENBERGER Acta Soc. ent. Čsl. 33.—*C. acaciae* sp. n. Texas p. 105, KNULL Ent. News 47.—*C. (Colobothris)* subgen. n. p. 38), *laudabilis* p. 42, *lanei* p. 43, *paulensis* p. 45 spp. n. Brazil figs., THÉRY Rev. Ent. Rio de J. 6.—*C. gebhardti* sp. n. Amasia p. 119, THÉRY Bull. Soc. ent. Fr. 41.

Chrysochroa obenbergerella n. n. for *celebensis* Obenb. nec Théry; *celebigena* Obenb. a nom. nud. p. 59, THÉRY t.c.

Chrysophana placida var. n. *strandii* California p. 106, OBENBERGER Festschr. E. Strand 1.

Cisseis goerlingi sp. n. W. Australia p. 104, CARTER Proc. Linn. Soc. N.S. Wales 61.

Colobogaster embrikiellus sp. n. Guatemala p. 137, OBENBERGER Festschr. E. Strand 1.—*C. soror* p. 39, *itaitubensis* p. 40, spp. n. Brazil; *singularis* Gor. (= *kerremansi* Théry) p. 42 figs., THÉRY Rev. Ent. Rio de J. 6.

Colobothris subgen. n. see *Chrysobothris*.

Coraeus aequalipennis Fairm. (= *journisi* Théry) p. 60, THÉRY Bull. Soc. ent. Fr. 41.

Cylindromorphoides coelestis Kerr. from *Brachys* p. 471, THÉRY Rev. Ent. Rio de J. 6.

Cyphogastra javanica ab. n. *embrik-strandina* Halmaheira p. 109, OBENBERGER Festschr. E. Strand 1.

Dactylozodes spitzii sp. n. Brazil p. 46 fig., THÉRY Rev. Ent. Rio de J. 6.—*D. strandella* sp. n. Argentina p. 136; *quadrifasciata* var. n. *paraguayensis* Paraguay; *joergensseni* var. n. *ogloblini*, *alexandri* Argentina; *minor* var. n. *cyaneipennis*, *embriki* Chile p. 137, OBENBERGER Festschr. E. Strand 1.

Damarsila embrik-strandella sp. n.;
limbalis varr. n. *angoligena* p. 111,
regina Angola; *maraguana* sp. n.;
lethalis subspp. n. *machulkana*, *simbana*
 p. 111; *infralesvis* var. n. *ugandica*;
quadrioculata var. n. *embrikina*;
amaurotica varr. n. *ventrinotata*,
minuteplagosa, *robertsi* p. 112, *katangana*
rhodesiana, *pseudoproxima* p. 113 Centr.
 and E. Africa, OBENBERGER t.c.

Diadoxus scalaris varr. n. *strandii*,
odewahni Australia p. 109, OBENBERGER
 t.c.

Dicerca Catalan spp. pp. 33-34
 ESPAÑOL Butill. Inst. catal. H.n. 35
 1935.

Discoderes nigrovirens see *Disco-*
deropsis.

Discoderoides gen. n. p. 12, *priesneri*
 sp. n. Egypt p. 13 fig., THÉRY Bull. Soc.
 ent. Egypte 20.

Discoderopsis nigrovirens Fairm. (= *incurvata* Théry) from *Discoderes* p. 60,
 THÉRY Bull. Soc. ent. Fr. 41.

Ectinogonia minor p. 368, *uretai* p.
 369, *cyaniventris* p. 370, spp. n. Chile,
 key p. 375 figs., OLAVE Rev. chil. H.n.
 39.

Embrikillium gen. n. p. 116, *mirandum*
 sp. n. S.W. Africa pp. 116, 121 fig.,
 OBENBERGER Festschr. E. Strand 1.

Endelus pendleburyi sp. n. Selangor
 p. 173, FISHER J. F.M.S. Mus. 13.

Entomogaster carli sp. n. Madagascar
 p. 697 fig., THÉRY Rev. suisse Zool.
 43.

Evimantius embriki sp. n. Madagascar
 p. 139, OBENBERGER Festschr. E.
 Strand 1.

Exagistus embriki Java, *rossi* p. 130,
strandii p. 131 Borneo, spp. n., OBEN-
 BERGER t.c.

Fâhraesia gen. n. p. 115, *chalcea*
 sp. n. S. Africa pp. 115, 122 fig.,
 OBENBERGER t.c.

Galbella harti description p. 327,
 THÉRY Bull. Soc. ent. Egypte 20.

Habroloma theryi sp. n. Morocco p.
 297, RUNGS Livre Jubil. Bouvier 1936.

Haplotrinchus embrikiellus sp. n. N.
 Guinea p. 129, OBENBERGER Festschr.
 E. Strand 1.

Hyperantha boyi sp. n. Brazil p. 469
 fig., THÉRY Rev. Ent. Rio de J. 6.

Isophaenus acunai sp. n. Cuba p. 272,
 FISHER Mem. Soc. cubana H.n. 9.

Janthe key to Oriental and Palae-
 arctic spp. p. 5, *citri* p. 8, *marseuli*,
anniae p. 9, *regina* (with var. n.
aurantiorum), *radja* p. 10, *zyziph*,
aeneola p. 11 spp. n.; *indica* var. n.
cyanipennis p. 12 India; key to
 Ethiopian spp. p. 58, *gridellii* p. 61,
mülleri p. 65 Italian Somaliland,
bartoni p. 62, *fabrichi* p. 63, *herrera* E.
 Africa, *zambesica* Zambesi p. 64, *vansoni*
 Transvaal p. 63, spp. n., OBENBERGER
 Shorn. ent. odd. Nár. Mus. Praze 14.

Julodis list of spp. described up to
 Jan. 1936 p. 328, catalogue of southern
 African spp. p. 333, key p. 335; *egho*
 subspp. n. *jordani*, *pusilla*, *deducta*,
 p. 341; *subbrevicollis* p. 343, *inuitata*
 p. 356 spp. n.; *gariopina* var. n. *plagosa*
 p. 345; *sulcicollis* var. n. *grossegettata*
 p. 347; *cirrhusa* subspp. n. *ellenbergeri*
 p. 350, *auberti* p. 351; *chevolati*
 subspp. n. *hessei*, varr. n. *peringueyi*,
biseriata; *hirsuta* var. n. *sulfurata* p. 356
 S. Africa; corrections to Col. Cat. p.
 364 figs., THÉRY Bull. Ann. Soc. ent.
 Belg. 76.—*J. distincta* subspp. n. *dick-*
sonae Arabia p. 118, THÉRY Bull. Soc.
 ent. Fr. 41.—*J.* synonymy of and notes
 on Himalayan spp. pp. 181-188 figs.,
 THÉRY in SCHEIBE Arb. morph. tax.
 Ent. Berl. 3.—*J. gariopina* var. n.
monochroa; *humeralis* varr. n. *causta*
 p. 7, *inhumeralis*, *coelestina*; *fabrichi*
 var. n. *normalis*; *damarina* var. n.
belial p. 8; *occidentalis* var. n. *subuni-*
formis; *anthobia* var. n. *lateralis*;
brevicollis var. n. *aurantiacomarginata*;
klugi var. n. *lineatifascis*, subspp. n.
kuboosensis p. 10; *laportei* varr. n.
hirsutoides, *mannerheimi*, *luteoflocosa*,
medusa p. 12; *braunsi* subspp. n. *holubi*
 p. 13, *najas*, *nympha* p. 4; *chevolati*
 varr. n. *indigacea*, *klipfonteinensis*,
erinaceus; *hirtiventris* var. n. *sang-*
uinipilis p. 14; *purpurata* p. 9, *mira*,
vansoni p. 11 spp. n. Centr. W. and S.
 Africa fig., OBENBERGER Acta Soc. ent.
 Čsl. 33.

Leiopleura strandi sp. n. Colombia
 p. 141, OBENBERGER Festschr. E.
 Strand 1.—*L. steinbachi* p. 145,
jakovlevi p. 148, *sanctae-crucis* p. 150
 Bolivia, *catherinae* p. 146, *corax* p. 147,
jakobsoni p. 148, *bruchiana* p. 149,
cyaneifrons p. 151, *achardi* p. 152,
cantareirae p. 153, *luderwaldti* p. 154
 Brazil, *melaena* p. 146, *inunctiseta* p. 152
 Paraguay, *guyanensis*, *schroederi* p. 147,

opacipennis p. 153, *gemma* p. 155
 Paramaribo, *peruviae* p. 150, *limae* p.
 151 Peru, *cayennarum* p. 150, *aphrodyte*
 (with var. n. *andyomene*) p. 154
 Cayenne, *lorelana* p. 152, *ogloblini* p.
 153 Argentina, *artemis* p. 155, *anniae*
 Costa Rica, *hera* Colombia p. 156
 spp. n.; *trochilus* varr. n. *missionaria*
 Argentina, *gratiosus*, *paraënsis* Brazil
 p. 149, OBENBERGER Sborn. ent. odd.
 Nár. Mus. Praze 14.

Maoriella strandi sp. n. N. Zealand
 p. 143, OBENBERGER Festschr. E.
 Strand 1.

Melobasis impressa p. 102, *wannerua*
 p. 103, spp. n. Australia, CARTER Proc.
 Linn. Soc. N.S. Wales 61.

Metaenia capitata Kerr. (= *insuli-*
cola Théry) p. 60, THÉRY Bull. Soc. ent.
 Fr. 41.

Micrasta creola, *strand* spp. n.
 Guadeloupe p. 145, OBENBERGER
 Festschr. E. Strand. 1.

Nalanda discussed p. 6, SCHAEFER
 Misc. ent. 37.

Nascio simillima var. n. *strandella*
 N.S. Wales p. 130, OBENBERGER
 Festschr. E. Strand 1.

Neopolycesta quattuordecimmaculata
 var. n. *immaculicollis* Transvaal p. 148,
 OBENBERGER Acta Soc. ent. Cech. 33.

Oedisterna scope pp. 114, 120, *holubi*
 p. 124, *nickerli*, *strand* p. 125, spp. n.
 S. Africa, OBENBERGER Festschr. E.
 Strand 1.—*O. scabrosula* see *Pseudo-*
perotis; *vanson* see *Strandissa*.

Omoxyseus strand sp. n. Panama
 p. 140, OBENBERGER Festschr. E. Strand
 1.

Pachyschelus list of Oriental spp.
 p. 343, key to Indo-Chinese spp. p. 344,
coomani p. 345, *tonkinensis*, *mandarinus*
 p. 346, spp. n. Tonkin figs., THÉRY
 Livre Jubil. Bouvier 1936.

Paragrillus embrikiellus sp. n. Argen-
 tina p. 140, OBENBERGER Festschr. E.
 Strand 1. *

Paraleptodema gen. n., *strand* sp. n.
 ? Fiji p. 106, OBENBERGER t.c.

Peronaem *monticola* sp. n. Cuba p.
 343, FISHER Mem. Soc. Cubana H.n. 10.

Perotis cuprata var. n. *viridans* Bey-
 rout p. 119, THÉRY Bull. Soc. ent. Fr.
 41.

Phlocteis cyaniventris Kerr. (= *ditis-*
simus Pér.) p. 60, THÉRY t.c.

Planidia vanson var. n. *strandella*
 Transvaal p. 139, OBENBERGER
 Festschr. E. Strand 1.

Polycesta transvalensis sp. n. (with
 var. n. *atomosparsa*) Transvaal p. 148,
 OBENBERGER Acta Soc. ent. Cech. 33.
 —*P. embriki* Mexico p. 104, *fisheri* Haiti
 p. 105, spp. n., OBENBERGER Festschr. E.
 Strand 1.

Pseudoedisterna embriki p. 123 (with
 var. n. *chlorana*), *cyanea* p. 124, spp. n.
 S. Africa, OBENBERGER t.c.

Pseudoperotis gen. n. for *Oedisterna*
scabrosula Obenb. p. 115, scope p. 121
 fig., OBENBERGER t.c.

Ptosoma undecimmaculata ab. n.
unifasciata Hungary p. 168, CSIKI
 Rovart. Lap., Budapest 16 1909.—*P.*
undecimmaculata variation p. 70 figs.,
 KAVAN Ent. NachrBl. 10.—*P. embrik-*
strandina sp. n. India p. 99, OBEN-
 BERGER Festschr. E. Strand 1.

Pygichaeta strand sp. n. Centr. W.
 Africa p. 107; *semigranosa* var. n.
embrikiella Senegal p. 108, OBENBERGER
 t.c.

Sphenoptera faragi p. 6 (with var. n.
alieriana p. 8), *kasimi* p. 9 spp. n.;
cylindricollis var. n. *priesneri* p. 8
 Egypt figs., THÉRY Bull. Soc. ent.
 Egypte 20.—*S. cupriventris* Kerr.
 (= *konbirensis* Kerr.) p. 60, THÉRY Bull.
 Soc. ent. Fr. 41.

Steraspis speciosa varr. n. *nubica*,
 Nubia, *pyrothorax*, *subrosea* Sudan p. 5;
welwitschi var. n. *prasina* Dahomey;
subbrevicornis var. n. *cupreoaenea* Centr.
 Africa; *scabra* var. n. *machulkai* Sudan
 p. 22; *maunensis* var. n. *ngamensis*
 Bechuanaland; *dux* var. n. *viridicyanea*
 Belgian Congo; *hypocrita* var. n.
euchalcea Transvaal; *ambigua* varr. n.
fraudatrix, *ignicollis* Centr. Africa;
bechuana var. n. *aeruginosiformis* Trans-
 vaal p. 23; *amplipennis* varr. n.
zambesiensis, *obesula*, *sericans* Centr.
 Africa, *kalaharica* Kalahari p. 64,
 OBENBERGER Acta Soc. ent. Čsl. 33.—
S. laevis var. n. *embrik-strandi*
 Togo p. 108, OBENBERGER Festschr. E.
 Strand 1.

Stigmodera truncata sp. n. W. Austra-
 lia p. 104, CARTER Proc. Linn. Soc. N.S.
 Wales 61.

Strandissa gen. n. for *Oedisterna vansonii* Obenb. (type) and *limbata* Pér. p. 116 fig., OBENBERGER Festschr. E. Strand 1.

Suarezia see *Suarezina*.

Suarezina n. n. for *Suarezia* Théry nec Fairm. p. 60, THÉRY Bull. Soc. ent. Fr. 41.

Texania strandi sp. n. U.S.A. p. 109, OBENBERGER Festschr. E. Strand 1.

Thomassetia strandi sp. n. Transvaal p. 133, OBENBERGER t.c.

Thrinopyge alacris var. n. *strandii* Texas p. 104, OBENBERGER t.c.

Trachys embrik-strandella sp. n. Java p. 142, OBENBERGER t.c.

Xenorhipis osborni sp. n. Texas p. 73, KNULL Ent. News 47.

TENEBRIONIDAE (BORIDAE, RHYSOPOUSSIDAE, TRETOTHORACIDAE).

Tenebrionidae collected in Karakorum, GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.

Tenebrionidae of Jehol, MIWA Rep. First sci. Exp. Manchoukuo (5) 1 pt. x art. 49, 8 pp. 2 pls.

Revision of Opatrinae of U.S.S.R. (much synonymy p. 217), REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19 223 pp. 122 figs. 1 map.

List of Tenebrionidae from Greece and the islands of Aegean Sea, SCHUSTER S. B. Akad. Wiss. Wien 145 Abt. i pp. 65-80.

Adelium hirsutum sp. n. N.S. Wales p. 106, CARTER Proc. Linn. Soc. N.S.W. 61.

Afghanprosodes subgen. n. see *Prosodes*.

Ammobius dilatatus see *Psammestus*.

Anatolica immarginata var. n. *hummeli* China p. 4, SCHUSTER Ark. Zool. 27A (sep. dated 1934) no. 24.

Anatrum gen. n. pp. 84, 209, *songoricum* sp. n. Songoria p. 85 fig., REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19.

Anemia aegyptiaca n. n. for *denticulata* Pic nec Wol. p. 300, PIC Bull. Soc. zool. Fr. 61.

Blaps seidlitzii sp. n. China p. 5, SCHUSTER Ark. Zool. 27A (sep. dated 1934) no. 24.—*B. zarudniana* p. 554

(with subsp. n. *persis*, *chorassanica*) Persia, *kiritschenkoi* Ordos p. 555, *nanshanica* Centr. Asia p. 556, *strandii* Mongolia p. 557, *reichardti*, *ogloblini* Bukhara p. 558, *tianshanica* p. 559, *eximia* p. 561 Dzunggharia, *rimskii* p. 560, *znojkoii* (with ab. n. *subsulcigera*) p. 563, *tschitscherini* p. 564 China, *glaznuovi* Persia p. 562, *jakovlevi* (*Nanoblaps* subgen. n.) Turcomania p. 565; *transversimulcata* subsp. n. *rudesculpta* Dzhungaria p. 560; notes on existing spp. p. 566, SEMENOV-TIAN-SHANSKII & BOGATSHEV Festschr. E. Strand 1.—*B. requieni* ab. n. *bigiber* Tunisia p. 362, NORMAND Bull. Soc. H.n. Afr. N. 27.

Brycopia barossae, *browni* p. 107; *denticulata*, *harrisoni* p. 108, *musgravei* p. 109, spp. n. Australia, CARTER Proc. Linn. Soc. N.S.W. 61.

Caedius carmanicus sp. n. Persia pp. 199, 216 figs., REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19.

Calyptopsis solieri subsp. n. *libanicus* Lebanon p. 291, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Catomus schusteri p. 366, *grosclaudei* p. 367, spp. n. Tunisia, NORMAND Bull. Soc. H.n. Afr. N. 27.

Chianalus subcostipennis sp. n. Kashmir p. 64 figs., GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.

Colpotus schusteri sp. n. Asia Minor p. 298, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Crypticus culminicola sp. n. Grand Atlas p. 74, ANTOINE Bull. Soc. Sci. nat. Maroc 16.

Dichillus desioi sp. n. Kashmir p. 58 figs., GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.—*D. carinatus* subsp. n. *libanicus* Lebanon p. 295; *nitidulus* subsp. n. *transjordanicus* Transjordan p. 296, KOCH Pubb. Mus. ent. Pietro Rossi 1.

Dilamus obsoletus subsp. n. *transjordanicus* Transjordan p. 300, KOCH t.c.

Diplocyrtus schrammi p. 139, *beidensis* p. 141, spp. n. Morocco, ANTOINE Bull. Soc. ent. Fr. 41.

Dolamara gen. n. for *Melanimon cupreomicans* Rtt. p. 251, REIKHARDT Trud. Tadzshik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Eumylada punctifera var. n. *amaroides* Mongolia pp. 172, 215 figs., REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19.

Euschides speculatus p. 225, *lecontella* p. 227 (with var. n. *tempestalis* p. 229), spp. n. U.S.A., BLAISDELL Trans. Amer. ent. Soc. 62.

Eutagenia aegyptiaca subsp. n. *tunisea* Tunisia p. 359, NORMAND Bull. Soc. H.n. Afr. N. 27.

Falsomycterus germaini var. n. *suturalis* Bolivia p. 36, PIC MÉL. exot. ent. 67.

Glabrasida embergeri sp. n. Grand Atlas p. 71, ANTOINE Bull. Soc. Sci. nat. Maroc 16.

Gonocephalum potanini pp. 108, 209, *sinicum* pp. 109, 209, spp. n. China; *recticollis* var. n. *terminale* Ussuri pp. 110, 210 figs., REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19.—*G. setulosum* var. n. *parallelum* Tunisia p. 363, NORMAND Bull. Soc. H.n. Afr. N. 27.

Heliophilus altiatlantidis sp. n. Grand Atlas p. 72, ANTOINE Bull. soc. Sci. nat. Maroc 16.

Helops rhaticus sp. n. Grand Atlas p. 75, ANTOINE t.c.

Lobodera pavlovski sp. n. p. 253; *pinguis* var. n. *nitescens* p. 255 Bukhara fig., REIKHARDT Trud. Tadzhik Sect. Acad. S.S.R. 5 (Zool. & Parasit.) 1935.—*L. semenovi* Turcmenia pp. 141, 211, *granulifera* Ferghana pp. 145, 211, *schusteri* China pp. 157, 211, *bruta* p. 160, 212, *lycaon* pp. 161, 213, *nanshanica* pp. 164, 214 Mongolia, *kiritschenkoi* (with var. n. *marginalis*) Altai pp. 160, 212, *laelaps* Gobi pp. 161, 213, *alashanica* Chinese Alashan pp. 163, 214, *beicki* (with var. n. *certerus*) Dzungaria pp. 164, 214 spp. n.; *gibbula* subsp. n. *tetra* pp. 158, 212; *explanata* subsp. n. *laesa* pp. 159, 212 figs., REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19.

Melanesthes chinganica Mongolia pp. 182, 215, *monatroides* China pp. 185, 215, spp. n. figs., REIKHARDT t.c.

Melanimon kiritschenkoi sp. n. U.S.S.R. pp. 68, 208, REIKHARDT t.c.—*M. cupreomicans* see *Dolamara*.

Micrositus cacuminum p. 73, *gattefossei* p. 74, spp. n. Grand Atlas, ANTOINE Bull. Soc. Sci. nat. Maroc 16.

Monatrum gen. n. for *Scleropatrum carinatum* Gebl. pp. 81, 208 figs., REIKHARDT Tabl. anal. Fn. U.R.S.S. no. 19.

Nanoblaps subgen. n. see *Blaps*.

Nyctozoilus subsculptus sp. n. Queensland p. 105 fig., CARTER Proc. Linn. Soc. N.S. Wales 61.

Opatrum asperipenne var. n. *verecundum* Mongolia p. 210; *sabulosum* subsp. n. *amauorptum* Caucasus pp. 131, 210 figs., REIKHARDT Tabl. anal. Fn. U.R.S.S. no. 19.

Oxycara centralis sp. n. Tibesti p. 77, PEYERIMHOFF Mém. Acad. Sci. Paris (2) 62.—*O. richardi* p. 129, *salinum* p. 130, spp. n. Cape Verde Is. fig., ALLUAUD Rev. franç. Ent. 3.

Pachyscelis wetsteini sp. n. Sirina, Aegean Sea p. 72, SCHUSTER S.B. Akad. Wiss. Wien 145 Abt. i.

Paragonocnemis foveicollis subsp. n. *rufescens* Belgian Congo p. 420, PIC Rev. Zool. Bot. afr. 28.

Pedinus strabonis var. n. *tibipinna* Anatolia p. 296 figs., KOCH Pubbl. Mus. ent. Pietro Rossi 1.—*P. borthysthenicus* sp. n. Russia; *strigicollis* var. n. *problematicus* Taurus p. 681 figs., REIKHARDT Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Pimelia horni sp. n. Himalayas p. 195, SCHUSTER Arb. morph. tax. Ent. Berl. 3.

Platyphanes planatus sp. n. W. Australia p. 106, CARTER Proc. Linn. Soc. N.S. Wales 61.

Polycoelogastridion gen. n. for *Scleropatrum sexcostatum* Mots. pp. 85, 208 figs., REIKHARDT Tabl. anal. Fn. U.R.S.S. no. 19.

Prosodes (Afghanprosodes) subgen. n.) *afghanica* p. 197, *scheibei* p. 199, spp. n. Himalayas, SCHUSTER Arb. morph. tax. Ent. Berl. 3.

Psammestus gen. n. for *Ammobius dilatatus* Reitt. pp. 194, 216 figs., REIKHARDT Tabl. anal. Fn. U.S.S.R. no. 19.

Pterocoma hedini sp. n. China p. 5, SCHUSTER Ark. Zool. 27A (sep. dated 1934) no. 24.

Scleropatrum carinatum see *Monatrum*; *sexcostatum* see *Polycoelogastridion*.

Selenis oshimanus sp. n. Amami Is. p. 21 [in Japanese] fig., MIWA Trans. Kansai ent. Soc. no. 6 1935.

Solskya revision pp. 47–54; *caporiaccovi* sp. n. Kashmir p. 53 figs., GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.

Stenosis rotrovi, *mazetieri* p. 13, *rungsi*, *elvirae*, *altiatlantis*, *alluaudi* p. 14, *gattefossei*, *zaiana*, *mediatlantis*, *pici*, *théryi* p. 15 (with subsp. n. *macra*), *mimeuri*, *mogadorica* p. 16, spp. n. Morocco; *fulvipennis* Pic (= *temporalis* Reitt.) (with subsp. n. *ramburi* Andalusia) p. 13 note, ANTOINE Bull. Soc. ent. Fr. 41.—*S. syrensis* sp. n. Syra I. p. 294, KOCH Pubbl. Mus. ent. Pietro Rossi 1.

Stibia revision pp. 57–105, *fallaciosa* p. 70 (with var. n. *interstitialis* p. 73), *blairi* p. 88, *imperialis* p. 94, *tanneri* p. 97, *tortugensis* p. 100 spp. n.; *puncticollis* subsp. n. *martinensis* p. 83 U.S.A. figs., BLAISDELL Trans. Amer. ent. Soc. 62.

Strongylium depressicorne sp. n. Belgian Congo p. 34, PIC Rev. Zool. Bot. afr. 29.—*S. thibetanum* var. n. *yunnanum* Yunnan p. 36, PIC Mél. exot.-ent. 67.

Syachis revision pp. 39–47; *ajmonis* p. 44, *cugiae* p. 45 spp. n. Kashmir figs., GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.—*S. afghanicus* sp. n. Himalayas p. 193, SCHUSTER Arb. morph. tax. Ent. Berl. 3.

Tenebrio atricola sp. n. Java, Borneo p. 321, BLAIR Treubia 15.

Tentyria angulata subsp. n. *winkerli*; *wiedemanni* subsp. n. *bisinuatibasalis* Asia Minor p. 292, KOCH Pubbl. Mus. ent. Pietro Rossi 1.—*T. angulata* subsp. n. *sulcatipennis* Paros, Aegean Sea p. 69, SCHUSTER S.B. Akad. Wiss. Wien 145 Abt. i.—*T. syrtana* sp. n. Tunisia p. 357, NORMAND Bull. Soc. H.n. Afr. N. 27.

Tetranillus simplicifrons sp. n. Kashmir p. 55 fig., GRIDELLI Atti Mus. Stor. nat. Trieste 12 1935.

CISTELIDAE (ALLECULIDAE).

Allecula lesnei sp. n. Mozambique p. 214, PIC Rev. franç. Ent. 3.—*A. paulonotata* Japan p. 29, *touzalini* China p. 30, spp. n., PIC Mél. exot.-ent.

67.—*A. pahangana*, *fortiterpunctata* spp. n. Malaya p. 171, PIC J. F.M.S. Mus. 13.

Bolbostetha pendleburyi sp. n. Pahang p. 172, PIC t.c.

Cacoplesia sikorai p. 34, *lemoulti*, *semipurpurea*, *semiopaca*, *vittata*, *robustior* p. 35, spp. n. Madagascar, PIC Mél. exot.-ent. 67.

Cnecosochara filia sp. n. Kizyl-kum p. 74, ZNOIKO Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Compsocula vittata p. 30, *minuta* p. 31, spp. n. Madagascar, PIC Mél. exot.-ent. 67.

Cteniopos priesneri sp. n. Egypt p. 17, WITTMER Bull. Soc. ent. Egypte 20.—*C. purkynei* sp. n. p. 205; *sulphuripes* ab. n. *androides* p. 206 Macedonia, MARAN Sborn. ent. odd. Nár. Mus. Praze 14.

Eubalia viridevittata, *diversa* spp. n. Madagascar p. 34, PIC Mél. exot.-ent. 67.

Heliotaurus doriai var. n. *obscuripes* Tunis; *analis* var. n. *henoni* Algeria p. 22, PIC Echange 52.

Helopsallecula gen. n., *minutissima* sp. n. Madagascar p. 33, PIC Mél. exot.-ent. 67.

Hymenorus doublieri, *avajewi* morphology pp. 173–178 fig., KANGAS Ann. ent. fenn. 2.—*H. multipunctatus* sp. n. Pahang p. 171, PIC J. F.M.S. Mus. 13.

Megischina cypria sp. n. Cyprus p. 206; *curvipes* subsp. n. *corcyrea* Corfu; *galbanata* var. n. *laticollis* Kalamai p. 207, MARAN Sborn. ent. odd. Nár. Mus. Praze 14.

Nocar suttoni sp. n. N.S. Wales p. 109, CARTER Proc. Linn. Soc. N.S.W. 61.

Petria ales sp. n. Bukhara p. 77, ZNOIKO Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Pseudocistela minutissima sp. n. Madagascar p. 30, PIC Mél. exot.-ent. 67.

Stenerula subpunctata sp. n. Madagascar p. 33, PIC t.c.

Steneryx gussakovskiyi Ferghana, *semenovi* Kara-Kum, spp. n. p. 73, ZNOIKO Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Stenogena trinotata, rufoapicalis p. 31, *rufa, diversesculpta, tananariva, enselata* p. 32, *spp. n.* Madagascar, PIC Mél. exot.-ent. 67.

Synallecula subparallela, lesnei *spp. n.* Mozambique p. 214, PIC Rev. franç. Ent. 3.

NILIONIDAE.

Linio subgen. n. see *Nilio*.

Nilio key pp. 76-102, *peruvianus* *ab. n. baubeliki* Colombia p. 79; *krumpschmidi* Amazonas p. 78, *borchmanni* Bolivia p. 82, *gerzabeki* Ecuador p. 83, *vulpinus* Peru, Brazil p. 86 *spp. n.*; *iheringi* *n. n.* for *gounellei* PIC nec Iher. p. 90; (*Linio* subgen. n. p. 94); *lanatus* *var. n. sublanatus* p. 95 (with *ab. n. rufonotatus, rufomaculatus*); *l. var. fascicularis* *ab. n. rufonotatus* p. 96; *maculatus* *var. n. margaritifera* p. 98 Brazil, MADER Ent. NachrBl. 10.

LAGRIIDAE.

Catalogue of Lagriidae, BORCHMANN Genera Insect. 204 561 pp. 9 pls. 39 figs.

Acerogria gen. n. type *dohrni* p. 137, scope p. 138, BORCHMANN t.c.

Acritolagria zenckeri p. 167, *cyani-pennis* p. 168, *nigricolor, benguelana* p. 169, *angolensis* p. 170, *spp. n.* Africa, BORCHMANN t.c.

Adosogria gen. n. type *bennigseni* Bm. p. 63, scope p. 64, *cameruna* *sp. n.* Kamerun p. 66, BORCHMANN t.c.

Adynata collarti Belgian Congo p. 25, *melanocephala* Kamerun p. 24, *spp. n.*, BORCHMANN t.c.

Anotoma gen. n. type *heynei* p. 81, scope p. 82, BORCHMANN t.c.

Aulonogria philippina Philippines, *chinesis* China *spp. n.* p. 140, BORCHMANN t.c.

Barseni timpanulata p. 522, *unicolor* p. 523, *spp. n.* Brazil, BORCHMANN t.c.

Bequaertiella irregularis *sp. n.* W. Africa p. 220, BORCHMANN t.c.

Borchmannia suturalis *sp. n.* Philippines p. 492, BORCHMANN t.c.

Bothrichara cyanea p. 69, *kuntzeni* p. 70, *atrata* p. 71, *fuscopubens, insignis* p. 72, *spp. n.* New Guinea figs., BORCHMANN t.c.

Bothrionota gen. n. type *foveata* p. 66, scope p. 68, BORCHMANN t.c.

Bothriostira gen. n. *cylindracea* *sp. n.* Belgian Congo p. 473, BORCHMANN t.c.

Bothynogria himalayana *sp. n.* India p. 116, BORCHMANN t.c.

Casonidea atronitens Sumatra p. 382, *momungana* Mindanao, *patruelis* Kurseong p. 384 *spp. n.*; *mauricei* *n. n.* for *nigriceps* PIC 1934 p. 390, BORCHMANN t.c.

Cerogria (*Parogria, Drepanomela* subgen. n. p. 119), *popularis* p. 121, *castaneipennis* p. 125, *hauseri* p. 126, *gardneri* p. 127 China, *adustula* Sumatra p. 124, *sikkimensis* Sikkim p. 128, *congoana* Belgian Congo p. 132 *spp. n.*; *hemichlora* *var. n. divisa* Java p. 128, BORCHMANN t.c.

Chilenolagria gen. n. p. 28, *limbata* *sp. n.* Chile p. 29, PIC Mél. exot.-ent. 67.

Chrysolagria elgeyoensis p. 86, *impressifrons* p. 87, *arthritica* p. 88, *amitina* p. 89, *metatarsalis* p. 90, *obendorferi, suturalis* p. 92, *antinorii* p. 93, *curvipes* p. 94, *pachycera, denticornis* p. 95, *infinitima* p. 96, *similata, neavei, ertli* p. 97, *methneri, parva* p. 99, *nyansana, sheffieldi* p. 101, *festiva, cupripennis* p. 102, *brunneipennis* p. 103, *assimilis, leptocera* p. 104, *uhaensis* p. 105, *miricornis, latitibia* p. 106, *kindana, pachyceroides* p. 107, *dilaticornis, concavipes* p. 108, *collarti, serri-cornis* p. 109, *naivashana, macer* p. 110, *raffrayi, simplicipes* p. 111, *spp. n.* Africa figs., BORCHMANN Genera Insect. 204.

Colparthrum grandis p. 439, *aenescens* Costa Rica p. 444, *corumbana* Brazil p. 442, *palliditarse* Colombia p. 444 *spp. n.*; *decoratum* *var. n. mäklini* Centr. America p. 447, BORCHMANN t.c.

Cybstira subgen. n. see *Epicyles*.

Cylindrosora gen. n. type *macer* Bm. p. 375, *maceroides* *sp. n.* Philippines p. 376, BORCHMANN t.c.

Cylindrostira gen. n. type *corporeali* Bm. p. 374, scope p. 375, BORCHMANN t.c.

Derolagria ruficeps *var. n. atriceps*; *sororcula* p. 154, *bailundensis, eichelbaumi* p. 155, *nana* p. 157, *hintzi, dimidiata* p. 158, *moloensis* p. 159 Africa, *madagascariensis* Madagascar p. 156 *spp. n.*, BORCHMANN t.c.

Diorhynchina gen. n. p. 472, *perforata* sp. n. Kamerun p. 473, BORCHMANN t.c.

Donaciolagria pici sp. n. Sikkim p. 179, BORCHMANN t.c.

Drepanomela subgen. n. see *Cerogria*.

Dysodera gen. n. p. 470, *methneri* sp. n. E. Africa p. 471, BORCHMANN t.c.

Dysopinus gen. n. type *serra* Bm. p. 379, BORCHMANN t.c.

Ecnocera gen. n. type *gracilis* Bm. p. 220, scope, *macer* sp. n. Belgian Congo p. 221, BORCHMANN t.c.

Ecnolagria (*Onocera* subgen. n. p. 139), *melaena* sp. n. Celebes p. 140, BORCHMANN t.c.

Ecoplostira gen. n. type *rohdei* Pic p. 377, *sororia* sp. n. Kamerun p. 379, BORCHMANN t.c.

Epicydes (*Cybstira* subgen. n. p. 429), *caligata* sp. n. Costa Rica p. 430, BORCHMANN t.c.

Eutrapela divisa p. 205, *suturella* p. 207, *pallidicauda* p. 209, spp. n. Africa, BORCHMANN t.c.

Exostira schroederi Canton p. 421, *longicollis* Luzon p. 427, spp. n., BORCHMANN t.c.

Flabellolagria conradi sp. n. Africa p. 201, BORCHMANN t.c.

Gebienia atricolor sp. n. Peru p. 26, Pic Mél. exot.-ent. 67.

Heterogria dilaticollis p. 192, *puella* p. 195, *setosella* Philippines p. 196, *aclydis* Sumatra p. 198, spp. n., BORCHMANN Genera Insect. 204.

Lagria palidipennis China p. 33, *merokensis* New Guinea, *garnetana* Queensland p. 40, *inexpecta* p. 42, *pupillicollis* p. 43 New Guinea, *collartiana* Kamerun p. 44, *angolensis* Angola p. 45, *collarti* Belgian Congo p. 55, spp. n. figs., BORCHMANN t.c.—*L. pici* sp. n. Tunis p. 161, NORMAND Bull. Soc. H.n. Afr. N. 27.

Lagriomima ignorata Palawan, *valida* Sumatra, p. 410, *dubiosa*, *lucida* Philippines p. 412, *fuscula* Borneo p. 413, spp. n., BORCHMANN Genera Insect. 204.

Lagriostira spinimana, *natalensis* p. 337, *insularis*, *pici* (with var. n. *obscuripennis*) p. 338, spp. n. Africa, BORCHMANN t.c.

Leptinostethus gen. n., scope p. 466, *fuscicollis* p. 467, *methneri* (type) p. 468, spp. n. Belgian Congo, BORCHMANN t.c.

Leptosora gen. n. p. 471, *hamata* sp. n. Kamerun p. 472, BORCHMANN t.c.

Lopholagria jokoensis p. 162, *tenuipilosa*, *togoensis* p. 163, spp. n. Africa, BORCHMANN t.c.

Lophophyllus pectinatus sp. n. Madagascar p. 475, BORCHMANN t.c.

Lorona gen. n. type *bakeri* Bm. p. 62, scope p. 63, BORCHMANN t.c.

Mallogria gen. n. type *longipilis* Fairm., scope p. 165, BORCHMANN t.c.

Minasius minor sp. n. Amazonas p. 25, Pic Mél. exot.-ent. 67.

Nemostira ceylanica see *Pseudocasonidea*.

Nemostiropsis subgen. n. see *Sora*.

Nevermanniella gen. n. for *Statira albolineata* Champ. p. 332, BORCHMANN Genera Insect. 204.

Ocularisora congoensis sp. n. Belgian Congo p. 470, BORCHMANN t.c.

Odontogria gen. n., type *blairi* Bm. p. 62, BORCHMANN t.c.

Onocera subgen. n. see *Ecnolagria*.

Othryades boliviensis Bolivia, *columbiana* Colombia, spp. n. p. 437, BORCHMANN t.c.

Parogria subgen. n. see *Cerogria*.

Phaedogria gen. n. type *ionoptera* Er. p. 57, scope p. 58, BORCHMANN t.c.

Piciella gen. n., *helopioides* sp. n. Brazil p. 435, BORCHMANN t.c.

Pseudocasonidea gen. n. for *Nemostira ceylanica* Bm. p. 489, BORCHMANN t.c.

Pseudolagria impressifrons p. 173, *colombiana* p. 174, spp. n. Colombia, BORCHMANN t.c.—*P. laterufa* p. 28, *subapicalis* p. 29, spp. n. Brazil, Pic Mél. exot.-ent. 67.

Rhagostira gen. n., *collarti* sp. n. Belgian Congo p. 468, BORCHMANN Genera Insect. 204.

Rhaibogria gen. n. type *ampla* Fairm. p. 144, scope p. 145; *abdominalis* sp. n. Madagascar p. 146, BORCHMANN t.c.

Schevadera gen. n. type *hirticollis* Bm. scope p. 59, BORCHMANN t.c.

Schevogria gen. n. *methneri* type p. 164, *pilicollis* p. 165, spp. n. Africa, BORCHMANN t.c.

Sora (*Nemostiropsis* subgen. n. p. 341), *cylindracea* p. 345, *mutica* p. 348 Madagascar, *decumana*, *dayaka* Sumatra p. 351, *pilosivestis* India p. 351, *luzonensis* p. 357, *crassifemur* p. 359, *minima* p. 368 Philippines, spp. n.; *ribbei* var. n. *pici* S. Celebes p. 353, BORCHMANN t.c.

Splichalia andrewesi sp. n. Kashmir p. 340, BORCHMANN t.c.

Sphragidophorus ocularis sp. n. Costa Rica p. 507, BORCHMANN t.c.

Statira incisicollis var. n. *championi*; *infantina*, *plaumanni* Brazil p. 245, *jacobii* Paraguay p. 246, *nevermanni* Costa Rica p. 255, *magnifica* Brazil p. 256, *ignorata* p. 258 Brazil, *sculpturata* Colombia p. 259, *amicula* Brazil p. 261, *reticulaticollis* Costa Rica p. 269, *vitticollis* p. 270, *aspericollis* p. 271, *castaneicolor* p. 272, *corumbana* p. 273, *preapicalis*, *violaceicollis* p. 274 Brazil, *heliophila* Costa Rica p. 276, *aequabilis* p. 278, *riedeli* p. 280 Brazil, *opaca* p. 283, *simplex* p. 284, *inaequicollis* p. 287 Costa Rica, *dromiodema* Amazonas p. 289, *bimaculata* p. 291, *heliconiae* p. 292, *amicta* p. 294, *ingae* p. 295 Costa Rica, *maculipennis* Peru p. 296, *genualis* Brazil p. 301, *schmidtii* p. 304, *paradoxa* p. 306, *antennalis* p. 313, *limonis*, *glabricollis* p. 315 Costa Rica, *fulvescens* Venezuela, Colombia p. 314, *leonhardi* Brazil p. 316 spp. n.; *casaensis* n. n. for *canaliculata* Bm. p. 317; *cyanipennis* var. n. *nigrithorax* Colombia, Bolivia p. 273; *variabilis* var. n. *inexpecta* Panama p. 282; *trisellata* var. n. *championi* Colombia p. 331; *conspicillata* var. n. *lateannulata* Guatemala p. 291; *minima* var. n. *subatra* Centr. America p. 276; *scabrosicollis* n. n. for *scabricollis* Bm. p. 270, BORCHMANN t.c.—*S. albolineata* see *Nevermanniella*.

Syntractus wareonus p. 394, *diloensis* p. 397, *quadrilineatus*, *intermedius* p. 398 New Guinea, *hackeri* Australia p. 399, *anaematicus* Sumatra, *rufobrunneus* Singapore p. 400 spp. n.; *variabilis* var. n. *semiruber*, *pici*, *unicolor* Australia p. 395; *andrewesi*, *politicollis* India p. 403, BORCHMANN t.c.

Thoracostira gen. n. type *sculpta* Kirsch p. 508, BORCHMANN t.c.

Uroplatopsis simulans var. n. *nevermanni* Panama p. 482, BORCHMANN t.c.

Xenocera gen. n. type *feai* Bm. p. 116, scope p. 117, BORCHMANN t.c.

Xenogena gen. n. type *crinita* Bm. p. 212, scope p. 212, BORCHMANN t.c.

Xenostethus hamatus p. 461, *congoanus guineensis* p. 462, *camerunus* p. 463, *bomolensis* p. 464, spp. n. Africa, BORCHMANN t.c.

MELANDRYIDAE (SERROPALPIDAE).

Some French Melandryids, JARRIGE Misc. ent. 37 pp. 74–75.

Enstrophinus insuturalis sp. n. Mozambique p. 215, PIC Rev. franç. Ent. 3.

Tetratoma fungorum abb. n. *chlorina*, *amethystina* Poland p. 89, TRELIA Polsk. Pismo ent. 13.

SCRAPTIIDAE.

Trotomma normandi sp. n. Tunis p. 150, NORMAND Bull. Soc. H.n. Afr. N. 27.

PYTHIDAE.

Pytho jezoensis sp. n. Japan p. 36, KÔNO Ins. mats. 11.

Salpidema laticollis sp. n. Madagascar p. 36, PIC Mél. exot.-ent. 67.

Vincenzellus unifasciatus sp. n. Madagascar p. 35, PIC t.c.

OTHNIIDAE.

Elacatis 4-dentatus sp. n. Tanganyika p. 127, PIC Bull. Soc. zool. Fr. 61.

OEDEMEBIDAE.

Homomorpha semenovi sp. n. Transcaspiya p. 298 fig., KUZNETZOVA Rev. Ent. U.R.S.S. 25 1935.

Oshaninia zhelochovtzevi sp. n. Bukhara p. 300, KUZNETZOVA t.c.

Oxaxis basithorax p. 27 (with var. n. *reductelateralis*), *flavonotaticeps* p. 28, spp. n. Brazil, PIC Mél. exot.-ent. 67.

Probosca boiteli sp. n. Tunis p. 148, NORMAND Bull. Soc. H.n. Afr. N. 27.

Uroplatosisensens latefasciatus Brazil. p. 26, *angustatissimus* Parana p. 27, spp. n., PIC Mél. exot.-ent. 67.

Xanthochroa hilleri var. n. *impressithorax* Japan p. 24; *testaceipes* Sumatra, *nitidicollis* Borneo spp. n.; *notaticollis* abb. n. *lineata*, *binotata* Java p. 25, PIC t.c.—*X. strandi* p. 516, *caudata* p. 517 spp. n. Japan figs., Kôno Festschr. E. Strand 1.

PYROCHROIDAE.

Dendroides nakabusana sp. n. Japan p. 97 fig., Kôno Ins. mats. 10.

Ischalia philippina var. n. *insuturalis* Philippines p. 299, PIC Bull. Soc. zool. Fr. 61.

PEDILIDAE.

Macratia pendleburyi sp. n. Malaya p. 58, PIC J. F.M.S. Mus. 13.

ANTHICIDAE.

Anthicus pallidioritarsis sp. n. Morocco p. 213, PIC Bull. Soc. ent. Fr. 41.—*A. sydowi* sp. n. (with var. n. *reductor*); *fasciatus* var. n. *basidentatus* p. 21; *caliginosus* var. n. *epidaurosus* p. 22 Greece, PIC Echange 52.

Formicomus flavicornis see *Phalantias*.

Notoxus revision of Palaearctic spp. pp. 125–180, *lancifer* subsp. *sedilloti* ab. n. *communis* p. 140; *l. subsp.* n. *hoggarensis* N. Africa, *orientalis* Transcaspia p. 142, *afghanus* Afghanistan p. 143; *appendicinus* abb. n. *semimaculatus*, *semiornatus*, *maculatus*, *biconjunctus*, *conjunctus*, Palaearctic p. 147; *cavifrons* ab. n. *biconjunctus* p. 150; *mauritanicus* abb. n. *semimaculatus*, *connexus* p. 152, subsp. n. *maroccanus* N. Africa, *latefasciatus* Transcaspia p. 153; *siculus* ab. n. *connexus* Sicily p. 155; *hirtus* abb. n. *subornatus*, *biconjunctus* Centr. Asia p. 158, var. n. *montanus* E. Turkestan p. 159; *sareptanus* p. 160 (with ab. n. *continuus* p. 161) S. Russia, *anatolicus* Anatolia p. 162 spp. n.; *simulans* ab. n. *bimaculatus* Russia p. 164; *monoceros* ab. n. *concolor*, *bimaculatus*, *semimaculatus*, *tenuicornatus*, *ornatus*, *tenuijunctus*, *continuus* Europe p. 168 figs., HEBERDEY Kol. Rdsch. 22.—*N. visaliensis* California p. 144, *obesulus* Br. Columbia p. 146, spp. n., BLAISDELL Canad. Ent. 68.

Phalantias gen. n. type *Formicomus flavicornis* Mots., p. 6; *blairi* Ceylon, *grandiceps* Madras spp. n. p. 7, HEBERDEY Proc. R. ent. Soc. Lond. (B) 5.

Tomoderus revision of Malayan and Australian spp. pp. 246–256, key p. 248, *fuscobrunneus* Sumatra p. 249, *novaeguineae* New Guinea p. 250, *semipunctatus* Australia p. 251, *burmanus* Burma, *excisicollis* p. 252, *strandii*, *bifenestratus* Java, *capitatus* Sumatra p. 253, *flavus* Borneo p. 254 spp. n.; *kekichi* n. n. p. 252, HEBERDEY Festschr. E. Strand 2.

HYLOPHILIDAE.

Hylophilus barbatus p. 363, *rubrocinctus* p. 364, *abnormipes*, *fulmeki* p. 365, spp. n. Sumatra, HEBERDEY Treubia 15.—*H. burgeoni*, *sublunulatus* spp. n. Belgian Congo p. 35, PIC Rev. Zool. Bot. afr. 29.

MELOIDAE.

American Meloids, with key to Meloini genn., DENIER Rev. chil. H.n. 37 1933 pp. 237–246, 1 pl.

Catalogue of American Meloidae, DENIER Rev. Soc. ent. argent. 7 1935 pp. 139–176.

Anomalonyx gen. n. type *fumosus* Germ. p. 161, DENIER Rev. Soc. ent. argent. 7 1935.

Cissites sasakii sp. n. Formosa p. 97 fig., Kôno Ins. mats. 10.

Epicauta taipina sp. n. Formosa; *waterhousei* Haag-Rut. (= *formosensis* Wellm.) p. 90, Kôno Ins. mats. 10.—*E. aymara* Peru p. 152, *borchmanni*, *bosqi* p. 153, *franciscana* p. 155, *borgmeieri* p. 153, *montei* p. 157 Brasil, *yungana* Bolivia p. 160, spp. n., DENIER Rev. Soc. ent. argent. 7 1935.

Euzonitis adustipennis var. n. *inapicalis* Caucasia; 4-punctata var. n. *adanensis* Turkey p. 11, PIC Echange 51 1935.

Excavatomeloë subgen. n. see *Meloë*.

Horia tosana sp. n. Japan p. 96 fig., Kôno Ins. mats. 10.

Lytta griseopubesces sp. n. Argentina p. 163, DENIER Rev. Soc. ent. argent. 7 1935.

Meloë spp. on bees, systematics, habits pp. 20–27 fig., ÖRÖSI-PÁL Z. Parasitenk. 9.—*M. sapporensis* p. 91, *menoko* p. 92, spp. n. Japan, Kôno Ins. mats. 10.—*M. (Submeloegonius) subgen.* n.) *adis-abebae* sp. n. Abyssinia p. 320, (*Trapezimeloë* subgen. n. p. 322, *Excavatomeloë* p. 323 subgen. n.), FLIGINSKIÏ

Rev. Ent. U.R.S.S. 25 1935.—*M. foveolatus* a var. of *erythrocnemus*, biology pp. 18–22, CROS Bull. Soc. H.n. Afr. N. 26 bis (Vol. jubil.) 1935.

Mylabris 4-punctata ab. n. *normandi* Tunis p. 155, PIC op. cit. 27.

Oenas afra ab. n. *maculata* Tunis p. 154, NORMAND t.c.

Parameloe gen. n. p. 241, *alatus* sp. n. Peru p. 245 figs., DENIER Rev. chil. H.n. 37 1933.

Picnoseus laevigatus sp. n. Argentina p. 165, DENIER Rev. Soc. ent. argent. 7 1935.

Submeloe gen. n. see *Meloë*.

Teratolytta coeensis sp. n. Coe I. (Aegean) p. 91, MÜLLER Boll. Soc. ent. ital. 68.

Trapezimeloë subgen. n. see *Meloë*.

Zonitis okinawensis Japan, *mirwai* Formosa p. 94, *kimi* Korea p. 95, spp. n. figs., KÔNO Ins. mats. 10.

MORDELLIDAE.

List of Philippine Mordellidae, RAY Philipp. J. Sci. 59 p. 435.

Catalogue of Formosan Mordellidae, CHÛJÔ Sylvia 6 1935 pp. 75–86.

Anaspis gafsana Tunis p. 159, *simplicata* Algeria p. 160, spp. n., NORMAND Bull. Soc. H.n. Afr. N. 27.

Anthobates atosuturalis sp. n. (with var. n. *insignata*) Mozambique p. 214, PIC Rev. franç. Ent. 3.

Dellamora pubescens sp. n. Mindanao p. 433, RAY Philipp. J. Sci. 59.

Diclidia oceanica p. 434, *antipodes* p. 435, spp. n. Philippines, RAY t.c.

Glipa subsinuatipennis n. n. for *subsinuata* Pic preocc. p. 214. PIC Bull. Soc. ent. Fr. 41.

Glipodes tertia sp. n. Brazil p. 218, ROY Arb. morph. tax. Ent. Berl. 3.

Mordella submaculata p. 149, *auropubescens*, *lineatonotata* p. 215, *maculipennis* p. 216, *aurolineata* p. 217 Brazil, *diversinotata* Paraguay p. 148, *auroviolacea* Chile p. 150, spp. n., RAY t.c.—*M. verdensis*, *bistrimaculata* p. 1, *fruhstorferi*, *luteosuturalis*, *rufopectoralis*, *trifasciata*, *reitteri*, *atripes*, *longehumeralis* p. 2, *testaceohumeralis* (with var. n. *inhumeralis* Venezuela), *malleri*, *testaceipes*, *curtipennis* p. 3, *plumanni*,

mediolineata, *griseosuturalis* p. 4 Brazil, *subobliquefasciata* p. 1, *lemoulti* p. 3, *luteodispersa*, *biquadrinotata* p. 4 Fr. Guiana, *innotatopyga* Paraguay p. 2, *conradti* Guatemala p. 3, *mendesensis* Mexico, *schapleri* Argentina p. 4, spp. n.; *pauly* var. n. *holtzei* Paraguay p. 3; *albodispersa* var. n. *bisbijnuncta* Brazil p. 4, PIC Echänge 52 hors-texte.—*M. laterufescens* p. 214, *octonotata* (with var. n. *diversa*), *tijucaensis* Brazil, *pulchripennis* no locality p. 215 spp. n.; *luteonotatipennis* n. n. for *luteonotata* Pic preocc.; *binominata* n. n. for *madagascariensis* Pic preocc. p. 214, PIC Bull. Soc. ent. Fr. 41.—*M. auromaculata* sp. n. Formosa p. 72 fig., CHÛJÔ Sylvia 6 1935.—*M. bidenominata* n. n. for *madagascariensis* Pic nec Csiki p. 300, PIC Bull. Soc. zool. Fr. 61.

Mordellistena kono n. n. for *horni* Kono nec Pic p. 300, PIC t.c.—*M. fuscodorsalis* Paraguay p. 218, *metcalfi* Surinam p. 219, spp. n., RAY Arb. morph. tax. Ent. Berl. 3.—*M. claggi* sp. n. Mindanao p. 434, RAY Philipp. J. Sci. 59.—*M. bifasciata*, *ozarkensis* p. 125, *rubrofrontalis*, *tiara* p. 127, *rufocephala* p. 128, spp. n. U.S.A. figs., RAY Canad. Ent. 68.—*M. annuligaster* n. n. for *annuliventris* Pic preocc.; *tonkinensis* n. n. for *quadrinotata* Pic nec Lilj. p. 214, PIC Bull. Soc. ent. Fr. 41.—*M. pendleburyi*, *basilunulata* spp. n. Malaya p. 170, PIC J. F.M.S. Mus. 13.—*M. nigrofasciata* sp. n. Formosa p. 74 fig., CHÛJÔ Sylvia 6 1935.

Paramordella gen. n., *brevesetosa* sp. n. Brazil p. 1, PIC Echänge 52 hors-texte.

Tomoxia multilineata sp. n. Brazil p. 1, PIC t.c.—*T. trimaculata* p. 143, *quadrinotata* p. 144, *auratonotata* p. 145, *trilineata* p. 146, *horni* (also Paraguay) p. 148 Brazil, *albonotata* Mexico p. 144, *ruboabdominalis* p. 145, *psotai* p. 147 Paraguay, spp. n., RAY Arb. morph. tax. Ent. Berl. 3.—*T. laticollis* p. 128, *subsuturalis* p. 298, spp. n. Brazil, PIC Bull. Soc. zool. Fr. 61.—*T. paulonotata* sp. n. Malaya p. 59, PIC J. F.M.S. Mus. 13.—*T. formosana* sp. n. Formosa p. 73 fig., CHÛJÔ Sylvia 6 1935.

RHIPHIPHORIDAE.

Catalogue of Formosan Rhipiphoridae, CHÛJÔ Sylvia 6 1935 pp. 129–135, 1 fig.

Macrosiagon uninotaticolle sp. n. Formosa p. 133 fig., CHÛJÔ Sylvia 6 1935.—*M. iwatai* sp. n. Japan p. 88, KÔNO Ins. mats. 10.

Pelecotoma septentrionalis sp. n. Japan p. 87 fig., KÔNO Ins. mats. 10.

Rhipidius pectinicornis morphology, biology pp. 289–297 figs., STAMM Ent. Medd. 19.

STYLOPIDAE.

Position of Strepsiptera in classification of insects, PIERCE Ent. News 47 pp. 257–263.

Corioxenos gen. n., *antestiae* sp. n. Tanganyika p. 113 figs., BLAIR Proc. R. ent. Soc. Lond. (B) 5.

Neostylops see *Stylops*.

Stylops Kby. (= *Neostylops* Pierce) p. 9, partial key to males in N. America p. 10, *vandykei* p. 11, *timberlakei* p. 14, *pacificus* p. 15, *cuneiformis* p. 16 spp. n. U.S.A., figs., BOHART Pan-Pacific Ent. 12.

Lamellicornia.

List with keys of Scarabaeidae of Madagascar, PAULIAN Bull. Acad. malgache (N.S.) 18 pp. 121–144, 2 pls.

PASSALIDAE.

Passalidae of Borneo, HINCKS Ent. mon. Mag. 72 pp. 155–159.

Pseudacanthus nonstriatus sp. n. Mexico p. 129 fig., DIBB Proc. R. ent. Soc. Lond. (B) 5.

LUCANIDAE.

Catalogue of Lucanidae of Franco-Rhenish fauna (contd.), HOULBERT & BARTHE Misc. ent. 37 sep. pp. 161–208, 7 figs.

Aegus duplodentatus sp. n. Pahang p. 298, NAGEL Stettin. ent. Ztg. 97.

Chiasognathus granti var. n. *pygmaea* Chile p. 75 fig., DALLAS Rev. chil. H.n. 37, 1933.

Cladognathus bouvieri sp. n. Assam p. 191 figs., DIDIER Livre Jubil. Bouvier 1936.

Cyclommatellus gen. n., *bucephalus* (type) p. 293, *titanus* p. 295 Borneo, *taurus* Sumatra p. 296, spp. n. figs., NAGEL Stettin. ent. Ztg. 97.

Cyclommatinus pahangensis sp. n. Pahang p. 289, NAGEL t.c.—*C. pahangensis* sp. n. Pahang p. 36 fig., NAGEL J. F.M.S. Mus. 13.

Dorcus miwai sp. n. Formosa p. 12 figs., BENESH Trans. n.H. Soc. Formosa 26.—*D. rotundo-punctatus* sp. n. Himalayas p. 209 fig., NAGEL Arb. morph. tax. Ent. Berl. 3.

Sclerostomus denticulatus p. 299, *securiformis* p. 300, spp. n. Brazil, NAGEL Stettin. ent. Ztg. 97.

COPRIDAE.

Allonitis gen. n. for *Onitis nasutus* Felsche p. 1 figs., JANSSENS Bull. Mus. H.n. Belg. 12 no. 16.

Caccobius key to Japanese spp. p. 62, *hirayamai* p. 62, *jononis*, *kasuganus* (M. & YOHENA) p. 63, *narashinensis*, *sapporensis* p. 64, *suzukii*, *yubariensis* p. 65, *yamauchii* p. 66, spp. n. Japan, MATSUMURA Ins. mats. 11.

Catharsius timorensis var. n. *kangeanus* Kangean I. p. 296; *borneensis* Borneo, *dubius* Sikkim spp. n. p. 396 fig., PAULIAN Treubia 15.

Chironitis irroratus ab. n. *nigerrimus* Tunisia p. 369, NORMAND Bull. Soc. H.n. Afr. N. 27.

Drepanocerus arthuri sp. n. E. Africa p. 493, BOUCOMONT Rev. Zool. Bot. afr. 28.

Epilissus colasi p. 129, *fleutiauxi* p. 130, spp. n. Madagascar fig., PAULIAN Bull. Acad. malgache (N.S.) 18.

Onitis consanguineus Felsche (= *laevissimus* Gillet); *decellei* Paulian var. of *consanguineus* p. 4; *politus* Lansb. (= *bidentulus* Fairm. *fallaciosus* Felsche); *vicinus* Lansb. (= *propinquus* Felsche); *damocetas* Stev. (= *laevigatus* Ol.) p. 5 figs., JANSSENS Bull. Mus. H.n. Belg. 12 no. 8.—*O. nasutus* see *Allonitis*.

Onthophagus turneri E. Africa, *monradi* Angola, spp. n. p. 495, BOUCOMONT Rev. Zool. Bot. afr. 28.—*O.* revision of Palaearctic spp. pp. 551–566, *talyshensis* Transcaucasia p. 554, *proximus* China p. 556, *ophthalmicus* Sikkim p. 560, *simulator* Ussuri p. 565, spp. n. figs., KIRSCHENBLATT Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.—*O. unxovi* sp. n. Caucasus p. 87 fig., BOIACHEV Ann. Lenin St. Univ. Baku

9 1930.—*O. aerarius* ab. n. *rufinus* Tunisia p. 370, NORMAND Bull. Soc. H.n. Afr. N. 27.—*O. embrikianus* n. n. for *acuminatus* Bouc. nec Har.; *catharinensis* n. n. for *acuminatus* Paul. nec Bouc. p. 507; *schunckeii* sp. n. Peru p. 508 fig., PAULIAN Festschr. E. Strand 1.—*O. kangeanus* sp. n. Kangean I. p. 397, PAULIAN Treubia 15.

Panelus hopsoni p. 99, *politus* p. 100, spp. n. N.S. Wales fig., CARTER Proc. Linn. Soc. N.S. Wales 61.

Paraphytus characters p. 82, key p. 84, distribution p. 86 figs., PAULIAN Bull. Soc. ent. Fr. 41.

Pedaria interrupta p. 101, *metallica* p. 102, spp. n. Australia, CARTER Proc. Linn. Soc. N.S. Wales 61.

Phacosoma madecassus sp. n. Madagascar p. 131, PAULIAN Bull. Acad. malgache (N.S.) 18.

Saproecius turneri sp. n. E. Africa p. 491, BOUCOMONT Rev. Zool. Bot. afr. 28.

Sisyphus schaefferi var. *boschnakii* morphology pp. 80–82, HEPP Ent. Bl. 32.—*S. alveatus* sp. n. Kenya p. 280, BOUCOMONT Miss. sci. Omo 2 1935.

Synapsis tridens distribution p. 487 fig., TINKHAM Lingnan Sci. J. 15.

Trichillum arrowi sp. n. Brazil p. 205, key p. 206 fig., PAULIAN Bull. Soc. ent. Fr. 41.

APHODIIDAE.

Ahermodontus ambrosi sp. n. Morocco p. 392, PARDO-ALCAIDE Bull. Soc. H.n. Afr. N. 27.

Aphodius makólskii sp. n. Polonia p. 99 fig., ROUBAL Ent. Bl. 32.—*A. oberthüri* (with varr. n. *rubricatus*, *nigrescens*) p. 63, *pedongensis* p. 65, spp. n. India figs., PAULIAN Folia zool. hydrobiol. 9.—*A. (Trichonotulus)* key to Indian spp.; *castetsi* Trichinopoly p. 363, *moorei* Ceylon p. 364, spp. n. figs., PAULIAN Rec. Ind. Mus. 38.—*A. overlaeti* sp. n. Belgian Congo; *corniculans* n. n. for *corniculatus* Bouc. nec Schmidt p. 496, BOUCOMONT Rev. Zool. Bot. afr. 28.—*A. (Pseudocalamosternus* subgen. n.) *rigidus* p. 1, *nabeleki* p. 2 China (*Caenaphodius* subgen. n.), *asperolineatus* Syria p. 5, spp. n., BALTHASAR Ent. Nachr. Bl. 10.

Ataenius arrowi Galapagos Is. p. 414, *duplex* Mexico p. 418, *communis* p. 421,

panamensis p. 425 Panama, spp. n., figs., HINTON Ann. Mag. n.H. (10) 17.—*A. borgmeieri* sp. n. Mexico p. 472 figs., HINTON Rev. Ent. Rio de J. 6.

Caenaphodius subgen. n. see *Aphodius*.

Euparia vandykei sp. n. Mexico p. 273, HINTON Univ. Calif. Pub. Ent. 6.

Euparixia costaricensis sp. n. Costa Rica p. 274, HINTON t.c.

Euparixoides gen. n., *cribratus* sp. n. Panama p. 275 fig., HINTON t.c.

Psammobius brevior sp. n. Tunisia p. 374, NORMAND Bull. Soc. H.n. Afr. N. 27.

Pseudocalamosternus subgen. n. see *Aphodius*.

OCHODAEIDAE.

Codocera ferruginea subsp. n. *chinensis* N. China p. 98, BALTHASAR Ent. Bl. 32.

GEOTRUPIDAE.

Bibliographical notes on Junk's Coleopterorum Catalogus Pars 46 [contd.], HEPP Ent. Rdsch. 54 pp. 25–27.

Revision of Lethrini of U.R.S.S. SEMENOV-TIAN-SHANSKIĬ & MEDVEDEV Tabl. anal. Faune U.R.S.S. 18 104 pp. 316 figs.

Lethrus zarudnianus Turkomania p. 282, *chorassanicus* Persia, *tenuipunctus* Bukhara p. 283, *splendidus*, *zarudnyi* p. 284, *jacobsoni* p. 285 Turkestan, *serpenterifera* Mongolia p. 286, *lebedevi*, *petri* Heptapotamia p. 287, spp. n., SEMENOV-TIAN-SHANSKIĬ & MEDVEDEV Rev. Ent. U.R.S.S. 25 1935.

TROGIDAE.

Monograph of Palaearctic Troginae, BALTHASAR Festschr. E. Strand 1 pp. 407–459 1 pl.

Geotrogus unguicularis sp. n. Tunisia p. 378 figs., NORMAND Bull. Soc. H.n. Afr. N. 27.

Philharmostes setosus, *nevermanni* p. 230, *americanus* p. 231, spp. n. Costa Rica fig., BOUCOMONT Ent. Bl. 32.

Trox hispidus and ff. pp. 75–78, SCHMIDT Ent. Bl. 32.—*T. granulipennis* subsp. n. *sordidatus* Greece p. 452; *strandii* sp. n. Algeria p. 453, BALTHASAR Festschr. E. Strand 1.

MELOLONTHIDAE.

Aleucoschema subgen. n. see *Chioneosoma*.

Amphimallon jedlickai sp. n. Syria p. 94, BALTHASAR Ent. Bl. 32.

Chioneosoma revision of subgenn. pp. 280-281, *Lefcolasium*, *Leucoschema*, *Leucoschesis* p. 280, *Aleucoschema* p. 281 subgenn. n., SEMENOV-TIAN-SHANSKIĬ Rev. Ent. U.R.S.S. 25 1935.

Hoplia kuldshensis sp. n. Dsharkent p. 97, BALTHASAR Ent. Bl. 32.—*H. scheibei* sp. n. Himalayas p. 207, BALTHASAR Arb. morph. tax. Ent. Berl. 3.

Lachnosterna (*Phyllophaga*) *sequoiana* California p. 2, *linsleyi* Arizona p. 4, *chaenobiana* p. 62, *freeborni* p. 63 Mexico spp. n. figs., SAYLOR J. Ent. Zool. 28.—*L. lanceolata* status p. 52, characters p. 54 (with subsp. n. *arizonae*) p. 55; *grisiana* p. 56, *cazieri* p. 57, spp. n. U.S.A., VON BLOEKER Bull. S. Calif. Acad. Sci. 35.—*L. squamipilosa* sp. n. Texas p. 280, SAYLOR Canad. Ent. 68.—*L. quayabillos* p. 293, *irazuana*, *assmani* p. 294, *reventazona* p. 295, spp. n. Costa Rica, SAYLOR Rev. Ent. Rio de J. 6.—*L. spreta* additional records p. 185, RITCHER, CHAMBERLIN & LEE SEATON Proc. ent. Soc. Wash. 38.

Leucolasium subgen. n. see *Chioneosoma*.

Leucoschema subgen. n. see *Chioneosoma*.

Leucoschesis subgen. n. see *Chioneosoma*.

Listrochelus terminalis subsp. n. *gentryi* San Bernardo p. 64, SAYLOR J. Ent. Zool. 28.

Melolontha excisicauda sp. n. Syria p. 95, BALTHASAR Ent. Bl. 32.

Ochranoxia expallida sp. n. Turkestan p. 281, SEMENOV-TIAN-SHANSKIĬ Rev. Ent. U.R.S.S. 25 1935.

Oedanomerus longicornis sp. n. N.W. Rhodesia p. 258, ARROW Novit. zool. 39.

Pachydema veneriata p. 379, *decorosa* p. 380, spp. n. Tunisia, NORMAND Bull. Soc. H.n. Afr. N. 27.

Pachypus demoflysi sp. n. Tunisia p. 376, NORMAND t.c.

Phobetus palpalis sp. n. California p. 1 SAYLOR J. Ent. Zool. 28.

Phyllophaga see *Lachnosterna*.

Plectris aliena larva p. 169 figs., BÖVING Proc. ent. Soc. Wash. 38.

Serica prunipennis n. n. for *pruinosa* Sayl. preocc. p. 4, SAYLOR J. Ent. Zool. 28.

Trichinopus rufescens, *picipennis* spp. n. S.W. Africa p. 257, ARROW Novit. zool. 39.

Triodontella cinctipennis var. n. *atra* Tunisia p. 377, NORMAND Bull. Soc. H. n. Afr. N. 27.

EUCHIRIDAE.

Propomacrus nankinensis sp. n. China p. 1 figs., YU Insekto interesa 2 no. 1.

RUTELIDAE.

Adoretus kamberanus sp. n. Soemba p. 360 fig., OHAUS Treubia 15.—*A. horni* p. 205, *nuristanicus* p. 206, spp. n. Himalayas, BALTHASAR Arb. Morph. tax. Ent. Berl. 3.

Anomala sternitica Flores p. 357, *nycterina* New Guinea p. 358, spp. n. fig., OHAUS Treubia 15.—*A. kapangana* sp. n. Belgian Congo p. 389 fig., OHAUS Rev. Zool. Bot. afr. 28.—*A. clarescens* p. 125, *kokodae*, *subterfulva* p. 126, spp. n. New Guinea figs., OHAUS Proc. R. ent. Soc. Lond. (B) 5.—*A. viridifusca* Celebes, *ceramica* Ceram p. 142, *tenimbrica* Tenimber p. 143, *crinifrons* p. 144, *trichonota* p. 145 Perak, *sarsinorum* Celebes p. 146, *sampitana* Borneo, *manguliana* Sula p. 147, *rugulicollis* Celebes p. 148, spp. n. figs., OHAUS Stettin. ent. Z. 97.

Aprosterna celebica sp. n. Celebes p. 141, OHAUS t.c.

Chaetadoretus marahnus sp. n. Borneo p. 361, OHAUS Treubia 15.

Malaisia luluana sp. n. Belgian Congo p. 392 fig., OHAUS Rev. Zool. Bot. afr. 28.

Mimela prilca sp. n. Borneo p. 359 fig., OHAUS Treubia 15.—*M. pomicolor* sp. n. Yunnan p. 149 fig., OHAUS Stettin. ent. Z. 97.

Nannopopillia overlaeti sp. n. Belgian Congo p. 391 fig., OHAUS Rev. Zool. Bot. afr. 28.

Popillia mokana Fernando Po. I. p. 149, *celebica* Celebes p. 151, spp. n. figs., OHAUS Stettin. ent. Z. 97.

Rhinyptia stylifer Togo, *pemetipennis* Belgian Congo, spp. n. p. 152 figs., OHAUS t.c.

DYNASTIDAE.

Homonymy in Dynastidae, PRELL Ent. Bl. 32 pp. 145-152.

Aceratus n. n. for *Acerus* Burm. nec Agass. p. 145, PRELL Ent. Bl. 32.

Acerus see *Aceratus*.

Anoplocephalus see *Coscinocephalus*.

Asemantus see *Asemopterus*.

Asemopterus n. n. for *Asemantus* Blackburn nec Foerst. p. 146, PRELL Eng. Bl. 32.

Aspidolella n. n. for *Aspidolites* Höhne nec Conrad p. 146, PRELL Ent. Bl. 32.

Aspidolites see *Aspidolella*.

Coscinocephalus n. n. for *Anoplocephalus* Schaeff. nec Hendrick p. 145, PRELL Ent. Bl. 32.

Heteronychus jacki sp. n. Kenya p. 259; *paolii* n. n. for *sacchari* Paolinee Arrow p. 260, ARROW Novit. zool. 39.

Isodon see *Trissodon*.

Neatocnemis n. n. for *Neocnemis* Sharp nec Crotch p. 150, PRELL Ent. Bl. 32.

Neobothynus n. n. for *Neoryctes* Arrow nec Stirling p. 150, PRELL Ent. Bl. 32.

Neocnemis see *Neatocnemis*.

Neoryctes see *Neobothynus*.

Pseudocyphonistes laevis sp. n. Cape Province p. 258, ARROW Novit. zool. 39.

Spilosota hirta subsp. n. *pilosicollis* California p. 2, SAYLOR J. Ent. Zool. 28.

Trissodon n. n. for *Isodon* Hope nec Say p. 150, PRELL Ent. Bl. 32.

CETONIIDAE.

Cyclidiosoma see *Lissogenius*.

Lecanoderus vernayi sp. n. Kalahari p. 118 fig., VAN SON Ann. Transv. Mus. 17.

Lissogenius Schaum (= *Cyclidiosoma* Janson) p. 260, ARROW Novit. zool. 39.

Lomaptera moseriana n. n. for *fasciata* Mos. nec Burm. p. 198, BURGEON Bull. Ann. Soc. ent. Belg. 76.

Poecilopharis revision pp. 65-73; *curtisi* Waterh. (= *laevipennis* Kraatz nec Rits.) p. 67; *leai* N. Queensland p. 68, *schochi* p. 69, *angulicollis* p. 70, *penicillata* p. 71 New Guinea, *quadrimaculata* New Mecklenburg, *bimaculata* New Pomerania, *wallacei* Matabello I., *otundipennis* Kei I. p. 69, *laeviclypeata* Namanumi I., *valckhucasseni* Bachian p. 70, spp. n., SCHÜRHOFF Mitt. dtsch. ent. Ges. 6.

Scaptobius zulu sp. n. S.E. Africa p. 260, ARROW Novit. zool. 39.

Sisyrphora angolensis sp. n. Angola, Belgian Congo p. 405, VALCK LUCASSEN Rev. Zool. Bot. afr. 28.

CURCULIONIDAE.

Notes on British Rhynchophora COULSON Proc. S. Lond. ent. n.H. Soc. 1935-36 pp. 100-107.

Catalogue of Calandrinae, Cossoninae, CSIKI Col. Cat. 149 212 pp.

Catalogue of Brachyderinae, I, DALLA TORRE & VAN EMDEN Col. Cat. 147 132 pp.

Key to genera of Brachyderinae, van EMDEN Stettin. ent. Ztg. 97 pp. 66-99, 211-239, 4 figs.

Catalogue of Cholinae (32 pp.), Tachygoninae (4 pp.), Antliarrhinae (2 pp.), Ulomascinae (1 p.), Epipedinae (1 p.) & Pyropinae (1 p.), KLIMA Col. Cat. 146.

Catalogue of Otiorrhynchinae I, LONA Col. Cat. 148 226 pp.

Catalogue of Prionomerinae (11 pp.), Aterpinae (9 pp.), Amalactinae (3 pp.), Haplonychinae (8 pp.) Omophorinae (2 pp.), SCHENKLING & MARSHALL Col. Cat. 150.

Status of Hormorini, VAN DYKE Pan-Pacific Ent. 12 p. 80.

Characters of Scolopterini in New Zealand, VOSS Arb. morph. taxon. ent. Berl. 3 pp. 60-62, 110-121, 3 figs.

Notes on "Die Cossoninen Afrikas und Madagascars..." VOSS Arb. morph. tax. ent. Berl. 3 pp. 296-298.

Preliminary studies on a revision of Central European Ceuthorrhynchinae, WAGNER Ent. Bl. 32 pp. 161-170, 178-188.

Check list of Baridinae of S.E. Polynesia, ZIMMERMAN Occ. Pap. Bishop Mus. 12 no. 3, 8 pp. 2 figs.

Acallestes camelus sp. n. Brazil p. 499 figs., MARSHALL Bull. ent. Res. 27.

Acantholophus suttoni sp. n. Queensland p. 109, CARTER Proc. Linn. Soc. N.S.W. 61.

Acythopeus barbatus p. 219, *unicornis* p. 220, spp. n. Bengal figs., MARSHALL Ind. For. Rec. Ent. 1.

Adapanetus gen. n. (Sphenophorini) p. 77, *sericoclava* sp. n. Tonkin, Burma p. 78 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Afrophytoscaphus gen. n. (Phytoscapini) p. 443, *variabilis* sp. n. Abyssinia p. 444 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Agametis bifasciata sp. n. Queensland p. 56, LEA Trans. R. Soc. S. Aust. 34 1910.

Alcides neavei sp. n. Portuguese E. Africa, Rhodesia, Nyasaland p. 33, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*A. puncti-collis* p. 191, *monardi* p. 192, *bimbiense* p. 193, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*A. minute-pustulatus* sp. n. Congo p. 31, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.—*A. fallerianus* sp. n. Abyssinia p. 503, HUSTACHE Ann. Mag. n.H. (10) 18.

Amalorhinoncus subgen. n. see *Rhinoncus*.

Ambates cristulifer sp. n. Amazonas p. 273, GÜNTHER Ent. Rdsch. 53.

Amblyrrhinus brunneus var. n. *zwairensis* Abyssinia p. 443, HUSTACHE Ann. Mag. n.H. (10) 18.

Amleanus gen. n. (Cryptorrhynchinae) type *bicrucicollis* Lea p. 195, MARSHALL Proc. R. ent. Soc. Lond. (B) 5.

Amphitmetus scotti p. 367, *gibbosus* p. 369, spp. n. Abyssinia fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Anascopus gen. n. (Zygopinae) p. 47, *angustus* sp. n. Pondoland, Portuguese E. Africa, Rhodesia p. 48, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Anathresa carinirostris sp. n. Bechuanaland p. 27, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.

Anchitelus gen. n. (Otiorrhynchinae), *albovidis* sp. n. California p. 19, VAN DYKE Pan-Pacific Ent. 12.

Anthonomus (*Pterochalybs* subgen. n. pp. 168, 181) *czekanowskii* sp. n. Lena-Tal pp. 171, 181; *rubi* var. n. *transiliensis* Alatau pp. 169, 182 figs., TER-MINASYAN Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.—*A. varians* f. n. *strandata* Czechoslovakia p. 58, ROUBAL Festschr. E. Strand 1.—*A. longirostris* sp. n. Belgian Congo p. 28, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.

Aosseterus longipilis sp. n. Bechuanaland p. 27, HUSTACHE t.c.

Aparopion see *Lobosoma*.

Aphanonyx gen. n. for *Diabathrarius setulosus* Mshl. p. 24, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Apion inornatum, *tenuistriatum* p. 28, *longicolle* p. 29, *convexipenne*, *niveo-dispersum* p. 30, *subopacum* p. 31, *stilbum*, *pilistriatum* p. 32, *congestum* p. 33, *vertebrale* p. 34, *microscopicum* (also Tasmania) p. 35, *nigrosuturale* p. 36 Australia, *tasmanicum* Tasmania p. 35, spp. n., LEA Trans. R. Soc. S. Aust. 34 1910.—*A. muluense* p. 497, *zukwalaense* p. 498, *inhumerale* p. 499, spp. n. Abyssinia figs., HUSTACHE Ann. Mag. n.H. (10) 18.—*A. diverserostratum* sp. n. p. 13; *urticarium* subsp. n. *atlanticum* p. 14 Canary Is. figs., UYTENBOOGAART Comment. biol. 6 1935 no. 2.—*A. monardi* sp. n. Angola p. 194, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*A. corchori* sp. n. S. India p. 255, MARSHALL Bull. ent. Res. 27.

Apoderus ducorpsi sp. n. Dahomey p. 31, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.

Aragnomus setosus sp. n. California p. 30, VAN DYKE Pan-Pacific Ent. 12.

Auletes punctipennis p. 38, *bryophagus* p. 39, *imitator* (also Australia), *inconstans* p. 41, *subcalceatus* p. 42, *variicollis*, *decipiens* p. 43 Tasmania, *puncticollis* *sobrinus*, p. 39, *aterrimus* p. 40 Australia, spp. n., LEA Trans. R. Soc. S. Aust. 34 1910.

Auletobius uniformis f. n. *fulvescens* Japan p. 61, VOSS Mitt. dtsh. ent. Ges. 7.

Bagous corsicanus sp. n. Corsica p. 61, key to Palaearctic spp. of subgen. *Parabagous* p. 62, HOFFMANN Bull. Soc. ent. Fr. 41.—*B. gaillardii* sp. n. Lake Chad p. 22, HUSTACHE Sborn. ent. odd.

Nár. Mus. Prazé 14.—*B. cylindricollis* var. n. *aethiopicus* Abyssinia p. 489, HUSTACHE Ann. Mag. n.H. (10) 18.

Baridius subcylindricus see *Mecobaris*.

Baris planetes sp. n. S.W. Africa, Portuguese E. Africa, Rhodesia etc. p. 51, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*B. novaki* sp. n. Portugal p. 220, PENECKE Kol. Rdsch. 21.—*B. amaranthi* p. 257, *dodonis* p. 259, spp. n. Uganda figs., MARSHALL Bull. ent. Res. 27.—*B. carinipennis* p. 203, *ebangaense*, *gandaense* p. 204, *lundaense* p. 205, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*B. vadoni* Kamerun, *rufulus* Lake Chad spp. n. p. 37, HUSTACHE Sborn. ent. odd. Nár. Mus. Prazé 14.—*B. abyssinica* p. 574, *sculpturata* p. 575, *plantarum* p. 577, spp. n. Abyssinia fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Belus bassiae sp. n. W. Queensland p. 192, MARSHALL Proc. R. ent. Soc. Lond. (B) 5.

Blosyrus impendens p. 1, *manicanus* (also S. Rhodesia) p. 3, *mozambicus* p. 4, *simplicifrons* p. 5, spp. n. Mozambique, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Bradybatus inermis ♂ p. 221 PENECKE Kol. Rdsch. 21.

Bradybastes costulatus sp. n. Abyssinia p. 492 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Bubaris hardcastlei sp. n. Queensland p. 20, LEA Trans. R. Soc. S. Aust. 34 1910.

Cactophagus sanguinipes p. 88, *aurantiacus* p. 89 Ecuador, *rubricatus* p. 88, *consularis* p. 89 Fr. Guiana, spp. n., HUSTACHE Bull. Ann. Soc. ent. Belg. 76.

Calendra dietrichi ♂ p. 38, SATTERTHWAIT Ent. News 47.—*C. tenuivittata* Dominican Republic p. 149, *cubensis* Cuba p. 150, spp. n., BUCHANAN Mem. Soc. cubana H.n. 10.

Calandrella gen. n. (Calandriini), *pashini* sp. n. Russia p. 440 figs., FURSOV Bull. Soc. Nat. Moscou (N.S.) 44 1935 Sect. Biol.

Calomycterus strigiceps sp. n. China p. 10, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Camptorrhinus latifemur p. 37, *vulturinus* p. 38, *simplex* p. 40, spp. n. Portuguese E. Africa etc., MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Ceratocrates regularis sp. n. Abyssinia p. 371 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Cercidocerus planicollis sp. n. Borneo p. 130, GÜNTHER Arb. morph. tax. Ent. Berl. 3.

Ceuthorrhynchus revision of spp. of subgen. *Oreorrhynchus* pp. 46–53, *spectator* sp. n. Italy p. 50, HOLDHAUS Rev. franç. Ent. 3.—*C. cognatus* Sch. (= *albosignatus* Reitt.); *austriacus* Bris. (= *cognatus* Reitt.) p. 217; *pallidicornis* Bris. (= *4-punctatus* Stierl.); *thlaspiophilus* ♂; *itvensis* sp. n. Elba p. 218, PENECKE Kol. Rdsch. 21.—*C. derennei* sp. n. Belgium p. 193, GUILLEAUME Bull. Ann. Soc. ent. Belg. 76.—*C. smreczynskii* sp. n. Poland p. 92 figs., TRELLA Polsk. Pismo ent. 13.

Chalcodermus key to S. American spp. p. 282, *subrufus*, *ovalis* p. 282, *ovatulus*, *subcostatus*, *piceus*, *lateralis* p. 283, *dentipennis*, *cicatricosus*, *laticollis* p. 284, *humerosus*, *castaneus* p. 285, *bimaculatus*, *truncatipennis* p. 286, *bicolor*, *curvifasciatus* p. 287, *subnitens*, *cupreus*, *cupreolus* p. 289, *segnis*, *rhomboidalis*, *pseudenedrus* p. 290, *ater*, *irregularis* p. 291, *humeralis*, *triangularis* p. 292, spp. n. S. America, FIEDLER Arb. morph. tax. Ent. Berl. 3.

Chlorophanus kansuanus sp. n. China p. 5, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Cimbocera cazieri sp. n. California p. 73, VAN DYKE Pan-Pacific Ent. 12.

Cionus scrophulariae f. n. *albosuturata* Bosnia p. 45, ROUBAL Ent. Anz. 16.—*C. canariensis* sp. n. Canary Is. p. 16, UYTENBOOGAART Comment. biol. 6 1935 no. 2.

Cissodicaesticus gen. n. (Otiorrhynchinae), *morulus* sp. n. Abyssinia p. 360 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Cleonus freyi sp. n. China p. 15, ZUMPT Mitt. dtsh. ent. Ges. 7.

Coffearhynchus gen. n. (Hylobiinae) p. 112, *neocaledonicus* sp. n. N. Caledonia p. 113, RISBEC Agron. colon. 25.

Collabismus American spp. pp. 239–259, characters p. 240, key p. 242, *cuniculus* p. 245, *marcescens* p. 248, no locality, *centromaculatus* p. 246, *dorsalis* p. 256 Colombia, *ornatus*, *atrofulvus* p. 248, *undulatus* p. 250, *unicolor*, *luteo-albus* p. 252, *retrosetosus* p. 253, *uniformis*, *aureolus* Brazil, *longicollis* Espirito Santo p. 251, *auronebulosus* Paraguay p. 255 spp. n.; *notulatus* var. n. *nigrescens* Brazil p. 259, FIEDLER Stettin. ent. Ztg. 97.

Colobodes dolichotis sp. n. S. India p. 256 fig., MARSHALL Bull. ent. Res. 27.

Conradiella canripes sp. n. Portuguese E. Africa, Uganda p. 49, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Corigetetus hedini sp. n. China p. 11, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.—*C. vexator* p. 441, *ghindaensis* p. 442, spp. n. Abyssinia, HUSTACHE Ann. Mag. n.H. (10) 18.

Corynemerus laevis sp. n. Belgian Congo p. 39, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.—*C. pullus* sp. n. Belgian Congo p. 331, HUSTACHE Rev. Zool. Bot. afr. 28.

Corysopus picturatus sp. n. Angola p. 201, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Cosmobaris squamiger p. 27, *sionilli*, p. 28, spp. n. Illinois, HAYES J. Kans. ent. Soc. 9.

Cossonus key to and notes on *pacificus* group pp. 111–116, *americanus* Quebec p. 112, *rufipennis* Kansas p. 114 spp. n. BUCHANAN Pan-Pacific Ent. 12.—*C. euphorbiae* p. 578, *gibbistrois* p. 580, *tarsalis* p. 581, spp. n. Abyssinia, HUSTACHE Ann. Mag. n.H. (10) 18.

Crematogasterobius gen. n. (Cryptorrhynchinae) p. 333, *haywardi* sp. n. p. 334 Argentina figs., HUSTACHE & BRUCH Rev. Ent. Rio de J. 6.

Cryptacrus fulvonotatus p. 120, *variegatus* p. 123, *camelus*, *semialbus* p. 124, spp. n. Brazil, FIEDLER Ent. Bl. 32.

Cryptolepidus n. n. for *Lepidopus* Van Dyke preocc. p. 191, VAN DYKE Pan-Pacific Ent. 12.

Cryptorrhynchus key to Indian spp. 217, *spondias* p. 213, *atkinsoni* p. 214, *quercus* p. 215, spp. n. India; *frigidus* F. (= *gravis* F.) p. 219, MARSHALL Ind. For. Rec. Ent. 1.

Cryptosternum gen. n. (Pyropini) p. 140, *nevermanni* sp. n. Costa Rica p. 141 figs., HELLER Arb. morph. tax. Ent. Berl. 3.

Cychrotonus dissimilis sp. n. Belgian Congo p. 15, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.—*C. angolanus* sp. n. Angola p. 169, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Cylas of Belgian Congo pp. 504–509, *van-den-plasi* sp. n. Belgian Congo p. 508, BURGEON Rev. Zool. Bot. afr. 28.

Cyllophorus scutellatus sp. n. Angola p. 198, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Dactylotus calvus sp. n. China p. 2, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Decilaus bassiae sp. n. Queensland p. 193, MARSHALL Proc. R. ent. Soc. Lond. (B) 5.

Derelomus nigrovariegatus p. 484, *abyssinicus* p. 486, spp. n. Abyssinia figs., HUSTACHE Ann. Mag. n.H. (10) 18.

Dereodus uhlenhuthi sp. n. Abyssinia p. 358, HUSTACHE t.c.

Diabathrarius setulosus see *Aphanonyx*.

Dialeptopus pyriferus sp. n. S. Australia p. 25, LEA Trans. R. Soc. S. Aust. 34 1910.

Dicasticus curtus sp. n. Abyssinia p. 359, HUSTACHE Ann. Mag. n.H. (10) 18.

Dichotrachelus E. Alpine spp. pp. 35–52; key p. 41 figs., FRANZ Zool. Jb., Syst. 68.

Diraus gen. n. (Hylobiinae) p. 190, *cristatus* sp. n. Queensland p. 191 fig., MARSHALL Proc. R. ent. Soc. Lond. (B) 5.

Dolichonotus subgen. n. see *Panscopus*.

Dyscerus kalshoveni, *naso* see Kobuzo.

Echinocnemus tostus p. 28, *nitidus* p. 29, spp. n. Portuguese E. Africa, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*E. granulipennis*, *curvirostris* spp. n. Angola p. 185, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Ectatorrhinus aculifer sp. n. Borneo p. 125 fig., GÜNTHER Arb. morph. tax. Ent. Berl. 3.

Egriodes **gen. n.** (Ceuthorrhynchinae)
p. 44, *dollmani* (type) p. 45, *alticollis*
p. 46, **spp. n.** Portuguese E. Africa,
Rhodesia, MARSHALL Mem. Mus. zool.
Univ. Coimbra (I) no. 81 1935.

Elleschus carludovicae **sp. n.** Costa
Rica p. 190 fig., GÜNTHER Ent. Rdsch.
53.

Endaeus abyssinicus **sp. n.** Abyssinia
p. 488 fig., HUSTACHE Ann. Mag. n.H.
(10) 18.—*E. angolanus* **sp. n.** Angola
p. 187, HUSTACHE Bull. Soc. neuchâtel.
Sci. nat. 60.

Eremonyx reticulatus **sp. n.** Austral
Is. p. 6 figs., ZIMMERMAN Occ. Pap.
Bishop Mus. 12 no. 3.

Eremotes oxydemoides Fr. Congo p. 41,
vadoni Kamerun p. 42, **spp. n.**, HUS-
TACHE Sborn. ent. odd. Nár. Mus. Praze
14.

Eucactophagus appolinairei p. 90,
fallaciosus, viduus p. 91, **spp. n.** Colom-
bia, HUSTACHE Bull. Ann. Soc. ent.
Belg. 76.

Eucyllus echinus p. 31, *unicolor* p. 32,
spp. n. U.S.A., VAN DYKE Pan-Pacific
Ent. 12.

Eurychirus alleni **sp. n.** Queensland
p. 26, LEA Trans. R. Soc. S. Aust. 34
1910.

Eurymetopellus **n. n.** for *Eurymeto-*
pinus v. Emd. p. 86, VAN EMDEN
Stettin. ent. Z. 97.

Eurymetopinus **n. n.** for *Eurymetopus*
Kirsch nec Schönh. p. 32, VAN EMDEN
in DALLA TORRE & VAN EMDEN Col.
Cat. 147.—See *Eurymetopellus*.

Eurymetopus see *Eurymetopinus*.

Faustiella ventralis, bifasciata p. 199,
scutellata p. 200, **spp. n.** Angola, HUS-
TACHE Bull. Soc. neuchâtel. Sci. nat.
60.

Gastrotaphrus **gen. n.** (Trachodinae)
p. 180, *barberi* **sp. n.** California p. 181,
BUCHANAN Proc. ent. Soc. Wash. 37.

Geoderces see *Nemocestes*.

Gronops transversecollis **sp. n.** Persia
p. 38, VOSS Kol. Rdsch. 22.

Hadromerus conirostris, planidorsis
p. 171, *ovatus* p. 172, (*Neohadromerus*
subgen. n.) *denticollis* p. 173, *nigriclava*
p. 174, **spp. n.** Angola, HUSTACHE Bull.
Soc. neuchâtel. Sci. nat. 60.

Hadronotus lesnei **sp. n.** Portuguese
E. Africa p. 11 fig., MARSHALL Mem.
Mus. zool. Univ. Coimbra (I) no. 81
1935.

Haplocorynus nigrolateralis **sp. n.**
Rhodesia, Portuguese E. Africa, p. 35,
MARSHALL t.c.

Haplonyx modicus p. 44, *latus* p. 45,
mucidus p. 46, *variegatus* (also Tasmania)
p. 47, *maestus* p. 48, *puncticollis, mini-*
mus p. 49, **spp. n.** Australia, LEA Trans.
R. Soc. S. Aust. 34 1910.

Heterophytobius **gen. n.** for *Phytobius*
4-nodosus Gyll., *muricatus* Bris., *grana-*
tus Gyll.; (*Neophytobius* **subgen. n.** p.
181) p. 180, WAGNER Ent. Bl. 32.

Heterostylus roseotinctus **sp. n.**
Mozambique p. 16, HUSTACHE Sborn.
ent. odd. Nár. Mus. Praze 14.—*H.*
caducus **sp. n.** Portuguese E. Africa,
Nyasaland, N.W. Rhodesia p. 13,
MARSHALL Mem. Mus. zool. Univ.
Coimbra (I) no. 81 1935.

Himatinum key to Indian spp. p. 217,
lalli Bengal p. 225, *dutti* Ceylon p. 226,
spp. n., MARSHALL Ind. For. Rec. Ent.
1.

Homalostylus rufirostris p. 92, *geni-*
culatus Bolivia, *goyaensis* Brazil p. 93,
spp. n., HUSTACHE Bull. Ann. Soc. ent.
Belg. 76.

Homapterus nevadensis **sp. n.** Sierra
Nevada p. 149, HOFFMANN Rev. franç.
Ent. 3.

Homoeometamelus **gen. n.** (Mene-
machinae) p. 571, *euphorbiae* (type)
p. 572, *tibialis* **spp. n.** Abyssinia; *den-*
ticulatus Hust. from *Phylanticus* p. 574
fig., HUSTACHE Ann. Mag. n.H. (10)
18.

Hoplitotrachelus orbitalis **var. n.**
similis Angola p. 187, HUSTACHE Bull.
Soc. neuchâtel. Sci. nat. 60.

Hoplocneme brouni **sp. n.**; *hookeri*
subsp. n. *interstitialis* New Zealand
p. 116, VOSS Arb. morph. tax. Ent.
Berl. 3.

Hypera aequabilis **sp. n.** China p. 14,
MARSHALL Ark. Zool. 27A (sep. dated
1934) no. 29.—*H. moczarskii* **sp. n.**
Thessaly p. 212, PENECKE Kol. Rdsch.
21.—*H. ovalis* new to France p. 73,
AUDRAS Bull. Soc. linn. Lyon (n.s.)
5.

Hyponotus parceguttatus p. 498, *modestus* p. 499, spp. n. Brazil, MARSHALL Bull. ent. Res. 27.

Iphisomus mandibularis sp. n. Angola p. 175, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Isaniris australis sp. n. Portuguese E. Africa p. 15, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Ischnobrotus gen. n. (Otiorrhynchinae) p. 362, key p. 363, *typicus* (type), *convexus* p. 366, *bicallosus*, *hystricosus* Abyssinia p. 367, *setulosus* Kenya p. 366, spp. n., HUSTACHE Ann. Mag. n.H. (10) 18.

Ischnotrachelus apicalis sp. n. Angola p. 178, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Kobuzo crassus sp. n. Bengal p. 206; *kalshoveni* Mshl., *naso* Mshl. from *Dyscerus* p. 207, MARSHALL Ind. For. Rec. Ent. 1.

Lamitema gen. n. (Zygopinae), *decipiens* sp. n. Queensland p. 55, LEA Trans. R. Soc. S. Aust. 34 1910.

Larinus lucidirostris sp. n. Armenian Taurus p. 209, PENECKE Kol. Rdsch. 21.

Lepidophorus Kby. (= *Lophalophus* Lec.), characters p. 1, key p. 2, *angulatus* p. 4, *plumosus* p. 6, *bakeri* p. 8 (with subsp. n. *utensis* p. 10) U.S.A., *pumilus* Br. Columbia p. 7, spp. n., BUCHANAN Bull. Brooklyn ent. Soc. 31.

Lepidopus gen. n. (Otiorrhynchinae) p. 76, *nevadicus* (type) p. 77, *parvulus* p. 78, spp. n. U.S.A., VAN DYKE Pan-Pacific Ent. 12.—See *Cryptolepidus*.

Leptosphaerotus ruficolor sp. n. Algeria p. 22, PIC Echange 52.

Lepyrus revision of Palaearctic spp. pp. 259-290, *elongatus* Siberia p. 271, *chinganensis* Manchuria p. 273, *staudingeri* Baikal, *konoï* Korea p. 281, spp. n. figs., ZUMPT Pub. Mus. ent. Pietro Rossi 1.—*L. flavipunctatus* sp. n. Japan p. 146 fig., ZUMPT Ins. mats. 10.

Lixus biangulifer sp. n. Portuguese E. Africa p. 26 fig., MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*L. sanghaiensis* Sangha p. 23, *germaini* Mozambique p. 23, *leninus* p. 24, *inaffectatus* p. 26 Ruanda *babauli* Uganda p. 25, spp. n., HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.—*L. xanthocheloides* p. 188,

elendeensis p. 189, *bimbiensis*, *perjurus* p. 190, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Lobosoma gen. n. for *Aparopion* of American lists nec Hampe, type *Trachodes horridus* Mann. p. 180, BUCHANAN Proc. ent. Soc. Wash. 37.

Lophalophus see *Lepidophorus*.

Lupinocolus gen. n. (Hormorini) p. 81, *blaisdelli* sp. n. California p. 82, VAN DYKE Pan-Pacific Ent. 12.

Magdalis frontalis subsp. n. *transbaicalica* Transbaikalia p. 40, VOSS Kol. Rdsch. 22.

Malosomus elegans sp. n. Abyssinia p. 490, HUSTACHE Ann. Mag. n.H. (10) 18.

Mecistocerus fossatifrons sp. n. Bengal p. 207, MARSHALL Ind. For. Rec. Ent. 1.

Mecobaris gen. n. (Baridinae) p. 221, *terminaliae* (type) p. 222, *squamifera* p. 223 spp. n.; *subcylindricus* Fst. from *Baridius* p. 221, fig., MARSHALL t.c.

Mecopus macleayi p. 51, *pictus* p. 52, spp. n. Queensland, LEA Trans. R. Soc. S. Aust. 34 1910.

Menemachus robustirostris p. 35, *variegatus* p. 36, spp. n. Belgian Congo, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.

Meneudetus vagus sp. n. Belgian Congo p. 34, HUSTACHE t.c.—*M. chatterjeei* sp. n. Bengal p. 223 fig., MARSHALL Ind. For. Rec. Ent. 1.

Merimnetes fagi p. 13, *simplicipennis*, *montanus* p. 14, *decipiens* p. 15 Tasmania, *viridis*, *celmisiae* Australia p. 15, spp. n., LEA Trans. R. Soc. S. Aust. 34 1910.

Mesitolabus subgen. n. see *Omolabus*.

Metamasius benoisti p. 93, *dentirostris* p. 96, *alternans* p. 104 Ecuador, *vicinus* p. 95, *peruanus* p. 96, *conicicollis* p. 98, *semirubripes* p. 106 Peru, *puncticeps* Colombia p. 97, *bilobus* Bolivia p. 99 (with var. n. *amplicollis* p. 100 Ecuador) *fractelineatus* p. 100, *scutellatus* p. 101 Fr. Guiana, *tuberculipectus* Fr. Guiana, Colombia p. 102, *brevinasus* Fr. Guiana, Peru p. 103, *elegantulus* Brazil p. 105, spp. n., HUSTACHE Bull. Ann. Soc. ent. Belg. 76.—*M. dasycnemis* sp. n. Costa Rica p. 192 figs., GÜNTHER Ent. Rdsch. 53.

Metialma australiae sp. n. Queensland p. 50, LEA Trans. R. Soc. S. Aust. 34 1910.

Miloderoides gen. n. (Otiorrhynchinae) p. 74, *maculatus* sp. n. Idaho p. 76, VAN DYKE Pan-Pacific Ent. 12.

Minurophilus gen. n. for *Rhynchites fulvescens* Blanch. p. 280; *apionoides* sp. n. Argentina p. 282, Voss Stettin. ent. Ztg. 97.

Miorrhinus gen. n. (Cossoninae) p. 228, *sulcifrons* sp. n. Bengal p. 229, MARSHALL Ind. For. Rec. Ent. 1.

Mitostylus elongatus sp. n. Texas p. 83, VAN DYKE Pan-Pacific Ent. 12.

Molytophilus puncticollis p. 491, *affinis* p. 492, spp. n. Abyssinia fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Myllocerus penecke sp. n. Ussuri p. 37, Voss Kol. Rdsch. 22.—*M. veterator* p. 439, *denigrator* p. 440, spp. n. Abyssinia, HUSTACHE Ann. Mag. n.H. (10) 18.—*M. elendeensis* p. 182, *kalukembensis* p. 183, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Mythites frater p. 21, *poropteroides* p. 22, *foveipennis* p. 23, spp. n. Australia, LEA Trans. R. Soc. S. Aust. 34 1910.

Nanophyes nitidulus ab. n. *suzannae* France p. 101, HOFFMANN Bull. Soc. Sci. nat. Seine-et-Oise, Versailles (3) 3 1935.—*N. congoanus* sp. n. Belgian Congo p. 30, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.—*N. chillaloensis* p. 495, *pilirostris* p. 496, spp. n. Abyssinia, HUSTACHE Ann. Mag. n.H. (10) 18.—*N. globulus* var. n. *jacqueti* Corcy; *setulosus* var. n. *ruficolor*; *minutissimus* var. n. *fayoumensis*, *externenotatus* Egypt p. 12 51 1935; *hemisphaericus* ab. n. *piceosuturalis* France p. 22 52, Pto Echänge.

Nea longicollis sp. n. Java p. 69, HELLER Tijdschr. Ent. 79.

Nemocestes n. n. for *Geoderces* Horn type *incomptus* Horn p. 22, key p. 24; *horni* n. n. for *melanotrix* Horn nec Kby. p. 25; *longulus*, *sordidus* p. 26, *montanus* p. 27, *tuberculatus* p. 28, *koebeli* p. 29 (emended to *koebeli* p. 183) spp. n. U.S.A., VAN DYKE Pan-Pacific Ent. 12.

Neophimeropus gen. n. (Hydronomini), *elegantulus* sp. n. Belgian Congo, Mozambique p. 20, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Neohadromerus subgen. n. see *Hadromerus*.

Neomerimnetes inflatus sp. n. Queensland p. 16, LEA Trans. R. Soc. S. Aust. 34 1910.

Neomias gen. n. (Peritelini) for *Omius alpinus* Hust. (type), *kenyae* Hust. p. 433; *cribricollis* p. 434, *major* p. 435, *crassicornis* p. 436, *monilicornis* p. 437 spp. n. Abyssinia figs., HUSTACHE Ann. Mag. n.H. (10) 18.

Neonotaris gen. n. (Eriirrhinae) p. 18, *rufulus* sp. n. Mozambique p. 19, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Neophytobius subgen. n. see *Heterophytobius*.

Neophytoscapheus gen. n. (Phytoscapini), *variegatus* (type) p. 183, *viridis* p. 184, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Notaris granulipennis, *bimaculatus* characters p. 214, PENECKE Kol. Rdsch. 21.

Ochyromera asperata sp. n. Java p. 69, HELLER Tijdschr. Ent. 79.

Ocladius pusillus, *cyanipennis* p. 195, *quadriseriatus* p. 196, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*O. nodifer* sp. n. Portuguese E. Africa p. 41, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Odoiporus longicollis subsp. n. *sulcicollis* Borneo p. 128, GÜNTHER Arb. morph. tax. Ent. Berl. 3.

Omius alpinus, *kenyae* see *Neomias*.

Omolabus (subgen. *Mesitolabus* n. n. for *Mesitinus* Voss nec Fairm. p. 297), Voss Arb. morph. tax. Ent. Berl. 3.

Omotemnus distribution p. 66, key p. 67, *conicus* Jord. (= *nigrocrinitus* Faust) p. 69; *cryptodiacrites* sp. n. Borneo p. 74 figs., GÜNTHER Mitt. zool. Mus. Berl. 21.

Orochlesis revision pp. 1-19; *lunata* p. 5, *gibbera* p. 7 Society Is., *vitticollis* p. 9, *bryani* p. 11, *nigra* p. 12 Fiji, *cornuta* Queensland p. 14, spp. n. figs., ZIMMERMAN Occ. Pap. Bishop Mus. 12 no. 1.

Orthochaetes (*Styphlidi* subgen. n.) *corcyreus* Reitt. (= *globosus* Pen. n.n.) p. 216, PENECKE Kol. Rdsch. 21.

Ospthilia subulirostris sp. n. Basuto-land p. 34, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Ospthiliades scotti p. 566, *hirtipes* p. 568, *euphorbiae* p. 569, spp. n. Abyssinia, HUSTACHE Ann. Mag. n.H. (10) 18.

Otiorrhynchus revision of *carceli* group pp. 112–120, *stöckleini* Bulgaria p. 115, *setosellus* Greece p. 116 spp. n. figs., ZUMPT Acta Inst. Mus. zool. Univ. Athenien. 1.—*O. kaltakkirani* sp. n. Turkey p. 55, Voss Mitt. dtsh. ent. Ges. 7.—*O. morio* subsp. n. *uyttenboogaarti* Azores p. 92, ZUMPT Tijdschr. Ent. 79.—*O. nevadensis* var. n. *mulhacensis*; *mesnili* sp. n. Sierra Nevada p. 147 fig., HOFFMANN Rev. franç. Ent. 3.

Pachycerus armeniacus sp. n. Armenian Taurus p. 207, PENECKE Kol. Rdsch. 21.—*P. madidus* subsp. n. *premadidus* Italy p. 141, DEPOLI Boll. Soc. ent. ital. 68.

Pachyonyx octofasciculatus sp. n. Abyssinia p. 563 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Pachytychius riftensis sp. n. Morocco p. 79, HUSTACHE Bull. Soc. Sci. nat. Maroc 16.

Pagiophloeus levipectus sp. n. Bengal p. 205, MARSHALL Ind. For. Rec. Ent. 1.

Panophthalmus gen. n. (Ceuthorhynchinae) p. 145, *cubanus* (type) Cuba p. 146, *puertoricanus* Porto Rico p. 147 spp. n., BUCHANAN Mem. Soc. cubana H.n. 10.

Panscopus key to subgen. p. 1, *impressus* subsp. n. *thoracicus* U.S.A. p. 4; *Parapanscopus* subgen. n. p. 5; *ovatipennis* (with subsp. n. *verrucosus* U.S.A.) sp. n. Canada p. 6; *Dolichonotus* subgen. n. p. 9; *convergens* p. 10, *oregonensis* p. 11, *wickhami* p. 13, *longus* p. 16, *bakeri* p. 17 U.S.A. spp. n., BUCHANAN Smithson. misc. Coll. 94 no. 16.—*P. coloradensis* sp. n. Colorado p. 80, VAN DYKE Pan-Pacific Ent. 12.

Pantoreites clarki sp. n. W. Australia p. 189 fig., MARSHALL Proc. R. ent. Soc. Lond. (B) 5.

Parapactola gen. n. type *Pactola demissa* Pasc. (with f. n. *depressirostris* New Zealand) p. 121, Voss Arb. morph. tax. Ent. Berl. 3.

Parapanscopus subgen. n. see *Panscopus*.

Parapantomorus n. n. for *Pseudopantomorus* Heller nec Champ. p. 25, VAN EMDEN in DALLA TORRE & VAN EMDEN Col. Cat. 147.

Paraphytobius subgen. n. see *Phytobius*.

Parasystates abyssinicus sp. n. Abyssinia p. 419, HUSTACHE Ann. Mag. n.H. (10) 18.

Parataxia uniformis sp. n. Arizona p. 79, VAN DYKE Pan-Pacific Ent. 12.

Peritelinus erinaceus p. 20, *oregonus* p. 21, spp. n. U.S.A., VAN DYKE t.c.

Peritmetrus cardatus sp. n. Belgian Congo p. 13, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Phacemastix bimaculata p. 196, *angolanus* p. 197, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Phacephorus tessellatus sp. n. Persia p. 39, Voss Kol. Rdsch. 22.

Phaenomerus latus p. 38, *albiventris* p. 39, spp. n. Belgian Congo, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Phaunaeus gen. n. (Zygopinae) p. 57, *longirostris* sp. n. Queensland p. 58, LEA Trans. R. Soc. S. Aust. 34 1910.

Phloeophagosoma aesculi sp. n. India p. 227, MARSHALL Ind. For. Rec. Ent. 1.

Phylanticus denticulatus see *Homoeometamelus*.

Phytobius (*Paraphytobius* subgen. n. p. 181), WAGNER Ent. Bl. 32.—*P. 4-nodosus*, *muricatus*, *granatus* see *Heterophytobius*.

Phytoscapus sinensis sp. n. China p. 13, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Piazomias hummeli sp. n. p. 3 (with var. n. *herbeus* p. 4) China, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Piazurus superbus p. 21, 106, *boliviensis* p. 23 Bolivia, *reticulatus* (p. 107), *cratosomiodes* (p. 108), *pseudoalternans* (p. 110) p. 21, *leucomelas* (p. 111) p. 22, *curtus* (p. 110), *vagus*, *impressipennis* (p. 109) p. 23 Fr. Guiana, *benoisti* (p. 107) p. 21, *rubripes*, *illus* Ecuador, *triangularis* Colombia p. 22, *peruviansis*, *posticus* (p. 111) Peru, *bubo* Venezuela p. 22, *bogotensis* Bogota, *semicellatus*

p. 23, *equatorialis* p. 24 no localities, spp. n., HUSTACHE Bull. Soc. ent. Fr. 41.—*P.* key pp. 7–36, *concavus* Cayenne p. 113, *dentipennis* Colombia p. 114, *sutrellus* p. 115, *recticollis*, *griseoviridis* (also Colombia, Venezuela) p. 117, *proximus* p. 118, *guttulatus* p. 120, *griseolus* p. 121, *orbifer* p. 122, *apicatus* p. 123 Brazil, *occipitalis* Colombia p. 124, *costatus* p. 126, *tomentosus* p. 127 Brazil, *bicolor* Colombia, *nevermanni* Costa Rica p. 128, *anastomosans* Cayenne p. 129, *rufulus* p. 131, *brevicollis* p. 132 Brazil, *griseescens* Mexico, *subnodosus* Venezuela p. 133, *attenuatus* Brazil p. 135, *extremus* Ecuador p. 136, *planus* p. 137, *subcostatus* p. 138 Brazil, *ranoides* Mexico p. 139, *vulpinus* Ecuador p. 140, *subcondyliatus* Costa Rica p. 141, *pehlkei* Colombia p. 142, *minutus* p. 143, *albescens* p. 144, *batrachus*, *tessellatus* p. 145, *gibbicollis* p. 146 Brazil, spp. n., FIEDLER Ent. Nachr. 10.

Plastoleptops see *Premnotrypes*.

Platymicus graciliscapus p. 180, *angolanus* p. 181, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Plectrodontus see *Prionomerus*.

Plinthus mihóki sp. n. Hungary p. 210, PENECKE Kol. Rdsch. 21.

Polycleis rugosus sp. n. Angola (*livingstoni* Ancey =) *equestris* Boh. p. 170, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*P. scotti* p. 354, *castaneipennis* p. 356 spp. n.; *octoplagiatus* var. n. *obliteratus* p. 357 Abyssinia fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Polydrosus pulchellus a sp. p. 126, BLAIR Ent. mon. Mag. 72.—*P. balearicus* sp. n. Balearic Is. p. 56, Voss Mitt. dtsh. ent. Ges. 7.

Poteriophorus opacus sp. n. Borneo p. 129 fig., GÜNTHER Arb. morph. tax. Ent. Berl. 3.

Premnotrypes Pierce (= *Plastoleptops* Heller p. 498) *fractirostris* sp. n. Peru p. 497 fig., MARSHALL Bull. ent. Res. 27.—*P.* Pierce (= *Plastoleptops* Heller) p. 285, HELLER Arb. phys. angew. Ent. Berl. 3.

Prionomerus Schh. (= *Prionopus* Voss, *Plectrodontus* Voss, *Scymnoplatophilus* Voss) p. 49, *gibbicollis* p. 46,

ruficeps p. 47, *brevirostris*, *vulgaris* p. 48 Brazil, *ferrugineus* Centr. America p. 49, spp. n., HUSTACHE Misc. ent. 37.

Prionopus see *Prionomerus*.

Proicles biovatus sp. n. Dahomey p. 13, HUSTACHE Sborn. ent. odd. Nár. Mus. Praze 14.—*P. viduus* p. 167, *striatus* p. 168, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Protostrophus angolanus sp. n. Angola p. 168, HUSTACHE t.c.—*P. armatipes* p. 253, *sorghii*, *cerealis* p. 254, spp. n. S. Africa, MARSHALL Bull. ent. Res. 27.

Pseudancistropterus gen. n. (Scolopterini), *horni* sp. n. New Zealand p. 118, VOSS Arb. morph. tax. Ent. Berl. 3.

Pseudauletes curvirostris p. 285, *modestus* Mexico, *subelongatus* Costa Rica, *freiburgensis*, *nitens* p. 286, *callosicollis*, *albolineatus* p. 287 Brazil, spp. n., VOSS Stettin. ent. Ztg. 97.

Pseudechinosa gen. n. (Cycloterina) p. 229, *nodosum* sp. n. Azores p. 230, HUSTACHE Bull. Soc. ent. Fr. 41.

Pseudocneorrhinus squamosus p. 6, *alternans* p. 7, *sellatus* spp. n. China, key p. 8, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Pseudopantomorus see *Parapantomorus*.

Pseudophyllobius subglobosus distribution, morphological notes pp. 103–107, TEMPÈRE Misc. ent. 37.

Pseudotanaos tessmanni sp. n. W. Africa p. 298, VOSS Arb. morph. tax. Ent. Berl. 3.

Pseudypera gen. n. (Curculioninae) p. 57, *subtessellata* (type) p. 58, *steineri* p. 59, spp. n. Turkey figs., VOSS Mitt. dtsh. ent. Ges. 7.

Pterochalybs subgen. n. see *Anthonomus*.

Rhadinocerus paetulus sp. n. Portuguese E. Africa p. 42, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*R. euphorbiae* sp. n. Abyssinia p. 570 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Rhadinomerus acrocarpi p. 208, *machili* p. 209, *maesae* p. 210, *squamicollis* p. 212, spp. n. Bengal, MARSHALL Ind. For. Rec. Ent. 1.

Rhadinopus redefined p. 219, MARSHALL t.c.

Rhamphus mimosae sp. n. Abyssinia p. 501, HUSTACHE Ann. Mag. n.H. (10) 18.

Rhigopsidius piercei sp. n. Peru p. 285 fig., HELLER Arb. phys. angew. Ent. Berl. 3.

Rhinoncus henningsi sp. n. Germany p. 71; (*Amalorhinoncus* subgen. n. p. 168), WAGNER Ent. Bl. 32.

Rhodobaenus boliviensis Bolivia p. 107, *nigripes* Peru, *longicollis* p. 108, *apicalis* p. 109 Ecuador, spp. n., HUSTACHE Bull. Ann. Soc. ent. Belg. 76.

Rhynchaenus loniceræ f. n. obscurior Czechoslovakia p. 199, ROUBAL Sborn. ent. odd. Nár. Mus. Praha 14.

Rhynchites aethiopicus Abyssinia p. 32, *haemorrhoidalis* Fr. Congo p. 33, spp. n., HUSTACHE t.c.—*R. fulvescens* see *Minurophilus*.

Rhyncolus asperipennis sp. n. Abyssinia p. 583 fig., HUSTACHE Ann. Mag. n.H. (10) 18.

Rhytirrhinus kocheri p. 78, *alluaudi* p. 79, spp. n. Morocco, HUSTACHE Bull. Soc. Sci. nat. Maroc 16.

Scymnoplastophilus see *Prionomerus*.

Sharpia revision of Palaearctic spp. pp. 25–34, key p. 26, *torretassoi* sp. n. Egypt p. 30 figs., ZUMPT Mem. Soc. ent. ital. 15.

Sibinia sobrina sp. n. Russia p. 60, VOSS Mitt. dtsh. ent. Ges. 7.—*S. chariense* sp. n. Niger p. 29, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Siderodactylus striatipennis Rhodesia p. 17, *pyriformis* Tanganyika p. 18, spp. n., HUSTACHE t.c.

Sirocalus hampei f. n. *dilucidipes* Borkum I. p. 60, VOSS Mitt. dtsh. ent. Ges. 7.

Sitophilus see *Calendra*.

Smicronyx angolanus sp. n. Angola p. 186, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*S. quadratuberculatus* sp. n. Belgian Congo p. 21, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Sphenocorynus key p. 100, *cinereus* subsp. n. *sobrinus* Borneo, Sarawak p. 101; *marginalis* p. 102, *minimus* p. 103, *silvanus* p. 105 Sumatra, *impevus*

Mindanao p. 104, *excellens* Celebes p. 105, *distinctus* Tonkin spp. n.; *feae* subsp. n. *sylhetensis* Sylhet p. 106, *exsultans* Kanara, *badgleyi* Assam, *dyselius* Sumatra, *grandis* China p. 107 figs., GÜNTHER Stettin. ent. Z. 97.

Sphenophorus geminatus p. 110, *brasiliensis* p. 111, *semicalvus* p. 113 Brazil, *bruchii* p. 112, *vilis* (also Uruguay) p. 114 Argentina, *napoanus* Ecuador p. 112, spp. n., HUSTACHE Bull. Ann. Soc. ent. Belg. 76.—*S. letestui* p. 40, *cristulatus* p. 41, spp. n. Gabun, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Sphrigodes depressifrons sp. n. Portuguese E. Africa p. 14, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Stenoscelis scutellatus sp. n. Abyssinia p. 585, HUSTACHE Ann. Mag. n.H. (10) 18.

Stephanocleonus divisiventris sp. n. China p. 16, MARSHALL Ark. Zool. 27A (sep. dated 1934) no. 29.

Stephanorhynchus luctuosus New Zealand p. 114, VOSS Arb. morph. tax. Ent. Berl. 3.

Stereogaster gen. n. (Calyptrillini) p. 84, *globosa* sp. n. California p. 85, VAN DYKE Pan-Pacific Ent. 12.

Stereorrhynchus lateralis sp. n. Bechuanaland p. 28, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.

Sthereus Mots. (= *Trachodes* of American lists nec Germ.) key to American spp. p. 178, *multituberculatus* sp. n. Oregon, Alaska p. 179, BUCHANAN Proc. ent. Soc. Wash. 37.

Strophosomus uniseriatus, *ellipticus* spp. n. Morocco p. 77, HUSTACHE Bull. Soc. Sci. nat. Maroc 16.

Styphlidius subgen. n. see *Orthochaetes*.

Systates hystricodes p. 17, *peryanus* p. 19, *lesnei* p. 21 spp. n.; *aeneolus* subsp. n. *manicanus* p. 20, Portuguese E. Africa; *nyasalis* sp. n. Nyasaland p. 18, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*S. monardi* p. 178, *planusculus* p. 179, spp. n. Angola, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.—*S. laevinasus* sp. n. Belgian Congo p. 14, HUSTACHE Sborn. ent. odd. Nár. Mus. Praha 14.—*S. zukwalanus* p. 420, *scotti* p. 422, *pilifrons*

p. 424, *dilaticollis* p. 425, *nigriclava* p. 427, *acuminatus* p. 429, *noxius* p. 430 spp. n. Abyssinia figs., HUSTACHE Ann. Mag. n.H. (10) 18.

Tanymecus tonsus p. 7, *tessellatus* p. 8 S. Rhodesia, Portuguese E. Africa, *biplagiatus* Portuguese E. Africa p. 10, spp. n., MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.—*T. ovalipennis* sp. n. Angola p. 176, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Temialma gen. n. (Zygopinae) p. 53, *suturalis* sp. n. Queensland p. 54, LEA Trans. R. Soc. S. Aust. 34 1910.

Tepperia brachychitonis p. 193, *bryanti* p. 194, spp. n. Australia, MARSHALL Proc. R. ent. Soc. Lond. (B) 5.

Tetratopus foveolatus sp. n. Borneo p. 127 fig., GÜNTHER Arb. morph. tax. Ent. Berl. 3.

Thoracocyphus gen. n. (Brachyderinae) *denticollis* sp. n. no locality p. 81, VAN EMDEN Stettin. ent. Z. 97.

Titanobaris semirubra sp. n. Angola p. 202, HUSTACHE Bull. Soc. neuchâtel. Sci. nat. 60.

Trachodes see *Sthereus*; *T. horridus* see *Lobosoma*.

Trachyploeus latitarsis sp. n. E. Rumelia p. 206, PENECKE Kol. Rdsch. 21.

Trigonocolus vitticollis sp. n. Portuguese E. Africa, N.W. Rhodesia p. 32, MARSHALL Mem. Mus. zool. Univ. Coimbra (I) no. 81 1935.

Trigonoscuta imbricata sp. n. California p. 83, VAN DYKE Pan-Pacific Ent. 12.

Trochorrhopalus balwanti sp. n. Bengal p. 224, MARSHALL Ind. For. Rec. Ent. 1.

Trymatoderus carinicollis sp. n. China, Tonkin p. 76 figs., GÜNTHER Mitt. zool. Mus. Berl. 21.

Tychius fagniezi p. 101, *vauchusianus* p. 104, spp. n. France figs., HOFFMANN Bull. Soc. ent. Fr. 41.—*T. afflictus* n. n. for *galloprovincialis* Hoffm. nec Hust. p. 143, HUSTACHE t.c.—*T. cupricolor* Taurus p. 222, *oedemerus* Portugal p. 224, *baldshuanus* Baldshuan p. 225, spp. n., PENECKE Kol. Rdsch. 21.

Xylinophorus persianus sp. n. Persia p. 38, VOSS op. cit. 22.—*X. güntheri* sp. n. China p. 14, ZUMPT Mitt. dtseh. ent. Ges. 7.

PROTERHINIDAE.

Proterhinus unicolor sp. n. Marquesas p. 221, PERKINS Ent. mon. Mag. 72.

SCOLYTIDAE (IPIDAE).

Revision of western N. American Hylesinae, BRUCK Bull. S. Calif. Acad. Sci. 35 pp. 38–51, 108–126, 8 pls.

Anchonocerus brasiliensis sp. n. Brazil p. 107, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Carphoborus cressaty sp. n. California p. 36, BRUCK Bull. S. Calif. Acad. Sci. 35.

Ceratolepsis brasiliensis sp. n. Rio Grande do Sul p. 104, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Cladoctenus natalensis sp. n. Natal p. 34, EGGERS Ann. Mag. n.H. (10) 18.

Cnesinus intermedius p. 105, *bicos-tatus* p. 106 Costa Rica, *paraguayensis* Paraguay p. 107, spp. n., SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Coccotrypes impressus sp. n. Singapore p. 632, EGGERS Ann. Mag. n.H. (10) 17.

Corthylus robustus ♀ p. 108, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Craniodicticus minor sp. n. India p. 635, EGGERS Ann. Mag. n.H. (10) 17.

Cryptoxyleborus eggersi sp. n. Mindanao p. 60, SCHEDL Philipp. J. Sci. 60.

Crypturgus beesoni sp. n. Kashmir p. 627, EGGERS Ann. Mag. n.H. (10) 17.

Cylindrotomicus gen. n., *squamulosus* sp. n. India p. 633, EGGERS t.c.

Cyrtogenius scotti sp. n. Abyssinia p. 31, EGGERS op. cit. 18.

Diamerus nigrescens p. 77, *obtus* p. 78, *nigrisetosus*, *minor* p. 79, spp. n. Java, EGGERS Tijdschr. Ent. 79.

Dryocoetes javanus sp. n. Java p. 87, EGGERS t.c.—*D. perakensis* Malaya p. 9, *semigranulatus* Java p. 10, spp. n., SCHEDL J. F.M.S. Mus. 13.

Eccoptopterus tarsalis sp. n. Borneo p. 26, SCHEDL t.c.

Ernoporus centralis sp. n. Mysore p. 629, EGGERS Ann. Mag. n.H. (10) 17.

Eupteroxylon gen. n. p. 392, *comatum* sp. n. Bolivia p. 393, EGGERS Rev. Ent. Rio de J. 6.

Hexacolus blandfordi sp. n. Costa Rica p. 104, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Hylesinus revision in U.S.S.R. pp. 148–153, key p. 150, *tupolevi* p. 151, *pravdini*, *lubarskii* p. 153 spp. n. U.S.S.R., STARK Plant Prot. 8.

Hylurgopinus rufipes morphology pp. 613–650 figs., KASTON Bull. Connecticut agric. Exp. Sta. no. 387.

Hylurgops niponicus sp. n. Japan p. 142, MURAYAMA Tenthredo 1.

Hyorrhynchus granulatus p. 80, *pilosus* p. 81, *drescheri* p. 82, spp. n. Java, EGGERS Tijdschr. Ent. 79.

Lepicerinus n. n. for *Lepicerus* Eichh. nec Mots. p. 473, HINTON Ann. Mag. n.H. (10) 17.

Lepicerus longipennis sp. n. Abyssinia p. 30, EGGERS op. cit. (10) 18.—See *Lepericinus*.

Microcorthylus costaricensis sp. n. Costa Rica p. 108, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Neodryocoetes obscurus p. 390, *amazonicus* Brazil, *mexicanus* Mexico p. 391, spp. n. fig., EGGERS Rev. Ent. Rio de J. 6.

Orthotomicus tropicus sp. n. Malaya p. 25, SCHEDL J. F.M.S. Mus. 13.

Phloeophthorus venezuelensis sp. n. Venezuela p. 105, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Phloeosinopsis gen. n., *armatus* sp. n. Selangor p. 23 fig., SCHEDL J. F.M.S. Mus. 13.

Phloeosinus malayensis sp. n. Selangor p. 22, SCHEDL t.c.—*P. granulatus* sp. n. California p. 33, BRUCK Bull. S. Calif. Acad. Sci. 35.

Pityophthorus philippinensis sp. n. Luzon p. 59, SCHEDL Philipp. J. Sci. 60.

Problechilus novateutonicus sp. n. Brazil p. 105, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Pseudocryphalus maclayi sp. n. California p. 35, BRUCK Bull. S. Calif. Acad. Sci. 35.

Pseudodiamerus aspericollis sp. n. S. Rhodesia p. 33, EGGERS Ann. Mag. n.H. (10) 18.

Pseudohylesinus serratus sp. n. California p. 37, BRUCK Bull. S. Calif. Acad. Sci. 35.

Pseudophloeotribus squamosus p. 28, *variegatus* p. 29, spp. n. Abyssinia, EGGERS Ann. Mag. n.H. (10) 18.

Pseudothysanoes key p. 30, *bartoni* p. 32, *sulcatus* p. 33, spp. n. California, BRUCK Bull. S. Calif. Acad. Sci. 35.

Scolytoplatypus opacicollis sp. n. S. Rhodesia p. 38, EGGERS Ann. Mag. n.H. (10) 18.

Scolytus nitidus Himalaya, *papuanus* New Guinea, spp. n. p. 8, SCHEDL J. F.M.S. Mus. 18.

Spongotarsus rufus sp. n. Java p. 83, EGGERS Tijdschr. Ent. 79.

Stephanoderes cuneolus sp. n. Selangor p. 24, SCHEDL J. F.M.S. Mus. 13.—*S. ampliatus* p. 627, *erythrinae* p. 628, India (10) 17, *dispar* S. Rhodesia p. 35, *natalensis*, *marshalli* Natal p. 36 (10) 18, spp. n., EGGERS Ann. Mag. n.H.

Strombophorus minutissimus sp. n. Belgian Congo p. 136, SCHEDL Rev. Zool. Bot. afr. 29.

Thammurgides ater Sumatra, *nephelii* p. 84, *uniseriatus* p. 85, *gedeanus* p. 86 Java, spp. n., EGGERS Tijdschr. Ent. 79.—*T. cinnamomi* Ceylon p. 630, *indicus* India p. 631, spp. n., EGGERS Ann. Mag. n.H. (10) 17.

Triotemnus aethiopicus Abyssinia p. 31, *striatus* Natal p. 37, spp. n. EGGERS op. cit. (10) 18.

Webbia camphorae sp. n. India p. 634, EGGERS op. cit. (10) 17.

Xyleboricus suturalis sp. n. Java p. 91, EGGERS Tijdschr. Ent. 79.

Xyleborus nepotulomorphus p. 88, *uniseriatus*, *canellatus* p. 89 (with var. n. *pronusciatus* p. 90), spp. n. Java, EGGERS t.c.—*X. conidens* Mysore p. 632 (10) 17, *parallelus* p. 39, *rhodesianus* p. 40, S. Rhodesia (10) 18, spp. n., EGGERS Ann. Mag. n.H.—*X. pseudopilifer* Borneo p. 11, *latecarinatus* p. 10, *siclus* p. 26, *leprosulus* p. 27, *striato-truncatus* p. 29, *declivigranulatus* p. 30, *tunggali* p. 32 Malaya, *crassitarsus* p. 28, *peliciformis* p. 29, *retusiformis* Borneo, *ferinus* India p. 31, spp. n., SCHEDL J. F.M.S. Mus. 13.—*X. fulvus* p. 142, *kojimai* p. 143, *miyazakiensis* p. 144, spp. n. Japan, MURAYAMA Tenthredo 1.—*X. marginicollis* p. 64, *limatus* p. 65,

spp. n. Luzon, SCHEDL Philipp. J. Sci. 60.—*X. itatiayensis, pseudotenius* p. 109, *conspiciens*, p. 110, spp. n. Brazil, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.—*X. duprezi* sp. n. France p. 43 figs., HOFFMANN Misc. ent. 37.

PLATYPIDAE.

Platypids new to Abyssinia, SCOTT Ann. Mag. n.H. (10) 18 p. 33.

Cenocephalus pusillus sp. n. Fr. Guiana p. 250, SCHEDL Rev. franç. Ent. 2.

Crossotarsus divaricus p. 126, *fusci-pilosulus* Kamerun, *unispinosus* Guinea, *bilobatus* p. 127, *galerus* p. 131 Fr. Congo, *lobatus* E. Africa p. 128, *delicatus* p. 129, *semipilosus* p. 133, *bituberculatus* p. 134 Belgian Congo, *perminutissimus* Kamerun, Spanish Guinea p. 130, spp. n., SCHEDL Rev. Zool. Bot. afr. 29.—*C. lorae* p. 44, *castigatus* p. 47, *gemellus* p. 48, *gracilicornis, fracticornis* p. 49 New Guinea, *siporanus* Mentawai p. 44, *modiglianii* Sumatra p. 46, spp. n.; *loricatus* ♀ p. 45, SCHEDL Ann. Mus. Genova 59.—*C. contaminatus* ♀ p. 146, MURAYAMA Tenthredo 1.—*C. brownei* p. 12, *impar* p. 13, *substriatus* p. 33, spp. n. Malaya; *terminatus* ♀ p. 13, SCHEDL J. F.M.S. Mus. 13.

Diapus serratus p. 17, *pendleburyi* p. 18, spp. n. Malaya, SCHEDL t.c.—*D. plumatus* p. 66, *multiaporus* p. 67, spp. n. Philippines, SCHEDL Philipp. J. Sci. 60.

Periomatus bifrons Kamerun p. 134, *truncatus* Belgian Congo p. 135, spp. n., SCHEDL Rev. Zool. Bot. afr. 29.

Platypus vetulus, westwoodi ♀ ♀ p. 14; *balanocarpus, armaticeps* p. 15, *transformis* p. 16, *algius* p. 33, *pahan-gensis* p. 34, *pseudoterminalis* p. 35 spp. n.; *suffodiens* var. n. *malayensis* p. 34; *excedens* var. n. *volaticus* p. 35 Malaya, SCHEDL J. F.M.S. Mus. 13.—*P. raucus* p. 224, *conciliatus* p. 225, *lineaticornis* p. 226, *gregalis* p. 227, *fragosus* p. 228, *egregius* p. 229, *in-violatus, permarginatus* p. 230, *flexiosius* p. 232, *permodestus, decorus* p. 235, *dignatus, exitiosus* p. 236, *permimicus* p. 237, *carduus* p. 238, *perdilgens* p. 240, *ornatus* p. 241, *inaccessus, nudus* p. 242, *pernudus* p. 243, *complanatus* p. 245, *umbrosus* p. 247, *irreptus* p. 248, French Guiana, *malignus* p. 228,

irruptus p. 229, *insignatus* p. 231 Dutch Guiana, *ignotus* p. 232, *attentus* p. 234 Surinam, *durus* p. 233, *enizus* p. 244, *collatatus* p. 245 Br. Guiana, *percomis* Venezuela p. 239, *perdifficilis* Rio Grande do Sul p. 245, *subitarius* p. 241, *abditus* p. 246, *manus* p. 247 Brazil spp. n.; *tuberculatus* p. 226, *quadri-spinatus* p. 239, *humilis* p. 241 ♀ ♀; *macroporus* ♂ p. 238, SCHEDL Rev. franç. Ent. 2.—*P. bajulus* p. 52 (with var. n. *sumatranus* p. 53 Sumatra), *subsimilis* p. 54, *hirtellus* p. 55 Mentawai, *singalagensis* p. 53, *pseudosolidus, ovalicollis* p. 56, *sirambeensis* p. 59 Sumatra, *quadrifissilis, caliginosus* Philippines p. 58, *obliquecaudatus* New Guinea p. 59 spp. n.; *circularis* ♀ p. 57, SCHEDL Ann. Mus. Genova 59.—*P. kiushuensis* sp. n. Japan p. 145, MURAYAMA Tenthredo 1.—*P. abdominalis* p. 99, *trispinosus* Brazil, *costari-censis* p. 101, *minusculus* p. 102 Costa Rica, *subaequalispinosus* Bolivia, *otiosus* Mexico p. 100, spp. n., SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Stenoplatypus principeensis Principe I. p. 60, *feae* San Thomé p. 61, spp. n., SCHEDL Ann. Mus. Genova 59.

Tesserocephalus gen. n., *forficula* sp. n. Guiana p. 103, SCHEDL Arch. Inst. Biol. veg. Rio de J. 3.

Tesserocerus fronteproductus sp. n. Brazil p. 102, SCHEDL t.c.—*T. simulatus* sp. n. Fr. Guiana p. 249, SCHEDL Rev. franç. Ent. 2.

Tesserocranulus flexibilis Brazil or Guiana p. 249, *ornatus* Brazil p. 250, spp. n., SCHEDL t.c.

BRENTHIDAE.

Allodapinus opulentus sp. n. Selangor p. 138 figs., KLEINE J. F.M.S. Mus. 13. *Cerobates puerilis* sp. n. Selangor p. 137, KLEINE t.c.

Cyphagogus brownei p. 134, *raptor* p. 136, spp. n. Selangor figs., KLEINE t.c.

Eutrachelus morio sp. n. Pahang p. 124 fig., KLEINE t.c.

Glaucocephalus densepunctatus sp. n. Belgian Congo p. 17, KLEINE Ann. Mus. Congo Belge Zool. (3) sect. ii 5.

Opisthozemius honestus sp. n. Belgian Congo p. 22, KLEINE t.c.

Schizotrachelus quaesitus sp. n. New Hebrides p. 94, KLEINE Ann. Mag. n.H. (10) 17.

Stratiorrhina pulla sp. n. Pahang p. 121 fig., KLEINE J. F.M.S. Mus. 13.

Teraticorhynchus serratus sp. n. Pahang p. 122 fig., KLEINE t.c.

ANTHRIBIDAE.

Acorynus anthinus sp. n. Kenya p. 326, JORDAN Novit. zool. 39.

Anaulodes oligus Abyssinia, *artius* Zanzibar spp. n. p. 329, JORDAN t.c.

Apolecta dilopha, *malayana* spp. n. Malay Pen.; *latipennis* ♂ p. 324, JORDAN t.c.

Basitropis angustifrons sp. n. Malay Pen. p. 323, JORDAN t.c.

Blaberops asemus sp. n. Belgian Congo p. 327, JORDAN t.c.

Blaberus see *Noxius*.

Brachytarsus spp. in California p. 191, ZIMMERMAN Pan-Pacific Ent. 12.

Caranistes firmus, *arboreus* spp. n. Mauritius p. 288, JORDAN Novit. zool. 39.

Corynaecia amended description p. 291, JORDAN t.c.

Dinephrius dorsatus Fairm. (= *mauritus* Jord.) p. 284; *saphis*, *candidus* p. 285, *lenis* p. 286 spp. n. Mauritius fig., JORDAN t.c.

Echotropis gen. n., *cultus* sp. n. N. Borneo p. 312, JORDAN t.c.

Ecprepia gen. n., *bigrumis* sp. n. Malay Pen. p. 311, JORDAN t.c.

Gomphides gen. n., *entornus* sp. n. Mauritius p. 289, figs., JORDAN t.c.

Heniocera gen. n. p. 277, *mameti* (type) p. 278, *sericea* p. 279, spp. n. Mauritius, JORDAN t.c.

Hormiscops thomasseti see *Nesidobius*.

Hucus loratus sp. n. Bengal p. 314, JORDAN t.c.

Icospermus gen. n. p. 290, *ovatus* sp. n. Mauritius p. 291 figs., JORDAN t.c.

Illis gen. n. p. 319, *rusia* (type) p. 320, *medana* p. 321 Sumatra, *omopholis* no locality p. 320 (with subsp. n. *seriata* Philippines p. 321), spp. n., JORDAN t.c.

Mauia rudis sp. n. Malay Pen. p. 322, JORDAN t.c.

Monosirhapis gen. n. p. 282, *morini* (type) p. 284, *albonigra* p. 282, *adelpha* p. 283, spp. n. Mauritius fig., JORDAN t.c.

Nesidobius gen. n., *vinsoni* (type) p. 279, *dipholis* p. 280, *pollicis* p. 281, *ramulus* p. 282, spp. n. Mauritius; *thomasseti* Jord. from *Hormiscops* p. 279 figs., JORDAN t.c.

Nessiodocus angulatus subsp. n. *nigrans* Malay Penin. p. 313, JORDAN t.c.

Noxius n. n. for *Blaberus* (preocc. in Orth.) p. 328, JORDAN t.c.

Oxyconus gen. n., *stipinus* sp. n. Dutch New Guinea p. 325, JORDAN t.c.

Phloeomimus tenuipes sp. n. Java p. 322, JORDAN t.c.

Physopterus sumatranus subsp. n. *ephelus* Perak p. 311, JORDAN t.c.

Pseudeuparius trifax sp. n. E. Africa p. 328, JORDAN t.c.

Rhaphitropis discus p. 315, *carbo* United Provinces, *habrus* p. 316, *pissodes* p. 317 Java, spp. n., JORDAN t.c.

Sistellorhynchus plumbicolor sp. n. Chile p. 326, JORDAN t.c.

Syntophoderes cymatias sp. n. Belgian Congo p. 328, JORDAN t.c.

Tropidobasis trigemmis Singapore, *synoris* Malay Pen. spp. n. p. 323, JORDAN t.c.

Uncifer lius Java p. 318, *stigmatosus* United Provinces p. 319, spp. n., JORDAN t.c.

Xenopternis gen. n. p. 313, *lissus* sp. n. Java p. 314, JORDAN t.c.

LONGICORNIA.

Longicorns from Korea, Chô Trans. n.H. Soc. Formosa 26 p. 93.

Longicorns of Queyras, Cottian Alps, FAGNIEZ Rev. franç. Ent. 2 pp. 189-191.

Cerambycidae of Jehol, KANô Rep. First scient. Exped. Manchoukuo (5) 1 pt. × art. 52, 10 pp. 1 col. pl.

Cerambycids of Kurile Is., KONô Ins. mats. 11 pp. 28-35.

Cerambycidae of U.R.S.S., I. PLAVILSTSHIKOW Faune de l'URSS 21 ix + 611 pp. 247 figs.

Wing venation of Cerambycidae and their phylogenetic development, SAA-LAS Ann. Zool. Soc. Vanamo 4 no. 1 pp. 1-198, 19 pls. 28 figs.

PRIONIDAE.

Key to Bulgarian Prioninae, KANTARDZHEVA-MINKOVA Mitt. bulg. ent. Ges. Sofia 9 pp. 172-175, 11 figs.

Prioninae of Chile, PORTER Rev. chil. H.n. 37 1933 pp. 200-209, 2 pls.

Prionus key to U.R.S.S. spp. p. 237, *pavlovskii* sp. n. Bukhara p. 239; *turkestanicus* var. n. *minusculus* Ferghana p. 249 figs., SEMENOV-TIAN-SHANSKII Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*P. semenovianus* sp. n. S. Tadzhiikistan pp. 92, 490 fig., PLAVILSTSHIKOV Faune de l'URSS 21.

Rhaphipodus drescheri sp. n. Java p. 77, de JONG Zool. Meded. 19.

CERAMBYCIDAE.

Annotated list of Lepturini of Oregon, CANOVA Pan-Pacific Ent. 12 pp. 126-132.

Cerambycidae of Aran Valley, ESPAÑOL Butll. Inst. catal. H.n. 35 1935 pp. 254-257.

Cerambycidae new to Vancouver I., HARDY Rep. prov. Mus. n.H. Victoria, B.C. 1935 pp. 34-35.

Studies in N. American Phoracanthini and Sphaerionini, LINSLEY Ann. ent. Soc. Amer. 29 pp. 461-479, 1 pl.

Keys to Bulgarian Cerambycinae, KANTARDZHEVA-MINKOVA Mitt. bulg. ent. Ges. Sofia 9 pp. 175-204, 20 figs.

Acmacops marginata ab. n. *immarginata* U.R.S.S. pp. 219, 520, PLAVILSTSHIKOV Faune de l'URSS 21.

Allosterna tabacicolor subsp. n. *caucasica* Caucasus pp. 303, 546, PLAVILSTSHIKOV t.c.

Aneflomorpha duncani p. 472, *texana*, *elongata* p. 473, *arizonica*, *fisheri* p. 475, *californica* p. 476, spp. n. U.S.A., LINSLEY Ann. ent. Soc. Amer. 29.

Aneflus basicornis sp. n. Mexico p. 471 fig., LINSLEY t.c.

Anelaphus gen. n. for *Elaphidion spurcum* Lec. and others p. 464, LINSLEY t.c.

Anopliomorpha gen. n. for *Periboeum reticulole* Bates and others p. 465, LINSLEY t.c.

Callidium przewalskii sp. n. Mongolia p. 389, SEMENOV-TIAN-SHANSKII & PLAVILSTSHIKOV Eos 11.

Chlorophorus gracilipes var. n. *rosinae* Siberia; *nigripes* var. n. *macedonicus* Macedonia p. 15, PIC Echange 51 1935.

Clytus robusticollis sp. n. China p. 4, PIC Echange 51 hors-texte.

Coleoxestia ebenina sp. n. Brazil p. 174, MELZER Arch. Inst. Biol. veg. 2 1935.

Coloborhombus drescheri (with varr. n. *flavipes*, ater p. 177) sp. n. Java p. 176, FISHER Tijdschr. Ent. 79.

Compsa dilaticornis Costa Rica p. 172, *multiguttata* Argentina p. 178, *lineatoguttata* Brazil p. 179, spp. n., MELZER Arch. Inst. Biol. veg. 2 1935.

Cornumutula quadrivitta ab. n. *bivittata* Russia; *semenovi* sp. n. Siberia pp. 313, 549 figs., PLAVILSTSHIKOV Faune de URSS 21.

Cortodera villosa ab. n. *rubdiventris* S. Europe pp. 272, 533; *analisis* ab. n. *nigriventris* pp. 283, 537; *semenovi* (with abb. n. *clementzi*, *atra* pp. 285, 537 pp. 284, 537 W. Siberia, *taurica* pp. 280, 536); *beckeriana* pp. 285, 538 Crimea, *ruthena* (with ab. n. *zhuravlevi*) Russia pp. 286, 538, *transcaspica* Transcaspia pp. 290, 539 spp. n.; *umbripennis* ab. n. *atripennis* Armenia pp. 289, 539; *pseudomophus* ab. n. *persica* Persia pp. 291, 539 figs., PLAVILSTSHIKOV t.c.

Cyrtoclytus capra f. n. *vavrai* Czechoslovakia p. 198, ROUBAL Sborn. ent. odd. Nár. Mus. Praze 14.

Demonax drescheri p. 179, *javanicus* p. 180, spp. n. Java, FISHER Tijdschr. Ent. 79.

Dihammaphora aurovittata var. n. *debilis* Costa Rica p. 184, MELZER Arch. Inst. Biol. veg. 2 1935.

Distenia formosana sp. n. Formosa p. 420 fig., MITONO Trans. n.H. Soc. Formosa 26.

Elaphidion spurcum see *Anelaphus*; *alienum* see *Stenelaphus*.

Elaphidionopsis gen. n., *fasciatipennis* sp. n. Texas p. 467 fig., LINSLEY Ann. ent. Soc. Amer. 29.

Epania cingalensis Ceylon p. 131, *mundali* India p. 132, spp. n., GARDNER Ind. For. Rec. 2.—*E. opaca* sp. n. Java p. 175, FISHER Tijdschr. Ent. 79.

Ephies sericeus sp. n. Java p. 173, FISHER t.c.

Eurymerus decoratus sp. n. Brazil p. 173, MELZER Arch. Inst. Biol. veg. 2 1935.

Euryptera costaricensis Costa Rica p. 182, *angustata*, *nigrosuturalis* p. 183, spp. n. Brazil, MELZER t.c.

Evodinus caucasicola sp. n. (with many new abb.) pp. 197, 517; *caucasicus* p. 191, *variabilis* p. 195, *interrogationis* p. 200, *borealis* p. 204 many new abbs. U.R.S.S. figs., PLAVILSTSHIKOV Faune de l'URSS 21.

Gnomidolon addictum sp. n. Brazil p. 175, MELZER Arch. Inst. Biol. veg. 2 1935.

Grammoptera erythropus ingrica ab. n. *brachialis* Galicia pp. 297, 544; *chalybeella* ab. n. *diversicornis* Siberia pp. 299, 545 figs., PLAVILSTSHIKOV Faune de l'URSS 21.—*G. japonica* sp. n. Japan p. 11; *angustata* var. n. *bicoloricornis* Algeria p. 12, PIC Echange 51 1935.

Hakata gen. n. p. 33, *hirsuta* sp. n. Japan p. 34 figs., MITONO & NISHIMURA Mushi 9.

Heterachles mutabilis p. 179, *rubricolor* p. 180, spp. n. Costa Rica, MELZER Arch. Inst. Biol. veg. 2 1935.

Heterops bicolor sp. n. Cuba p. 346, FISHER Mem. Soc. Cubana H.n. 10.

Hylotrupes spp. morphology pp. 305–326 figs., WEIDNER Z. PflKrankh. 46.

Ibidion immaculipenne sp. n. Argentina p. 181, MELZER Arch. Inst. Biol. veg. 2 1935.

Ipthalia elegans sp. n. Java p. 178, FISHER Tijdschr. Ent. 79.

Judolia cerambyciformis ab. n. *matéjkai* p. 52; *sexmaculata* ab. n. *sekerai* p. 153 Czechoslovakia, HEYROVSKY Acta Soc. ent. Cech. 33.—*J. orthotricha* sp. n. Siberia pp. 393, 571; *sexmaculata*, *cerambyciformis*, *erratica*, *longipes* many abb. n. pp. 386–398 figs., PLAVILSTSHIKOV Faune de l'URSS 21.

Judolidia gen. n. p. 399, *znojtkoi* sp. n. E. Siberia pp. 261, 573 figs., PLAVILSTSHIKOV t.c.

Leptepania further description p. 133, *indica* sp. n. India p. 134, GARDNER Ind. For. Rec. 2.

Leptidea see *Leptideella*.

Leptideella n. n. for *Leptidea* Muls. nec Billb. p. 169, STRAND Folia zool. hydrobiol. 9.

Leptura baeckmanni (with ab. n. *julii*) sp. n. Siberia pp. 333, 567; *bipunctata* abb. n. *exclata*, *zubkovi* Europe pp. 341, 555; b. subsp. n. *mulsantiana* (with ab. n. *anthracochroa*) Siberia pp. 341, 568; *tesserula* ab. n. *bisbispinata* Caucasus pp. 359, 569; *succedanea* ab. n. *nigronotaticollis* Siberia pp. 363, 562; *cardinalis* ab. n. *regradata* Centr. Asia pp. 364, 562; *scotodes* subsp. n. *continentalis* (with abb. n. *quotidiana*, *festata*) Siberia; s. ab. n. *masculina* Japan pp. 371, 564 figs., PLAVILSTSHIKOV Faune de l'URSS 21.—*L. savioi* sp. n. China p. 16, PIC Notes Ent. chinoise, Mus. Heude 3.

Misenia minuta sp. n. Java p. 197, FISHER Tijdschr. Ent. 79.

Molorchus alashanicus sp. n. Mongolia p. 392, SEMENOV-TIAN-SHANSKI & PLAVILSTSHIKOV Eos 11.—*M. kieswenwetteri* ab. n. *štěrba* Lebanon p. 20, HEYROVSKÝ Acta Soc. ent. Čsl. 33.—*M. darjeelingensis* p. 129, *hederae* p. 130, spp. n. India, GARDNER Ind. For. Rec. 2.

Necydalis indica sp. n. India p. 128, GARDNER t.c.—*N. ulmi* abb. n. *rufipes*, *mesembrina* Ukraine pp. 467, 588; *major* ab. n. *obscurata* Siberia pp. 467, 589; (*Necydalisca* subgen. n. pp. 469, 589), *coa* pp. 470, 591, *pacifica* pp. 472, 592, *ussuriensis* pp. 473, 593, *semenovi* pp. 475, 594 spp. n. Ussuri figs., PLAVILSTSHIKOV Faune de l'U.R.S.S. 21.—*N. insulicola* sp. n. Java p. 171, FISHER Tijdschr. Ent. 79.

Necydalisca subgen. n. see *Necydalis*.

Neocerambyx pubescens sp. n. Java p. 169, FISHER Tijdschr. Ent. 79.

Neodeuteromma gen. n. p. 32, *serratipenne* sp. n. Formosa p. 31 figs., MITONO Trans. n.H. Soc. Formosa 26.

Neogesima javana sp. n. Java p. 193, FISHER Tijdschr. Ent. 79.

Nida kala sp. n. India p. 136, GARDNER Ind. For. Rec. 2.

Nivellia extensa, *sanguinosa* morphology pp. 21–23 figs., KROGERUS Notul. ent. 16.

Obrium unicolor sp. n. India p. 127, GARDNER Ind. For. Rec. 2.

Octoplon antennatum var. n. rubricolle Rio Grande do Sul p. 176, MELZER Arch. Inst. Biol. veg. 2 1935.

Ommata globulicollis sp. n. Brazil p. 181, MELZER t.c.

Omphalodera puziloi ab. n. nigriventris U.R.S.S. pp. 231, 523 figs., PLAVILSTSHIKOV Faune de l'URSS 21.

Pachyta lamed abb. n. bisignata, marginata U.R.S.S. pp. 183, 514 figs., PLAVILSTSHIKOV t.c.—*P. mediofasciata* sp. n. China p. 15, PIC Notes Ent. chinoise, Mus. Heude 3.—*P. degener* sp. n. Mongolia p. 393, SEMENOV-TIAN-SHANSKIĬ & PLAVILSTSHIKOV Eos 11.

Pentomacrus acutai sp. n. Cuba p. 344, FISHER Mem. Soc. cubana H.n. 10.

Periboeum reticolle see *Anopliomorpha*.

Perissus bauhiniae sp. n. India p. 135, GARDNER Ind. For. Rec. 2.

Phymatodes kozlovi sp. n. Mongolia p. 390, SEMENOV-TIAN-SHANSKIĬ & PLAVILSTSHIKOV Eos 11.

Piezocera araujosilvai sp. n. Brazil p. 174, MELZER Arch. Inst. Biol. veg. 2 1935.

Pseudopidonia amurensis ab. n. octoguttata pp. 243, 525; gibbicollis ab. n. decolorata pp. 247, 526; signifera ab. n. infasciata pp. 249, 527 U.R.S.S. figs., PLAVILSTSHIKOV Faune de l'URSS 21.—*P. bisignata* sp. n. Japan p. 12, PIC Echange 51 1935.

Purpuricenus nuristanicus sp. n. Himalayas p. 212, HEYROVSKÝ Arb. morph. tax. Ent. Berl. 3.

Rhagium mordax ab. n. mediofasciatum Europe pp. 138, 503 figs., PLAVILSTSHIKOV Faune de l'URSS 21.

Rhamnusium gracilicorne ab. n. occipitale Ukraine pp. 152, 506, PLAVILSTSHIKOV t.c.

Raphuma formosana sp. n. Formosa p. 424, MITONO Trans. N. H. Soc. Formosa 26.—*R. mushana* sp. n. Japan p. 147, MATSUSHITA Kontyû 10.

Rathymoscelis characters p. 766, tauunayi sp. n. Brazil p. 772 figs., LANE Rev. Mus. paul. 20.

Rhopalopus nubigena sp. n. Tibet p. 391, SEMENOV-TIAN-SHANSKIĬ & PLAVILSTSHIKOV Eos 11.

Rosalia alpina ab. n. testouti Syria p. 113, PIC Bull. Soc. linn. Lyon (n.s.) 4 1935; 8 new abb. n. Czechoslovakia p. 145 figs., ČEPELÁK Acta Soc. ent. Cech. 33.

Stenelaphus gen. n. for *Elaphidion alienum* Lec. p. 477 fig., LINSLEY Ann. ent. Soc. Amer. 29.

Stenhomalus overbecki sp. n. Java p. 70, HELLER Tijdschr. Ent. 79.

Stenocorus quercus ab. n. bistriatus pp. 162, 508; insitivus ab. n. lividipennis pp. 167, 510; suvorovi abb. n. insuturalis, obscuratus pp. 174, 512; univittatus abb. n. semifulvus, semirufus pp. 175, 513; tataricus ab. n. suturalis pp. 177, 513 U.R.S.S. figs., PLAVILSTSHIKOV Faune de l'URSS 21.

Stenopterus ater abb. n. lateralis Algeria, milliati S. France p. 3, PIC Echange 51 hors-texte.

Strangalia yamasakii p. 421, coccinea p. 423, spp. n. Formosa fig., MITONO Trans. n.H. Soc. Formosa 26.—*S. quadrifasciata* ab. n. josephi Bohemia p. 30 fig., ŠTUSÁK Acta Soc. ent. Čsl. 33.—*S. maculata* ab. n. bureši Bulgaria p. 179, JUREČEK Sborn. ent. odd. Nár. Mus. Praz 14.—*S. thoracica* abb. n. discovittata, rubrofemoralis, rubromaculata, bicolorata, rubroplagiata Europe pp. 419, 577; circaocularis ab. n. tamanukii Japan pp. 437, 581; aurulenta p. 422, quadrifasciata p. 424, maculata p. 428, arcuata p. 430, duodecimguttata p. 433, septempunctata p. 447 many new abb. figs., PLAVILSTSHIKOV Faune de l'URSS 21.—*S. maculata* abb. n. veselýi Caucasus, machulkaï Corsica p. 54; arcuata ab. n. slovenica; septempunctata ab. n. teplicensis Czechoslovakia p. 55, HEYROVSKÝ Acta Soc. ent. Čsl. 33.

Sydax fuscolineatus sp. n. Brazil p. 176, MELZER Arch. Inst. Biol. veg. 2 1935.

Tibestia gen. n., dallonii sp. n. Tibesti p. 78 figs., PEYERIMHOFF Mém. Acad. Sci. Paris (2) 62.

Trypogeus apicalis sp. n. Java p. 171, FISHER Tijdschr. Ent. 79.

Xylosteus caucasicola (with *ab. n. inbasalis* pp. 121, 497) *sp. n.* Caucasus pp. 119, 496 fig., PLAVILSTSHIKOV Faune de l'URSS 21.

Xylotrechus sekii *sp. n.* Japan p. 146, MATSUSHITA Kontyû 10.—*X. jeholensis* *sp. n.* Jehol p. 8 fig., KANÔ Rep. First sci. Exp. Manchoukuo (5) 1 pt. X art. 52.—*X. curticornis* *var. n. latefasciatus* China p. 4, PIC Echange 51 hors-texte.

Zatrephus javanicus *sp. n.* Java p. 170, FISHER Tijdschr. Ent. 79.

LAMIIDAE.

Acanthocinus validus *sp. n.* Japan p. 148, MATSUSHITA Kontyû 10.

Acanthoderes versicolor p. 190, *armata* p. 191, *alboguttata*, *analis* p. 192, *schmithi* p. 193, *itaiyensis* p. 194, *spp. n.* Brazil, MELZER Arch. Inst. Biol. veg. 2 1935.

Acridocephala alboannulata *sp. n.* Gabun p. 300, BREUNING Festschr. E. Strand 1.

Aderpas lesnei *sp. n.* Mozambique p. 312, BREUNING Festschr. E. Strand 1.

Aegocidrus inlineatus *sp. n.* S. India p. 21, PIC Mél. exot.-ent. 67.

Agelasta transversefasciata, *mindanensis* Philippines, *grisea* India, *spp. n.* p. 309, BREUNING Festschr. E. Strand 1.

Agniopsis *gen. n.*, *flavovittatus* *sp. n.* Borneo p. 303, BREUNING t.c.

Agniohammus *gen. n.* p. 302, *olivaceus* *sp. n.* Malacca p. 303, BREUNING t.c.

Aldidion cereicola *sp. n.* Argentina p. 7, FISHER Proc. ent. Soc. Wash. 38.

Anamera harmandi *sp. n.* Lakhon, Asia; *alboguttata* *var. n. violaceipennis* Assam p. 216, PIC Bull. Soc. ent. Fr. 41.

Anancylus strix *subsp. n. dissolutus* Masbate p. 69, KRIESCHE Ent. Bl. 32.

Ancita ochraceovittata *sp. n.* New Guinea p. 312, BREUNING Festschr. E. Strand 1.

Anisopodus varius Costa Rica p. 196, *nigrosparvus* Brazil p. 197, *spp. n.*, MELZER Arch. Inst. Biol. veg. 2 1935.

Anamantum griseomaculatum *sp. n.* Tonkin p. 296, BREUNING Festschr. E. Strand 1.

Apriona hageni Sumatra, *neglectissima* Borneo *spp. n.* p. 75 fig., de JONG Zool. Meded. 19.—*A. unidentata* *sp. n.* Tonkin p. 16, PIC Mél. exot.-ent. 67.

Arctolamia strandi *sp. n.* Yunnan p. 296, BREUNING Festschr. E. Strand 1.

Atossa cribripennis Singapore, *leucostictica* Borneo, *spp. n.* p. 312, BREUNING t.c.—*A. vittata* *sp. n.* Java p. 185, FISHER Tijdschr. Ent. 79.

Bangalaia alboguttata Kamerun p. 223, *schoutedeni* Fr. Equator, Africa p. 224, *fisheri* Ivory Coast p. 225, *spp. n.* figs., BREUNING Novit. ent. 6.

Batocera rosenbergi *subsp. n. sumbavana* Sumbawa p. 69, KRIESCHE Ent. Bl. 32.

Blepephacus annulatus Annam, *banksi* Borneo p. 297, *strandii* Philippines p. 298, *spp. n.*, BREUNING Festschr. E. Strand 1.

Breuningiana *n. n.* for *Lux* Jordan nec Chemnitz p. 169, STRAND Folia zool. hydrobiol. 9.

Brimidius *gen. n.* for *Stixis laevicollis* Auriv.; *kivuensis* *sp. n.* Belgian Congo p. 281, BREUNING Festschr. E. Strand 1.

Cacia palawanica Palawan, *ochraceomaculata* Philippines, *spp. n.* p. 308, BREUNING t.c.

Caciella *gen. n.*, *philippinarum* *sp. n.* Philippines p. 308, BREUNING t.c.

Cagosima *spp.* notes [in Japanese] pp. 374–380, SEKI Ent. World 4.

Callienispia monticola *sp. n.* Java p. 192, FISHER Tijdschr. Ent. 79.

Cephalosaperda *gen. n.*, *atrimembris* *sp. n.* Tonkin p. 22, PIC Mél. exot.-ent. 67.

Cereopsius ornatus *sp. n.* Java p. 182, FISHER Tijdschr. Ent. 79.—*C. siamensis* Siam, *kulzeri*, *cinereus* Borneo, *javanicus* Java, *spp. n.* p. 299, BREUNING Festschr. E. Strand 1.

Choeromorpha albofasciata *sp. n.* Malacca p. 310, BREUNING t.c.

Chydopsius multilineatus *sp. n.* Malacca p. 20, PIC Mél. exot.-ent. 67.

Clyzomedus borneensis *sp. n.* Borneo p. 312, BREUNING Festschr. E. Strand 1.

Controderus setosus sp. n. Java p. 197, FISHER Tijdschr. Ent. 79.

Coptops brunnea Andamans p. 310, *japonica* Japan p. 311, spp. n., BREUNING Festschr. E. Strand 1.

Coptosia ganglbaueri Jerusalem p. 3, *semiannullicornis* Greece p. 4 spp. n., PIC Echange 51 hors-texte.

Cremnosterna laterialba sp. n. India p. 295, BREUNING Festschr. E. Strand 1.

Crossotus basimaculatus Tanganyika p. 314, *pseudocostiger*, *lesnei* Fr. Centr. Africa, *pseudocaffer* Natal p. 315, *ugandae* Uganda p. 316, spp. n., BREUNING t.c.

Crucihammus gen. n., *subcruciatu* sp. n. Tonkin p. 295, BREUNING t.c.

Cryllis sumatrensis sp. n. Sumatra p. 299, PIC Bull. Soc. zool. Fr. 61.

Cylindrepomus javanicus Java, *indicus* India, *laosensis* Indo-China p. 317, *sexplagiatus* Andamans, *malaccensis* Malacca p. 318, spp. n., BREUNING Festschr. E. Strand 1.

Desmiphora rufocristata p. 185, *pretiosa*, *crocata* p. 186, *x-signata* p. 187, *spitzi* p. 188, spp. n. Brazil, MELZER Arch. Inst. Biol. veg. 2 1935.

Didymodonta orientalis sp. n. Tanganyika p. 314, BREUNING Festschr. E. Strand 1.

Dihammus birmanus Burma p. 288, *flavithorax*, *misellus* Borneo, *sumatrensis* Sumatra, *scotti* Sikkim, *densepunctatus* Tonkin p. 289, *malaccensis* Malacca, *griseus* Burma, *pseudauratus* India, *aurosericeus* p. 290, *dayremi*, *tenuis* Australia, *ternatensis* Ternate I., *flavomarmoratus* N. Britain p. 291, *semi-sericeus* China, *pseudopunctatus*, *pseudoconvexus*, *marmoratus* New Guinea p. 293, spp. n., BREUNING t.c.—*D. dentiferoides* sp. n. Borneo p. 109, BREUNING Ent. mon. Mag. 72.—*D. lupinus* Palau I., *truncatus* Caroline I. p. 66, *tavura*, *tultul* p. 67, *bisericans* spp. n.; *lessoni* subsp. n. *sericeiceps* p. 68 Bougainville I.; *solatus* subsp. n. *nodius* New Guinea p. 67, KRIESCHE Ent. Bl. 32.

Docus leonensis sp. n. Sierra Leone p. 321, BREUNING Festschr. E. Strand 1.

Dolichostyrax tuberculatus sp. n. Java p. 181, FISHER Tijdschr. Ent. 79.

Dystasia variegata sp. n. Java p. 188 FISHER t.c.

Echinovelleda gen. n., *chinensis* sp. n. China p. 284, BREUNING Festschr. E. Strand 1.

Enispia drescheri p. 190, *fasciata* p. 191, spp. n. Java, FISHER Tijdschr. Ent. 79.—*E. rufoapicalis* sp. n. Sumatra p. 17, PIC Mél. exot.-ent. 67.

Epepeotes quadriplagiatus p. 286, *gardneri* p. 287, spp. n. Andamans, BREUNING Festschr. E. Strand 1.

Ereis javanica sp. n. Java p. 305, BREUNING t.c.—*E. distincta* sp. n. Tonkin p. 16, PIC Echange 51 1935.

Eryssamena griseus Yunnan, *multimaculata* Malacca spp. n. p. 19, PIC Mél. exot.-ent. 67.

Essostrutha scaramuzzai sp. n. Cuba p. 271, FISHER Mem. Soc. cubana H.n. 9.

Eunidia bicolor sp. n. India p. 137, GARDNER Ind. For. Rec. 2.

Eutrichillus brasiliensis sp. n. Rio Grande do Sul p. 197, MELZER Arch. Inst. Biol. veg. 2 1935.

Eutrypanus dignus p. 203, *sobrinus* p. 204, spp. n. Brazil, MELZER t.c.

Exocentrus bicolor var. n. *lateralis* Tonkin p. 299, PIC Bull. Soc. zool. Fr. 61.

Falsomesosella rufa sp. n. Tonkin p. 17, PIC Mél. exot.-ent. 67.—*F. andamanica* Andamans p. 305, *nilghirica* India p. 306, spp. n., BREUNING Festschr. E. Strand 1.

Groma nicobarica sp. n. Nicobars p. 304, BREUNING t.c.—*G. luzonicum* subsp. n. *transiens* Santa Cruz p. 69, KRIESCHE Ent. Bl. 32.

Hammoderus blairi sp. n. N. Granada p. 297, BREUNING Festschr. E. Strand 1.

Hecyra rufithorax sp. n. Portuguese E. Africa p. 324, BREUNING t.c.

Hepomidion granulatum see *Parahepomidion*.

Hoplothrix perakensis sp. n. Malacca p. 298, BREUNING Festschr. E. Strand 1.

Imantocera niasensis sp. n. Nias I. p. 304, BREUNING t.c.

Lamiomimus chinensis sp. n. China p. 286, BREUNING t.c.

Leiopus imitans sp. n. Texas p. 107, KNULL Ent. News 47.

Leptostylus monki sp. n. Texas p. 106, KNULL t.c.

Lepturges humilis p. 201, *franciscanus* p. 202, spp. n. Brazil, MELZER Arch. Inst. Biol. veg. 2 1935.

Lux see *Breuningiana*.

Lychrosia albonotata var. n. *innotata* Tonkin p. 17, PIC MÉL. exot.-ent. 67.

Megalobrimus ingranulatus sp. n. Belgian Congo p. 281, BREUNING Festschr. E. Strand 1.

Melanauster strandi sp. n. India p. 293, BREUNING t.c.—*M. adonis* var. n. *vitalisi* Cochinchina p. 16, PIC MÉL. exot.-ent. 67.

Mesocacia elongata sp. n. Tonkin p. 305, BREUNING Festschr. E. Strand 1.

Mesosa tonkinensis, *persimilis* Indo-China, *affinis* Bhutan, *bimaculata* Sikkim, spp. n. p. 306, BREUNING t.c.—*M. pichi* sp. n. China p. 16, PIC Notes Ent. chinoise, Mus. Heude 3.

Micromandibularia gen. n. *ruficeps* sp. n. Tonkin p. 21, PIC MÉL. exot.-ent. 67.

Micromulciber notatus sp. n. Java p. 186, FISHER Tijdschr. Ent. 79.

Mimoenispia gen. n., 4-dentata sp. n. Tonkin p. 18, PIC MÉL. exot.-ent. 67.

Mimothestus gen. n. p. 15, *annulicornis* sp. n. Canton p. 16, PIC Echange 51 1935.

Moechrotypa trifasciculata, *strandii* Cochinchina, *sikkimensis* Sikkim, *assamensis* Assam, spp. n. p. 324, BREUNING Festschr. E. Strand 1.

Momisis nicobarica sp. n. India p. 139, GARDNER Ind. For. Rec. 2.

Monochamus pseudotuberosus sp. n. Kenya p. 288, BREUNING Festschr. E. Strand 1.

Monohammus spp. of Netherlands Indies pp. 5–8, KALSHOVEN Ent. Meded. Ned.-Ind. 2.

Morimus indicus, *assamensis* spp. n. India p. 285, BREUNING Festschr. E. Strand 1.

Mycerinus multilineatus sp. n. Kamerun p. 321, BREUNING t.c.

Neohecyra gen. n., *compacta* sp. n. N. Rhodesia p. 323, BREUNING t.c.

Niphecyra uniformis sp. n. Belgian Congo p. 321, BREUNING t.c.

Nupserha ceylonica sp. n. Ceylon p. 139, GARDNER Ind. For. Rec. 2.

Oberea heudei sp. n. Shanghai p. 23, PIC MÉL. exot.-ent. 67.

Olenecamptus albovittatus, *affinis* Borneo, *siamensis* Siam, *sarawakensis* Sarawak p. 319, *blairi* India, *nicobaricus* Nikobars, *hebridarum* New Hebrides p. 320, *senegalensis* Senegal p. 321, spp. n., BREUNING Festschr. E. Strand 1.

Ostodes dentata Yunnan p. 18, *fouqueti* Tonkin p. 19, spp. n., PIC MÉL. exot.-ent. 67.

Ozineus quadricristatus p. 198, *zikani* p. 199, *bicristatus* Brazil, *dorsalis* Costa Rica p. 200, spp. n., MELZER Arch. Inst. Biol. veg. 2 1935.

Parabiobessa gen. n., *ugandae* sp. n. Uganda p. 322, BREUNING Festschr. E. Strand 1.

Parabrimus gen. n., *alboscutellatus* sp. n. Transvaal p. 282, BREUNING t.c.

Paracoptops cristata sp. n. Java p. 183, FISHER Tijdschr. Ent. 79.

Paraglenea fortunei var. n. *innotatilis* China p. 17, PIC Notes Ent. chinoise, Mus. Heude 3.

Parahepomidion gen. n. type *Hepomidion granulatum* Auriv.; *fossulatum* Tanganyika p. 280, *burgeoni* Belgian Congo p. 281 spp. n., BREUNING Festschr. E. Strand 1.

Paraleprodera malaccensis sp. n. Malacca p. 296, BREUNING t.c.

Paramelanauster gen. n., *bimaculatus* (type) India p. 294, *flavosparsus* China p. 295, spp. n., BREUNING t.c.

Parametopides gen. n. p. 299, *niveoscutellatus* sp. n. Gold Coast p. 300, BREUNING t.c.

Paramurosternum gen. n., *pictum* sp. n. Tanganyika p. 313, BREUNING t.c.

Paranaleptes gen. n. p. 231, BREUNING Novit. ent. 10.

Parapocera subgen. n. see *Prosopocera*.

Parastixis gen. n. for *Stixis bispinosa* Auriv. p. 275; *bassamensis* sp. n. Belgian Congo p. 276, BREUNING Festschr. E. Strand 1.

Paravelleda gen. n. for *Velleda aberrans* Duviv.; *nyassana* sp. n. Nyasaland p. 278, BREUNING t.c.

Paroriaethus gen. n. p. 282, multi-spinis sp. n. Assam p. 283, BREUNING t.c.

Pelargoderus papuanus sp. n. N. Guinea p. 287, BREUNING t.c.

Periaptodes frater subsp. n. salomonum Bougainville I.; *potemnemoides* New Guinea sp. n. p. 68, KRIESCHE Ent. Bl. 32.

Pharsalia tonkinensis Tonkin p. 300, borneensis Borneo, obliquemaculata, philippinensis Philippines p. 301, strandi India p. 302, spp. n., BREUNING Festschr. E. Strand 1.

Phidola picea sp. n. Cuba p. 348, FISHER Mem. Soc. cubana H.n. 10.

Phytoecia pustulata var. n. brevenotata Syria p. 4, Pic Echange 51 hors-texte.—*P. repetekensis* sp. n. Turkmenia p. 279, SEMENOV-TIAN-SHANSKIĖ Rev. Ent. U.R.S.S. 25 1935.

Planodes quaternaria subsp. n. evanescens Masbate p. 69, KRIESCHE Ent. Bl. 32.—*P. johorensis* sp. n. Johore p. 305, BREUNING Festschr. E. Strand 1.

Prosopocera fryi ab. n. ochreomaculata Nigeria p. 169; griseomaculata p. 170, viridifulgens p. 183, arrowiana p. 198 Gold Coast, brunnea, albovestita p. 171, schoutedeni p. 173, strandi p. 176, fuscomaculata p. 178, regia p. 181, itzingeri, regalis p. 183, luteomarmorata p. 185, lineatopunctata p. 186, flavomarmorata p. 189, strandiella p. 190, multiguttata p. 193, indistincta p. 194, jeanneli p. 198, gracilis, lemoulti p. 200, viridibasalis p. 201, rufobrunnea p. 202, congoana p. 204, rufescens p. 206, bella p. 207, ochraceomaculata, flavostriata p. 211, itzingeriana, imitans p. 213 Belgian Congo, blairi (with ab. n. unimaculata) p. 176, olivacea p. 184, pulchra p. 208, lesnei p. 210 Nigeria, gassneri p. 178, albomaculata p. 212 Kamerun, prasina p. 183, lockleyi p. 203 Sierra Leone, albovariegata, parallela Angola p. 185, (Parapocera subgen. n. p. 186), kulzeri p. 187, blairiella p. 195, gracillima p. 206, albicollis p. 207 Rhodesia, multipunctata p. 187, fisheri p. 195, flavovittata p. 208, principalis p. 209, pulcherrima p. 227 Tanganyika, fossulata S.W. Africa p. 188, grossepunctata p. 190, plasoni p. 191 E. Africa, marshalliana p. 207, flavovittata p. 208 Uganda, brunneomaculata p. 203, elongata p. 217 Portuguese E. Africa,

ochracea p. 206, flavopunctata p. 211, orchymonti p. 216 Ivory Coast, insularis S. Thomé p. 211, capensis p. 214, trimaculata p. 227 S. Africa, flavescens Sudan p. 216, harrarensis Abyssinia p. 218, betschuana Bechuanaland p. 227 spp. n.; thomsoni n. n. for bipunctata Thoms. preoc. p. 202; viridegrisea ab. n. grisescens p. 172; antennata var. n. quadrimaculata p. 174; bipunctata var. n. unipunctata p. 175; lactator var. n. femoralis, conjuncta p. 179; dejeani abb. n. reducta, confluens, pseudocornifrons; inermis ab. n. viridescens p. 191; peeli ab. n. confluentina p. 195; aemilii abb. n. viridissima, ochrescens, albida, annulata p. 196; robecchi ab. n. albipennis p. 200; flavosignata ab. n. connexa p. 210; pyrgopolynica ab. n. brunneoviolacea p. 218; maculosa ab. n. cana p. 219 Africa; albomarmorata n. n. for assimilis Hintz nec Jord. p. 191 figs., BREUNING Novit. ent. 6.

Protonarthron gracile, fasciatum spp. n. Belgian Congo p. 316, BREUNING Festschr. E. Strand 1.

Pseudapriana gen. n., flavoantennata sp. n. India p. 304, BREUNING Festschr. E. Strand 1.

Pseudhepomidion gen. n. p. 283, assamense sp. n. Assam p. 284, BREUNING t.c.

Pseudobixadus gen. n. p. 287, marshalli sp. n. Uganda p. 288, BREUNING t.c.

Pseudobrimus gen. n., griseomarmoratus (type), affinis, congoanus Belgian Congo p. 277, gabonicus Gabun p. 278, spp. n., BREUNING t.c.

Pseudochoeromorpha gen. n., siamensis sp. n. Siam p. 310, BREUNING t.c.

Pseudodihammus gen. n., albicans sp. n. Borneo p. 283, BREUNING t.c.

Pseudometopides gen. n., spinipennis sp. n. Belgian Congo p. 300, BREUNING t.c.

Pseudostixis gen. n. for Stixis flavifrons Auriv.; griseostictica, kivuensis, vicina p. 274, proxima, densepunctata Belgian Congo, marshalli Kenya p. 275, spp. n., BREUNING t.c.

Pseudovelleda gen. n. p. 278, pulchra (type) Belgian Congo, kenyensis Kenya spp. n. p. 279, BREUNING t.c.

Pseudozelota gen. n., annamensis sp. n. Annam p. 307, BREUNING t.c.

Ptericoptomimus gen. n. p. 189;
truncatus sp. n. Brazil p. 190, MELZER
Arch. Inst. Biol. veg. 2 1934.

Pterolophia javicola sp. n. Java p. 187,
FISHER Tijdschr. Ent. 79.

Rhaphiptera obtusipennis sp. n. Brazil
p. 188, MELZER Arch. Inst. Biol. veg.
2 1935.

Rhodopis andrewesi India, *tonkinensis*
Tonkin, spp. n. p. 316, BREUNING
Festschr. E. Strand 1.

Rosenbergia denserugata sp. n. Fergu-
son I. p. 303, BREUNING t.c.

Saimia sumatrana Sumatra, *lateri-
alba* no locality, *alternata* Malacca,
spp. n. p. 311, BREUNING t.c.

Scleronotus travassosi, *flavosparsus*
spp. n. Brazil p. 195, MELZER Arch.
Inst. Biol. veg. 2 1935.

Serixia discoidalis Java, *atra* Min-
danao p. 22, *subelongata* Basilan I. p.
23 spp. n., PIC Mél. exot.-ent. 67.—*S.*
inconspicua p. 137, *vateriae* p. 138,
spp. n. India, GARDNER Ind. For. Rec.
2.

Spalacopsis spinipennis sp. n. Cuba
p. 347, FISHER Mem. Soc. cubana H.n.
10.

Sporetus abstrusus sp. n. Brazil p.
203, MELZER Arch. Inst. Biol. veg. 2
1935.

Stixis itzingeri sp. n. no locality p.
275, BREUNING Festschr. E. Strand 1.—
S. laevicollis see *Brimidius*; *flavifrons*
see *Pseudostixis*; *bassamensis* see *Para-
stixis*.

Strandiata gen. n. p. 285, *abyssinica*
sp. n. Abyssinia p. 286, BREUNING
Festschr. E. Strand 1.

Sybra drescheri sp. n. Java p. 195,
FISHER Tijdschr. Ent. 79.

Therippia latefasciata sp. n. Malacca
309, BREUNING Festschr. E. Strand 1.

Tomolamia griseomarmorata sp. n.
Uganda p. 293, BREUNING t.c.

Trichostixis gen. n., *orientalis* sp. n.
Tanganyika p. 276, BREUNING t.c.

Uraecha yunnana sp. n. Yunnan p.
296, BREUNING t.c.

Velleda aberrans see *Paravelleda*.

Velledopsis gen. n. p. 279, *kenyensis*
sp. n. Kenya p. 280, BREUNING Festschr.
E. Strand 1.

Xaenapta nigrosignata sp. n. Java p.
20, PIC Mél. exot.-ent. 67.

Zelota malaccensis sp. n. Malacca p.
307, BREUNING Festschr. E. Strand 1.

BRUCHIDAE (LARIIDAE).

Annotated list of Bruchidae of
Seine-et-Oise, HOFFMANN Bull. Soc. Sci.
nat. Seine-et-Oise (3) 4 pp. 1-9.

Distribution of some Chilean Bru-
chids, PORTER Rev. chil. H.n. 37
1933 pp. 86-87.

Bruchus spp. bionomics pp. 34-43
figs., BONDAR Arch. Inst. Biol. veg.
Rio de J. 3.—*B. seminarius* var. n.
vinsoni Mauritius p. 299, PIC Bull. Soc.
zool. Fr. 61.

Phytophaga.

Chrysomelidae on Sandal in India,
CHATTERJEE & BHASIN Ind. For. Rec.
(N.S.) 1 pp. 243-318, 3 figs.

Catalogue of Phytophagous beetles
of China [contd.], LIU Lingnan Sci. J.
15 pp. 19-30, 249-261.

Chrysomelidae of Jehol, YUASA Rep.
First scient. Exped. Manchoukuo (5) 1
pt. × art. 51, 29 pp. 2 col. pls. 1 fig.

DONACIIDAE.

Revision of Asiatic Donaciinae, II,
GOECKE Ent. Bl. 32 pp. 220-228.

Donacia assama sp. n. Assam p. 224,
GOECKE Ent. Bl. 32.

Donaciasta minuta sp. n. Mada-
gascar p. 11, PIC Mél. exot.-ent. 67.

Donaciocrioceris gen. n., *dentatus*
sp. n. Mozambique p. 10, PIC t.c.

MEGALOPIDAE.

Leucastea subfasciata var. n. *semi-
limbata* Dahomey p. 36, PIC Rev. Zool.
Bot. afr. 29.

ORSODACNIDAE.

Hemydacne testaceus sp. n. Madagascar
p. 16, PIC Echange 51 1935.

Orsodacne lineola ab. n. *brancsiki*
Hungary p. 57 fig., LACZÓ Rovart. Lap.,
Budapest 16 1909.

CRIOCERIDAE.

Elisabethana key p. 253, *imitata* sp.
n. Belgian Congo p. 256 figs., HEINZE
Ent. Bl. 32.

Lema coromandeliana var. n. *obscuriventris* Tonkin p. 16, PIC Echänge 51 1935.

CLYTRIDAE.

Cyaniris viridana subsp. n. *marioutensis* Egypt p. 16, WITTMER Bull. Soc. ent. Egypte 20.

Gynandrophthalma cyanea ab. n. *corporali* Poland p. 90, TRELLA Polsk. Pismo ent. 13.

Lachnaea curtipennis sp. n. Morocco p. 214, PIC Bull. Soc. ent. Fr. 41.

CRYPTOCEPHALIDAE.

Acolastus rufolineatus sp. n. Kenya p. 214, PIC Rev. franç. Ent. 3.

Anteriscus mauritiensis sp. n. (with var. n. *obscuricolor*) Mauritius p. 11, PIC Mél. exot.-ent. 67.—*A. monardi* sp. n. Angola p. 628, PIC Rev. suisse Zool. 43.

Cryptocephalus bilunulatus (with var. n. *bimbiensis*, *kalukembensis*), *bijunctus* p. 624, *unijunctus* p. 625, *trilineaticollis*, *v-notaticeps*, *angolanus* p. 626, *monardi*, *subopacipennis* p. 627, spp. n.; *rudeli* var. n. *lateluteus* p. 625 Angola, PIC t.c.

Pachybrachys testaceus var. n. *paganetti* Sardinia p. 12, PIC Echänge 51 1935.

Pycnophthalma aenea sp. n. New Hebrides p. 242, BRYANT Ann. Mag. n.H. (10) 17.

EUMOLPIDAE.

Corynodes costatus var. n. *inlimbatus*; *parryi* var. n. *jeanvoinei* Tonkin; *adonis* sp. n. China p. 13, PIC Mél. exot.-ent. 67.

Demotina difficilis, *flavipes* spp. n. New Hebrides p. 245, BRYANT Ann. Mag. n.H. (10) 17.

Leprotus atra Yunnan, *bicoloripes* "Algeria" spp. n. p. 15, PIC Mél. exot.-ent. 67.

Malegia bicoloripes sp. n. Tonkin p. 16, PIC t.c.

Melinophora iglesiasii sp. n. Brazil p. 35 figs., da COSTA LIMA O Campo 1936 no. 11 p. 35.

Microlypsethes gen. n. p. 15, *coomani* sp. n. Tonkin p. 16, PIC Mél. exot.-ent. 67.

Pachnephorus tessellatus var. *sabulosum* biology p. 159, LUGOVIKOV Plant Prot. 8.

Rhyparida buxtoni sp. n. New Hebrides p. 244, BRYANT Ann. Mag. n.H. (10) 17.

Syagrus inhumeralis sp. n. p. 628; *opacus* var. n. *angolensis* p. 629 Angola, PIC Rev. suisse Zool. 43.—*S. rosae* sp. n. Uganda p. 217 fig., BRYANT Proc. R. ent. Soc. Lond. (B) 5.

Trichochrysea superba Indo-China, *griseonotata*, *viridipes* Tonkin spp. n. p. 14, PIC Mél. exot.-ent. 67.

CHRYSOMELIDAE.

Chrysomelinae of China and Tonkin, CHEN Ann. Soc. ent. Fr. 105 pp. 144–176, 11 figs.

Catalogue of Chrysomelinae of China, Indo-China and Japan, CHEN Notes Mus. chin., Mus. Heude 3 pp. 63–102, 3 pls.

Asiphytodecta subgen. n. see *Phytodecta*.

Chrysolina pيلي sp. n. China p. 96 figs., CHEN Notes Mus. Chin., Mus. Heude 3.

Chrysomela limbata subsp. n. *luigionii* Italy p. 139, DEPOLI Boll. Soc. ent. ital. 68.—*C. varians* var. n. *malleti* France p. 95 figs., JACQUET Bull. Soc. linn. Lyon (n.s.) 4 1935.—*C. varians* var. n. *nigricollis* France p. 141, MALLET Bull. Soc. linn. Lyon (n.s.) 5.—*C. tesari* sp. n. Caucasus p. 68, ROUBAL Ent. NachrBl. 10.

Chrysomelini see Doryphorini.

Doryphorini n. n. for Chrysomelini Weise p. 26, YUASA Rep. First scient. Exped. Manchoukuo (5) 1 pt. × art. 51.

Gastrolina thoracica var. n. *immaculicollis* China p. 83, CHEN Notes Ent. chin. Mus. Heude 3.

Megistomela rubra sp. n. Amazonas p. 274, GÜNTHER Ent. Rdsch. 53.

Melasoma 20-*punctata* variation p. 123 fig., TENENBAUM Polsk. Pismo ent. 13.

Phytodecta Asiatic spp. pp. 125–133; *Asiphytodecta*, *Sinomela* subgen. n. p. 126, CHEN Chinese J. Zool. 1 1935.—*P. norvegicus* sp. n. Norway p. 104 figs., STRAND Norsk ent. Tidsskr. 4.

Plagioderma fulvicollis sp. n. New Hebrides p. 246, BRYANT Ann. Mag. n.H. (10) 17.

Sinomea **suogen. n.** see *Phytodecta*.

HALTICIDAE.

Halticinae of Japan, CHÛJÔ Trans. n.H. Soc. Formosa 25 1935 pp. 354-369, 392-400, 459-476; 26 pp. 15-30, 84-92, 108-114.

Altica bimarginata characters p. 13, key to allied spp. p. 15; *ambiens* **var. n.** *latiplicata* p. 21; *napensis* p. 23 U.S.A., *caurina* p. 24 Canada **spp. n.** figs., BLAKE Proc. ent. Soc. Wash. 38.

Aphthona cheesmani, *erromangana* **spp. n.** New Hebrides p. 250, BRYANT Ann. Mag. n.H. (10) 17.—*A. aeneomicans* **subsp. n.** *orientalis* Czechoslovakia p. 198, ROUBAL Sborn. ent. odd. Nár. Mus. Praha 14.

Argopus formosanus **sp. n.** Formosa p. 112, CHÛJÔ Trans. n.H. Soc. Formosa 26.

Cercyonia quadrinotata **sp. n.** Uganda p. 218 fig., BRYANT Trans. R. ent. Soc. Lond. (B) 5.

Chaetocnema formosensis **sp. n.** Formosa p. 471, CHÛJÔ Trans. n.H. Soc. Formosa 25 1935.

Crepidodera coeruleoviolacea **sp. n.** New Hebrides p. 251, BRYANT Ann. Mag. n.H. (10) 17.

Disonycha camposi **sp. n.** Ecuador p. 181, BARBER J. Wash. Acad. Sci., Menasha 26.

Epitrix nicotianae **sp. n.** Brazil p. 114, BRYANT Arb. physiol. angew. Ent. Berl. 3.—*E. torvi* **sp. n.** Uganda p. 219, BRYANT Proc. R. ent. Soc. Lond. (B) 5.

Febra ovata **sp. n.** New Hebrides p. 247, BRYANT Ann. Mag. n.H. (10) 17.

Hespera antennalis, *montana* p. 87, *rufotibialis* p. 88, *insulana* p. 89, *auripilosa*, *formosana* p. 90, **spp. n.** Formosa, CHÛJÔ Trans. n.H. Soc. Formosa 26.

Jamesonia semicuprea **sp. n.** E. Africa p. 219 BRYANT Trans. R. ent. Soc. Lond. (B) 5.

Licyllus viridipennis **sp. n.** New Hebrides p. 248, BRYANT Ann. Mag. n.H. (10) 17.

Lipromima fulvipes (with **ab. n. bicolor**) **sp. n.** Japan p. 399, CHÛJÔ Trans. n.H. Soc. Formosa 25 1935.

Liprus montanus **sp. n.** Japan p. 396, CHÛJÔ t.c.

Manobia nigrita p. 21, *formosana* p. 23, **spp. n.** Formosa, CHÛJÔ op. cit. 26.—*M. costata* **sp. n.** New Hebrides p. 249, BRYANT Ann. Mag. n.H. (10) 17.

Nesohaltica atra **sp. n.** New Hebrides p. 252, BRYANT t.c.

Nonarthra coreanum Korea p. 359, *formosense* Formosa p. 360, **spp. n.**, CHÛJÔ Trans. n.H. Soc. Formosa 25 1935.

Phyllotreta springeri **sp. n.** Egypt p. 16, WITTMER Bull. Soc. ent. Egypte 20.

Psylliodes vehemens **ab. n. storði** Canary Is. p. 12, UYTENBOOGAART Comment. biol. 6 1935 no. 2.—*P. taivanica* p. 364, *gigantea* p. 367, **spp. n.** Japan, CHÛJÔ Trans. n.H. Soc. Formosa 25 1935.

Sangariola costata **sp. n.** Japan p. 394, CHÛJÔ t.c.

GALERUCIDAE.

Galerucinae of India, Ceylon and Burma, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936 xiv + 648 pp. 1 pl. 1 map 144 figs.

Galerucinae of U.R.S.S., OGLOBLIN Fn. de l'U.R.S.S., Col. 36 xiv + 455 pp. 146 figs.

Acroxena paradoxa **sp. n.** Tonkin p. 240 fig., LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Aenidea ornata see *Euliroëtis*.

Agetocera flava see *Mimagitocera*.

Alafia **gen. n.** for *Galerucella albopilosa* Jac. (type) p. 251, *melancholica* Jac. p. 252, *submetallescens* Baly p. 253, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Anadimonía **gen. n.** pp. 127, 391, *potanini* **sp. n.** China pp. 128, 392 figs., OGLOBLIN Fn. de l'U.R.S.S., Col. 36.

Anastena **gen. n.** for *Astena nigromaculata* Jac. p. 296, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Antipha hirsuta, *pubescens* see *Avinasa*.

Aplosomyx rubra **sp. n.** India p. 620, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Apophyllia eoa sp. n. Ussuri pp. 140, 393 figs., OGLOBLIN Fn. de l'U.R.S.S., Col. 36.—*A. nila* p. 80, *lebongana* p. 82, *nilakrishna* p. 83, spp. n. India figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Astena nigromaculata see *Anastena*.

Atysa mureana p. 247, *sudiyana*, *gigantica* p. 248, *montivaga* p. 250, spp. n. India figs., MAULIK Fn. Br. India, Col. Chrysom. (Gal.) 1936.

Aulacophora almora p. 170, *param-bikulamensis* p. 171, *viridis* p. 180, spp. n. India figs., MAULIK t.c.—*A. fulvimargo* sp. n. New Hebrides p. 253, BRYANT Ann. Mag. n.H. (10) 17.

Avinasa gen. n. for *Antipha hirsuta* Jac. (type) p. 456, *pubescens* Jac. p. 457, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Bijukta gen. n. type *Malacosoma flaviventre* Baly p. 321 fig., MAULIK t.c.

Cerophysa zhenzhuristi sp. n. China pp. 172, 389 fig., OGLOBLIN Fn. de l'URSS, Col. 36.

Cnecodes suturalis see *Paraluperodes*.

Cneorane dohertyi p. 341, *rubyana*, *manipurana* p. 343, *sudha* p. 347, spp. n. India figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.—*C. pallida* see *Cneoranela*.

Cneoranela gen. n. type *Cneorane pallida* Jac. p. 334, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Cynorta sarvesha sp. n. Assam p. 513, MAULIK t.c.

Dercetis shona p. 361, *wallardia* p. 366, *travancorensis* p. 367, spp. n. India, MAULIK t.c.—*D. concolor* see *Dercetisoma*.

Dercetisoma gen. n. type *Dercetis concolor* Jac. p. 455, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Diorhabda lusca p. 234, *trirakha* p. 236, spp. n. India figs., MAULIK t.c.

Doryzena siva sp. n. India p. 124 fig., MAULIK t.c.

Erynephalia gen. n. for *Monoxia maritima* Lec. (type), *puncticollis* Say, *morosa* Lec. p. 425; *glabra* sp. n. Mexico p. 430; key p. 426, BLAKE J. Wash. Acad. Sci. 26.

Euliroëtis gen. n. for *Aenidea ornata* Baly (type) and others pp. 197, 403;

lameyi var. n. *obscurus* Ussuri pp. 200, 405, figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Galerotella gen. n. for *Galerucella virida* Jac. (type) p. 268; *garoana* p. 271, *euryobotryae* p. 272, spp. n. India figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Galeruca tanaceti food-plants p. 231, PICARD Bull. Soc. ent. Fr. 41.—*G. bennetti* see *Shamshera*.

Galerucella subaenea pp. 102, 389, *orientalis* pp. 103, 390 spp. n. China; *maculicollis* ab. n. *vittula* U.R.S.S. pp. 106, 391; *luteola* var. n. *bicarinata* Kashmir pp. 108, 391 figs., OGLOBLIN Fn. de l'URSS, Col. 36.—*G. xanthomelaena* habits p. 23, HRISAFI Bul. Soc. Nat. Roman., Bucharest 4 1933.—*G. aurata* p. 219, *aludela* p. 220, *digambara* p. 221, spp. n. India figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.—*G. albopilosa*, *melancholica*, *submetallescens* see *Alafia*; *virida* see *Galero-tella*.

Galerucida flava pp. 351, 444, *jacobsoni* pp. 364, 446 Ussuri, *confusa* pp. 354, 444, *potanini* pp. 358, 445, *aeneomicans* pp. 361, 446 China, spp. n. figs., OGLOBLIN Fn. de l'URSS, Col. 36.—*G. amala* p. 549, *achala* p. 558, *chunia* p. 559, *chanchala* p. 560, spp. n. India, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Galerupipla gen. n. p. 222, *brunnea* sp. n. India p. 224 fig., MAULIK t.c.

Geinula gen. n. pp. 142, 394, *jacobsoni* sp. n. Tibet pp. 143, 395 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Hesperomorpha gen. n. for *Luperus hirsutus* Jac. (type) pp. 298, 429; *potanini* sp. n. China pp. 300, 430 figs., OGLOBLIN t.c.

Hoplasomedia gen. n. p. 493, *chinmatra* (type) p. 494, *krisha*, *sarata* p. 496, *rasha*, *krishila* p. 497, *nirada* p. 498, spp. n. India figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Hylaspes apurva sp. n. India p. 603, MAULIK t.c.

Hyphaenia cyanescens Tonkin, Yunnan p. 242, *aenea* Yunnan p. 243, spp. n. fig., LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Khasia andrewesi see *Shairia*.

Tiroëtis spinipes sp. n. China pp. 212, 406 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Luperus (*Stenoluperus* subgen. n. pp. 247, 419) *deserticola* Turkmenia pp. 251, 420, *gussakovskiyi* Tadshikistan pp. 252, 421, *hissaricus* Hissar pp. 253, 421, *ophthalmicus* Kerman pp. 254, 422, *diadematus* pp. 268, 423, *concolor* pp. 269, 424 China, *nigriventris* Ganssu pp. 268, 423, *anthracinus* Altai pp. 289, 426, *semiflavus* Manchuria, *kiritshenkoi* Crimea pp. 294, 427, *mandzhuricus* Manchuria pp. 295, 428 spp. n.; *ictericus* ab. n. *unicolor* U.R.S.S. pp. 256, 423; *altaicus* subsp. n. *eous* Ussuri pp. 274, 425; *longicornis* var. n. *tenebricosus* pp. 291, 426; *flavipes* subsp. n. *obscuricornis* pp. 294, 426 Yakutsk; *viridipennis* subsp. n. *spurius* Japan pp. 297, 429 figs., OGLOBLIN t.c.—*L. hirsutus* see *Hesperomorpha*.

Macrima lutea sp. n. Tonkin p. 245, LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Malacosoma flaviventre see *Bijukta*.

Merista fraternalis var. n. *yunnanensis* Yunnan p. 146, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Meristoides vigintiguttata sp. n. China pp. 337, 439 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Mimagitocera gen. n. type *Agetocera flava* Jac. p. 453, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Mimastra kandyensis Ceylon p. 531, *nitida* p. 540, *fortipunctata* p. 542 India, spp. n. figs., MAULIK t.c.—*M. pellucida* sp. n. China pp. 182, 400 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Monolepta semenovi pp. 318, 434, *coa* pp. 319, 435, *nebulosa* pp. 320, 435 Ussuri, *impressipennis* Iran pp. 321, 436, spp. n. figs., OGLOBLIN t.c.—*M. andreweiana* n. n. for *andreweyi* Jac. preocc. p. 388; *tenasserimensis* p. 393, *eunicia* p. 395 spp. n.; *albomaculata* n. n. for *alborplagiata* Jac. preocc. p. 399, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.—*M. cheesmani* sp. n. New Hebrides p. 254, BRYANT Ann. Mag. n.H. (10) 17.

Monoxia maritima, *puncticollis*, *morosa* see *Erynephala*.

Morphosphaera montivaga p. 319, *prava* p. 320, *brunnea* p. 321, spp. n. India, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Nadrana rugipennis p. 261, *facialis* p. 262, spp. n. Tonkin, LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Neomahutia gen. n. p. 220, *cyanipennis* sp. n. Transvaal p. 221 fig., LABOISSIÈRE Livre jubil. Bouvier 1936.

Oides bengalensis sp. n. India p. 110, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Paleosepharia gen. n. p. 251, *truncata* sp. n. Cochinchina p. 252 fig., LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Palpoxena nasika n. n. for *nasuta* Jac. p. 581, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Parageina gen. n., *bouvieri* sp. n. India p. 222 fig., LABOISSIÈRE Livre jubil. Bouvier 1936.

Paraluperodes gen. n. for *Cnecodes suturalis* Mots. pp. 310, 431 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Paridea octomaculata var. n. *pathkaiensis*; *dohertyi* p. 505 (with varr. n. *divisa* (Perak, Sumatra), *assama* p. 506) sp. n.; *quadriplagiata* varr. n. *quinqueplagiata* p. 507, *fasciata* p. 508 India figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Phyllobrotica binotata sp. n. Surmal pp. 194, 402 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Platyzantha tonkinensis sp. n. Tonkin p. 239, LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Proëgmene aeneipennis sp. n. China pp. 327, 437 figs., OGLOBLIN Fn. de l'URSS, Col. 36.

Pseudadimonia debria sp. n. India p. 95, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Pseudosepharia gen. n. type *dilatipennis* Fairm. p. 253, LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Sastra rubya p. 256, *mamaya* p. 257, *dohertyi* p. 265, spp. n. India, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Sepharia yunnanensis p. 249, *aurantiaca* Yunnan, *cornuta* China p. 250, *pallida* Kulu p. 249, spp. n., LABOISSIÈRE Ann. Soc. ent. Fr. 105.—*S. straminea* sp. n. China pp. 324, 436 figs., OGLOBLIN Fn. de l'URSS Col. 36.

Sermylodes coomani p. 257, *apicalis* p. 258, spp. n. Tonkin fig., LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Shairia gen. n., *maculata* (type) p. 277, *krishna* p. 278, *palnia* p. 280 spp. n.; *andrewesi* Jac. from Khasia p. 279 figs., MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Shamshera gen. n. type *Galeruca bennetti* Hope p. 452, MAULIK t.c.

Sikkimia tamra sp. n. India p. 523, MAULIK t.c.

Solenia see *Solephyma*.

Solephyma n. n. for *Solenia* Jac. nec Muls. p. 329, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Stenoluperus subgen. n. see *Luperus*.

Strobiderus nigriceps p. 258, *tonkinensis* p. 259, spp. n. Tonkin, LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Swargia gen. n. p. 275, *nila* sp. n. India p. 276, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Taphinella cyanipennis sp. n. Tonkin p. 255 figs., LABOISSIÈRE Ann. Soc. ent. Fr. 105.—*T. bengalensis* see *Taphinellina*.

Taphinellina gen. n. type *Taphinella bengalensis* Jac. p. 299, MAULIK Fn. Br. Ind., Col. Chrysom. (Gal.) 1936.

Trichobalya tonkinensis Tonkin, Yunnan p. 260, *gularis* Tonkin p. 261, spp. n. figs., LABOISSIÈRE Ann. Soc. ent. Fr. 105.

Tricosepharia gen. n. p. 254, *pubescens* (with var. n. *basalis*) Tonkin p. 255, LABOISSIÈRE t.c.

HISPIDAE.

Key to genera of Cryptonychini SPAETH Temminckia 1 p. 293.

Adalurnus gen. n. p. 393, *rotundatus* sp. n. Brazil p. 394 figs., MAULIK Ann. Mag. n.H. (10) 18.

Alurnus eckardtae sp. n. Amazonas p. 275 fig., GÜNTHER Ent. Rdsch. 53.

Aulostyrax incerta Uhm. from *Xiphispa* p. 291, SPAETH Temminckia 1.

Bronthispa characters p. 286, *linearis* sp. n. New Guinea p. 288, SPAETH t.c.—*B. angulosa*, *surigaoana*, *banguiensis* see *Octodonta*.

Cephalolia American spp. pp. 109–117, key to known spp. p. 481, *abscisa* S. America p. 112, *fiebrigi* Paraguay p. 115 spp. n. figs., UHMANN Rev. Ent. Rio de J. 6.

Chalepus balli Colombia p. 614, *assmanni* Costa Rica p. 619 spp. n.; *marginiventris* ab. n. *strandii* Brazil p. 617 figs., UHMANN Festschr. E. Strand 1.

Cirrispa gen. n., *conradsi* sp. n. E. Africa p. 123 fig., UHMANN Arb. morph. tax. Ent. Berl. 3.

Coelaenomenodera collarti sp. n. Belgian Congo p. 441, UHMANN Rev. Zool. Bot. afr. 28.

Cryptonychus cochlearius ab. n. *obscurata* p. 435; *aberrans* p. 437, *striolatus* p. 438 spp. n.; *macrorrhinus* ab. n. *uniformis* p. 440 Belgian Congo, UHMANN t.c.

Dactylispa pilosula p. 445, *collaris* spp. n.; *tenuicornis* var. n. *major* p. 411; *pubicollis* ab. n. *metallica* p. 488 Belgian Congo, UHMANN t.c.

Decispella gen. n. p. 409, *monochiri* sp. n. Ruanda p. 410, UHMANN t.c.

Demothispa nigrinotata Brazil, madoni Fr. Guiana, spp. n. p. 12, Pto Mél. exot.-ent. 67.

Hispa burgeoni sp. n. p. 412; *poeciloptera* ab. n. *nigrata* p. 450 Belgian Congo, UHMANN Rev. Zool. Bot. afr. 28.

Homalispa vespertina var. n. *donckieri* Fr. Guiana; *diversipes* Brazil p. 12, *subelongata* Bolivia p. 13, spp. n., Pto Mél. exot.-ent. 67.

Isopedhispa gen. n. p. 291, *ferruginea* sp. n. New Caledonia p. 292, SPAETH Temminckia 1.

Lepthispa cornuta, *collarti* spp. n. Belgian Congo p. 434, UHMANN Rev. Zool. Bot. Afr. 28.—*L. angolensis* sp. n. Angola p. 623, Pto Rev. suisse zool. 43.

Monochirus congoanus sp. n. Belgian Congo p. 409, UHMANN Rev. Zool. Bot. Afr. 28.

Octodonta (*Uhmanna* subgen. n. p. 282), *angulosa* Uhm., *surigaoana* Uhm., *banguiensis* Uhm. from *Bronthispa* p. 283; *subparallela* sp. n. Papua p. 289, SPAETH Temminckia 1.

Oxycephala characters p. 283, key p. 284, *puncticollis* New Guinea, *misolensis* Misol p. 285 spp. n.; *bruijni* subsp. n. *morotaiensis* Moluccas p. 286, SPAETH t.c.—*O. grossa* sp. n. Moluccas p. 397 fig., MAULIK Ann. Mag. n.H. (10) 18.

Platypria funebris subsp. n. *kalongana* Belgian Congo p. 414 fig., UHMANN Rev. Zool. Bot. afr. 28.

Plesispa characters, scope p. 279, *ruficollis* sp. n. Admiralty Is. p. 281 SPAETH Temminckia 1.

Spilispa imperialis Baly (= *balyi* Chap.) p. 401 fig., MAULIK Ann. Mag. n.H. (10) 18.

Uhmannia subgen. n. see *Octodonta*.

Xiphispa incerta see *Aulostyrax*.

CASSIDIDAE.

Agrioconota key p. 213; *sodalis* Venezuela p. 171, *lateripunctata* Bolivia, *vittifera* Amazonas p. 172, *reimoseri*, *aulatipennis* Paraguay p. 215, *subtriangularis* Peru, spp. n.; *stupidula* subsp. n. *luciventris* Argentina p. 216, SPAETH Ent. Rdsch. 53.

Charidotis key to Centr. and S. American spp. pp. 66-99, *beatula* Para., *bicallousula* p. 67, *luederwaldti* p. 68, *laeviculpta* p. 69, *laetabunda*, *pumilio* p. 76, *petulans* p. 75, *aerosa* p. 76, *strandii* p. 79, *perplacens* p. 81, *emendabilis* p. 82, *astraea* p. 85, *mrázi*, *cauta* p. 89, *fervida* p. 97 Brazil, *fugitiva* Paraguay p. 67, *valentula* p. 68, *obtrita* p. 69 Pernambuco, *princeps* p. 69, *phaedra* p. 89 Parana, *languida* Colombia, *formalis* p. 71 Caracas, *oblectans* p. 73, *turbida* p. 90, *venusta* p. 91, *brevicollis* p. 94 Amazonas, *chacoana* Bolivia p. 74, *pastica* Venezuela p. 77, *nevermanni*, *costaricea* Costa Rica, *sphaerica* Mexico p. 77, *paganettii* Panama p. 78, *reinecki* Ecuador, *subrubra* Peru p. 79, *chermesina* Para., *scarlatina* Fr. Guiana p. 80, *huallagensis* Peru, Ecuador p. 81, *arrowsi* Para p. 86, *turalbana* Costa Rica, *exilis* Petropolis p. 87, *cauta* Rio de Janiero p. 89, *tersa* Bolivia p. 91, *frugalis* p. 92, *descrobata* Peru, *zikáni* Minas Geraes p. 96, *desulta* no locality p. 97, spp. n.; SPAETH Sborn. ent. odd. Nár. Mus. Praze 14.

Chirida spp. critical notes p. 110; *guttata* subsp. n. *columbica* Colombia p. 139; *barberi* Florida p. 140, *trilineata* Costa Rica p. 170 spp. n., SPAETH Ent. Rdsch. 53.

Chiridopsis vitreicollis sp. n. Madagascar p. 109 fig. SPAETH t.c.

Coptocycla key to subgen. (*Dyscineta* p. 252, *Podostraba* p. 253 subgen. n.), *apicata* Brazil p. 254, *strandii* Ecuador p. 255, *jamaicana* Jamaica p. 256, *febricitans* Mexico p. 257, *laqueata*, *ruficornis*, *paranensis* Brazil p. 260, *robusta* Ecuador p. 261 spp. n., SPAETH Festschr. E. Strand 1.—*C. profana* see *Drepanocassis*; *amoena* see *Xenocassis*; *azteca* see *Mexicaspis*; *wesmaeli* see *Tapinaspis*; *bisignata* see *Strongylaspis*; *rubella* see *Erepsocassis*.

Dolichotoma waekneri sp. n. Amazonas p. 274 fig., GÜNTHER Ent. Rdsch. 53.

Drepanocassis gen. n. for *Coptocycla profana* Boh. p. 262, SPAETH t.c.

Dyscineta subgen. n. see *Coptocycla*.

Embolocassis subgen. n. see *Oxylepis*.

Erepsocassis gen. n. for *Coptocycla rubella* Boh. p. 260, SPAETH Ent. Rdsch. 53.

Megapyga chinensis sp. n. S. China p. 8, SPAETH Proc. R. ent. Soc. Lond. (B) 5.

Metriona salomonina p. 9, *cristobalensis* p. 10, spp. n. Solomon Is., SPAETH t.c.

Mexicaspis gen. n. for *Coptocycla azteca* Champ. p. 259, SPAETH Ent. Rdsch. 53.

Oxylepis (*Embolocassis* subgen. n.) *cuneipennis* sp. n. Cape Province p. 11, SPAETH Proc. R. ent. Soc. Lond. (B) 5.

Philaspis goyazensis p. 261, *bistillata* Brazil, *nigriceps* Misiones p. 262, spp. n., SPAETH Ent. Rdsch. 53.

Podostraba subgen. n. *Coptocycla*.

Sindia jawalagiriana sp. n. India p. 8, SPAETH Proc. R. ent. Soc. Lond. (B) 5.

Strongylaspis gen. n. for *Coptocycla bisignata* Boh. p. 216, SPAETH Ent. Rdsch. 53.

Tapinaspis gen. n. for *Coptocycla wesmaeli* Boh. (type) p. 260, SPAETH t.c.

Xenocassis gen. n. for *Coptocycla amoena* Boh. (type); *amicula* sp. n. Colombia p. 260, SPAETH t.c.

HYMENOPTERA.

Hymenoptera of Azores, BENOIST, BERLAND & BLÜTHGEN Ann. Soc. ent. Fr. 105 pp. 9-10.

Vespiiform Hymenoptera little known in France, II, BERNARD Bull. Soc. ent. Fr. 41 pp. 165-168.

Hymenoptera on the littoral Mediterranean, BERNARD Bull. Soc. ent. Fr. 41 pp. 285-290.

Notes on Hymenoptera of S. America, BRADLEY Act. Soc. sci. Chili 30 1921 pp. 51-74.

Catalogue of Hymenoptera of Belgium, VI, CRÉVECOEUR & MARÉCHAL Bull. Ann. Soc. ent. Belg. 76 pp. 237-257.

Check list of Serphoidea, Bethyridae and Anteonidae of Oceania, FOUTS Occ. Pap. Bishop Mus. 11 no. 18, 15 pp.

Hymenoptera of Venice Lido, GIORDANI SOIKA Boll. Soc. ent. ital. 67 1935 pp. 141-143.

Morphology and biology of Aculeate Hymenoptera, XV (with a list of spp. in author's collection p. 95 and index to Papers I-XV p. 122), GRANDI Boll. Ist. Ent. Univ. Bologna 8 pp. 27-140, 4 pls. 25 figs.

Hymenoptera Aculeata of Italian Sahara, GUIGLIA Boll. Soc. ent. ital. 66 pp. 3-16, 2 figs.

Scoliidae, Mutillidae and Chrysididae of N.W. Provinces of China, HAMMER Ark. Zool. 27A (sep. dated 1934) no. 23, 3 pp.

Hymenoptera of Anholt, JØKER Flora og Fauna 42 pp. 88-91.

Hymenoptera of Suffolk, MORLEY Trans. Suffolk Nat. Soc. 3 1935 pp. 17-52; 1936 pp. 132-162.

Nomenclature of British Aculeate Hymenoptera, RICHARDS Proc. R. ent. Soc. Lond. (B) 5 pp. 169-173.

Predatory Hymenoptera of Auvergne, VERGNE Rev. Sci. nat. Auvergne 1 1935 pp. 116-121.

Hymenoptera new or rare to Catalunya, VILARRUBIA Butll. Inst. catal. H.n. 35 1935 p. 81.

Apoidea.

APIDAE (*s.l.*).

Humble bees of Rugby district, ABBOTT Rep. Rugby Sch. nat. Hist. Soc. 69 pp. 26-31.

List of bees from Persia, ALFKEN Mitt. ent. Ver. Bremen 23 1935 pp. 21-24.

Bees from Venezuela, ALFKEN Veröff. dtsch. kol. Mus. Bremen 1 pp. 316-320.

Bees from Solomon Is., COCKERELL Proc. R. ent. Soc. Lond. (B) 5 pp. 225-226.

Bees from Alberta, COCKERELL Canad. Ent. 68 pp. 274-277.

Bees from Micronesia, ESAKI Mushi 9 pp. 44-47, 2 pls.

Apidae of N.-E. Greenland, FRIESE Skr. Svalb. Ishavet 65 1935 pp. 1-10, 1 map, 2 figs.

Some N. American Osminiinae, MICHENER Amer. Mus. Nov. no. 875 30 pp. 4 figs.

Bees of Podolia 1932-1935, NOSKIEWICZ Polsk. Pismo ent. 13 pp. 132-182, 2 pls.

Apidae of Tadzhikistan, POPOV Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935 pp. 351-408.

Apoidea of Rottnest I., Australia, RAYMENT J. roy. Soc. W. Aust. 20 1934 pp. 201-212, 1 pl.

Afrostelis ogilviei sp. n. S. Rhodesia p. 346, COCKERELL Ann. Mag. n.H. (10) 17.

Agapostemon revision of United States spp. pp. 70-83; *coloradinus* Vach. (= *tyleri* Ckll., *martini* Ckll.) ♀; *melliventris* Cress. (= *diguetti* Ckll.) p. 78; *cockerelli* Crawford. (= *femoratus* Crawford, *radiatus* Ckll. nec Say, *californicus* Crawford. p. 79, *pulcher* Roberts nec Smith, *martini* Ckll. ♂, *Nomia cillaba* Cameron); *radiatus* Say (= *sulcatulus* Ckll.) p. 80; *texanus* Cress. (= *californicus* Crawford, *borealis* Crawford, *cockerelli* Ckll. nec Crawford, *texanus subtilior* Crawford, *t. iowensis* Ckll., *t. vandykei* Ckll.) p. 82; *angelicus* Ckll. (= *texanus* Cress. (part)) p. 83 figs., SANDHOUSE J. Wash. Acad. Sci. 26.

Agrobombus yuennanensis p. 14, *hedini* p. 15, spp. n. China, BISCHOFF Ark. Zool. 27A no. 38.

Allodapula harveyi S. Rhodesia p. 636, *melanognatha* Natal p. 637 spp. n.; *macula* subsp. n. *bilineata* Belgian Congo p. 638, COCKERELL Ann. Mag. n.H. (10) 18.—*A. African* spp. 28 pp.,

acutigera p. 1, *durbanensis* p. 6, *flavo-lateralis* p. 8; *krugeri* p. 11, *lucidula* p. 13, *nigritula* p. 17, *peratra* p. 18, *poculifera* p. 19, *rufosticta* p. 24 S. Africa, *albomaculata* p. 2, *antiquorum* p. 3, *bulbifera* p. 5, *debilitata* p. 6, *hamatifera* p. 9, *innata* p. 10, *matopina* p. 14, *melanosoma* p. 15, *nativitatis* p. 16, *paupercula* p. 18, *pulchripes* p. 21, *pusilla*, *rhodesi* p. 22, *rufitarsis* p. 23, *umtatica* p. 26 S. Rhodesia, *brunnei-ventris* p. 3, *littoralis* p. 12 Portuguese E. Africa, *bukaviella* p. 4, *convexa* p. 6, *flavibasis* p. 7, *gorillarum* p. 8, *kivuensis* p. 11, *luapulana* p. 12, *ninzua* p. 17, *rufipennis* p. 22, *rugosella* p. 25 Belgian Congo spp. n.; *bevisi* subsp. n. *vagens* p. 3 Belgian Congo; *luckhoffi* subsp. n. *microsoma* Cape Province p. 14 figs., COCKERELL Amer. Mus. Nov. no. 840.

Alpigenobombus dentatus subsp. n. *pretiosus* China p. 11, BISCHOFF Ark. Zool. 27A no. 38.

Ammobatoides abdominalis Eversm. (= *rufitarsis* Smith) p. 159, POPOV Konowia 15.

Andrena haemorrhoa F. (= *albicans* auctt.); *labiata* F. (= *cingulata* auctt.); *rosae* Panz. (= *eximia* Smith) p. 172, RICHARDS Proc. R. ent. Soc. Lond. (B) 5.—*A. transitoria* subsp. n. *schmidtii* p. 378; *mehelyi* p. 380 Austria, *submicans* Hungary p. 381 spp. n., ALFKEN Veröff. dtsh. kol. Mus. Bremen 1.—*A. sieverti* var. n. *opacicauda* Wyoming p. 1, COCKERELL Amer. Mus. Nov. no. 831.—*A. ablusula* p. 135, *angustella* p. 136, *anisochlora* p. 137, *ceanothina* p. 138, *cercocarpus* p. 140, *lupini* p. 142, *nitidicornis* p. 144, *opacibasis* p. 146, *orthocarpus* p. 147, *ripariella* p. 148, *semotula* p. 149, *solutula* p. 150, *vandykei* p. 151, *viridinitens* p. 152 spp. n.; *microchlora* subsp. n. *subalia* p. 143 U.S.A., COCKERELL Pan-Pacific Ent. 12.—*A. griseohirta* p. 10, *kansuensis* p. 11, *rufoclypeata* p. 12, *zonativentris* p. 13, spp. n. China, ALFKEN Ark. Zool. 27 A no. 37.—*A. subarctica*, *hirsutula* N.W. Canada p. 282, *stricklandi* Alberta p. 275, spp. n., COCKERELL Canad. Ent. 68.

Anthidiellum lautulum sp. n. Orange Free State p. 454, COCKERELL Ann. Mag. n.H. (10) 18.—*A. aspidopodum* p. 45, *swalei* p. 603, spp. n. S. Rhodesia; *flavescens* Friese distinct sp. p. 605, MAVROMOUSTAKIS Ann. Mag. n.H. (10) 17.

Anthidium sjöstedti var. n. *rhodesianum* Rhodesia p. 32; *lanitarse* var. n. *lloydi* Nigeria p. 34; *mlanjense* Nyasaland p. 40, *braunsicum* p. 36, *hypocapicola* p. 42 S. Africa spp. n. figs. MAVROMOUSTAKIS t.c.—*A. rufopictum* p. 450, *inornatum* p. 451 S. Africa, *sevocans* Bechuanaland p. 456 spp. n., COCKERELL Ann. Mag. n.H. (10) 18.—*A. fedtschenkoi* subsp. n. *tadzhicum* p. 374; *crassepunctum* sp. n. p. 377 Tadzhikistan figs., POPOV Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Parasit. & Zool.) 1935.—*A. reichardti* Guss. (= *montanum pamirense* Alf.) p. 757, GUSSAKOVSKIĖ Trav. Inst. zool. Acad. Sci. U.R.S.S. 2.—*A. capense* subsp. n. *acaciae* p. 2; *hispidulum* S. Africa, *lobicaudum* Belgian Congo p. 3 spp. n.; *pallidicinctum* subsp. n. *multicinctum* Transvaal p. 4, COCKERELL Amer. Mus. Nov. no. 855.—*A. strigatum* rr. pp. 189–194, ALFKEN Stettin. ent. Ztg. 97.—*A. florentinum* subsp. n. *kissi* Hungary p. 25, ALFKEN Mitt. ent. Ver. Bremen 23 1935.—*A. edwini* p. 276, *adriani* p. 277, spp. n. Chile, RUIZ Rev. chil. H.n. 39.—*A. soni* p. 141, *damaraense* spp. n.; *cordiforme* var. n. *makarikaricum* p. 143 Kalahari 17; *polycanthum* sp. n. Cape Province; *integrum* Fr. (= *albolineatum* Ckl., *pallidicinctum* Fr.) p. 149 18 figs., MAVROMOUSTAKIS Ann. Transv. Mus.—*A. armaticeps* see *Dianthidium*.

Anthophora chlorops p. 92, *erythrothorax* p. 93, *rhodothorax* p. 94 spp. n.; *gohrmanae* var. n. *coloradensis* p. 92 U.S.A., MICHENER Bull. Brooklyn ent. Soc. 31.—*A. key* p. 1, *chlorops* subsp. n. *utahensis* Utah p. 2, MICHENER Amer. Mus. Nov. no. 876.—*A. neglecta* sp. n. California p. 4, TIMBERLAKE & COCKERELL op. cit. no. 831.—*A. African* spp. pp. 71–78, *arcana* Uganda p. 72, *leucospila* Cape Province, *nigromixta* Kenya p. 75, *nivescens* S.W. Africa p. 76 spp. n.; *rubricans* subsp. n. *aspilostoma* Orange Free State p. 77, COCKERELL Proc. R. ent. Soc. Lond. (B) 5.—*A. ferrocineta* p. 206, *vanderysti* p. 210, *vestitula* p. 211 Belgian Congo, *simbara* E. Africa p. 208 spp. n.; *torrida* var. n. *calceina* Boma p. 209, COCKERELL Rev. Zool. Bot. afr. 28.—*A. glycyrrhizae* p. 737, *croceitarsis* p. 748 Turkestan, *pygmaea* p. 738, *eugeniae* p. 740, *bucharica* p. 742, *zimini* p. 746 Bukhara, *ferghanensis* Fergana p. 739, *albella* p. 741, *submicans* p. 749,

shestakovi p. 751, *karakumensis* p. 753, *tekkensis* p. 755 Transcaspia, *desertorum* Oxus Desert p. 743 spp. n.; *fedtshenkoi* p. 745, *martensi* p. 754 ♂♂; *frey-muthi* Fedt. (= *oshanini* Fedt.); *meridionalis* Fedt. (= *flavescens* Fedt.); *latigena* Mor. (= *reinigi* Hed.); *nigripes* Mor. (= *parietina* pamiricola Hed.) p. 757 figs., GUSSAKOVSKIĖ Trav. Inst. zool. Acad. Sci. U.R.S.S. 2.—*A. lomamica* sp. n. Belgian Congo p. 523, COCKERELL Ann. Mag. n.H. (10) 18.—*A. albifacies* p. 18, *hedini* p. 19, spp. n. China, ALFKEN Ark. Zool. 27A no. 37.—*A. romandii* nest, biology pp. 65–75, CROS Festschr. E. Strand 2.—*A. albo-barbata* p. 397, *amseli* p. 399, *bicalcarata* p. 400 spp. n.; *acervorum* subsp. n. *palestinensis* p. 401 Palestine fig., HEDICKE S. B. Ges. naturf. Fr. Berl. 1935.—*A. simillima* var. n. *californiensis* California p. 182, MICHENER Pan-Pacific Ent. 11.

Ashmeadiella timberlakii p. 56, *clypodentata* p. 57, *rhodopus* p. 59, *lateralis* p. 60, *maxima* p. 61, *cockerelli*, *florissantensis* p. 62, *altadenae* p. 63 spp. n.; *haematopoda*, *bigeloviae* ♀♀ figs., MICHENER op. cit. 12.—*A. sub-maxima*, *arizonensis* spp. n. p. 3; *basalis* subspp. n. *basalis* p. 6, *nigra* p. 7 U.S.A. figs., MICHENER Amer. Mus. Nov. no. 875.

Ashtonipsithyrus distinctus subsp. n. *hedini* China p. 25, BISCHOFF Ark. Zool. 27A no. 38.

Bombus terrestris subsp. n. *minshanicola* p. 2; *patagiatus* subsp. n. *minshanensis* China p. 3, BISCHOFF t.c.—*B. cingulatus* systematic notes p. 130 (with ubsp. n. *pseudocalidus* Siberia p. 135), REINIG S.B. Ges. naturf. Fr. Berl. 1936.—*B. hyperboreus* var. n. *vulpinus* Greenland p. 4, FRIESE Skr. Svalb. Ishavet 65 1935.—*B. alinae* sp. n. p. 3; *wistnei* subsp. n. *chinganensis* p. 5; *sicheli* subsp. n. *chinganicus* p. 6; *patagiatus* subsp. n. *albopilosus*; *consobrinus* subsp. n. *alini* p. 7 Manchukuo, REINIG Mitt. dtsh. ent. Ges. 7.

Camptopoeum rufiventre further description p. 7 (with f. n. *flavovaria* Russia p. 10) figs., POPOV Folia zool. hydrobiol. 9.

Centris lanipes subsp. n. *ogilviei* Br. Guiana p. 632, COCKERELL Ann. Mag. n.H. (10) 18.

Ceratina iwatai p. 550, *satoi* p. 552 spp. n. Japan figs., YASUMATSU Annot. zool. Jap. 15.—*C. nigra* Handl. (= *nitidula* Mor.) p. 159, POPOV Konowia 15.—*C. sequoiæ* p. 1, *subpunctigena* p. 6, *utahensis* p. 7 spp. n.; *nanula* subsp. n. *rigdenae* p. 3 U.S.A., key to spp. of subgen. *Zaodontomerus* in U.S.A. and N. Mexico p. 9, MICHENER Amer. Mus. Nov. no. 844.

Chalicodoma strandi sp. n. Turkmenia, p. 591 fig., POPOV Festschr. E. Strand 1.

Chlorosmia lawae sp. n. California p. 29, MICHENER Amer. Mus. Nov. no. 875.

Coelioxys decipiens sp. n. (= *aberrans* Mor.) p. 160, POPOV Konowia 15.—*C. otaviensis* sp. n. S.W. Africa p. 635, COCKERELL Ann. Mag. n.H. (10) 18.—*C. mongolica* sp. n. Mongolia p. 22, ALFKEN Ark. Zool. 27A no. 37.—*C. bisoncornua* sp. n. Nebraska p. 205, HILL Ent. News 47.

Colletes revision of Palaearctic spp. pp. 1–531; *flavescens* p. 106, *restingensis* p. 168, *escalerai* p. 361 Morocco, *biskrensis* p. 110, *elegans* p. 217, *acutiformis* p. 382 Algeria, *cypricus* Cyprus p. 118, *illyricus* p. 120, *meyeri* p. 401 Dalmatia, *creticus* Crete p. 123, *bidentulus* Persia p. 129, *tarsalis* p. 140, *maidli* p. 166, *dusmeti* p. 170, *merceti* p. 223, *albescens* p. 330, *tuberculiger* p. 333, *ibericus* p. 471 Spain, *transitorius* p. 151, *lebedewi* p. 163, *squamulosus* p. 191, *rubellus* p. 204, *comatus* p. 213, *penulatus* p. 285, *edentulus* p. 329, *Caucasia*, *morawitzi* p. 173, *rubripes* p. 205, *skorikowi* p. 209, *dubitalus* p. 241, *alicularis* p. 260, *emaceatus* p. 264, *plumulosus* p. 267, *pallipes* p. 274, *radoszkowskii* p. 452, *conradi* p. 459 Turkestan, *wollmanni* Turkmenia p. 188, *pollinarius* Transcaspia p. 224, *jejunus* p. 231, *fuscicornis* p. 284 Egypt, *uralensis* Urals p. 251, *popovi* p. 271, *ravulus* p. 335, *fulvicornis* p. 416 Mongolia, *pusillus* Abd el Kuri I. p. 280, *tardus* Ukraine p. 294, *inexpectatus* Poland p. 325, *subnitens* Altai Mts. p. 345, *laevigena* p. 368, *bischoffi* p. 485 Himalaya, *reinigi* W. Pamir p. 372, *brumalis* Canton p. 376, *dofleini* Macedonia p. 398, *pseudocimerascens* Siberia p. 424, *integer* Ala Tau Mts. p. 427, *grisescens* Asia Minor p. 442, *pallescents* S.E. Russia p. 468, spp. n.; *fodiens* subsp. n. *hispanicus* p. 303; *cunicularius*

subsp. n. *infuscatus* p. 396 Spain; *succinctus* subsp. n. *aegyptiacus* Egypt p. 479, *brevigena* Macedonia p. 480; *Denticolletes* p. 486, *Puncticolletes* p. 490 subgen. n. figs., NOSKIEWICZ Prace Nauk. Wydawn. Tow. Nauk. Lwow II 3.—*C.* list of Japanese and Chinese spp. pp. 241–245, *gigas* ♂ p. 244, YASUMATSU Ent. & Phytopath. 4.—*C.* African spp. 10 pp., *bukavanus* p. 3, *ruwenzoricus* p. 9, *michaelis* p. 7 Belgian Congo, *callaspis* S. Rhodesia, *hirtibasis* p. 5, *ogilviei* p. 8, *rugibasis* p. 9, *sororcula* p. 10 S. Africa, spp. n., COCKERELL Amer. Mus. Nov. no. 856.

Conanthalictus wilmattae sp. n. California p. 2, COCKERELL op. cit. no. 831.

Crocisa brachyaspis Orange Free State, *stellifera* Belgian Congo, spp. n. p. 1 figs., COCKERELL op. cit. no. 864.—*C. conessa* p. 45 (with subsp. n. *katanagana*) Belgian Congo, *laticauda* Kenya p. 46, *oxyaspis* Natal p. 47, spp. n., COCKERELL Proc. R. ent. Soc. Lond. (B) 5.

Ctenoptectra ussuriensis sp. n. Ussuri p. 78 figs., POPOV t.c.—*C.* characters p. 273, *vagans* re-description p. 279; *cockerelli* sp. n. China p. 281 figs., POPOV Ann. Mus. Genova 59.

Denticolletes subgen. n. see *Colletes*.

Derotropis subgen. n. see *Megachile*.

Diandrena marinensis p. 153, *purdyi* p. 155, spp. n. U.S.A., COCKERELL Pan-Pacific Ent. 12.

Dianthidium zebra subsp. n. *spilognathum* Natal p. 6, COCKERELL Amer. Mus. Nov. no. 855.—*D. otavicum* sp. n. S.W. Africa p. 452, COCKERELL Ann. Mag. n.H. (10) 18.—*D. armaticeps* Fr. from *Anthidium*; ♂ described p. 150 fig., MAYROMOUSTAKIS Ann. Transv. Mus. 18.—*D. ovatum*, *rufobalatum*, *rufomaculatum* see *Protanthidium*.

Dioxys turkestanica p. 11, *modesta* p. 14 Uzbekistan, *maroccana* Morocco p. 16, *distinguenda* p. 18, *gussakovskii* p. 24 Turkmenia, *bluthgeni* Taskhent p. 26, *schulthessi* Cyrenaica p. 31, spp. n. figs., POPOV Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Diversobombus hummeli sp. n. p. 18; *ningpoensis* subsp. n. *minshanicus* p. 19 China, BISCHOFF Ark. Zool. 27A no. 38.

Dufourea versicolor sp. n. China p. 17, ALFKEN op. cit. no. 37.

Emphoropsis mucida var. n. *ventralis* Wyoming p. 3, MICHENER Amer. Mus. Nov. no. 876.—*E. salviae* sp. n. California p. 95, MICHENER Bull. Brooklyn ent. Soc. 31.

Epeolus stuardi sp. n. Chile p. 377, RUIZ Rev. chil. H.n. 39.

Eucera hispana notes on and key to allied spp. pp. 1–13, ALFKEN Dtsch. ent. Z. 1936.—*E. vittulata* sp. n. Podolia p. 154, NOSKIEWICZ Polsk. Pismo ent. 13.

Eupetersia paradoxa p. 177, *coerulea* p. 181 ♂ ♂; *seyrigi* Madagascar p. 178, *ruficrus Abyssinia* p. 180, (*Nesoeupetersia* subgen. n. p. 182), *sakalava* 183, *madagassa* p. 185, *picea* p. 187 Madagascar, spp. n. figs., BLÜTHGEN Dtsch. ent. Z. 1935.

Euryglossina hypoxantha p. 202, *parazantha*, *microdonta* p. 203 spp. n.; *inconspicua* subsp. n. *lutea* p. 204 Rottentest I. figs., RAYMENT J. roy. Soc. W. Aust. 20 1934.

Gronoceras cerberus var. n. *optima* S.W. Africa p. 25, COCKERELL Ann. Mag. n.H. (10) 17.

Habropoda alashanica sp. n. Ala-Shan p. 735 figs., GUSSAKOVSKIĖ Trav. Inst. zool. Acad. Sci. U.R.S.S. 2.

Halictoides californicus sp. n. California p. 181, MICHENER Pan-Pacific Ent. 11.

Halictus sequoiae p. 165, *humboldtensis* p. 166, *mendocinensis*, *marinensis* p. 167, spp. n. U.S.A., MICHENER op. cit. 12.—*H. allonotus* p. 156, *cyanurus* p. 157, *lupinelli* p. 158, *orthocarpi* p. 159, *pilosellus* p. 60, *tracyi* p. 161, spp. n. U.S.A., COCKERELL t.c.—*H. guianensis* sp. n. Br. Guiana p. 251, COCKERELL J. N.Y. ent. Soc. 44.—*H. emeraldensis* sp. n. Australia p. 289 figs., RAYMENT Arb. phys. angew. Ent. Berl. 3.—*H. berlandi* Taurus p. 270, *humkalensis* Bukhara p. 273, *fatsensis* Mesopotamia p. 276, *submodernus* S.W. Persia p. 278, *dschulfensis* Dschulfa p. 281, *quadrincinctoides* p. 282, *subalfkenellus* p. 284 Taurus, *luganicus* Lugansk p. 285, *holomelaenus* Crete p. 289, *eurygnathopsis*, *ponticus* Black Sea Coast p. 293, *samarensis* Samara p. 294, *wjernicus* Kirgis p. 296, *scardicus* Balkans p. 297, *georgicus* Gandja p. 303,

bagirensis Askhabad p. 305, *bucharicus* Bukhara p. 307, *takuiricus* Takuir-Ter p. 309 (with subsp. *n. sefidicus* Persia), *dunganicus* Narynj p. 310 spp. n.; *carinthiacus* n. n. for *brachyceros* Schmied. nec Bisch. p. 299; *rubicundus* var. *n. mongolensis* Mongolia p. 302, (var. *laticinctus* a subsp.) p. 303; *cochleareitarsis* p. 272, *graecus* p. 287 *stachi* p. 311 ♂; *palustris* ♀ p. 291 figs., BLÜTHGEN Mitt. zool. Mus. Berl. 21.—*H. abietum* p. 281, *pasadenae* p. 285, *benardinensis* p. 286, spp. n. California, MICHENER Ann. Mag. n.H. (10) 18.

Heriades binodosus Cape Province p. 347, *heterostictus* p. 349, *mackieae* p. 350, *microstictus* p. 352, *ornaticornis* p. 353, *scalatifrons* p. 356 S. Rhodesia, *matopensis* Shanghai p. 351, *sakaniensis* Belgian Congo p. 355, (10) 17, *calviniensis* Cape Province p. 449 (10) 18, spp. n., COCKERELL op. cit.—*H. hierosolomita*, *palaestina* p. 277, *pici* p. 279, *hebraea* p. 280 Palestine, *coelostoma* p. 277, *subnitida* p. 278, *maidli*, *dolosa* p. 279, *brevifurca* p. 280 Asia Minor, *decipiens* Morocco, *pulex*, *limbata* Syria p. 278, *cantabrica* Spain p. 279, *ursina* Trans-Caucasia p. 280, BENOIST Bull. Soc. ent. Fr. 40.

Hesperapis (= *Zacesta* Ashm.) p. 185, *rufipes* ♂ ♀ p. 182; *arida* sp. n. California p. 183; *wilmattae* ♂ p. 184, MICHENER Ent. News 47.—*H. nanula* sp. n. Cape Province p. 482, COCKERELL Ann. Mag. n.H. (10) 17.

Hortobombus supremus subsp. n. *beicki* p. 20; *koreanus* subsp. n. *pekingensis* p. 21; *consobrinus* subsp. n. *cansuanus* p. 22; *quennanicus* sp. n. p. 23 China, BISCHOFF Ark. Zool. 27A no. 38.

Hylaeus abjunctus p. 1, *absonulus*, *graafi* p. 2 Cape Province, *isochromus* p. 3 Liberia, *kasindensis*, *perater* p. 4, *rhodognathus* p. 7 Belgian Congo, *perdensus* p. 5, *sanctus* p. 7, *varians* p. 10 S. Rhodesia, *punctiferus*, *reditus* Natal p. 6, *sublucens* Transvaal, var. *Mossel Bay* p. 9 spp. n.; *tenuis* var. n. *dominae* S. Africa p. 8; *tinctulus* subsp. n. *extensicornis* Belgian Congo p. 10, COCKERELL Amer. Mus. Nov. no. 847.

Hypanthidium abdominale var. n. *histrionicum* p. 6; *halophilum*, *honestum* Cape Province p. 7, *sakaniense* Belgian Congo p. 8, spp. n.,

COCKERELL op. cit. no. 855.—*H. xanthopodum* sp. n. S.W. Africa p. 453; *braunse* subsp. n. *leonis* Cape Town p. 454, COCKERELL Ann. Mag. n.H. (10) 18.—*H. silverlocki* sp. n. N. Rhodesia p. 601, MAVROMOUSTAKIS Ann. Mag. n.H. (10) 17.

Lapidariobombus pyrrhosoma subsp. n. *hönei* China p. 10, BISCHOFF Ark. Zool. 27A no. 38.

Lithurgus bamangwatonis sp. n. Bechuanaland p. 358, COCKERELL Ann. Mag. n.H. (10) 17.

Macropis characters p. 275, *Paramacropis* subgen. n. p. 287 figs., POPOV Ann. Mus. Genova 59.—*M. hedini* sp. n. China p. 16, ALKFEN Ark. Zool. 27A no. 37.

Megachile sculpturatis var. n. *nudi-collis* China p. 21, ALKFEN t.c.—*M.* spp. from Turkmenia pp. 307–316; keys p. 309; *dolosa* p. 312, *rufo-flagellata* p. 313 spp. n. Turkmenia, ALKFEN Veröff. dtsh. kol. Mus. Bremen 1.—*M.* spp. synonymic and systematic notes p. 57; *analis* var. n. *holsatica* N. Friesian Is. p. 59; keys pp. 55, 60, ALKFEN Mitt. dtsh. ent. Ges. 6.—*M. similis* ♀ further description (with subsp. n. *singowli*) p. 173; *rambutwan* p. 174, *rangii* p. 175 spp. n. New Hebrides, CHEESMAN Trans. R. ent. Soc. Lond. 85.—*M. chlypeata* subsp. n. *grandis*; *rotnnestensis* p. 209, *subremotula* p. 210 spp. n. Rottnest I. figs., RAYMENT J. roy. Soc. W. Aust. 20 1934.—*M. manago* p. 554, *subalbata* p. 556 spp. n. Japan figs., YASUMATSU Annot. zool. jap. 15.—*M. podolica* sp. n. Podolia p. 152, NOSKIEWICZ Polsk. Pismo ent. 13.—*M.* key to subgen. p. 119, *subfortis* sp. n. Arizona p. 145 (*Derotropis* subgen. n. p. 156) figs., MITCHELL Trans. Amer. ent. Soc. 62.—*M.* Finnish spp. pp. 86–96, 140–149, *circumcincta* var. n. *fennica* p. 90; *lignisecca* var. n. *borealis* p. 95; figs., NIEMELÄ Ann. ent. fenn. 2.—*M. centuncularis* nests p. 288, HAVERHORST Ent. Ber. 9.—*M. maritima* habits pp. 168–170 figs., SITOWSKI Roczn. ochrony Roślin 3.—*M. laticincta*, *rufobarbata* spp. n. Br. Guiana p. 250, COCKERELL J. N.Y. ent. Soc. 44.—*M. pirenaica* f. *alpina* morphology p. 133, MICHELI Bol. Soc. venez. Stor. nat. 1 1935.—*M. nitidicollis* Mor. (= *ruficrus* Mor.) p. 160, POPOV Konowia 15.—*M. dokrandti* subsp. n. *uzboica*; *albisepta*

subsp. n. *adlerbergi* Turkmenia p. 595, POPOV Festschr. E. Strand 1.—*M. infrapicta* see *Osmia*.

Melecta söderbomi sp. n. China p. 21, ALFKEN Ark. Zool. 27A no. 37.—*M. luctuosa* primary larva p. 47 fig., GIORDANI SOIKA Boll. Soc. ent. ital. 68.

Melipona fasciata subsp. *paraensis* var. n. *guerreroensis* U.S.A. p. 1; *schencki* subsp. *picadensis* ♀ p. 3, SCHWARZ J. N.Y. ent. Soc. 44.

Meliturgula haematospila subsp. n. *ogilviei* Cape Province p. 359, COCKERELL Ann. Mag. n.H. (10) 17.

Metylaeus semlikiensis sp. n. Belgian Congo p. 11, COCKERELL Amer. Mus. Nov. no. 847.

Morgania indecisa sp. n. Cape Province p. 31, COCKERELL Ann. Mag. n.H. (10) 17.

Neolarra congregata subsp. n. *helianthi* Colorado p. 5, COCKERELL Amer. Mus. Nov. no. 831.

Nesoeupetersia subgen. n. see *Eupetersia*.

Nomada hummeli sp. n. China p. 15, ALFKEN Ark. Zool. 27A no. 37.

Nomia meridionalis (FREISE) *pallidibasis* p. 516, *angulifera* p. 518 (with subsp. n. *apicata* p. 519), *hirsutipes* p. 520 spp. n. S.W. Africa, COCKERELL Ann. Mag. n.H. (10) 18.—*N. bolliana* subsp. n. *helenii* Texas p. 2, COCKERELL Amer. Mus. Nov. no. 831.—*N. cillaba* see *Agapostemon*.

Nomioides atomella Belgian Congo p. 1, *callonotus* Cape Province p. 2 spp. n.; *somalica* subsp. n. *kalaharica* Kalahari p. 3, COCKERELL Amer. Mus. Nov. no. 857.

Nothylaeus fortis Belgian Congo p. 12, *libericus* Liberia p. 13, *umtalicus* S. Rhodesia p. 14 spp. n.; *heraldicus* subsp. n. *maculipes* Belgian Congo p. 13, COCKERELL op. cit. no. 847.

Osmia aurulenta emergence of sexes p. 45, ARNOLD Proc. R. ent. Soc. Lond. (A) 11.—*O. bucharica* sp. n. Tadjikistan p. 380 figs., POPOV Trud. Tadzshik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*O. crenulaticornis*, *claremontensis* p. 84, *punctata* p. 85, *marginata*, *latisulcata* p. 86, *tokopahensis* p. 87, *mixta* p. 88, *potentillae* p. 89, *sequoiae* p.

90, *femorata* p. 91 spp. n.; *integra* subsp. n. *nigrigena* p. 90 California, MICHENER Bull. S. Calif. Acad. Sci. 35.—*O. gracilis* p. 183, *abdominalis* p. 184, spp. n. California, MICHENER Pan-Pacific Ent. 11.—*O. karakalensis* sp. n. Turkmenia p. 596 fig., POPOV Festschr. E. Strand 1.—*O. neavei* sp. n. N.E. Rhodesia p. 37; *infrapicta* Ckll. from *Megachile* p. 38, COCKERELL Entomologist 69.—*O. pamirensis* Guss. (= *rickmersi* Alf.) p. 757, GUSSAKOVSKI Trav. Inst. zool. Akad. Sci. U.R.S.S. 2.—*O. ribifloris* subsp. n. *biedermanni*; *parallela* p. 19, *brevior* p. 20, *lutzi* p. 25, *wyomingensis* p. 27 spp. n., U.S.A., MICHENER Amer. Mus. Nov. no. 875.—*O. uncinata* p. 39, *erecta* p. 40, *alta*, *elongata* p. 41, *occidentalis* p. 42, *austromaritima* p. 43 spp. n.; *wardiana* subsp. n. *austromontana* p. 42 U.S.A. MICHENER Canad. Ent. 68.

Pachyanthidium carinaticeps sp. n. Cape Province p. 9; *severini* subsp. n. *maculiferum* S. Rhodesia, *abjunctum* Belgian Congo; *truncatum* subsp. n. *livingstonei* Tanganyika p. 10, COCKERELL Amer. Mus. Nov. no. 855.—*P. cordatum* subsp. n. *arnoldi* p. 147; *prionognathum* sp. n. p. 148 Bulawayo figs., MAVROMOUSTAKIS Ann. Transv. Mus. 18.—*P. lanificum* var. n. *simpsoni* Sierra Leone p. 47, MAVROMOUSTAKIS Ann. Mag. n.H. (10) 17.

Panurginus key to N. American spp. p. 275, *gracilis* p. 276, *gabrielis* p. 277 spp. n. U.S.A., MICHENER Canad. Ent. 67.—*P. maritimus* p. 178, *emarginatus*, *nigrihirtus* p. 179, *ceanothi* p. 180, spp. n. California, MICHENER Pan-Pacific Ent. 11.—*P. turcomanicus* sp. n. Askabad p. 2 figs., POPOV Folia zool. hydrobiol. 9.

Panurgus calcaratus larva, biology pp. 14–16 figs., MICHELI Atti Soc. ital. Sci. nat. 75.

Paracolletes opacior p. 446, *viridibasis* p. 447, *maritimus* p. 448, spp. n. N. Zealand, COCKERELL Ann. Mag. n.H. (10) 18.—*P. subminutus*, *submacrodonatus* spp. n. Rottneist I. p. 206 fig., RAYMENT J. roy. Soc. W. Aust. 20 1934.

Parafidelia cinerea sp. n. Bechuana-land p. 358; *pallidula* subsp. n. *incerta* S.W. Africa p. 481, COCKERELL Ann. Mag. n.H. (10) 17.

Paramacropis subgen. n. see *Macropis*.

Parammobatodes schmidtii sp. n. Austria p. 56, ALFKEN Zool. Anz. 114.

Poecilomelitta obscurata p. 478, *latifrons* p. 479, *robustula* p. 480, spp. n. S.W. Africa, COCKERELL Ann. Mag. n.H. (10) 17.

Pratobombus mearnsi subsp. n. *chekiangensis* p. 5; *reticulatus*, *yuennanicola* p. 7 spp. n. China, BISCHOFF Ark. Zool. 27A no. 38.

Prosopis spp. from Tadzhikistan and Turkmenia pp. 384-388, ALFKEN Veröff. dtsh. kol. Mus. Bremen 1.—*P. excelsa* sp. n. Persia p. 23, ALFKEN Mitt. ent. Ver. Bremen 23 1935.—*P. ikedai* sp. n. Bonin Is. p. 356 fig., YASUMATSU Trans. n.H. Soc. Formosa 26.—*P. nigricollis* ♂ p. 8; *sjoestedti* sp. n. China p. 9, ALFKEN Ark. Zool. 27A no. 37.—*P. stictifrons* p. 633, *clavigera* p. 634, spp. n. S. Africa, COCKERELL Ann. Mag. n.H. (10) 18.—*P. syriaca* p. 51, *trifida* p. 52 spp. n.; *hyalinata* var. *n. longimacula* p. 53 Lebanon, ALFKEN Konowia 15.

Prothanthidium ovatum p. 288, *rufobalteatum*, *rufomaculatum* p. 289 from *Dianthidium*, MAVROMOUSTAKIS Ann. Mag. n.H. (10) 18.

Proteriades tristes, *evansi* spp. n. California p. 92, MICHENER Bull. S. Calif. Acad. Sci. 35.

Protoxaea nigerrima subsp. n. *arizonica* Arizona p. 6, COCKERELL Amer. Mus. Nov. no. 831.

Psithyrus of Klapálek's collection pp. 200-203, POPOV Sborn. ent. odd. Nár. Mus. Praha 14.—*P. chinensis* subsp. n. *hönei* China p. 26, BISCHOFF Ark. Zool. 27A no. 38.—*P. rupestris* var. *solowievi* Kol. (= *r. hispanicus* Pérez) p. 159, POPOV Konowia 15.—*P. barbutellus* ff. n. *flavothoracica*, *nigrescens* p. 73; *maxillosus* f. n. *gilva* p. 74 Germany, MÜLLER Mitt. dtsh. ent. Ges. 6.—*P. chinganicus* sp. n. p. 8; *richardsi* subsp. n. *leucopygus* p. 9 Manchukuo, REINIG op. cit. 7.—*P. campestris* var. n. *swynnertoni* Scotland p. 110, RICHARDS Ent. mon. Mag. 72.

Puncticolletes subgen. n. see *Colletes*.

Raphidostoma gen. n. p. 133, *ceanothi* U.S.A. p. 134, COCKERELL Pan-Pacific Ent. 12.

Scapter clarissima p. 30, *flavitaris* p. 481, S. Africa, spp. n., COCKERELL Ann. Mag. n.H. (10) 17.

Sphecodes levicinctus sp. n. Bechuanaland p. 631, COCKERELL op. cit. (10) 18.—*S. arnoldi* ♂; *dilutus* Natal p. 4, *libericus* Liberia p. 6, spp. n. figs., COCKERELL Amer. Mus. Nov. no. 864.—*S. tadschicus* sp. n. Tadzhikistan p. 366, BLÜTHGEN Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Stelis ornatula larva p. 131, MICHELI Bol. Soc. venez. Stor. nat. 1 1935.

Systropha (*Systrophidia* subgen. n.) *ogilviei* sp. n. S.W. Africa p. 477, COCKERELL Ann. Mag. n.H. (10) 17.

Systrophidia subgen. n. see *Systropha*.

Tarsalia ancyliformis sp. n. Tadzhikistan p. 400 figs., POPOV Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Tetralonia orellanae p. 274, *herrerae* p. 275, spp. n. Chile, RUTZ Rev. chil. H.n. 39.—*T. cuniculina* and allied spp. p. 295, ALFIERI Bull. Soc. ent. Egypte 20.—*T. nudicauda* S.W. Africa p. 557, *cinctula* p. 558, *bechuanica* p. 559 Bechuanaland, spp. n., COCKERELL Ann. Mag. n.H. (10) 18.

Thaumatosoma fliferum sp. n. Cape Province p. 482, COCKERELL op. cit. (10) 17.

Thrinchostoma undulatum Belgian Congo p. 7, *umtaliense* S. Rhodesia p. 8, spp. n., COCKERELL Amer. Mus. Nov. no. 864.

Titusella clypeata sp. n. California; *cubiceps* Cress. (= *pronitens* Ckll.) p. 93, MICHENER Bull. S. Calif. Acad. Sci. 35.

Townsendiella californica sp. n. California p. 181, MICHENER Ent. News 47.

Trypoxylon politiforme nest building p. 44, FATTIG Canad. Ent. 68.

Turnerella glauerti sp. n. Rottneest I. p. 202 fig., RAYMENT J. roy. Soc. W. Aust. 20 1934.

Xylocopa pavlovskyi sp. n. Tadzhikistan p. 395 figs., POPOV Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*X. tarsata* subsp. n. *oblita* p. 26; *sicheli* subsp. n. *gordonica* p. 27 S. Africa, COCKERELL Ann. Mag. n.H. (10) 17.—*X. attenuata* var. n. *omeiana* China p. 468, MA Ent. & Phytopath. 4.

Zacesta see *Hesperapis*.

Sphecoidea.

SPHEGIDAE (*s.l.*).

Sphegidae collected in Brussels and Ostend, BONDROIT Ann. Soc. zool. Belg. 64 1934 pp. 59-65, 2 figs.

Sphegids of Creusot, DULAC Bull. Soc. Hist. nat. Creusot 1 1932-33 pp. 39-41.

Sphecoidea of Tadjikistan, GUSSAKOVSKIĬ Trud. Tadjik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935 pp. 411-463.

Biology and morphology of Sphegidae of Chile, JOSEPH An. Univ. Chile (2) 4 1926 pp. 5-69, 15 figs.

Biological notes on some solitary wasps, KROMBEIN Ent. News 47 pp. 93-99.

Habits of male Sphegids, MINKIEWICZ Polsk. Pismo ent. 13 pp. 1-20, 1 fig.

Ampulicidae of the Japanese Empire, YASUMATSU Tenthredo 1 pp. 165-232, 13 pls.

Larridae from Solomon Is., WILLIAMS Ann. Mag. n.H. (10) 18 pp. 124-130, 6 figs.

Ammophila nigriventris p. 5, *sjöstedti* p. 6, spp. n. China, GUSSAKOVSKIĬ Ark. Zool. 27A (sep. dated 1934) no. 21.—*A. infesta* habits pp. 121-139 figs. [in Japanese], IWATA Kontyû 10.

Ampulex esakii p. 179, *sonani* p. 183, *takeuchii* p. 195, *satoi* p. 204, *kurarensis* p. 208, spp. n. Japan figs., YASUMATSU Tenthredo 1.

Ancistromma asiaticum p. 429, *shestakovi* p. 431, spp. n. Centr. Asia figs., GUSSAKOVSKIĬ Trud. Tadjik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Anomiopteryx gen. n. p. 418, *paradoxa* sp. n. Bukhara p. 420 figs., GUSSAKOVSKIĬ t.c.

Arpactus browni p. 540, *guttatulus* p. 541, spp. n. Australia figs., TURNER Ann. Mag. n.H. (10) 18.—*A. liberiensis* Liberia p. 6, *callipe* Belgian Congo p. 8, *melpomene* S. Rhodesia p. 9, *decipiens* p. 11, *pretoriensis* p. 12, *gibbosus* p. 14 S. Africa spp. n.; *umtalicus* ♂ p. 10 figs., ARNOLD Occ. Pap. Rhod. Mus. no. 5.

Astatus boops habits pp. 19-35 figs., PIEL Notes Ent. chinoise, Mus. Heude 3.

Belomicrus rufiventris p. 30, *minutissimus* p. 31, *crassus* p. 32, spp. n. S. Africa figs., ARNOLD Occ. Pap. Rhod. Mus. no. 5.—*B. franciscus* habits p. 3 figs., WILLIAMS Pan-Pacific Ent. 12.—*B. excisus* sp. n. Centr. Asia p. 437, GUSSAKOVSKIĬ Trud. Tadjik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Bembicinus asiaticus sp. n. Centr. Asia p. 441, GUSSAKOVSKIĬ t.c.

Bembix niponica habits p. 244 [in Japanese] figs., IWATA Kontyû 10.—*B. nigropectinatus* sp. n. Australia p. 538 fig., TURNER Ann. Mag. n.H. (10) 18.

Bicyrtes cisandina Argentina p. 219, *oribates* Mexico p. 220, spp. n., PATE Rev. Ent. Rio de J. 6.

Cerceris kansuensis sp. n. China p. 13, GUSSAKOVSKIĬ Ark. Zool. 27A (sep. dated 1934) no. 21.—*C. dedariensis* p. 534, *adae* p. 535, *merredinensis* p. 536, *raymenti* p. 537 spp. n.; *armigera* subsp. n. *rufofusca* p. 538 Australia, TURNER Ann. Mag. n.H. (10) 18.—*C. formosana* further description p. 495; *sobo* sp. n. Japan p. 497 fig., YASUMATSU & OKABE Festschr. E. Strand 1.—*C. spectrum* p. 1, *ulcerosa* p. 4, spp. n. S. Rhodesia figs., ARNOLD Occ. Pap. Rhod. Mus. no. 5.

Chlorion subfuscum r. n. *rhodesianum* S. Rhodesia p. 28, ARNOLD t.c.

Crabro chinensis sp. n. China p. 11 figs., GUSSAKOVSKIĬ Ark. Zool. 27A (sep. dated 1934) no. 21.—*C. jungi* sp. n. p. 469 (with var. n. *quinquemaculatus* p. 470) China, MA Ent. & Phytopath. 4.

Diodontus puncticeps sp. n. Bukhara p. 417, GUSSAKOVSKIĬ Trud. Tadjik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Encopognathus (*Rhectognathus* subgen. n. p. 147) *pectinatus* sp. n. California p. 148, PATE Ent. News 47.

Gastrosericus errans n. sp. W. Australia p. 544, TURNER Ann. Mag. n.H. (10) 18.

Harpactophilus steindachneri r. n. *deserticolus* Australia p. 534, TURNER t.c.

Hoplisoides (*Psammaletes* subgen. n. p. 49) key to subgen. p. 51, *pechumani* sp. n. New York p. 53; *crusis* Ckll. & Fox (= *venustus* Mickel) p. 56, PATE Trans. Amer. ent. Soc. 62.

Hoplisus latifrons biology p. 20 fig., MANEVAL Rev. franç. Ent. 2.

Liris corniger sp. n. Solomon Is. p. 126 figs., WILLIAMS Ann. Mag. n.H. (10) 18.

Lyroda minima sp. n. W. Australia p. 545, TURNER Ann. Mag. n.H. (10) 18.

Microglossella see *Spilomena*.

Mimesa key to Belgian and Swiss spp. p. 63 figs., BONDROIT Ann. Soc. Belg. 64 1934.—*M. kohli* sp. n. China p. 7, GUSSAKOVSKIĖ Ark. Zool. 27A, (sep. dated 1934) no. 21.

Miscophus eximus sp. n. China p. 9, GUSSAKOVSKIĖ t.c.—*M. hissaricus, montanus* spp. n. Centr. Asia p. 422 figs., GUSSAKOVSKIĖ Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Nippononysson gen. n. p. 501, *rufopictus* sp. n. Japan p. 502 figs., YASUMATSU & MAIDL Festschr. E. Strand 1.

Nothosphecus subgen. n. see *Sphecus*.

Notogonidea pompiliformis Pz. (= *Larra confusa* Rad.) p. 621, BEAUMONT Rev. suisse Zool. 43.

Nysson porteri sp. n. Chile p. 274, RUIZ Rev. chil. H.n. 39.

Oxybelus spinulosus Turkestan p. 434, *subtilis* Centr. Asia p. 436, spp. n. fig., GUSSAKOVSKIĖ Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*O. bechuanae* sp. n. Bechuana-land p. 33 figs., ARNOLD Occ. Pap. Rhod. Mus. no. 5.—*O. quadrinotatus* var. *montanus* habits p. 1, WILLIAMS Pan-Pacific Ent. 12.

Pavlovskia gen. n. p. 424, *tadzhika* sp. n. Bukhara p. 425 figs., GUSSAKOVSKIĖ Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Pemphredon flavistigma ♂ p. 120 figs., MERISUO Ann. ent. fenn. 2.

Philanthus arnoldi sp. n. Niger p. 278 fig., BERLAND Ann. Soc. ent. Fr. 105.—

P. triangulum morphology, biology pp. 41–49 figs., PELTZER Natur am Niederrhein 12.

Pison key to spp. from Japan, Ussuri Region, China p. 228, *strandii* p. 231, *iwatai* p. 233 Japan, *tosawai* Bonin Is. p. 234, spp. n. figs., YASUMATSU Annot. zool. jap. 15 1935.

Podalonia violaceipennis habits p. 137, BALDUF Canad. Ent. 68.

Prosopigastra gigantea sp. n. Bukhara p. 427 fig., GUSSAKOVSKIĖ Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Psammolestes subgen. n. see *Hoplisoides*.

Psen hissaricus sp. n. Centr. Asia p. 416, GUSSAKOVSKIĖ Trud. Tadzika Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Rhectognathus subgen. n. see *Encopognathus*.

Sceliphron tubifex biology pp. 41–54 [in Japanese] figs., KATAYAMA & IKUSHIMA Trans. Kansai ent. Soc. no. 6 1935.—*S. turanicum* sp. n. Centr. Asia, Persia p. 414 fig., GUSSAKOVSKIĖ Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*S. destillatorius* habits, nest pp. 298–308 figs., MAZEK-FIALLA Z. wiss. Zool. 148.

Sericophorus aliceae sp. n. W. Australia p. 542, TURNER Ann. Mag. n.H. (10) 18.

Sphecus (*Nothosphecus* subgen. n. p. 199), PATE Bull. Brooklyn ent. Soc. 31.—*S. speciosus* habits p. 421, HARTZELL Contr. Boyce Thompson Inst. 7 1935.

Sphex habits, Japan pp. 163–187 [in Japanese] figs., IWATA Kontyû 10.—*S. funerarius* sp. n. China p. 3, GUSSAKOVSKIĖ Ark. Zool. 27A (sep. dated 1934) no. 21.

Spilomena Shuck. (= *Microglossella* Raym.), *luteiventris* sp. n. Queensland p. 533, TURNER Ann. Mag. n.H. (10) 18.

Stizus eugeniae sp. n. Centr. Asia p. 438, GUSSAKOVSKIĖ Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*S. eximius* p. 15, *stevensoni* p. 25 S. Rhodesia, *breyeri* p. 18, *kobrowi* p. 19, *karooensis* p. 20 (with r. n. *atratus* p. 22), *solitarius* p. 23, *flavopictus* p. 24 S. Africa spp. n.; *imperialis* r. n. *tulbaghensis* p. 17;

boer var. n. *willowmorensis* p. 27 S. Africa; *haemorrhoidalis* var. n. *chirindensis* S. Rhodesia p. 26 figs., ARNOLD Occ. Pap. Rhod. Mus. no. 5.—*S. japonicus*, *formosanus* habits pp. 236–244 [in Japanese] figs., IWATA Kontyû 10.

Tachysphex French spp. pp. 177–212, key p. 184, *denisi* sp. n. France p. 197 figs., DE BEAUMONT Ann. Soc. ent. Fr. 105.—*T. fluctuatus* biology pp. 355–368, CROS t.c.—*T. stachi* sp. n. Caucasasia p. 618 figs., BEAUMONT Rev. suisse Zool. 43.

Tachytella aureopilosa r. n. *nana* Cape Province p. 29, ARNOLD Occ. Pap. Rhod. Mus. no. 5.

Tachytes radoszkowskii sp. n. Trans Caspia p. 606 figs., BEAUMONT Res. suisse Zool. 43.

Thyreopus stvensoni r. n. *fraternus* S. Rhodesia p. 29, ARNOLD Occ. Pap. Rhod. Mus. no. 5.

Tracheloides hicksi sp. n. Colorado p. 2, SANDHOUSE Ent. News 47; *T.* hunting ants pp. 4–7, HICKS Ent. News 47.

Trypoxylon nesting habits pp. 111–115 figs., FITZGERALD Proc. R. ent. Soc. Lond. (A) 11.—*T.* revision of Palaearctic spp. pp. 639–667, *chinense* China p. 648, *arabicum* Arabia p. 649, *sulcifrons* p. 654, *turkestanicum* p. 656 Centr. Asia, *carinifrons* Heptapotamia p. 657, *eugeniae* Turkestan p. 658, *fronticorne* Europe, Siberia, etc. p. 659, *rubiginosum* Caucasus p. 662, spp. n. figs., GUSSAKOVSKIÏ Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.—*T. figulus*, *clavicerum*, *attenuatum* ethology life-histories pp. 373–396 figs., MARÉCHAL Bull. Ann. Soc. ent. Belg. 76.—*T. chirindensis* sp. n. S. Rhodesia p. 35 figs., ARNOLD Occ. Pap. Rhod. Mus. no. 5.—*T. nitidum* var. n. *schulthessi* p. 457; *schmidtii* p. 460 Costa Rica, *wheeleri* Panama p. 459 spp. n.; *suffrigidum* Rohw. (= *nigrellum* Rohw.) p. 463, RICHARDS Ann. Mag. n.H. (10) 18.

Zoypium tuberculatum sp. n. W. Australia p. 543, TURNER Ann. Mag. n.H. (10) 18.

Vespoidea.

BETHYLIDAE (including DRYINIDAE).

The Cameron collection of Dryinidae in Brit. Mus. (Nat. Hist.), RICHARDS Ann. Mag. n.H. (10) 18 pp. 463–467.

Aphelopus typhlocybae sp. n. New York p. 167, MUESEBECK Proc. ent. Soc. Wash. 37.

Cephaloderma subgen. n. see *Cephalonomia*.

Cephalonomia destructrix sp. n. Tashkent p. 229 fig., GUSSAKOVSKIÏ Rev. Ent. U.R.S.S. 25 1935.—*C. (Cephaloderma) strandi* sp. n. France p. 460 fig., HOFFER Festschr. E. Strand 1.—*C. formiciformis* Westw. (= *polypori* Foerst.) p. 170, RICHARDS Proc. R. ent. Soc. Lond. (B) 5.

Chelogygnus berlandi n. n. for *angusticollis* Berl. nec Ogloblin p. 169, RICHARDS t.c.

Dicondylus (= *Laberius* Kieff.), *oratorius* Westw. from *Gonatopus* p. 169, RICHARDS t.c.

Epyris fraternus Westw. (= *saevus* Westw.) p. 110, RICHARDS t.c.

Gonatopus pilosus Thoms. British records transferred to *sepsoides* Westw. p. 169, RICHARDS t.c.—*G. oratorius* see *Dicondylus*.

Laberius see *Dicondylus*.

Lestodryinus (Dryinid) *gregori* sp. n. Czechoslovakia p. 164 fig., HOFFER Sborn. ent. odd. Nár. Mus. Praha 14.

Mesitius zavadii sp. n. p. 120; *cursor* var. n. *picardi*; *fuscicornis* var. n. *moravica* p. 123 Czechoslovakia figs., HOFFER Acta Soc. ent. Csl. 33.

SCOLIIDAE (including TIPHIIDAE).

Catalogue of Tiphidae, HEDICKE Hym. Cat. 1 32 pp.

Campsomeris pocillator p. 12, *minutalis* p. 13 Madagascar, *fax* Mauritius p. 14, *rodriguezensis* Rodriguez I. p. 17, spp. n. figs., BRADLEY Proc. R. ent. Soc. Lond. (B) 5.

Scolia yasumatsui sp. n. Japan p. 85 fig., UCHIDA Ins. mats. 10.—*S. turanica* n. n. for *vollenhovi* Sauss. 1880 nec 1859 p. 455; *variabilis* sp. n. Centr. Asia p. 457, GUSSAKOVSKIÏ Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Tiphia flagellaria sp. n. Bukhara p. 458, GUSSAKOVSKIĭ t.c.—*T. minutostriata* p. 461, wangpeisunana p. 462, spp. n. China, MA Lingnan Sci. J. 15.

SAPYGIDAE.

Polochrum koreanum sp. n. Korea p. 124 figs., SUGIHARA & KIM Ins. mats. 10.

MUTILLIDAE (including
METHOCIDAE, MYRMOSIDAE).

Mutillidae of Czechoslovakia, HOFFER Sborn. Kl. přír. Brně 18 pp. 63–65.

Mutillids of Italian Sahara, INVREA Boll. Soc. ent. ital. 67 1935 pp. 119–120.

Anomutilla gen. n., *difficilis* sp. n. Idaho p. 295, MICKEL Ann. ent. Soc. Amer. 29.

Apterogyna bampura 283, *appropinqua* (*Gynecaptera* subgen. n.), *trimaculata* p. 284, spp. n. Centr. Asia, SKORIKOV Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Craspedopyga subgen. n. see *Dasylabris*.

Dasylabris key p. 293 (*Craspedopyga* subgen. n. p. 304), *caecia*, *pavlovskii* p. 293, *argyroloma*, *kiritshenkoi*, *gobicola*, *kozlovi*, *bergi* p. 294, *exarenaria* (with var. n. *algira*), *turana* p. 296, *duplicolor*, *juxtarenaria* p. 297, *jacobsoni*, *scutula*, *stenothoracica* (with var. n. *paupera*, *nigripica*, *armenica*), *gussakovskii* p. 298, *zimini*, *mauroopsis* p. 299 spp. n.; *maura* subspp. n. *nostras*, *infusata*, *argentata*, *quinquemaculata*, *argyrauxa*, *consueta*, *tricincta* p. 296; *sibirica* var. n. *incompleta*, *intermedia* p. 295, *insignata* p. 294; *italica* var. n. *miogramma*, *popovi*, *triangulomaculata*, *adversa*; *ornata* var. n. *paupertina*, *armenica ditiescens*; *sarafschanii* var. n. *bucharensis*, *argyronota*; *mixta* var. n. *cirrata*; *desertorum* var. n. *deficiens* Centr. Asia, SKORIKOV Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Dasymutilla revision of Nearctic spp. pp. 29–60, key p. 29, *dawsoni* p. 40, *beameri* p. 48, *parksii* p. 50, *hersilia* p. 51, *klugioidea* p. 54, *hispidaria* p. 55, *asteria* p. 57 spp. n.; *nitidula* var. n. *nigridia* p. 47; *arenivaga* var. n. *unicolor* p. 59 U.S.A.; *nigripes* F. (= *sparsa* Fox and var. *segregata* Roh.) p. 43; *stevensi* Mick. ♀ (= *medora*

Mick. ♂) p. 44; *melanippe* Mick. (= *lauta* Mick.) p. 46; *gloriosa* Sauss. (= *reperticia* Mick.) p. 56 figs., MICKEL Ann. ent. Soc. Amer. 29.—*D. albiceris* p. 91, *atricauda* p. 92, *dammersi* p. 94, spp. n. California, MICKEL Pan-Pacific Ent. 12.

Ephutomma cithara, *orthophthalma*, *baktriana*, *armeniaca*, *irana* p. 322, *brachythorax*, *schachruda* (with var. n. *robusta* p. 324), *selevkida* p. 323, *radoszkovskii* p. 325 spp. n.; *incerta* var. n. *rufothoracica* p. 323 Central Asia, SKORIKOV Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Gynecaptera subgen. n. see *Apterogyna*.

Lomachaeta gen. n., *hicksi* (type) p. 289, *coloradensis* p. 292, *punctinota* p. 293, *minuta* p. 294, spp. n. U.S.A., MICKEL Ann. ent. Soc. Amer. 29.

Methoca yasumatsui sp. n. Japan p. 58, y. and *japonica* biology pp. 60–87 figs., IWATA Kontyû 10.

Myrmilla medoides, *longocapitata* p. 286, *variola*, *kumakana*, *tenuitruncata* p. 288, *shnitnikovi*, *propodealis* p. 289, spp. n. Centr. Asia, SKORIKOV Trud. Tadzhiik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Myrmosa myrmillicephalata sp. n. Bukhara p. 286, SKORIKOV t.c.

Promecilla primana sp. n. Centr. Asia p. 321, SKORIKOV t.c.

Pseudophotopsis key p. 290, *pavlovskii* var. n. *melanocephala* p. 291; *komarovi* subsp. n. *zarudnyi* p. 292, SKORIKOV t.c.

Smicromyrme semenovi, *angustata* p. 312, *sabulicola*, *sabulosa*, *rufocapita* p. 313, *immaculata*, *tekensis*, *baigakuma* p. 314, *kurda* (with subsp. n.), *subtunensis*, *kiritshenkoae*, *ambigua*, *gracilis*, *kuznetzovi* p. 315, *simia*, *persa* p. 316 spp. n.; *curtiventris* var. n. *nigrocapitata* p. 317; *rufipes* var. n. *nigricollaris* (Russia, E. Siberia) p. 318; *viduata* var. n. *aurantiaca*, *andalusiana* (Andalusia), *protunensis* p. 319 Centr. Asia, SKORIKOV t.c.—*S. yasumatsui* sp. n. Japan p. 52, MICKEL Mushi 9.—*S. pouzdranensis* sp. n. p. 157; *punctata* subsp. n. *pseudomontana* p. 161; *montana* ff. n. *moravica*, *susterai*; *subcommata* f. n. *nigricollis*; *pusilla* subsp. n. *septentrionalis* p. 162, f. n. *gregori* p. 163 Czechoslovakia, HOFFER Acta Soc. ent. Cech. 33.

Stenomutilla shelkovnikovi, carinata, angustisquama, tetrazonia (with *ferugineocapitata* p. 309), *choresmiensis* (with *var. n. infusca*) p. 310 spp. n. Centr. Asia, SKORIKOV Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*S. freyi* life-history, morphology pp. 313–316 figs., SEYRIG Livre jubil. Bouvier 1936.

Timulla pustulata ♀ p. 358, YASUMATSU Trans. n.H. Soc. Formosa 26.

POMPILIDAE (PSAMMOCHARIDAE).

Revision of Pompilidae of Ethiopian region, v, vi, ARNOLD Ann. Transv. Mus. 18 pp. 73–123, 415–460, 77 figs.

Revision of Psammocharidae of N. Carolina, BRIMLEY J. Elisha Mitchell sci. Soc. 52 pp. 107–131, 3 figs.

Psammocharidae of Italy, IV, HAUPT Boll. Ist. Ent. Univ. Bologna 8 pp. 150–168, 9 figs.

Nests of Pompilids, MINKIEWICZ Polsk. Pismo ent. 13 pp. 43–60, 1 pl.

Pompilidae of Chile, RUIZ Rev. chil. H.n. 37 1933 pp. 209–218, 1 pl.

Aeluropetrus gen. n. p. 120, *lugubris* (type) Cape Province p. 121, *braunsi* Algoa Bay p. 122 spp. n. figs., ARNOLD Ann. Transv. Mus. 18.

Afropompilus subgen. n. see *Tachypompilus*.

Anoplius zimini sp. n. Bukhara p. 453, GUSSAKOVSKI Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*A. eous* p. 25, *marginipennis* p. 27, spp. n. Japan figs., YASUMATSU Mushi 9.—*A. marginipennis* biology pp. 30–32 figs., IWATA t.c.

Aulocostethus haupti sp. n. Brazil p. 514 figs., ARLE Festschr. E. Strand 1.

Bambesa gen. n. p. 421, *grisea* sp. n. Belgian Congo p. 422 figs., ARNOLD Ann. Transv. Mus. 18.

Ceropales pygmaeus ♂ ♀ p. 167, BERNARD Bull. Soc. ent. Fr. 41.

Cryptochilus popovi sp. n. Bukhara p. 447, GUSSAKOVSKI Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*C. affinis* larva p. 23 figs., MANEVAL Rev. franç. Ent. 3.—*C. versicolor* f. n. *remorata* Italy p. 155, HAUPT Boll. Ist. Ent. Univ. Bologna 8.

Deuteragenia faggioli sp. n. Italy p. 153 fig., HAUPT t.c.

Dromochares clavipennis S. Rhodesia p. 93, *transvaalensis* p. 95, *rufipes* Transvaal, *fumipennis* Natal p. 96, spp. n. figs., ARNOLD Ann. Transv. Mus. 18.

Episyron histrio r. n. *aeneipennis* Mt. Kenya p. 451; *braunsi* p. 453, *viduus* p. 458 Cape Province, *tropicalis* p. 453, *crassicornis* Belgian Congo (with *var. n. ugandensis* Uganda) p. 457, *turneri* Natal p. 455, *bequaerti* p. 456, *pedunculatus* p. 459 Liberia (with *var. n. junodi* Transvaal p. 460), *argillaceus* N. Rhodesia p. 458, spp. n. figs., ARNOLD t.c.

Hadropompilus montanus sp. n. Cape Province p. 114, ARNOLD t.c.

Hemipepsis turneri sp. n. Cape Province p. 109 fig., ARNOLD t.c.

Homonotus iwatei biology pp. 60–72 [in Japanese] figs., YASUMATSU Trans. Kansai ent. Soc. no. 6 1935.—*H. sanguinolentus* biology pp. 385–404 figs., NIELSEN Ent. Medd. 19.

Idopompilus gracilicornis p. 79, *kohli* p. 80, *handlirschii* p. 81, *brunnescens* p. 82 Cape Province, *algoensis* p. 83 (with *var. n. major* p. 84), *angusticollis* Algoa Bay, (*Tomonotulus* subgen. n.) *quadrifasciatus* Bulawayo p. 85, spp. n. figs., ARNOLD Ann. Transv. Mus. 18.

Parabatozonus gen. n. for *Pompilus hakodadi* D.T. p. 23 fig., YASUMATSU Mushi 9.

Paracyphononyx laboriosus Orange Free State, *gemellus* Zululand, spp. n. p. 438 figs., ARNOLD Ann. Transv. Mus. 18.

Pompiloides latifrons p. 417, *decipiens* p. 418, *trifasciatus* p. 419, *validus* p. 420, spp. n. S. Africa figs., ARNOLD t.c.

Pompilus hakodadi see *Parabatozonus*.

Priocnemis longipes var. n. *monticola*; *clypeatus* p. 110, *varicolor* p. 111, *fumipennis* p. 112 Cape Province, *bidentatus*, spp. n.; *magnificus* ♂ S. Rhodesia p. 113 figs., ARNOLD t.c.—*P. alticola* p. 448, *brachypterus* p. 449, spp. n. Bukhara figs., GUSSAKOVSKI Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*P. pumilus* sp. n. Italy p. 164 figs., HAUPT Boll. Ist. Ent. Univ. Bologna 8.

Psammochares clericalis in S. Manchuria p. 9 fig., YASUMATSU & NARISADA Mushi 9.—*P. tebemi* sp. n. N. Carolina p. 127, BRIMLEY J. Elisha Mitchell sci. Soc. 52.

Pseudagenia cinnamomea Kamerun, *trisinuata* p. 116, *sankuruensis* p. 117, *paupercula* p. 118, *cana* p. 119 Belgian Congo, *lacustris* Tanganyika p. 118, spp. n.; *flavotegulata* r. n. *gaudens* Belgian Congo p. 119 figs., ARNOLD Ann. Transv. Mus. 18.

Pseudoclavelia willowmorensis, *rufescens* Cape Province p. 88, *rhodesiana* S. Rhodesia, *nitidula* p. 90, *damarensis* p. 92 S.W. Africa, spp. n. figs., ARNOLD t.c.

Salix whiteanus see *Trichosalix*.

Spuridiophorus turneri Cape Province p. 101, *maculipennis* Bulawayo p. 102 (with r. n. *karrooensis* Cape Province p. 103), spp. n. figs., ARNOLD Ann. Transv. Mus. 18.

Tachypompilus, *Afropompilus* subgen. n. p. 107, ARNOLD t.c.

Tomonotulus subgen. n. see *Idopompilus*.

Trichosalix whiteanus from *Salix* p. 115, ARNOLD Ann. Transv. Mus. 18.

Wesmaelinus sanguinolentus larva p. 26 figs., MANEVAL Rev. franç. Ent. 3.

VESPIDAE (including MASARIDAE, EUMENIDAE).

Vespidae of Mozambique, GIORDANI SOIKA Mem. Mus. zool. Univ. Coimbra (I) no. 82 1935 18 pp. 3 figs.

Bibliographic and synonymic catalogue of Chinese Vespidae, LIU Peking n.H. Bull. 11 pp. 91-114.

Vespinæ and Eumenidinae of Charco, SCHULTHESS-SCHINDLER Kono-wia 15 pp. 176-179.

Alastor (Eumenid) *oliveri* sp. n. Chile p. 158, RUIZ Rev. chil. H.n. 37 1933.

Ancistrocerus revision of Ethiopian spp. pp. 32-45, key p. 32, *nitidissimus* sp. n. S. Rhodesia p. 39; *lineaticollis* var. n. *stevensoni* E. Griqualand p. 42; *maculiscapus*, *striativentris* ♀♀ p. 43, *massaicus* ♂ p. 37; *egidae* sp. n. Sudan p. 234; corrigenda to supplement p. 236 figs., GIORDANI SOIKA Rev. franç. Ent. 3.

Discoelius priesneri sp. n. Austria p. 261, MADER Ent. Z. 50.

Eumenes tadzhicorum sp. n. Bukhara p. 464 figs., GUSSAKOVSKI Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.—*E. maxillosus* instincts pp. 6-14 figs., de LÉPINEY Bull. Soc. Sci. nat. Maroc 16.

Odynerus lesnei sp. n. Zambesi p. 6 figs., GIORDANI SOIKA Mem. Mus. zool. Univ. Coimbra (I) no. 82 1935.—*O. tempiferus* var. n. *macio* p. 81; *pratensis* var. n. *brumalis* p. 86 U.S.A., BEQUAERT Proc. U.S. nat. Mus. 84.—*O. tempiferus* var. *macio* nest, habits pp. 89-95, CLARK & SANDHOUSE Proc. U.S. nat. Mus. 84.—*O. egregius* var. n. *discosignatus* N. Italy p. 275; *floricola* ab. n. *immaculata* Croatia; *spinipes* ab. n. *flaviscapus* no locality p. 276, MADER Ent. Z. 50.—*O. difformis* see *Pseudonortonia*.

Paragia (Masarid) *schulthessi* sp. n. W. Australia p. 352, TURNER Ann. Mag. n.H. (10) 18.

Paravespa gen. n. p. 806, *eva* sp. n. India p. 803 fig., BELL J. Bombay n.H. Soc. 38.

Polistes carnifex colour variation pp. 376-383 (with var. n. *boliviensis* Bolivia p. 381), BEQUAERT Rev. Ent. Rio de J. 6.—*P. gallicus* variation in larva pp. 133-138 figs., PELTREIRA Boll. Soc. ent. ital. 67 1935.—*P. major* characters p. 8, var. n. *palmarum* p. 11, *castaneicolor* p. 12 U.S.A., BEQUAERT Ent. News 47.—*P. foederata* ab. n. *obscuricornis* N. Italy p. 263, MADER Ent. Z. 50.

Polybia scutellaris, nests, habits pp. 125-135 figs., BRUCH Rev. Soc. Argent. Ci. nat. 12.—*P. atra* life-history pp. 1-51 figs., HASE S.B. Ges. naturf. Fr. Berl. 1936.

Provespa morphology pp. 159-162, key p. 162 figs., VAN DER VECHT J. F.M.S. Mus. 13.

Pseudochilus characters, *asmarensis* sp. n. Eritrea p. 63; *glabripalpis* Sauss. (= *adonis* M.W.) p. 67 figs., GIORDANI SOIKA Ann. Mus. Genova 59.

Pseudonortonia gen. n. type *Odynerus difformis* Sauss.; *arnoldi* S. Rhodesia p. 268, *aurantiaca* S. Africa p. 271 spp. n. figs., GIORDANI SOIKA t.c.

Pterochilus (Eumenid) *eckloni* in S. Manchuria p. 10 fig., YASUMATSU & NARISADA Mushi 9.

Quartinia (Masarid) *popovi* sp. n.
Centr. Asia p. 466 fig., GUSSAKOVSKIĬ
Trud. Tadzhik Sect. Acad. Sci. S.S.R.
5 (Zool. & Parasit.) 1935.

Raphiglossoides gen. n. (Eumenid),
aethiopicus sp. n. Namaqualand p. 77
figs., GIORDANI SOIKA Boll. Soc. ent.
ital. 68.

Vespa tropica characters p. 333
key to color ff. p. 353, *varr. n. haematodes*
India p. 338, *anthracina* Philippines p.
341, *loochooensis* Loo-Choo p. 343;
affinis characters p. 345 key to ff. p.
346, *varr. n. hainensis* Hainan p. 349,
continentalis India p. 350, figs.,
BEQUAERT *Treubia* 15.—*V. vulgaris*,
germanica habits pp. 88–90, SANDEMAN
Proc. R. ent. Soc. Lond. (A) 11.—*V.*
matsumurai p. 370, *esakii* p. 371, *spp. n.*
Japan figs., SONAN Trans. n.H. Soc.
Formosa 25 1935.—*V. bicolor* p. 6,
germanica f. *flaviceps* p. 8 notes [in
Chinese] figs., MA Ent. & Phytopath.
4.—*V. vulgaris* habits pp. 6–8, NIXON
Ent. mon. Mag. 72.

Vespula maculata habits p. 138,
BALDUF Canad. Ent. 68.

Chrysididae.

CHRYSIDIDAE.

Chrysididae of Czechoslovakia,
HOFFER Sborn. přir. Společ. mor.
Ostravě 8 pp. 41–47.

Ecological notes on Chrysidids,
HOFFER Acta Soc. ent. Cech. 33
p. 170.

Chrysidids of Cyprus, INVREA Boll.
Soc. ent. ital. 67 1935 pp. 102–106.

Chrysididae collected in Czecho-
slovakia 1934–35, SPAČEK Folia zool.
hydrobiol. 9 p. 166.

Chrysididae in Tosa Province [in
Japanese], SUGIHARA Trans. Kansai
ent. Soc. n. 6 1935 pp. 31–34.

Chrysis shanghaiensis morphology,
biology pp. 449–458 figs., PARKER J.
agric. Res. 52.—*C. succincta albanica*
Tr. (= *s. pannonica* Hoffm.) p. 277;
leachi ab. n. *auriceps* N. Italy; *groh-*
manni cyanicolor n. n. for *g. cyanea* Tr.
nec L. p. 288, MADER Ent. Z. 50.

Duckeia gen. n. p. 174, *cyanea* sp. n.
Brazil p. 175 figs., DA COSTA LIMA
Livres jubil. Bouvier 1936.

Hedychrum rutilans larva p. 19 figs.,
MANEVAL Rev. franç. Ent. 3.

Formicoidea.

FORMICIDAE.

Formicids of Bulgaria, II, ATANASSOV
Mitt. bulg. ent. Ges. 9 pp. 211–236.

Annotated list of ants of Idaho,
COLE Canad. Ent. 68 pp. 34–39.

Biology of Formicids of Piedmont,
DELLA BEFFA Boll. Lab. sper. Oss.
Fitopat. Torino 12 1935 pp. 149–161.

Ants of the Azores, DONISTHORPE
Ent. mon. Mag. 72 pp. 130–133.

Ecological studies on S. Brazilian
ants, EIDMANN Arb. physiol. angew.
Ent. 3 pp. 26–48, 81–114, 1 pl. 5 figs.

Formicids of Egypt and Sinai, FINZI
Bull. Soc. ent. Egypte 20 pp. 155–210,
12 figs.

Ant fauna of E. Baltic high moors,
JACOBSON Folia zool. hydrobiol. 9 pp.
143–165.

Formicids of Ukraine, KARAVAJEV
Trav. Inst. Zool. Biol. Akad. Sci.
Ukraine (1) pp. 1–162 (1934), pp. 163–
316 (1936), 68 figs.

Formicidae of Italian Aegean Is.,
MENOZZI Boll. Lab. Zool. Portici 29
pp. 262–311, 19 figs.

List of ants of Cyrenaica, MENOZZI
Atti Soc. Nat. Mat. Modena 65 pp.
157–166.

Behaviour of certain ants in St. Louis
County, RAU Trans. Acad. Sci. St.
Louis 28 1934 pp. 207–215.

List of ants of Transbaikalia, RUZSKIĬ
Trav. Inst. sci. Biol. Tomsk 2 pp. 89–
97.

A list of the ants of Texas, SMITH J.
N.Y. ent. Soc. 44 pp. 155–176.

Experiments with colonies of Myrmi-
cinae, WEBER Mitt. schweiz. ent. Ges.
16 pp. 684–691.

Lists of termitolestic and of inquiline
ants from termitaries, WHEELER Proc.
Amer. Acad. Arts Sci. 71 pp. 219–235.

Annotated list of ants of Haiti,
WHEELER Bull. Mus. comp. Zool.
Harv. 80 pp. 193–211.

Ants of Rottnest I., Australia,
WHEELER J. roy. Soc. W. Aust. 20
1934 pp. 137–163.

Acantholepis frauenfeldi *varr. n.*
aegyptiaca Egypt p. 184, *opaciventris*
Sinai p. 187 figs., FINZI Bull. Soc. ent.
Egypte 20.

Acromyrmex gallardoi sp. n. Argentina p. 411, SANTSCHI Rev. Ent. Rio de J. 6.

Acropyga robae sp. n. Colombia p. 108, list of neotropical spp. of subgen. *Rhizomyrma* p. 110, DONISTHORPE Entomologist 69.—*A. decedens*, *goeldii*, *picketi* characters p. 304, BORGMEIER Rev. ent. Rio de J. 6.—*A. fuhrmanni*, *paramaribensis* biology pp. 2023–2026 figs., ROBÁ Rev. Cafetera Colombia 6.—*A. paleartica* sp. n. Aegean Is. p. 298 fig., MENOZZI Boll. Lab. Zool. Portici 29.

Aenictus rhodiensis sp. n. Rhode Is. p. 266 fig., MENOZZI t.c.

Anillidris gen. n., *bruchii* sp. n. Argentina p. 414 figs., SANTSCHI Rev. Ent. Rio de J. 6.

Anochetus haytianus subsp. n. *longispina* Haiti p. 196, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Atta sexdens bionomics pp. 257–266 figs., EIDMANN Naturwissenschaften 24.

Bothriomyrmex jannoni sp. n. Aegean Is. p. 295 fig., MENOZZI Boll. Lab. Zool. Portici 29.

Bregmatomyrma discussed p. 218, WHEELER Tijdschr. Ent. 79.

Camponotus castaneus st. n. *rufinasis* U.S.A. p. 204; *bonariensis* st. n. *curtulus* Brazil p. 205; *simillimus* st. *indianus* var. n. *avarus* p. 206 Panama; *abdominalis* st. n. *epistomatus* Colombia p. 208; *a. mediopallidus* var. n. *flavobasalis* p. 209; *a. capiens* var. n. *luisae* p. 210; *a. floridanus* var. n. *panamanus* Panama, *defrictus* Mexico p. 214; *flandus* var. n. *pronotalis* p. 215; *brevis* var. n. *obscurifrons* Panama; *sericeiventris* st. *pontifex* n. n. for st. *imperator* Wheeler nec Emery p. 216; *conspicuus* st. *zonatus* p. 207, *lindigi* p. 217, *bugnioni* p. 215 ♂♂; *abdominalis* st. *listulatus* ♂ p. 211; *u.* var. *costaricensis* ♀ p. 212; *crassus* var. n. *picticornis* Argentina p. 421, SANTSCHI Rev. Ent. Rio de J. 6.—*C. andrewsi* Christmas I. p. 527, *mussolinii* Papua p. 528, spp. n., DONISTHORPE Ann. Mag. n.H. (10) 18.—*C. magister* var. n. *tibestiensis* Tibesti p. 81, SANTSCHI Mém. Acad. Sci. Paris (2) 62.—*C. darlingtoni* sp. n. p. 160; *gasseri* subsp. n. *caloratus* p. 162 Rottneist I., WHEELER J. roy. Soc. W. Aust. 20

1934.—*C. ustus* var. n. *depolitus* p. 205; *ramulorum* var. n. *vernula* p. 206; *altivagus* p. 207, *albitramineus* p. 208 spp. n. Haiti, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Cardiocondyla elegans var. n. *torre-tassoi* p. 167; *emeryi* subsp. n. *schatzmayri* p. 170 Egypt figs., FINZI Bull. Soc. ent. Egypte 20.

Cataglyphis cursor var. *aenescens* var. n. *maeotica* Ukraine p. 110, KARAVAJEV Trav. Mus. zool. Kiev no. 16.

Cataulacus jeanneli st. n. *kenyensis* Kenya p. 272 figs., SANTSCHI Miss. sci. Omo 2 1935.

Chalcoponera metallica var. n. *car-bonaria* Rottneist I. p. 139, WHEELER J. roy. Soc. W. Aust. 20 1934.

Cheliomyrmex andicola soldier p. 65 figs., BORGMEIER Arch. Inst. Biol. veg. Rio de J. 3.

Crematogaster atitlanica sp. n. p. 47; *sumichrasti* subsp. n. *maya* p. 48 Guatemala figs., WHEELER Psyche 43.—*C. castanea inversa* var. n. *elgona*; *foraminiceps* var. n. *mirmillo* p. 269; *aegyptiaca* var. n. *turkanensis*; *buchneri* var. n. *uasina* p. 271 Kenya figs., SANTSCHI Miss. sci. Omo 2 1935.—*C. scutellaris* in Rumania p. 10, BOGOESCU & MANOLACHE Bul. Soc. Nat. Romaniaa 1936 no. 8.

Cyphomyrmex rimosus minutus var. n. *flavidus* Haiti p. 204, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Dendromyrmex chartifex ♀ p. 218, SANTSCHI Rev. Ent. Rio de J. 6.

Dolichoderus glauerti sp. n. Rottneist I. p. 147, WHEELER J. roy. Soc. W. Aust. 20 1934.

Dorylus labiatus see *Typhlopone*.

Dorymyrmex pyramicus var. n. *smithi* Nebraska p. 120, COLE Ent. News 47.

Echinopla silvestrii sp. n. Papua p. 529, DONISTHORPE Ann. Mag. n.H. (10) 18.

Eciton densepunctatum p. 162, *diversinode* p. 163, *modestum*, *orthonotum* p. 165, *porrectognathum* spp. n. Brazil; *jermanni* For. (= *luederwaldti* Em.) p. 167, BORGMEIER Arch. Esc. agric. Med. vet. Rio de J. 10 1934.—*E.* morphology of some Brazilian spp. pp. 51–65, *Nomamyrmex* subgen. n. p. 55 figs., BORGMEIER Arch. Inst. Biol. veg. Rio de J. 3.

Emergella schmitti subsp. n. minor Haiti p. 195, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Euponera caffra var. n. *affinis* Fr. Congo p. 258, SANTSCHI Miss. sci. Omo 2 1935.—*E. clarki* sp. n. Rottnest I. p. 140, WHEELER J. roy. Soc. W. Aust. 20 1934.—*E. laevigata* see *Termitopone*.

Formica rufopratensis topographical notes pp. 679–684, STÄGER Mitt. schweiz. ent. Ges. 16.—*F. ulkei* beetles associated with pp. 216–231 figs., PARK Psyche 42 1935.

Froggattella revision of Australian spp. 11 pp., *kirbyi* subsp. n. *nigripes*, *ianthina* p. 8, *lutescens* p. 9, *laticeps*; *latispina* sp. n. p. 10 Australia, WHEELER Amer. Mus. Nov. no. 842.

Hypocrypterus haemorrhoidalis hamulus Roger (= *h. haytianus* For.) p. 201; *h.* subsp. n. *affinis*, *auricomus*, *vinosus* p. 202, *signatus* p. 203 Haiti, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Iridomyrmex pruinosus var. n. *testaceus* Idaho p. 121, COLE Ent. News 41.—*I. donisthorpei* n. n. for *bicolor* Don. nec Forel p. 417, SANTSCHI Rev. Ent. Rio de J. 6.

Lasius alienus instincts pp. xi–xv, STÄRCKE Tijdschr. Ent. 79.

Leptothorax dessyi p. 289, *solerii* p. 291, spp. n. Aegean Is. figs., MENOZZI Boll. Lab. Zool. Portici 29.—*L. angulatus* var. n. *lybica* Libya p. 155, MENOZZI Atti Soc. Nat. Mat. Modena 65.

Megalomyrmex brasiliensis var. n. *misionensis* Argentina p. 405, SANTSCHI Rev. Ent. Rio de J. 6.

Megaponera foetens var. n. *amazon* Abyssinia p. 257 fig., SANTSCHI Miss. sci. Omo 2 1935.

Melophorus insularis sp. n. p. 151; *turneri* subsp. n. *perthensis* p. 152 Rottnest Is., WHEELER J. roy. Soc. W. Aust. 20 1934.

Mesoxena mistura further description p. 119 figs., DONISTHORPE Proc. R. ent. Soc. Lond. (B) 5.

Messor oertzeni var. n. *carpathous* Aegean Is. p. 277 fig., MENOZZI Boll. Lab. Zool. Portici 29.

Monomorium key to spp. of subgen. *Xeromyrmex*, *demisum* sp. n. Transcaspia p. 36; *delagoense* p. 39, *subopacum* p. 41, *salomonis* p. 46 list of subsp. n.; *salomonis* st. *areniphilum*

varr. n. *bedui*, *fezzayense* p. 56, *tunicum*, *salaco* p. 52; s. st. n. *targui* p. 53 (with var. n. *mzabicum* p. 54); s. st. *didonis* varr. n. *molestum* p. 55, *volubile* p. 56, *pictum*; s. st. n. *pestiferum* p. 57; s. st. *sommieri* varr. n. *tanit* p. 58, *cupidum* p. 59 N. Africa figs., SANTSCHI Bull. Soc. Sci. nat. Maroc 16.—*M. insolescens* p. 145, *longiceps* p. 146 spp. n. Rottnest Is., WHEELER J. roy. Soc. W. Aust. 20 1934.

Myrmecocystus mexicanus subsp. n. *idahoensis* p. 118; *melliger* subsp. *semirufus* varr. n. *kennedyi* p. 119, *romainei* p. 120 U.S.A., COLE Ent. News 47.

Myrmelachista gogates sp. n. Haiti p. 204, WHEELER Bull. Mus. comp. Zool. Harv. 80.—*M. catharinae* varr. n. *major* p. 202, *petropolitana* p. 204 Brazil; *nigella* var. n. *ruficornis* Argentina p. 420, SANTSCHI Rev. Ent. Rio de J. 6.

Myrmica habits pp. 652–657, WEBER Mitt. schweiz. ent. Ges. 16.—*M. rugulosa* varr. n. *constricta* p. 74, *limanica* p. 75 (with var. n. *chersonensis* p. 76); *lobicornis* var. n. *kieviensis* p. 91 Ukraine figs., KARAVAJEV Trav. Inst. Zool. Ukraine (1) 1934.

Myrmicocrypta bruchi p. 409, *ogloblini* p. 411, spp. n. Argentina figs., SANTSCHI Rev. Ent. Rio de J. 6.

Myrmopalpella discussed p. 218, WHEELER Tijdschr. Ent. 79.

Myrmoplatys discussed p. 218, WHEELER t.c.

Neoponera commutata see *Termitopone*.

Nomamyrmex subgen. n. see *Eciton*.

Notoncus gilberti subsp. n. *annectens* p. 154, var. n. *manni* p. 155 Rottnest I., WHEELER J. roy. Soc. W. Aust. 20 1934.

Nylanderia darlingtoni sp. n. Haiti p. 210, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Oxyopomyrmex lagoi sp. n. Aegean Is. p. 278 fig., MENOZZI Boll. Lab. Zool. Portici 29.

Pheidole californica var. n. *hagermani* Idaho p. 35, COLE Canad. Ent. 68.—*P. darlingtoni* sp. n. Haiti p. 198, WHEELER Bull. Mus. comp. Zool. Harv. 80.

Plagiolepis xene sp. n. Piemont p. 279, STÄRCKE Ent. Ber. 9.—*P. lucidula* p. 155, *squamulosa* p. 156, *clarki* p. 157 (with subsp. n. *impasta* p. 158) spp. n. Rottneist I., WHEELER J. roy. Soc. W. Aust. 20 1934.

Pogonomyrmex barbatus subsp. n. *curvispinosus* Arizona p. 120, COLE Ent. News 47.—*P. schmitti* subspp. n. *aterrimus*, *darlingtoni* Haiti p. 197, WHEELER Bull. Mus. comp. Zool. Harv. 80.—*P. tenuipubens* sp. n. Argentina p. 403 fig., SANTSCHI Rev. Ent. Rio de J. 6.

Ponera of America north of Mexico pp. 420-430, SMITH Ann. ent. Soc. Amer. 29.—*P. coarctata* in Bulgaria pp. 131-134 map. WESSELINOFF Mitt. bulg. ent. Ges. Sofia 9.—*P. congrua* sp. n. Rottneist I. p. 142, WHEELER J. roy. Soc. W. Aust. 20 1934.—*P. jeanneli* sp. n. Mt. Elgon p. 262 figs. SANTSCHI Miss. sci. Omo 2 1935.

Pristomyrmex pungens ergatogyne p. 40 [in Japanese] figs., TERANISHI Trans. Kansai ent. Soc. no. 6 1935.

Pseudomyrma alternans Fr. Guiana p. 197, *ogloblini* Argentina p. 402, spp. n. figs., SANTSCHI Rev. Ent. Rio de J. 6.

Rhopalomastix janeti sp. n. Siam p. 55, DONISTHORPE Ent. Rec. 48.

Rhopalothrix schmidti sp. n. Costa Rica p. 82, larva p. 84 figs., MENOZZI Arb. morph. tax. Ent. Berl. 3.—*R. simoni* st. *spei* var. n. *sulcata* Panama p. 201, SANTSCHI Rev. Ent. Rio de J. 6.—*R. kokodensis* sp. n. Papua p. 524, DONISTHORPE Ann. Mag. n.H. (10) 18.

Rhytidoponera revision of Australian spp. pp. 14-89, key to workers p. 16, to males p. 22, *mirabilis* p. 29, *quadriceps* p. 30, *stridulator* p. 37, *occidentalis* p. 39, *petiolata* p. 41, *nitida* p. 45, *dixonii* p. 46, *gregoryi* p. 47, *ferruginea* p. 48, *barnardi*, *carinata* p. 54, *rufonigra* p. 58, *findersi* p. 60, *micans* p. 62, *flavicornis* p. 64, *reflexa* p. 76, *eremita* p. 78, *fuliginosa* p. 79, *pilosula* p. 80, *nigra* p. 81, spp. n. Australia figs., CLARK Mem. nat. Mus. Melbourne 9.

Rogeria caraiba p. 198, *cubensis* p. 199 (with var. n. *habanica* p. 200) spp. n. Cuba figs., SANTSCHI Rev. Ent. Rio de J. 6.

Solenopsis saevissima st. n. *oblongiceps* p. 405; *loretana* sp. n. p. 406 Argentina figs., SANTSCHI t.c.—*S. americana* sp. n. Tennessee p. 17 fig., BRUES Psyche 43.—*S. orbula* subsp. n. *kochi* Egypt p. 178 figs., FINZI Bull. Soc. ent. Egypte 20.—*S. crivellarii* sp. n. Aegean Is. p. 284 fig., MENOZZI Boll. Lab. Zool. Portici 29.

Stigmatocros termitoxenus sp. n. Western Australia p. 215 figs., WHEELER Proc. Amer. Acad. Arts Sci. 71.

Stigmatomma pallipes in Quebec p. 266, CHAGNON Nat. canad. 63.—*S. denticulatum* var. n. *gracilicornis* Rhode I. p. 269, MENOZZI Boll. Lab. Zool. Portici 29.

Strongylognathus silvestrii sp. n. Aegean Is. p. 292 figs., MENOZZI t.c.—*S. diveri* sp. n. England p. 113 figs., DONISTHORPE Ent. mon. Mag. 72.

Strumigenys pergandei habits pp. 171-174, WESSON Ent. News 47.—*S. ogloblini* sp. n. Argentina p. 409 fig., SANTSCHI Rev. Ent. Rio de J. 6.—*S. luctuosa* sp. n. Costa Rica p. 81 fig., MENOZZI Arb. morph. tax. Ent. Berl. 3.

Syllophopsis elgonensis sp. n. Mt. Elgon p. 267 figs., SANTSCHI Miss. sci. Omo 2 1935.

Syntermitepona subgen. n. see *Termitopone*.

Tapinoma menozzii sp. n. Rhodesia p. 526, DONISTHORPE Ann. Mag. n.H. (10) 18.—*T. rotnestense* sp. n. Rottneist I. p. 150, WHEELER J. roy. Soc. W. Aust. 20 1934.

Termitopone gen. n. for *Euponera laevigata* Smith p. 159, (= *l. whepleyi* Wheeler p. 164), *marginata* Roger p. 166 and for *Meoponera* (*Syntermitepona* subgen. n.) *commutata* Roger p. 169 figs., WHEELER Proc. Amer. Acad. Arts Sci. 71.

Tetramorium caespitum subsp. *hungarica* varr. n. *rufitarsis* Andorra, Hungary, *striatis* p. 59, *szaboi* p. 59, *staerckei* p. 60, *haltrichi* p. 61 Hungary figs., RÖSZLER Tijdschr. Ent. 79.—*T. semilaeve* subsp. n. *transbaicalense* Transbaikalia p. 93, RUZSKII Trav. Inst. sci. Biol. Tomsk 2.—*T. caespitum japonica* further description p. 121, RÖSZLER Ent. Anz. 16.

Trachymyrmex annulatus sp. n.
Panama p. 201 figs., SANTSCHI Rev.
Ent. Rio de J. 6.

Typhlopone fulva labiata Emery (= *Dorylus labiatus* Shuck.) p. 1 figs.,
MUKERJEE J. Dep. Sci. Calcutta Univ.
7 Zool. 1926 no. 2.

Xiphomyrmex viehmeieri var. n.
venustus Rottneist I. p. 147, WHEELER
J. roy. Soc. W. Aust. 20 1934.

Proctotrupoidea (Serphoidea).

SCELIONIDAE (including

PLATYGASTERIDAE).

Revision of African Teleasinae, NIXON
Ann. Mag. n.H. (10) 17 pp. 114–141,
161–191, 18 figs.

Allotropa conventus sp. n. France p.
195 figs., MANEVAL Bull. Soc. ent. Fr.
41.

Dissolcus indicus sp. n. Calcutta p.
335, MANI Rec. Ind. Mus. 38.

Hoplogryon lollius p. 127, *orion* p. 130,
marsyas p. 131, *ninus* p. 133, *magnes* p.
137, *oecleus* p. 139, *scepsis* p. 140,
schoenus p. 161, *codrus* p. 163, *pylus*,
tityrus p. 164, *sperches* p. 165, *uranus*
p. 167, *thoas* p. 169, *fons* p. 171, *tiresias*
p. 172, *carus* p. 174, *amphiaraus* p. 176,
paris p. 177, *laius* p. 178, *cyclops* p.
179, *sejus* p. 181, *incertus* p. 183 S.
Africa, *nomius* Kenya p. 134, spp. n.
figs., NIXON Ann. Mag. n.H. (10) 17.

Hoploteleia gravelyi sp. n. Madras p.
469, MANI Rec. Ind. Mus. 38.

Macrogyron gen. n. p. 185, *pluto*
(type) p. 186, *echion* p. 190 S. Africa,
caelebs Nyasaland p. 189, spp. n. figs.,
NIXON Ann. Mag. n.H. (10) 17.

Metachisis montagnei sp. n. France p.
45 figs., MANEVAL Bull. Ann. Soc. ent.
Belg. 76.

Microphanurus crotius p. 131, *suranus*
132 Uganda, *sipius* Kenya p. 133, spp.
n. figs., NIXON Proc. R. ent. Soc. Lond.
(B) 5.—*M. lemoleae* sp. n. Uganda p.
558 figs., NIXON Ann. Mag. n.H. (10)
17.

Misocyclops crevecoeuri sp. n. Belgium
p. 53 figs., MANEVAL Bull. Ann. Soc.
ent. Belg. 76.

Paracyclops gen. n. p. 56, *bettyae* sp.
n. France p. 58 figs., MANEVAL t.c.—
See *Urocyclops*.

Proleptacis strangulicornis sp. n.
France p. 50 figs., MANEVAL Bull. Ann.
Soc. ent. Belg. 76.

Scelio horai, *paivai* p. 336, *calcutta-*
ensis p. 337 spp. n. India, MANI Rec.
Ind. Mus. 38.

Telenomus sagei sp. n. W. Himalayas
p. 335, MANI t.c.—*T. ullyetti* E. Trans-
vaal p. 563, *demodoci* Uganda p. 564,
spp. n. figs., NIXON Ann. Mag. n.H.
(10) 17.

Trimorus iphias p. 116, *nephele* p.
119, *atys* p. 121, spp. n. S. Africa figs.,
NIXON t.c.

Urocyclops n. n. for *Paracyclops*
Manev. nec Claus (Crust.) p. 142,
MANEVAL Bull. Ann. Soc. ent. Belg.
76.

CALLICERATIDAE (CERAPHRONIDAE).

Palearctic Calliceratidae, SZELÉNYI
Ann. Mus. hungar. 30 pp. 50–66, 17
figs.

Aphanogmus steinitzi sp. n. Palestine
p. 248 figs., PRIESNER Bull. Soc. ent.
Egypte 20.

Elysoceraphron gen. n., *hungaricus*
sp. n. Hungary p. 64 figs., SZELÉNYI
Ann. Mus. hungar. 30.

Lagynodes thoracicus subsp. n. *biró*
Dalmatia p. 59, key to Palearctic spp.,
63, SZELÉNYI t.c.

Synarsis biró p. 51, *xanthothorax* p.
53, *brachyptera* p. 55 Hungary, *britan-*
nica England p. 56, spp. n., SZELÉNYI
t.c.

Chalcidoidea.

TORYMIDAE (CALLIMOMIDAE).

Callimome bifasciipennis sp. n. Mexico
p. 481, GAHAN Proc. U.S. nat. Mus. 83
no. 2995.

Iridophaga korsakowi sp. n. France
p. 76, PICARD Bull. Soc. ent. Fr. 41.

Lioterphus orissaensis sp. n. India p.
125, MANI Rec. Ind. Mus. 38.

Pachytomus mantispaghus sp. n. India
p. 126, MANI t.c.

Syntomaspis eurytomae sp. n. Russia
p. 632 figs., PUZANOVA-MALYSHEVA Z.
angew. Ent. 22.

Torymus veronicae ♂ p. 86, RIEDEL
Arb. morph. tax. Ent. Berl. 3.

CHALCIDIDAE.

Anacryptus bayoni sp. n. Eritrea p. 124, MASI Ann. Mus. Genova 59.—*A. chilkaensis* sp. n. India p. 127, MANI Rec. Ind. Mus. 38.

Arretoceroides ceylonensis sp. n. Ceylon p. 128, MANI t.c.

Brachymeria key to Illinois spp., *tegularis* Cress. from *Chalcis* p. 251; *coloradensis* Cress. (= *dalmanii* Thomson) from *Chalcis* p. 253 figs., BURKS Trans. Ill. Acad. Sci. 29 no. 2.—*B. mochii* p. 119, *erythraea* p. 120, spp. n. Eritrea, MASI Ann. Mus. Genova 59.—*B. carinatifrons* sp. n. Mexico p. 165 GAHAN Proc. ent. Soc. Wash. 37.—*B. cactoblastidis* p. 103, *koehleri* p. 105, *pseudovata* p. 107 spp. n. Argentina figs., BLANCHARD Rev. Soc. ent. argent. 7 1935.

Chalcis garutianus sp. n. Java p. 73 GÜNTHER Tijdschr. Ent. 79.—*C. tegularis*, *coloradensis* see *Brachymeria*.

Dirhinus synonymy p. 285, BURKS Proc. nat. Acad. Sci. Washington 22.

Epitranus Wlk. synonymy p. 286, BURKS t.c.

Euchalcis myrmeleoneae sp. n. Madras p. 470, MANI Rec. Ind. Mus. 38.

Heptasmicra brasiliensis see *Psychidosmicra*.

Hockeria notes p. 252, *aegyptiaca* sp. n. Egypt p. 254, MASI Bull. Soc. ent. Egypte 20.

Leucospis assamensis sp. n. Assam; *bengalensis* var. n. *mackenziei* Bihar p. 339, MANI Rec. Ind. Mus. 38.

Mixochalcis gen. n., *sibinecola* sp. n. Argentina p. 114 figs., BLANCHARD Rev. Soc. ent. argent. 7 1935.

Neochalcis myrmeleoneae sp. n. Madras p. 471, MANI Rec. Ind. Mus. 38.

Polistomorpha paivai sp. n. Bihar p. 338, MANI t.c.

Pseudeniaca gen. n., *lyncaea* sp. n. Eritrea p. 126 figs., MASI Ann. Mus. Genova 59.

Psychidosmicra gen. n. p. 109, *australis* (type) p. 110, *brethesi* p. 112 spp. n. Argentina; *brasiliensis* Bréth. from *Heptasmicra* p. 113 figs., BLANCHARD Rev. Soc. ent. argent. 7 1935.

Sabatiella japonica sp. n. Japan p. 48, MASI Mushii 9.

Spilochalcis fletcheri sp. n. Shillong p. 340, MANI Rec. Ind. Mus. 38.—*S. bosqi* p. 116, *koehleri* p. 118, *patagonica* p. 120, spp. n. Argentina figs., BLANCHARD Rev. Soc. ent. argent. 7 1935.

Stomatoceras ferrierei sp. n. Eritrea p. 132, MASI Ann. Mus. Genova 59.

Stomatoceroideus indicus sp. n. India p. 471, MANI Rec. Ind. Mus. 38.

EURYTOMIDAE.

Phylogeny of some Eurytomid genera, BUGBEE Ent. Amer. 16 pp. 169–222, 6 pls. 1 fig.

Harmolita revision of N. American spp. 25 pp., key p. 3, *minuenda* p. 6, *sativi* p. 7, *stipicola* p. 8, *comatae*, *ainsliei* p. 9, *poosi* p. 10, *utahensis*, *koebelii* p. 11, *pacifica* p. 12, *flavicoxa* p. 13, *dakota*, *oregon* p. 14, *jonesi* p. 15, *stipiphila*, *longipetiolata* p. 16, *stipiphaga* p. 17, *gahani*, *danthoniae* p. 18, *holci* p. 19, *bambusae* p. 20, spp. n. U.S.A. figs., PHILLIPS Tech. Bull. U.S. Dep. Agric. no. 518.

Rileya opuntiae sp. n. Texas p. 482, GAHAN Proc. U.S. nat. Mus. 83 no. 2995.

PERILAMPIDAE.

Perilampus revision of N. American spp. pp. 369–412, key p. 372, *carolinensis* p. 376, *regalis* p. 378, *crawfordi* p. 384, *ocellatus* p. 390, *rohweri* p. 396, *capitatus* p. 397, *gahani* p. 401, *muesebecki* p. 407 spp. n.; *canadensis* var. n. *nitidus* p. 393; *fulvicornis* var. n. *prothoracicus* p. 403 N. America; *subcarinatus* Cwfd. (= *bakeri* Cwfd.) p. 386, SMULYAN Proc. U.S. nat. Mus. 83 no. 2990.

EUPELMIDAE.

Anastatoidea seyrigi sp. n. Madagascar p. 196 figs., FERRIERE Livre jubil. Bouvier 1936.

Anastatus parasitic habits pp. 69–75; *ameleophagus* further description p. 70; *picardi* sp. n. France p. 71 fig., BERNARD Bull. Soc. ent. Fr. 41.

Solindenia amended description, *blattiphagus* sp. n. India p. 131 fig., MANI Rec. Ind. Mus. 38.

ENCYRTIDAE (including

APHELINIDAE).

Notes on the classification of Aphelinidae, COMPERE Univ. California Pub. Ent. 6 pp. 277–322, 19 figs.

Aenasioidea trimblei sp. n. California p. 183, DOZIER Proc. ent. Soc. Wash. 37.

Aneristus brasiliensis sp. n. Brazil p. 287, COMPERE Univ. California Pub. Ent. 6.

Aspidiotiphagus fuscus p. 296, *flavus* p. 300, *latipennis* p. 302, spp. n. S. Africa figs., COMPERE t.c.

Coccidoctonus ceroplastae sp. n. Haiti p. 185, DOZIER Proc. ent. Soc. Wash. 37.

Encarsia gallardoi sp. n. Argentina p. 3 figs.; list of known spp. p. 9, MARELLI El Microhimenoptero Calci-doidea *Encarsia gallardoi* 1933.—*E. partenopea*, *tricolor* in England characters pp. 79–80, BUTLER Proc. R. ent. Soc. Lond. (A) 11.

Eretmocerus clauseni S. Africa p. 317, *longipes* Hawaii p. 320, spp. n., COMPERE Univ. California Pub. Ent. 6.

Habrolepis rouxi sp. n. Transvaal p. 495 fig., COMPERE Bull. ent. Res. 27.

Hambletonia gen. n. p. 172, *pseudococcina* sp. n. Brazil p. 173 fig., COMPERE Proc. Hawaii. ent. Soc. 9.

Krishnieriella gen. n. p. 421, *ceroplastodis* sp. n. Coimbatore p. 422 fig., MANI Rec. Ind. Mus. 37 1935.

Marietta connecta p. 308, *exitiosa* S. Africa, *nigripes* N.S. Wales p. 312, spp. n. figs., COMPERE Univ. California Pub. Ent. 6.

Marlatiella secunda sp. n. Eritrea p. 280 fig., COMPERE t.c.

Ooencyrtus batocerae sp. n. Malaya p. 333, FERRIERE Bull. ent. Res. 27.

Prococcophagus aurantifrons sp. n. N.S. Wales p. 290 figs., COMPERE Univ. California Pub. Ent. 6.

Timberlakiella gen. n. p. 278, *applan-tonervus* sp. n. Philippines p. 279 fig., COMPERE t.c.

CLEONYMIDAE.

Louricia gen. n., *ovivora* sp. n. Malaya p. 331 figs., FERRIERE Bull. ent. Res. 27.

Neochalcodectus gen. n., *sinaiticus* sp. n. Sinai p. 68, MASI Boll. Soc. ent. ital. 68.

PTEROMALIDAE (including MISCOGASTERIDAE).

Dibrachys boucheanus egg-placing p. 215, MARSH Canad. Ent. 68.

Dinarmus mongolicus sp. n. Mongolia p. 2 fig., FERRIERE Ark. Zool. 27A (sep. dated 1934) no. 22.

Habrocytus tephritis sp. n. Brazil p. 159 figs., DA COSTA LIMA Ann. Acad. bras. Sci. 8.

Neocatolaccus moneilemae sp. n. Texas p. 484, GAHAN Proc. U.S. nat. Mus. 83 no. 2995.

Trigonogastra nigricola sp. n. Tangan-yika p. 479 figs., FERRIERE Bull. ent. Res. 27.

ELASMIDAE.

Elasmus invrae sp. n. Italy p. 131, MASI Boll. Soc. ent. ital. 67 1935.—*E. leucopterae* ♂♀ p. 480, FERRIERE Bull. ent. Res. 27.

EULOPHIDAE.

Achrysocharella ritchiei sp. n. E. Africa p. 484 fig., FERRIERE Bull. ent. Res. 27.

Chrysocharis lepellei sp. n. E. Africa p. 486 fig., FERRIERE t.c.

Cirrospilus cinctiventris p. 480, *longifasciatus* p. 481, spp. n. Tanganyika, FERRIERE t.c.

Derostenus coffeae sp. n. Tanganyika p. 487 fig., FERRIERE t.c.

Eulophus borboricus ♀ p. 482, FERRIERE t.c.

Melittobia japonica sp. n. Japan p. 38, MASI Mushi 9.

Ootetrastichoides gen. n., *habachi* sp. n. Japan p. 221 figs., LI Kontyû 10.

Pleurotropis coffeicola sp. n. E. Africa p. 483 fig., FERRIERE Bull. ent. Res. 27.

Sympiesis bukobensis sp. n. Tangan-yika p. 482 fig., FERRIERE t.c.

Teleopterus violaceus sp. n. E. Africa p. 486 fig., FERRIERE t.c.

Tetrastichodes leucopterae sp. n. Tan-ganyika p. 488 fig., FERRIERE t.c.

Tetrastichus lopezi sp. n. Argentina, p. 1 figs., CRISTOBAL Bol. inf. Lab. Zool. Ent. agric. La Plata July 1936.—

T. gerstaeckeriae sp. n. Texas p. 485, GAHAN Proc. U.S. nat. Mus. 83 no. 2995.—*T. brevistigma* sp. n. Massachusetts p. 76, GAHAN Proc. ent. Soc. Wash. 38.

Thripoctenus kutteri sp. n. Switzerland p. 637 fig., FERRIERE Mitt. schweiz. ent. Ges. 16.

MYMARIDAE.

Anagrus insularis Hawaii p. 175, *delicatus* Illinois p. 177 spp. n., DOZIER Proc. Hawaii. ent. Soc. 9.

Gastrogonatocerus subgen. n. see *Gonatocerus*.

Gonatocerus (*Gastrogonatocerus* subgen. n.) *membraciphagus* p. 65, *pusilus* p. 68, *spiracularis* p. 70, *urocerus* p. 72, *caudatus* p. 74, spp. n. Argentina figs., OGLOBLIN Rev. Soc. ent. argent. 7 1935.

Petiolaria anomala ♀ p. 115 figs., BLOOD & KRYGER J. Soc. Br. Ent. 1.

TRICHOGRAMMATIDAE.

Abbella zabinskii sp. n. Warsaw p. 121 figs., NOWICKI Z. angew. Ent. 23.

Aphelinoidea deserticola Biskra p. 141, *anatolica* p. 144 (with subsp. n. *halepensis* p. 147) N. Syria, spp. n., figs., NOWICKI t.c.

Asynacta further description p. 126 figs., NOWICKI t.c.

Brachista synonymy p. 127, NOWICKI t.c.

Brachysticha fidae see *Giraultiola*.

Giraultiola gen. n. type *Brachysticha fidae* Ashm. (= *cicadae* How.) p. 136, NOWICKI Z. angew. Ent. 23.

Lathromerella italica further description (with subsp. n. *carpathica* Italy) p. 128; *baetica* sp. n. Spain p. 131 figs., NOWICKI t.c.

Lathromeris inflaticornis sp. n. S. France p. 134; *johnstoni* var. n. *phoenicea* Turkey p. 136 fig., NOWICKI t.c.

Lathromeroidea silvarum sp. n. Poland p. 137 fig., NOWICKI t.c.

Oligosita discussed p. 114, *collina* ♀ p. 117 figs., NOWICKI t.c.

Poropoea minkiewiczzi Poland p. 124, (*Poropoeoides* subgen. n. p. 125) *bohémica* Bohemia p. 126 spp. n. figs., NOWICKI t.c.

Poropoeoides subgen. n. see *Poropoea*.

Trichogramma evanescens validity of trichiation as systematic character pp. 148-152 figs., OLDROYD & RIBBANDS Proc. R. ent. Soc. Lond. (B) 5.

Tumidiclava subcaudata sp. n. Poland p. 139 fig., NOWICKI Z. angew. Ent. 23.

Cynipoidea.

CYNIPIDAE.

Andricus fecundator Htg. is agamic form of *A. pilosus* Adl. and is not sexual form of *Biorrhiza aptera* Bosc. p. 43, HARDOUIN Bull. Soc. Sci. nat. Seine-et-Oise (3) 4.

Cynips origin of higher categories 334 pp., *catena* p. 102, *conexa* p. 105, *cubitalis* p. 107, *deceptrix* p. 108, *emergens* p. 113, *longa* p. 115, *occidua* p. 119, *oriens* p. 120, *oriunda* p. 122, *pictor* p. 123, *pulex* p. 125, *pumilio* p. 126, *pusa* p. 129, *spadix* p. 132, *spiculi* p. 134, *spinalis* p. 136, *spinescens* p. 137, *spinifera* p. 138, *subnigra* p. 140, *vasta* p. 141, *vulgata* p. 143, *bulboides* p. 149, *aequalis* p. 151, *bulbacea* p. 152, *bulbulus* p. 153, *bullia* p. 154, *cucurbita* p. 164, *finitima* p. 165, *sierrae* p. 166, *tigrina* p. 167, *aspera* p. 172, *pomifera* p. 176, *claripennis* p. 191, *euconus* p. 192, *fucosa* p. 193, *fuscipennis* p. 194, *glabrescens* p. 195, *hirsuta* p. 197, *jalisco* p. 198, *munda* p. 199, *scutata* p. 201, *subcostalis* p. 202, *subfusca* p. 204, *texocana* p. 205, *insulensis* p. 210, *latigenae* p. 212, *contacta* p. 226, *eluta* p. 227, *eminula* p. 229, *flavida* p. 230, *fugiens* p. 231, *saxifera* p. 232, *saxulum* p. 233, *tenebrica* p. 235, *tholi* p. 236, *chica* p. 247, *nigricula* p. 251, *radialis* p. 253, *rufula* p. 254, *subtincta* p. 256, *tincta* p. 257, *erutor* p. 260, *expletor* p. 261, *hibrida* p. 273, *inflata* p. 274, *bandero* p. 284, *hirtior* p. 286, *ulterior* p. 294 U.S.A. and Mexico, *lucaris* p. 116, *luminata* p. 118 Guatemala spp. n. figs., KINSEY Sci. Ser. Indiana Univ. Pub. no. 4.

Dieucoila indica sp. n. United Provinces p. 334, MANI Rec. Ind. Mus. 38.

Odonteucoila kurseongensis sp. n. E. Himalayas p. 334, MANI t.c.

Phanacis centaureae ♂ p. 3 fig., RIEDEL Arb. morph. taxon. Ent. Berl. 3.

Ichneumonoidea.

Corrigenda and addenda to Ichneumonoidea of Wicken Fen. KERRICH Trans. Soc. Br. Ent. 3 pp. 61-66.

TRIGONALIDAE.

Trigonalys prudnicensis sp. n. p. 151; *hahnii* var. n. *enslini* p. 153 Germany, TORKA Arb. physiol. angew. Ent. Berl. 3; notes p. 223, BISCHOFF Arb. morph. tax. Ent. Berl. 3.

ICHNEUMONIDAE.

Ichneumonids of Val Venosta, BAUER Boll. Soc. ent. ital. 68 pp. 103-111.

Revision of Mesostenini of New Guinea, CHEESMAN Nova Guinea 17 Zool. pp. 353-388, 3 pls.

List of Ichneumonidae of Rumania [contd.], CONSTANTINEANU Ann. Sci. Univ. Jassy 22 pp. 177-193.

Ichneumoninae collected by the scientific mission to Omo, HEINRICH Mém. Mus. H.n. Paris 4 pp. 227-244.

Systematics of Ichneumonidae stenopneusticae, VII, HEINRICH Dtsch. ent. Z. 1935 pp. 191-200.

Ichneumoninae and Cryptinae of Bulgaria, HEINRICH Mitt.-naturw. Inst. Sofia 9 pp. 81-88, 2 figs.

Polish Ichneumoninae, HEINRICH Polsk. Pismo Ent. 13 pp. 21-42, 1 fig.

Ichneumoninae new to Finland, HELLÉN Notul. ent. 16 pp. 101-109.

Ichneumonidae of Logie, Elgin, KERRICH Scot. Nat. no. 218 pp. 57-58.

Ichneumonidae of U.R.S.S. and neighbouring countries, MEIER Tabl. anal. Fn. URSS 5 340 pp. 8 figs.

Parasitic Ichneumonidae of U.R.S.S., VI, MEIER Tabl. anal. faune U.R.S.S. no. 22 356 pp. 9 figs.

Notes on British Metopini, PERKINS Ent. mon. Mag. 72 pp. 83-86, 3 figs.

Revision of Ophioninae, SCHMEDEKNECHT Opusc. Ichn. Suppl. fasc. 25 pp. 85-140.

List of and keys to Ichneumonidae collected by the scientific mission to Omo, SEYRIG Mém. Mus. H.n. Paris 4 pp. 1-100, 52 figs.

Ichneumoninae of Kuriles, UCHIDA Ins. mats. 10 pp. 135-146, 2 figs.

Aethiopischnus africanus sp. n. Kenya p. 244, HEINRICH Mém. Mus. H.n. Paris 4.

Afrectopius gen. n. (Platylabini) p. 232, *kenyae* sp. n. Mt. Kenya p. 233, HEINRICH t.c.

Afrocoelichneumon jeanneli sp. n. Kenya p. 228, HEINRICH t.c.

Agyrpon omabensis sp. n. New Hebrides p. 188, CHEESMAN Trans. R. ent. Soc. Lond. 85.

Allocamptus rapax sp. n. Abyssinia p. 50 fig., SEYRIG Mém. Mus. H.n. Paris 4.

Amblyteles podolicus sp. n. Poland p. 32, HEINRICH Polsk. Pismo ent. 13.—*A. fennicae* sp. n. Japan p. 115 fig., UCHIDA Ins. mats. 10.

Amesospilus key p. 53; *tsigegeus* Tanganyika p. 58, *laevis* p. 59, *gulosus* p. 60, *quietus* p. 61, *fortis* p. 62, *justus* p. 63, *rupeus* p. 64, *pescator* p. 65 Kenya, spp. n. figs., SEYRIG Mém. Mus. H.n. Paris 4.

Angitia brevis var. n. *valachica* p. 192; *punctipes* var. n. *rufifemur* p. 193 Rumania, CONSTANTINEANU Ann. sci. Univ. Jassy 22.—*A. brasiliensis* sp. n. Brazil p. 20 figs., DA COSTA LIMA O Campo 1935 1935 June pt.—*A. arisana* sp. n. Formosa p. 269, SONAN Trans. n.H. Soc. Formosa 26.

Aoplus castaneus abb. n. *nigrofemoratus*, *nigrocingulatus* Finland p. 105, HELLÉN Notul. ent. 16.

Apateator alluaudi sp. n. Kenya p. 234, HEINRICH Mém. Mus. H.n. Paris 4.

Apophus taiheizanus p. 251, *karenkonus* p. 252, spp. n. Formosa, SONAN Trans. n.H. Soc. Formosa 26.

Asphragis key to Ethiopian spp. p. 20; *humeralis* p. 21, *chappuisi* p. 22, *facialis*, *antennalis* p. 23, *jeanneli* p. 24, *arambourgi* p. 26 Kenya, *alluaudi* Ruwenzori p. 25, spp. n., SEYRIG Mém. Mus. H.n. Paris 4.

Atrophia babaulti sp. n. Belgian Congo p. 26, SEYRIG t.c.

Austrodops gen. n. (Diospilini), *eremita* sp. n. Argentina p. 308 figs., BLANCHARD An. Soc. ci. Argent. 122.

Badyorygma gen. n. (nr. *Amblyjoppa*), *flavoguttatum* sp. n. Formosa p. 112 figs., UCHIDA Ins. mats. 10.

Banchus notes on Irish spp. p. 63, STELLFOX Irish Nat. J. 6.

Bassus synonymy and morphology of European spp. pp. 53-55, KERRICH Opusc. ent. Lund 1.—*B. laetatorius* subsp. n. *ikiti* New Hebrides p. 182, CHEESMAN Trans. R. ent. Soc. Lond. 85.—*B. ruwenzoriensis* Ruwenzori p. 42, *marakwetensis* Kenya p. 43 spp. n., SEYRIG Mém. Mus. H.n. Paris 4.

Brachycyrtus key p. 18, *pretiosus* Florida p. 19, *convergens* p. 20, *oculatus* p. 22, Panama, spp. n. figs., CUSHMAN Proc. U.S. nat. Mus. 84 no. 2999.

Bureschias gen. n., *balkanicus* sp. n. Bulgaria p. 82 figs., HEINRICH Mitt. naturw. Inst. Sofia 9.

Caenocryptoides gen. n. for *Ischnojoppa tarsalis* Mats. p. 4 fig., UCHIDA Ins. mats. 11.

Calliephialtes argentinus sp. n. Argentina p. 402 fig., BLANCHARD An. Soc. ci. Argent. 122.

Campoplex karkil sp. n. New Hebrides p. 189, CHEESMAN Trans. R. ent. Soc. Lond. 85.

Cecidonomus sugiharai sp. n. Kuriles p. 42, UCHIDA Ins. mats. 11.

Certonotus mogimbensis sp. n. New Hebrides p. 180 fig., CHEESMAN Trans. R. ent. Soc. Lond. 85.

Charops key p. 83; *armatus* sp. n. Mombasa p. 84, SEYRIG Mém. Mus. H.n. Paris 4.

Chasmias paludicola ab. n. *rufomedia* Finland p. 104, HELLÉN Notul. ent. 16.

Chasmocryptus gen. n. for *Plectrocryptus hokkaidensis* Uch. p. 16 fig. UCHIDA Ins. mats. 11.

Cochlidionostenus gen. n. type *Cryptaulax coreanus* Szép. p. 115 fig., UCHIDA Ins. mats. 10.

Coleocentrus rufocoxatus sp. n. Massachussets p. 11, PRATT Bull. Brooklyn ent. Soc. 31.

Collyria trichophthalma distinct spp.; *calciator* Grav. (= *puncticeps* Thoms.) p. 124, KERRICH J. Soc. Br. Ent. 1.

Compsophorus albifasciatus sp. n. Kenya p. 230, HEINRICH Mém. Mus. H.n. Paris 4.

Cratichneumon meruensis sp. n. p. 241, *nairobiensis* p. 242, spp. n. Kenya,

HEINRICH t.c.—*C. longicaudatus* p. 138, *chishimanus* p. 139, spp. n. Kuriles, UCHIDA Ins. mats. 10.

Cremastus maluensis sp. n. New Hebrides p. 194, CHEESMAN Trans. R. ent. Soc. Lond. 85.

Cryptaulax coreanus see *Cochlidionostenus*.

Cryptus epomiatus p. 14, *pallidipennis* p. 15, spp. n. China, ROMAN Ark. Zool. 27A no. 40.—*C. kanoi* sp. n. Kuriles p. 39, UCHIDA Ins. mats. 11.—*C. suzukii* see *Nippocryptus*.

Ctenichneumon mongolicus sp. n. China p. 4, ROMAN Ark. Zool. 27A no. 40.

Ctenocaloides gen. n. p. 581, *anareolatus* (type) W. and Centr. Africa p. 582, *anthereae* E. Africa p. 583, *rufus* Fr. Congo p. 584, spp. n., FAHRINGER Festchr. E. Strand 1.

Cyanoxorides formosanus sp. n. Formosa p. 332 fig., SONAN Trans. n.H. Soc. Formosa 26.

Cyclolabus gen. n. type *Platylabus nigricollis* Wesm. p. 198, HEINRICH Dtsch. ent. Z. 1935.

Daugra gen. n. (Tryphoninae) p. 29, *allaudi* sp. n. Uganda p. 30 figs., SEYRIG Mém. Mus. H.n. Paris 4.

Delaulax jeanneli sp. n. Mt. Elgon p. 9, SEYRIG t.c.

Deltops gen. n. (Ophioninae) p. 84, *granulicoxis* sp. n. Nairobi p. 85, SEYRIG t.c.

Diadromus shakotanus sp. n. Kuriles p. 145, UCHIDA Ins. mats. 10.

Dicaelotus chinensis sp. n. China p. 12, ROMAN Ark. Zool. 27A no. 40.

Diceratops kenyensis sp. n. Mt. Kenya p. 19, SEYRIG Mém. Mus. H.n. Paris 4.

Diloa gen. n. for *Mesostenus pudens* Tosq. p. 372, CHEESMAN Nova Guinea 17 Zool.

Diotes regulator sp. n. Nairobi p. 92, SEYRIG Mém. Mus. H.n. Paris 4.

Ebiicha gen. n. (Ophioninae) p. 88, *croccata* sp. n. Kenya p. 89 fig., SEYRIG t.c.

Echthromorpha juncta p. 177, *castanea* p. 178, spp. n. New Hebrides, CHEESMAN Trans. R. ent. Soc. Lond. 85.

Ectopius marginalis sp. n. Kuriles p. 143, UCHIDA Ins. mats. 10.

Endrus flavofasciatus f. n. *nigrinotum* Formosa, Korea p. 2, UCHIDA Ins. mats. 11.

Enicospilus see *Henicospilus*.

Ephialtes tenchozanus p. 103, *arisanus* p. 104, *posticus* p. 105, *miwai* p. 107 spp. n.; *macropunctatus* var. n. *urainus* p. 105 Formosa, SONAN Trans. n.H. Soc. Formosa 26.—*E. nonmanifestator* sp. n. Kuriles p. 52, UCHIDA Ins. mats. 11.

Eremolytus distans Kenya p. 45, *pollutus* p. 47, *fractus* p. 48 Tanganyika spp. n. figs., SEYRIG Mém. Mus. H.n. Paris 4.

Eriogorgus fibulator f. n. *coreanus* Korea p. 119, UCHIDA Ins. mats. 10.

Evirchoma excellens sp. n. Kenya p. 239, HEINRICH Mém. Mus. H.n. Paris 4.

Exetastes falcifer sp. n. China p. 22, ROMAN Ark. Zool. 27A no. 40.

Foenotopus unistriatus sp. n. New Hebrides p. 195 fig., CHEESMAN Trans. R. ent. Soc. Lond. 85.

Foveosculum seyrigi sp. n. Kenya p. 237, HEINRICH Mém. Mus. H.n. Paris 4.

Gambrus sapporonis see *Paragambrus*.

Gelis brevitborax sp. n. China p. 18, ROMAN Ark. Zool. 27A no. 40.—*G. susakiensis* Japan p. 14, *shikotanensis* Kuriles p. 44, spp. n., UCHIDA Ins. mats. 11.

Genaemirum gen. n. (Ichneumoninae) p. 229, *mesoleucum* sp. n. Kenya p. 230, HEINRICH Mém. Mus. H.n. Paris 4.

Giraudia spinosa sp. n. Japan p. 17, UCHIDA Ins. mats. 11.

Goniocryptus tosaensis sp. n. Japan p. 5, UCHIDA Ins. mats. 11.

Goryphus promptus, *kokodensis*, *albifrons* p. 356 Papua, *salawattiensis* Salawatti I., *turneri* N. Queensland p. 357, *leveri* Solomon Is., *aruensis* Aru I. p. 358, spp. n. figs., CHEESMAN Nova Guinea 17 Zool.

Gotra bimaculata p. 359, *caveata* p. 362 (with subsp. n. *doddi* p. 363) Queensland, *wollastoni* Dutch New Guinea p. 360, *punctulata* Misol I. p.

361, *fuscicoxis* Solomon Is., spp. n.; *errabunda* n. n. for *insularis* Cam. (praeocc.) p. 363 figs., CHEESMAN t.c.

Habrocryptus shikokuensis sp. n. Japan p. 8; *assimilis* f. n. *yezoensis* Kuriles p. 41, UCHIDA Ins. mats. 11.

Hemiteles fukuiyamensis, *okamotoi* Japan p. 13, *shanaensis* p. 42, *etorofuensis* p. 43 Kuriles spp. n., UCHIDA Ins. mats. 11.

Henicospilus rhoedae, *iaramus* p. 183, *pankumensis* p. 184, *neddenveli* p. 185, *wenesubae*, *bakeri* p. 186, spp. n. New Hebrides figs., CHEESMAN Trans. R. ent. Soc. Lond. 85.—*H. (Enicospilus)* key p. 53; *interstitialis* var. n. *nigricauda* p. 67; *rubens* subsp. n. *nuberculatus* p. 69; *vorax* p. 70, *unidens* p. 71, *medius* p. 72, *mollis* p. 73, *furius* p. 74, *obnoxius* p. 75, *oculator* p. 76, *lahimierus* p. 77 (with subsp. n. *aethiopicus*), *menamena* p. 78 spp. n. Kenya figs., SEYRIG Mém. Mus. H.n. Paris 4.

Holcopimpla annulicornis sp. n. Belgian Congo p. 11, SEYRIG t.c.

Homocidus struvei sp. n. Germany p. 6, HEDWIG Mitt. ent. Ver. Bremen 23 1935.

Homotropus kenyensis sp. n. Kenya p. 44, SEYRIG Mém. Mus. H.n. Paris 4.

Hoplocryptus sugiharai sp. n. Japan p. 9, UCHIDA Ins. mats. 11.

Hygrocryptus wadai sp. n. Japan p. 9, UCHIDA Ins. mats. 11.

Hymenobosmina iavilai sp. n. New Hebrides p. 190, CHEESMAN Trans. R. ent. Soc. Lond. 85.

Hypomecus tylus sp. n. Kuriles p. 142 figs., UCHIDA Ins. mats. 10.

Iaria gen. n. for *Mesostenrus palatus* Tosq. (type), *papiliomaculata* Papua p. 369 (with subsp. n. *veitchi* Queensland), *reticulata* p. 370, *punctulata* p. 371 spp. n. Papua figs., CHEESMAN Nova Guinea 17 Zool.

Ibornia gen. n. (Tryphoninae) p. 32, *bicolor* (type) p. 34, *unicolor*, *andersoni* p. 36 spp. n. Kenya fig., SEYRIG Mém. Mus. H.n. Paris 4.

Ichneumon Linnean types in the Stockholm Museum, ROMAN Ent. Tidskr. 57 pp. 1-5, 2 figs.—*I. villosus* p. 7, *hummeli* p. 8, *plugatorius* p. 9, *pleuratoris* p. 10, spp. n. China, ROMAN Ark.

Zool. 27A no. 40.—*I. insidiosus* subsp. n. *balcanicus* Bulgaria p. 86, HEINRICH Mitt. naturw. Inst. Sofia 9.—*I. vulneratorius* ab. n. *nigricollis* Finland p. 106, HELLÉN Notul. Ent. 16.—*I. caedator* Grav. (= *antigai* Berth.) p. 33, HEINRICH Polsk. Pismo ent. 13.—*I. valentinensis* sp. n. Italy p. 106, BAUER Boll. Soc. ent. ital. 68.

Irabatha cairnsensis Queensland p. 375, *immaculata* Papua p. 376, spp. n. figs., CHEESMAN Nova Guinea 17 Zool.

Ischnojoppa tarsalis see *Caenocryptoides*.

Ischnus shikotanensis sp. n. Kuriles p. 145, UCHIDA Ins. mats. 10.

Iseropus provocator sp. n. Mt. Kenya p. 12, SEYRIG Mém. Mus. H.n. Paris 4.

Itopectis luteus sp. n. Mt. Kenya p. 15, SEYRIG t.c.

Leptocryptus speculator sp. n. Mt. Kenya p. 4, SEYRIG t.c.

Lorio gen. n. for *Mesostenus austerus* Tosq. (type) p. 384 (with subsp. n. *schlecteri* Kaiser Wilhelm's Land) and *tanyopus* Cam. p. 385 figs., CHEESMAN Nova Guinea 17 Zool.

Mavandia gen. n. (Ophioninae), *nanyukiana* (type) p. 94, *incompleta* p. 96, spp. n. Kenya figs., SEYRIG Mém. Mus. H.n. Paris 4.

Mavandiella gen. n. (Ophioninae), *hemitelina* sp. n. Kenya p. 97 figs., SEYRIG t.c.

Melanichneumon monostagon ab. n. *nigriscuta* p. 104; *locutor* ab. n. *nigriscutata* p. 105 Finland, HELLÉN Notul. Ent. 16.

Mesostenoides megaspilus see Wuda.

Mesostenus discoidalis sp. n. Japan p. 12, UCHIDA Ins. mats. 11.—*M. palatus* see *Iaria*; *pudens* see *Diloa*; *austerus*, *tanyopus* see *Lorio*.

Metacoelus conviva sp. n. Madagascar (with var. n. *kenyensis* Nairobi) p. 38, SEYRIG Mém. Mus. H.n. Paris 4.

Metopius brevicornis sp. n. Kenya p. 31, SEYRIG t.c.

Microcryptus murinanae sp. n. Germany p. 586 fig., FAHRINGER Z. angew. Ent. 22.—*M. setiferae* Japan p. 188

10, *tosaensis* p. 17 Japan, *maruyamensis* Kuriles p. 47 11, spp. n., UCHIDA Ins. mats.

Musakia bilineata sp. n. Kenya p. 236, HEINRICH Mém. Mus. H.n. Paris 4.

Myrmeleonostenus gen. n. (Mesostenini) p. 116, *babai* sp. n. Japan p. 117, fig., UCHIDA Ins. mats. 10.

Necolio gen. n. (Mesostenini), *jugosus* sp. n. New Guinea p. 373 figs., CHEESMAN Nova Guinea 17 Zool.

Nemeritis ejecta Uganda p. 90, *pulsator* Kenya p. 91 spp. n., SEYRIG Mém. Mus. H.n. Paris 4.—*N. tectonae* Burma p. 431, PERKINS Bull. ent. Res. 27; biology p. 432, ATKINSON t.c.

Neoplatylabus gen. n. type *Platylabus cothurnatus* Grav. p. 197, HEINRICH Dtsch. ent. Z. 1935.

Nepiera obliqua p. 87, *solitaria* p. 88, spp. n. Kenya, SEYRIG Mém. Mus. H.n. Paris 4.

Nippocryptus gen. n. for *Cryptus suzuki* Mats. p. 3 fig., UCHIDA Ins. mats. 11.

Notoplatylabus gen. n. (Ichneumoniinae) p. 30, *podolicus* sp. n. Poland p. 31 fig., HEINRICH Polsk. Pismo ent. 13.

Nototrachys taparilensis sp. n. Banks I. p. 188, CHEESMAN Trans. R. ent. Soc. Lond. 85.—*N. punctatulus* sp. n. Nairobi p. 45, SEYRIG Mém. Mus. H.n. Paris 4.

Omorgus alsophilae sp. n. Japan p. 119, UCHIDA Ins. mats. 10.—*O. multicinctus* var. n. *nigriscapus* Rumania p. 182, CONSTANTINEANU Ann. sci. Univ. Jassy 22.

Ophthalmochorus crassus sp. n. Kenya p. 99 figs., SEYRIG Mém. Mus. H.n. Paris 4.

Orthocentrus longiceps, *semiflavus* p. 39, *limpidus* p. 41, spp. n. Kenya figs., SEYRIG t.c.

Osprynchotus capensis subsp. n. *ruficeps* Abyssinia p. 3, SEYRIG t.c.

Paniscus samoana subsp. n. *barnardi*; *woris* p. 191, *ehilis* p. 192, *tamis* p. 193, spp. n. New Hebrides figs., CHEESMAN Trans. R. ent. Soc. Lond. 85.

Paragambrus gen. n. for *Gambrus sapparonis* Uch. p. 7 fig., UCHIDA Ins. mats. 11.

Parapeckthis gen. n. (nr. *Apeckthis*),
bazani sp. n. Argentina p. 404 figs.,
BLANCHARD An. Soc. ci. Argent. 122.

Parasilsilia gen. n. (Mesostenini),
trilineata sp. n. Queensland p. 368 figs.,
CHEESMAN Nova Guinea 17 Zool.

Pepsijoppa gen. n. type *Trogus gryps*
Morl. p. 199, HEINRICH Dtsch. ent. Z.
1935.

Perilissus nyerinus sp. n. Mt. Kenya
p. 28, SEYRIG Mém. Mus. H.n. Paris
4.—*P. athaliae* sp. n. Japan p. 121 fig.,
UCHIDA Ins. mats. 10.

Phaeogenes shiodai sp. n. Kuriles p.
144, UCHIDA Ins. mats. 10.

Photocryptus nigrosignatus Kriechb.
from *Poecilocryptus* p. 466, CUSHMAN
J. Wash. Acad. Sci. 26.

Phygadeuon kochiensis Japan p. 19,
kurilensis Kuriles p. 48, spp. n., UCHIDA
Ins. mats. 11.

Phytodietus formosanus p. 253, *arisanus*
p. 255, spp. n. Formosa, SONAN Trans.
n.H. Soc. Formosa 26.—*P. varicolor* sp.
n. Mt. Kenya p. 5, SEYRIG Mém. Mus.
H.n. Paris 4.

Pimpla key to African spp. p. 12;
properata subsp. n. *aequatorialis* Kenya
p. 13, SEYRIG Mém. Mus. H.n. Paris 4.

Platylabus stellae sp. n. Poland p. 28;
stali ♂ p. 37, HEINRICH Polsk. Pismo
ent. 13.—*P. latiscapus* see *Stenolabus*;
cothurnatus see *Neoplatylabus*; *nigri-*
collis see *Cyclolabus*.

Plectocryptus albitarsis sp. n. Kuriles
p. 45, UCHIDA Ins. mats. 11.—*P.*
hokkaidensis see *Chasmocryptus*.

Poecilocryptus Cam. (= *Poecilo-*
pimpla Morl.) p. 465, CUSHMAN J. Wash.
Acad. Sci. 26.—*P. nigrosignatus* see
Photocryptus.

Poecilopimpla see *Poecilocryptus*.

Poemenia taiwana sp. n. Formosa p.
414, SONAN Trans. n.H. Soc. Formosa
26.

Polysphincta curvicauda sp. n. Mt.
Elgon p. 6, SEYRIG Mém. Mus. H.n.
Paris 4.—*P. iwatai* sp. n. Japan p. 120
fig., UCHIDA Ins. mats. 10.

Polysphinctopsis eximia f. n. *nigri-*
thorax Kuriles p. 54, UCHIDA Ins. mats.
11.

Pristomerus taoi sp. n. Formosa p.
270, SONAN Trans. n.H. Soc. Formosa
26.

Procerochasmias rufithorax sp. n.
Kenya p. 238, HEINRICH Mém. Mus.
H.n. Paris 4.

Pseudopompilia gen. n., *gigantea* sp. n.
Fr. Congo p. 580, FAHRINGER Festschr.
E. Strand 1.

Rhopalophion gen. n., *curvus* sp. n.
Tanganyika p. 49 fig., SEYRIG Mém.
Mus. H.n. Paris 4.

Schizopyga pulchra sp. n. Canada p. 20,
WALLEY Canad. Ent. 68.

Schizospilus gen. n. (Ophioninae)
p. 79, *divisus* (type) Abyssinia p. 80,
babaulti Nairobi p. 81, spp. n. figs.,
SEYRIG Mém. Mus. H.n. Paris 4.

Seydelia gen. n. p. 578, *curiosa* sp. n.
Belgian Congo p. 579, FAHRINGER
Festschr. E. Strand 1.

Silsila albopictus subsp. n. *papuensis*
Papua p. 365 figs., CHEESMAN Nova
Guinea 17 Zool.

Siphimedia purpurata p. 250, *apicalis*
p. 415, *scutellaris* p. 416, *nigricephala*
p. 417, *intermedia* p. 418, spp. n.
Formosa, SONAN Trans. n.H. Soc.
Formosa 26.

Stenichneumon militarius ab. n. *rufe-*
scens Finland p. 106, HELLEN Notul.
ent. 16.

Stenolabus gen. n. type *Platylabus*
latiscapus Thoms. (type) p. 197;
mesoleucus sp. n. Rumania p. 198,
HEINRICH Dtsch. ent. Z. 1935.

Stiromesostenus albiorbitalis sp. n.
Queensland p. 372, CHEESMAN Nova
Guinea 17 Zool.

Stylocryptus sugiharai sp. n. Japan p.
18, UCHIDA Ins. mats. 11.

Taiwatheronia gen. n. (Pimplinae),
mahasenae sp. n. Formosa p. 256 fig.,
SONAN Trans. n.H. Soc. Formosa 26.

Tarytia maluensis sp. n. Hebrides p.
194, CHEESMAN Trans. R. ent. Soc.
Lond. 85.

Teleutaeta arisana sp. n. Formosa p.
251, SONAN Trans. n.H. Soc. Formosa
26.—*T. minor* sp. n. Nairobi p. 17,
SEYRIG Mém. Mus. H.n. Paris 4.

Tetractenion luteum sp. n. Mt. Kenya
p. 27, SEYRIG t.c.

Theronia univittata sp. n. Belgian
Congo p. 16 fig., SEYRIG t.c.

Trogus gryps see *Pepsijoppa*.

Tryphon venustensis sp. n. Italy p. 110, BAUER Boll. Soc. ent. ital. 68.

Viereckiana anomala sp. n. Kenya p. 82, SEYRIG Mém. Mus. H.n. Paris 4.

Wuda gen. n. for *Mesostenoides megaspilus* Cam. (type) p. 385, *singularis* sp. n. New Guinea p. 386 figs., CHEESMAN Nova Guinea 17 Zool.

Xanthocampoplex continentalis sp. n. Mombasa p. 86, SEYRIG Mém. H.n. Paris 4.

Xanthocryptus monstratus p. 377, *cordatus* p. 378, *albicularis* p. 379 Papua, *immixtum* p. 378, *unicarinatus* p. 380, *gravis* p. 381, *wallacei* New Guinea, spp. n.; *albopictus* subsp. n. *lugubris* Queensland p. 382 figs., CHEESMAN Nova Guinea 17 Zool.

Xanthopimpla nowebin p. 178, *xara* p. 179, spp. n. New Hebrides figs., CHEESMAN Trans. R. ent. Soc. Lond. 85.

Xorides mushana sp. n. Formosa p. 413, SONAN Trans. n.H. Soc. Formosa 26.

Zachrestia lua sp. n. New Hebrides p. 189, CHEESMAN Trans. R. ent. Soc. Lond. 85.

Zaglyptus varipes larva p. 28 fig., MANEVAL Rev. franç. Ent. 3.

BRACONIDAE.

Cheloninae of China CHU Ent. & Phytopath. 4 pp. 682-685.

Key to some Braconid subfamilies, FAHRINGER Festschr. E. Strand 1 p. 586.

Table of British genera, list of spp. with keys of Microgasterinae, MORLEY Entomologist 69 pp. 39-42, 64, etc. 1 fig.

Revision of Nearctic Euphorinae, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241 36 pp. 2 figs.

Braconidae of U.S.S.R., TELENGA Faune de l'URSS 5 1936 xvi + 402 pp. 53 figs.

Acrisis Först. (= *Euchasmus* Marsh., *Episigalphus* Ashm.) p. 175, characters p. 176; *americana* Ashm. from *Pygostolus* p. 177 fig., MUESEBECK Proc. ent. Soc. Wash. 37.

Apanteles seyrigi Madagascar p. 81, *olivierellae* Algeria p. 83, *sibyllarum*

England, Germany p. 174, *reinhardi* England p. 222 spp. n.; *pallipes* identity p. 220, re-description p. 221 figs., WILKINSON Proc. R. ent. Soc. Lond. (B) 5.

Aridelus Marshall (= *Helorimorpha* Schmied., *Stictometeorus* Cam., *Erythrometeor* Cam., *Scipolabia* End.) p. 6, *nigrithorax* sp. n. Texas p. 8, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Aspilota petiolatus Prov. from *Rhopalophorus* p. 35, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.—*A. phoridarum* sp. n. Italy p. 201 figs., GOIDANICH Boll. Ist. Ent. Univ. Bologna 8.

Atanycolus crenulatus pp. 84, 327, *nigriventris* pp. 85, 327, *picipes* pp. 85, 328 Ussuri, *albiscutis* Russia pp. 90, 328, *mongolicus* Mongolia pp. 92, 329, spp. n. figs., TELENGA Faune URSS 5.—*A. nigriventris. orientalis* spp. n. Ussuri p. 304, VOJNOUSKAJA-KRIEGER Rev. Ent. U.R.S.S. 25 1935.

Baryproctus zarudnianus Iran, *turanicus* Turkestan pp. 120, 337, *ussuriensis* Ussuri, *caucasicus* Caucasia pp. 121, 338, spp. n., TELENGA Faune URSS 5.

Bequartia [sic] gen. n. p. 573, *gigantea* sp. n. Belgian Congo p. 574, FAHRINGER Festschr. E. Strand 1.

Bracon mongolicus Mongolia pp. 180, 382, *saltator* Ussuri pp. 182, 382, *pliginskii* Crimea pp. 182, 383, *carinatus* Turkestan pp. 183, 383, *armeniacus* Armenia pp. 186, 384, *infernalis* Caucasus pp. 187, 384, *olgae* Kazakhstan pp. 189, 384, *spectabilis* Transcaucasia pp. 190, 385, *venustus* Crimea pp. 191, 385, *ciscaucasicum* N. Caucasus pp. 194, 385, *temporalis* Turkmenia pp. 193, 366, *ahngeri* Russia pp. 196, 387, *kozlovi* Mongolia pp. 198, 387, *popovi* Kazakhstan pp. 199, 387, *delusorius* Turkmenia pp. 199, 388, *helleni* Uralsk, *ductor* Transbaikalia pp. 200, 388, *ochrostigma* (p. 202) (as *xanthostigma* p. 389) Turkestan, *turcomenus* Turkmenia pp. 204, 389, *tauricus* Crimea pp. 207, 389, *persimilis* N. Caucasus, *collaris* Turkmenia pp. 209, 390, *lividus* Transcaucasia pp. 210, 390, *ornatus* Mongolia pp. 210, 391, *brevis* China pp. 214, 391, *camellatus* W. Siberia pp. 216, 392, *kirgisorum*, *jaroslavensis* pp. 217, 392, *tekkensis* Turkmenia pp. 223, 393, *chivensis* Turkestan pp. 228, 393, *kiritshenkoi* N. Caucasus

pp. 235, 393, *quadrimaculatus* Turkmenia pp. 237, 394, *pulcherrimus* Transcaucasia pp. 239, 394, *kozak* N. Caucasus pp. 240, 395, *ovoides* Turkmenia, *shestakovi* Turkmenia pp. 241, 395, *depressus* pp. 244, 396, *jacobsoni* pp. 245, 396 Turkmenia, *dahuricus* Ussuri pp. 246, 396, *segregatus* Siberia pp. 263, 397, *transbaicalicus* Transbaikalia pp. 266, 397, *meyeri*, *irkutensis* pp. 269, 398 E. Siberia, *planiceps* Russia pp. 273, 398, *transcaspicus* pp. 278, 399, *lencoranus* pp. 279, 399 Transcaspia, *talitzkii* Russia pp. 283, 399, *suchorukovi* Kazakstan, *dobrovolskii* Russia pp. 284, 400, *maslovskii* Ussuri pp. 286, 401, *laticeps* Crimea pp. 293, 401, *lagodechianus* Transcaucasia pp. 294, 402, *biimpressus* Russia pp. 295, 402 spp. n.; *urinator* var. n. *turkestanica* Turkmenia p. 186; *hemiflavus* var. n. *meridionalis* p. 202; *breviventris* var. n. *rytensis* p. 212; *maculiger* var. n. *caucasica* p. 213; *rufigaster* var. n. *notatus* p. 263; *praetermissus* var. n. *maculatus* p. 301 U.R.S.S. figs., TELENGA Faune URSS 5.

Bracotritoma n. n. for *Tritoma* Szépl. 1908 nec F. 1775 p. 13, CSIKI Rovart. Lap., Budapest 16 1909.

Brachystropha linearis Prov. from *Dinocampus* p. 35, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Centistes Hal. (= *Euphoridea* Ashm., *Liosigalphus* Ashm.) p. 34, MUESEBECK t.c.

Chelonella jungi sp. n. China p. 683 fig., CHU Ent. & Phytopath. 4.

Cryptoxilos convergens sp. n. U.S.A. p. 9 figs., MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Dacnusa cyanaraphila see *Grandia*.

Dinocampus coccinellae, *pyri* see *Perilitus*; *linearis* see *Brachystropha*.

Dirrhope characters p. 173, *americana* sp. n. Virginia p. 174 fig., MUESEBECK Proc. ent. Soc. Wash. 37.

Episigalphus see *Acrisis*.

Erythrometeoros see *Aridelus*.

Euchasmus see *Acrisis*.

Euglyptobracon gen. n. type *umbraulator* Nees; *bicolor* sp. n. Ciscaucasia pp. 104, 335, TELENGA Faune URSS 5.

Euphoridea see *Centistes*.

Euphoriella pacifica sp. n. California p. 26, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Euphorus key to Nearctic spp., *occipitalis* p. 29, *spiniscapus* p. 30, *tuberculatus* p. 31, *levifrons* p. 32 spp. n.; *maculipennis* Ashm. from *Sierola* p. 30; *pallipes* Curt. (= *mellipes* Cress., *Microctonus punctatus* Prov.) p. 33 figs., MUESEBECK t.c.

Exothecus propinquus sp. n. Baffin I. p. 190, WALLEY Canad. Ent. 68.

Fornicia chalcoscelidis sp. n. Malaya p. 386 fig., WILKINSON Bull. ent. Res. 27.

Glabriolium barchanicum, *deserti* spp. n. Turkmenia pp. 71, 322 figs., TELENGA Faune URSS 5.

Glyptomorpha desertor var. n. *intermedia* p. 59; *minuta* Caucasia pp. 65, 320, *deserticola* pp. 66, 320, *ovata* pp. 67, 320 Turkmenia, Armenia, *rugosa* pp. 68, 321, spp. n. figs., TELENGA t.c.

Grandia gen. n. for *Dacnusa cynaraphila* Goid. p. 205 figs., GOIDANICH Boll. Ist. Ent. Univ. Bologna 8.

Habrobracon nygmiae Russia pp. 127, 342, *mongolicus* Mongolia pp. 130, 342 (as *kozlovi* in Index p. x), *turkestanicus* pp. 131, 343, *flavus*, *radialis* pp. 134, 343 Turkmenia, spp. n., TELENGA Faune URSS 5.

Heliobracon gen. n., *zarudnyi* sp. n. Iran pp. 72, 323, TELENGA t.c.

Helorimorpha see *Aridelus*.

Hysteroctonus Vier. from Euphorinae to Blacinae p. 34, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Idiasta longicornis Prov. from *Rhopalophorus* p. 35, MUESEBECK t.c.

Iphiaulax pulchellus sp. n. Turkmenia pp. 117, 336, TELENGA Faune USSR 5.

Ipobracon praecinctus W. Siberia pp. 96, 331, *differens* pp. 199, 332, *brachyurus* pp. 100, 332 Russia, *curvatus* Ussuri pp. 101, 333, spp. n. figs., TELENGA t.c.

Lecythodella see *Streblocera*.

Liosigalphus see *Centistes*.

Macrocentrus innuitorum sp. n. Baffin I. p. 187, WALLEY Canad. Ent. 68.

Meteorus Hal. (= *Pachythecus* Cam.) p. 8, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Microctonus key to Nearctic spp. p. 15, *carabivorus* p. 16, *vittatae* p. 19, *pusillae* p. 20 spp. n.; *gastrophysae* Ashm., *mellinus* Prov. p. 17, *eleodis* Vier., *nigritus* Prov., *epitricis* Vier. p. 18 from *Perilitus* figs., MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.—*M. punctatus*, see *Euphorus pallipes*; *vigilax* see *Syntretus*; *agilis* see *Syrrhizus*.

Microgaster pluto sp. n. England p. 211, MORLEY Entomologist 69.—*M. papua* p. 86, *kokodana* p. 87, spp. n. Papua, WILKINSON Proc. R. ent. Soc. Lond. (B) 5.

Mirax leucopterae sp. n. Tanganyika p. 385 fig., WILKINSON Bull. ent. Res. 27.

Myiocephalus Marsh. (= *Spilomma* Morl.) p. 21, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Opius fijiensis sp. n. Fiji p. 179, FULLAWAY Proc. Hawaii. ent. Soc. 9.

Pachythecus see *Meteorus*.

Pelecystoma nigrovenosum sp. n. Ussuri p. 304, VOJNOVSKAJA-KRIEGER Rev. Ent. U.R.S.S. 25 1935.

Pentapleura mesocrinoides sp. n. Italy p. 197 fig., GOIDANICH Boll. Ist. Ent. Univ. Bologna 8.

Perilitus coccinellae Schrank p. 12, *pyri* Vier. p. 13 from *Dinocampus*, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.—*P. gastrophysae*, *mellinus*, *eleodis*, *nigritus*, *epitricis* see *Microctonus*.

Phanomeris borealis sp. n. Baffin I. p. 188, WALLEY Canad. Ent. 68.

Polemon melas re-description p. 213 figs., GOIDANICH Boll. Ist. Ent. Univ. Bologna 8.

Pseudodicrogenium gen. n. p. 571, *monstrosum* sp. n. Belgian Congo p. 572, FAHRINGER Festschr. E. Strand 1.

Pseudostrandiella gen. n., *helonoides* sp. n. Belgian Congo p. 575, FAHRINGER t.c.

Pygostolus americanus see *Acrisis*.

Rhopalophorus fasciatus see *Spathius*; *longicornis* see *Idiasta*; *petiolatus* see *Aspilota*.

Scipolabia see *Aridelus*.

Sierola maculipennis see *Euphorus*.

Spathius fasciatus Prov. from *Rhopalophorus* p. 35, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Spilomma see *Myiocephalus*.

Stictometeorus see *Aridelus*.

Streblocera Westw. (= *Lecythodella* End.) p. 13, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

Syntretus venustus p. 23, *brevicornis* spp. n.; *vigilax* Prov. from *Microctonus* p. 24 figs., MUESEBECK t.c.

Syrrhizus agilis Cress. from *Microctonus* p. 35, MUESEBECK t.c.

Teraturus shelkovnikovi sp. n. Transcaucasia pp. 45, 315, TELENGA Faune URSS 5.

Tritoma see *Bracotritoma*.

Vipio striolatus Transcaucasia pp. 31, 313, *shestakovi* Turkmenia, *mongolicus* Mongolia pp. 35, 313, *angaricus* Siberia pp. 42, 314, spp. n. figs., TELENGA Faune URSS 5.

Wesmaelia pendula Foerst. (= *cremasta* Marsh., *americana* Myers, *asiatica* Shest.) p. 21, MUESEBECK Misc. Pub. U.S. Dep. Agric. no. 241.

APHIDIIDAE.

Aphidius aterrimus sp. n. Austrian Alps p. 45, FAHRINGER in SEITNER Zbl. ges. Forstw. 62.—*A. expectatus*, *praevisus* spp. n. France p. 74, GAUTIER & BONNAMOUR Bull. Soc. linn. Lyon (n. s.) 5.

EVANIIDAE.

Hyptiogaster ritae sp. n. New Hebrides p. 176 fig., CHEESMAN Trans. R. ent. Soc. Lond. 85.

Tenthredinoidea.

Key to European genera of Fenu-sinae, BENSON Ann. Mag. n.H. (10) 18 p. 620.

Tenthredinoidea of E. Baltic, II, CONDE KorrespBl. naturf. Ver. Riga 61 1934 pp. 168-198.

Some Cumberland sawflies, MARRINER Ent. Rec. 48 pp. 41-44.

Tenthredininae of Pennsylvania, WILL Proc. Penn. Acad. Sci. 6 1932 pp. 38-42.

Synonymy of Tenthredininae of America, north of Mexico, WILL Proc. Penn. Acad. Sci. 6 1932 pp. 42-46.

Tenthredinoidea of Saghalien, TAKEUCHI Tenthredo 1 pp. 53-108, 2 pls.

Abia zirngiebli sp. n. Bukhara p. 1, FORSIUS Notul. ent. 16.

Allantus bistriatus sp. n. China p. 220, MALLACH Bull. Fan mem. Inst. Biol. 6.—*A.* key, *vilarrubai* sp. n. Spain p. 231; *syriacus* ♂ p. 232 figs., CONDE Butll. Inst. catal. H.n. 35 1935.—*A. sumatranus* sp. n. Sumatra p. 32, FORSIUS Ann. Mus. Genova 59 1935.

Anoplolyda viriditibialis var. n. aino Japan p. 62, TAKEUCHI Tenthredo 1.

Aprostema melanura Klg. (= *bifida* Klg.) p. 193, CONDE KorrespBl. naturf. Ver. Riga 61 1934.

Arge versicolor ♀ p. 1, FORSIUS Notul. ent. 16.

Armitarsus semirufus sp. n. Japan p. 86, TAKEUCHI Tenthredo 1.

Atlophorus caprae sp. n. Sumatra p. 34, FORSIUS Ann. Mus. Genova 59 1935.

Brachythops seminigra see *Coryna flavens*.

Cephus subrufa see *Neosyrista similis*.

Chalinus berlandi p. 6 (1935), *congoensis* p. 260 Belgian Congo, *schulthessi* Delagoa p. 136, spp. n. figs., GUIGLIA Ann. Mus. Genova 59.

Corymbas nipponica sp. n. Japan p. 154, key p. 155 fig., TAKEUCHI Tenthredo 1.

Coryna flavens Lep. (= *Brachythops seminigra* Curt.) p. 204, BENSON Ent. mon. Mag. 72.

Dolerus sachalinensis sp. n. Japan p. 89, TAKEUCHI Tenthredo 1.

Emphytina albovaria sp. n. Japan p. 91, TAKEUCHI t.c.

Empria key to Nearctic spp. p. 173, *nordica* sp. n. Canada p. 175 figs., ROSS Pan-Pacific Ent. 12.

Entomostethus hyalinus sp. n. Japan p. 99, TAKEUCHI Tenthredo 1.

Fenusa Leach (= *Paraphyllotoma* Fors.) p. 623, BENSON Ann. Mag. n.H. (10) 18.—*F.* key to Nearctic spp.; *dohrnii* Tischbein (= *Fenusa curtus* Norton) from *Kaliosysphinga* p. 263;

ulmi Sundewall (= *Messa alsia* MacGill.); *alumna* MacGill. (= *amica* MacGill. = *appota* MacGill.) from *Messa*; *inspiratus* MacGill. from *Parabates*; *anita* MacGill. from *Messa* p. 265; *lucifex* sp. n. Illinois p. 266 figs., ROSS Trans. Ill. Acad. Sci. 29 no. 2.—*F. excisa* see *Hinatara*.

Haplostegus key p. 120, *scutater* p. 122, *luteolus*, *nigricrus* p. 124, spp. n. Brazil, CONDE Rev. Ent. Rio de J. 6.

Hinatara gen. n. for *Fenusa excisa* Kon. p. 626, BENSON Ann. Mag. n.H. (10) 18.

Holcocneme inornata sp. n. Japan p. 162 fig., TAKEUCHI Tenthredo 1.

Hoplocampa revision of British species pp. 58-62, key p. 60 figs., MILES Ent. mon. Mag. 72.

Kaliosysphinga dohrnii see *Fenusa*.

Loderus sadensis sp. n. Japan p. 156 fig., TAKEUCHI Tenthredo 1.

Lygaonematus mollis Htg. (= *Pachynematus penegalensis* Ensl.) p. 190, CONDE KorrespBl. naturf. Ver. Riga 61 1934.—*L. subarcticus* sp. n. Lapland p. 14 figs., FORSSLUND Ent. Tidskr. 57.—*L. retusus* ♂ p. 109, LINDQUIST Notul. Ent. 16.—*L. stecki* sp. n. Switzerland p. 218; *pini* morphology, bionomics pp. 220-381 figs., NÄGELI Mitt. schweiz. Anst. forstl. Versuchsw. 19.

Macrophya birmanica sp. n. Burma p. 29, FORSIUS Ann. Mus. Genova 59 1935. Emended to *Pachyprotasis birmanica* in errata.—*M. trisyllabus* taxonomy and nomenclature p. 106, WILL Proc. Penn. Acad. Sci. 8 1934.—*M. canescens* p. 220, *vittata* p. 221, spp. n. China, MALLACH Bull. Fan mem. Inst. Biol. 6.

Megaxyela langstoni sp. n. Mississippi p. 131, ROSS Ent. News 47.

Mesoneura macroptera sp. n. Japan p. 160 fig., TAKEUCHI Tenthredo 1.

Messa alsia, *alumna*, *anita*, see *Fenusa*.

Micronematus camtschatcalis see *Pristiphora punctifrons*.

Mocsarya syriaca sp. n. Syria p. 2, BENSON Proc. R. ent. Soc. Lond. (B) 5.

Neopelmatus gen. n. type *anemones* Her. p. 181, CONDE KorrespBl. naturf. Ver. Riga 61 1934.

Neosyrista japonica ♂ p. 179 figs., RIES Proc. R. ent. Soc. Lond. (B) 5.—*N. similis* (= *japonica* Bens., *Cephus subrufa* Moes.) biology pp. 185–210 figs., Ho Bult. sci. Fak. terk. Kjušu Univ. 7.

Neurotoma nemoralis var. n. *obsoleta* Japan p. 60, TAKEUCHI Tenthredo 1.

Oryssia loriae status discussed p. 37, morphology p. 39 figs., GUIGLIA Ann. Mus. Genova 59 1935.

Pachynematus penegalensis see *Lygaeonematus mollis*.

Pachyprotasis antennatus (emended to *alboannulata* in errata) p. 28, *birmanica* (described p. 29 under *Macrophya*) errata, spp. n. Burma, FORSIUS Ann. Mus. Genova 59 1935.—*P. rapae* var. n. *melas* Japan p. 85, TAKEUCHI Tenthredo 1.

Parabates inspiratus see *Fenusia*.

Paraphyllotoma see *Fenusia*.

Parna gen. n. for *Tenthredo tenella* Klug p. 624 figs., BENSON Ann. Mag. n.H. (10) 18.

Priophorus laevifrons sp. n. England p. 205, BENSON Ent. mon. Mag. 72.

Pristiphora punctifrons Thoms. (= *viridana* Knw., *Micronematus camtschatcalis* Ensl.) p. 192, CONDE KorrespBl. naturf. Ver. Riga 61 1934.

Sciapteryx hauseri sp. n. Karateghin p. 2, FORSIUS Notul. ent. 16.

Scolioneura nigricans status discussed p. 55, STRITT Arb. morph. taxon. Ent. Berl. 3.—*S. nana* Klug (= *laeta* Enslin) p. 625, BENSON Ann. Mag. n.H. (10) 18.

Selandria cinereipes Kl. (= *foveifrons* Thoms.) p. 57, STRITT Arb. morph. taxon. Ent. Berl. 3.—*S. kanoi* sp. n. Japan p. 94, TAKEUCHI Tenthredo 1.

Tenthredella alboannulata var. n. *kanoi* p. 69; *tamanukii* p. 71, *rubrocaudata* p. 74 spp. n.; *pseudolivacea* var. n. *omega* p. 76 Japan, TAKEUCHI t.c.

Tenthredo babai sp. n. Japan p. 151 fig., TAKEUCHI t.c.—*T. triangulata* p. 217, *tombi* p. 218, *rufonotalis* p. 219, spp. n. China, MALLACH Bull. Fan mem. Inst. Biol. 6.—*T. limbata* ab. n. *nigri-femur* E. Baltic p. 170, CONDE KorrespBl. naturf. Ver. Riga 61 1934.—*T. rubricoxis* ♂ p. 58, STRITT Arb. morph. taxon. Ent. Berl. 3.—*T. tenella* see *Parna*.

Tenthredopsis sachalinensis var. n. *nigrolineatus* Japan p. 80, TAKEUCHI Tenthredo 1.—*T. taxonomy* and nomenclature of American spp. north of Mexico pp. 32–34, WILL Proc. Penn. Acad. Sci. 7 1933.

Ulotomostethus gen. n. p. 32, *gribodoi* sp. n. Burma p. 33 figs., FORSIUS Ann. Mus. Genova 59 1935.

Xiphydria annulitibia sp. n. Japan p. 55, TAKEUCHI Tenthredo 1.

LEPIDOPTERA.

French translations of descriptions of new forms of Lepidoptera described by Wize in Polish, [Anon.] Lambillionea **36** pp. 182-184.

Notes on some Lepidoptera of Mont Dore, des ABBAYES Amat. Papill. **8** pp. 11-16.

Figures of Palestine Lepidoptera described in 1935, AMSEL Veröff. dtsh. kol. Mus. Bremen **1** pp. 367-368.

Notes on some Swedish Lepidoptera, ANDER Opusc. ent. Lund **1** pp. 58-64.

Lepidoptera of Barra, CAMPBELL, MACKENZIE & BORGSTRÖM The book of Barra pp. 27, 317-318.

Macrolepidoptera of the Lower Rhine, DAHM & JUNG Iris **50** pp. 3-16.

Catalogue of Macrolepidoptera of Ireland, DONOVAN Cheltenham and London, E. J. Burrow & Co. 1936 100 pp.

Lepidoptera of Lund Univ. Museum, EHNBOOM Opusc. ent. Lund **1** pp. 31-35.

Taxonomic problems in Lepidoptera, FERRIS & DOUDOROFF Ent. News **47** pp. 124-128.

Lepidoptera of Hvar (Lesina), GALVAGNI Verh. zool.-bot. Ges. Wien **85** pp. 118-121.

Tabulated list of families of Lepidoptera of Sta. Catharina, HOFFMANN Ent. Z. **50** pp. 301-304.

Lepidoptera of St. Catharina, HOFFMANN Ent. Rdsch. **53** pp. 206-207, 221 etc.; **54** pp. 13-16, 23 etc.

Lepidopterous fauna of Actopan, HOFFMANN An. Inst. Biol. Mexico **7** pp. 259-263.

Lepidoptera observed in Jutland in 1926-1935, HOFFMEYER & KNUDSEN Flora og Fauna **42** pp. 49-58.

List of Lepidoptera of Volhyn, KATERINICH Trav. Soc. Nat. Charkow **53** 1930 pp. 65-74.

Catalogue of Japanese Lepidoptera, KISHIDA & NAKAMURA Ent. World **4** pp. 433-673.

Lepidoptera from central and southern Italy, KREUZER Ent. Rdsch. **53** pp. 477-480, 487-490, 497-500, 516-520.

Lepidopterous fauna of middle Sikhote-Alin range, KURENZOV C.R. Acad. Sci. U.R.S.S. (N.S.) **4** 1935 pp. 377-379.

Catalogue of Netherland Macrolepidoptera, LEMPKE Tijdschr. Ent. **79** pp. 238-315.

Notes on Finnish Lepidoptera, II, LINGONBLAD Notul. ent. **16** pp. 3-12, 2 figs.

Lepidoptera from Ceará, Brazil, MAY Rev. Chil. Hist. nat. **40** p. 111.

Lepidoptera of S. Trans-Dnepre region, OBRAZTSOV Festschr. E. Strand **2** pp. 229-242.

Lepidoptera of Nikolaev State, OBRAZTSOV Trav. Mus. zool. Kiev no. **15** 1935 pp. 141-161.

Lepidoptera of Aegean Is., REBEL S.B. Akad. Wiss. Wien **144** 1935 Abt. **1** pp. 256-262.

List of Lepidoptera from Dodecanese, REBEL S.B. Akad. Wiss. Wien **145** Abt. **1** pp. 19-33.

Lepidoptera of Ankara, II, REBEL Ann. naturh. Mus. Wien **47** pp. 43-58, 2 figs.

Some Lepidoptera of Katanga, ROMEUX Mitt. schweiz. ent. Ges. **16** pp. 716-721.

Notes on some N. African Lepidoptera, SCHNEEUR Ent. Z. **49** pp. 480-481.

On the Lepidoptera of S. Ostrobothnia, SJÖSTEDT Notul. ent. **16** pp. 12-20.

Notes on some Lepidoptera of São Paulo, STEPHAN Ent. Z. **49** pp. 477-480, 1 fig.

Macrolepidoptera of Borkum I., STRUVE Ent. Rdsch. **53** pp. 552-554.

Lepidoptera of Gniezno and neighbourhood, WIZE Polsk. Pismo ent. **13** pp. 105-117.

British Lepidoptera in 1935, de WORMS Entomologist **69** pp. 104-107, 132-135, 157-159.

Lepidoptera of Morocco, ZERNY Mém. Soc. Sci. nat. Maroc **42** 1935 163 pp. 2 pls. 4 figs.

A treatise on Lepidoptera, ZERNY & BEIER in KÜKENHAL Handb. Zool. **4** Hfte 2 Lief. 7, 8 pp. 1554-1728, 195 figs.

Macrolepidoptera of Rilo district, Bulgaria, ZÜLLICH Z. öst. EntVer. **21** pp. 17-19, 35 etc.

Rhopalocera.

Notes on Cuban butterflies, BATES Mem. Soc. cubana H.n. **9** pp. 225-228, 1 fig.

British butterflies in 1935, BURKILL London Nat. **1935** pp. 67-70.

Some unusual butterfly records taken in Scott County, Kansas, CALKINS Bull. Brooklyn ent. Soc. **31** pp. 66-68.

Corrections and comments by Unge-mach on Rhopalocera of Abyssinia, CARPENTER Proc. R. ent. Soc. London (B) **5** pp. 196-200.

Notes on Rhopalocera, CETON Levende Natuur **41** pp. 10-16, 47-51, 18 figs.

List of butterflies from E. Virginia, CLARK J. Wash. Acad. Sci. **26** pp. 66-70, 14 figs.

Further notes on butterflies of S. Newfoundland, DOS PASSOS Canad. Ent. **68** p. 98.

Bulgarian Rhopalocera, June and July 1933, HAIG-THOMAS Entomologist **69** pp. 101-103, 136-139.

Butterflies of Frankfurt, HEPP Ent. Rdsch. **53** pp. 400-405, 412-414, 430-432.

Notes on some Californian butterflies, HOVANITZ Pan-Pacific Ent. **11** pp. 190-192.

Annotated list of 42 butterflies from Philippine Islands, IZUKA Zool. Mag. **48** pp. 653-664, 1 pl. 3 figs.

List of butterflies of the Cape Peninsula, LUNT Cape Nat. **1** pp. 92-94.

Coloured illustrations of butterflies, MURAYAMA & CULVER Nat. geogr. Mag. **69** pp. [673], [676-677], [680-681], [684-685], [688], 8 pls.

List of butterflies of Finland, VALLE Animalia fennica **2** 1935 174 pp. 11 pls. 70 figs.

Biology and systematics of Swedish butterflies, NORDSTRÖM, WAHLGREN, TULLGREN & LJUNGDAHL Svenska Fjärilar I (Allmänna Delen) pp. 17-32, 3 pls.; II (Syst. Delen) pp. 33-72.

Exotic butterflies, PORTMANN Falter-schönheit, Bern 1935 22 pp. 12 col. pls.

Some varieties of British Lepidoptera, RILEY Entomologist **69** pp. 221-222, 1 pl.

Butterflies of Secunderabad, SANDERS J. Bombay n.H. Soc. **33** pp. 800-802.

Butterflies of Tobago, SHELDON Entomologist **69** pp. 200-208.

Diurnal Lepidoptera from Kwantung, TINKHAM Lingnan J. Sci. **15** pp. 557-568, 1 pl.

Butterflies of Kenya & Uganda, suppl. to Vol. I, VAN SOMEREN J. E. Afr. & Ug. nat. Hist. Soc. **12** pp. 147-199, 32 pls.

Rhopalocera from Kalahari, VAN SON Ann. Transv. Mus. **17** pp. 121-140, 1 pl. 2 figs.

Lowland races of butterflies Upper Rhone Valley (End), VERITY Ent. Rec. **48** sep. pp. 77-89.

Addenda to Lepidopterous fauna of Siberia, WNUKOWSKY Lambillionea **36** pp. 51-52.

DANAIDAE.

Danaus (*Danais*) *dannatti* sp. n. Philippines, p. 112 figs., TALBOT Entomologist **69**.

Hestia leuconoë ab. n. *kodairai* Formosa p. 206 fig., SONAN Zephyrus **6**.

SATYRIDAE.

Argentine Satyridae, KOHLER Rev. Soc. ent. argent. **7** 1935 pp. 209-217, 3 pls.

Agapetes psyche Hb. (= *syllius* Hb., *occitanica* Esper) type locality Languedoc p. 121, HEMMING Proc. R. ent. Soc. Lond. (B) **5**.—See *Melanargia*.

Aphantopus hyperantus hyperantus L. (= *h. anzuensis* Seok) p. 995, SEOK Zool. Mag. **48**; *subsp. n. serbianus* Serbia, *borisi* Russia p. 244, *krymaeus* Crimea, *sibiricus* Irkutsk p. 245, OBRAZTSOV Festschr. E. Strand **2**; ab. n. *albipunctata* Germany p. 460, BOLDT Ent. Z. **49**.

Calisto loxias p. 233, *chrysacros* p. 235, *tragi* p. 236, *lyceius* p. 240, *eleleus* p. 244 Haiti, *smintheus* p. 242, *delos* p. 243 Cuba, *spp. n.* figs., BATES Occ. Pap. Boston Soc. n.H. **8** 1935.

Coenonympha tiphon subsp. n. *mackenziei* Canada p. 79, DAVENPORT Canad. Ent. 67.—*C. iphis* ab. n. *inornata* Bavaria p. 358, HÖRHAMMER Ent. Z. 50.—*C. dorus* Esper (= *dorion* Hb.); *tullia* var. *philoxenus* Esp. (= *demophile* Hb.) p. 122; *t.* var. *suevica* n. n. for *isis* Thbg. nec Dru. p. 123, HEMMING Proc. R. Ent. Soc. Lond. (B) 5.—*C. tullia* abb. n. *impupillata*, addenda Holland p. 287, LEMPKE Tijdschr. Ent. 79.—*C. arcanus* *biocellata* amended description p. 18, PIONNEAU Echange 51.—*C. oedippus* ab. n. *nana* Siberia p. 51, WNUKOWSKY Lambillionea 36.—*C. oedippus* *relluminans* subsp. n. (with ab. n. *antigone*) Siberia p. 22, KOZHANCHIKOV Folia zool. hydrobiol. 9.

Cosmosatyrus tandilensis sp. n. Argentina p. 215, KOHLER Rev. Soc. ent. argent. 7 1935.

Elymnias kinistleri subsp. n. *mariae* Malaya p. 46 fig., TOXOPEUS Ent. Med. Ned.-Ind. 2.

Enodia portlandia subsp. n. *anthedon* New York, *borealis* Ontario p. 255 figs., CLARK Proc. U.S. nat. Mus. 83 no. 2983.

Epinephele jurtina meridionalis, *occidentalis* distribution and validity discussed p. 19 51; *tithonus* ab. n. *unipupillata* France; *pasiphaë* Esp. (= *p. pardilloi* Sag.) p. 23 52, PIONNEAU Echange.—*E. jurtina* ab. n. *inocellata* Hungary p. 153, KISS Rovart. lap., Budapest 16 1909.—*E. coctei* var. n. *confusa* Argentina p. 216, KOHLER Rev. Soc. ent. argent. 7 1935.—See *Maniola*.

E. monograph vii + 407 pp., *euryale* subsp. *adyte* ab. n. *splendens* Simplon Pass p. 68; *aethiops* ab. n. *infasciata* Austria p. 136; *fasciata* ab. n. *suffusa* N.W. Territories p. 180; *medusa* ab. *alpestris* n. n. for *m. altissima* Warr. nec Goltz p. 192; *m.* subsp. n. *dolomitica* Dolomites p. 192, f. n. *sylvatica* Alps p. 193; *theano* subsp. n. *demmia* Colorado p. 235; *t.* subsp. *pawlovskii* ab. n. *penultima*, f. n. *aequalis* Irkutsk p. 239; *gorge* f. n. *elisabethae* Dolomites p. 267; *tyndarus* subsp. n. *semimurina* Kandersteg, ab. n. *exannulata* Alps p. 288; *t.* ab. *dolomitensis* n. n. for *dolomitana* Goltz nec Schaw. p. 293; *theano* ab. *canadensis* f. n. *churchillensis* Ft. Churchill Hudson Bay p. 388

figs. WARREN, Monogr. Gen. Erebia 1936.—*E.* spp. Criticism of Warren's work pp. 425–430, GOLTZ Ent. Rdsch. 53.—*E. aethiops* r. n. *peneplana* Belgium p. 199, BERGER Lambillionea 36.—*E. tyndarus* Esper (= *cleo* Hb.) p. 121, HEMMING Proc. ent. R. Soc. Lond. (B) 5.—*E. tyndarus dromus* ab. n. *punctata* Pyrenees p. 18, PIONNEAU Echange 51.—*E. goante* r. n. *trinsensis* Tyrol p. 77, STERZL Z. öst. EntVer. 21.—*E. manto vogesiaca* life-history pp. 16–22, ab. n. *argento-ligata* Germany p. 20, GOLTZ Iris 50.

Euptychia celmis ab. n. *inocellata* p. 212; *phares* abb. n. *subclara*, *coeca*; *euphares* sp. n. p. 213 Argentina figs., KOHLER Rev. Soc. ent. argent. 7 1935.

Lethe sinorix subsp. n. *lotaoshanensis* China p. 561 fig., TINKHAM Lingnan J. Sci. 15.

Maniola jurtina subsp. n. *strandiana* Kiev p. 638, OBRAZTSOV Festschr. E. Strand 1. See *Epinephele*.

Melanargia distribution of European spp. pp. 231–238, PEAKE Entomologist 69; comments pp. 260–262, SHELDON t.c.—*M. parce* abb. n. *coeca*, *tenuimarginata* Turkestan p. 18, PIONNEAU Echange 51.—*M. syllius* abb. n. *minor*, *maculata* France p. 8, MEZGER Lambillionea 36.—*M. lucasi* ab. n. *erilda* Morocco; *lachesis* ab. n. *chlorinda* Spain p. 271, OBERTHÜR t.c. See *Agapetes*.

Nesoxenica Waterh. & Lyell (= *Xeniconympha* Nov.) p. 173, WATERHOUSE Proc. R. ent. Soc. Lond. (B) 5.

Oeneis ohshimai sp. n. Azores p. 483 figs., ESAKI Annot. zool. jap. 15.

Parage aegeria & ff. pp. 19–32 (conclusion), LEMPKE Lambillionea 36.—*P. megera festai* f. n. *aestiva* Cyrenaica p. 57, TURATI & KRÜGER Mem. Soc. ent. ital. 15; ab. n. *addenda* Holland p. 279, LEMPKE Tijdschr. Ent. 79.

Ristia gen. n., *tigrina* sp. n. Brazil sep. p. 8 figs., GAGARIN Rev. Syniatica 1936 No. 1–2.

Satyrodes eurydice r. *transmontana* f. n. *rawsoni* Michigan p. 22, FIELD J. Ent. Zool. 28.

Satyrus regeli subsp. n. *kasakstana* Ala Tau Mts. p. 108, BANG-HAAS Ent. Z. 50.—*S. actaea* subsp. n. *origantii* Briançon p. 42, HARTIG Z. öst. EntVer. 21.—*S. bryce* Hb. from *Papilio* p. 122, HEMMING Proc. R. ent. Soc. Lond. (B) 5.—*S. briseis* variation pp. 95-97, VARIN Lambillionea 36.—*S. dryas* ab. n. *unioculata* Austria p. 7, ROMANISZYN Z. öst. EntVer. 21.

Taygetis ypthima ab. n. *lineata* Argentina p. 53 fig., KIVIRIKKO Ann. ent. fenn. 2.

Triphysa phryne johrni abb. n. *semiluna*, *pupillata* Siberia p. 22, KOZHANCHIKOV Folia zool. hydrobiol. 9.

Xeniconympha see *Nesoxenica*.

AMATHUSIIDAE.

Amathusia revision with reference to Malayan spp. pp. 141-153, key p. 142, *gunneryi* p. 146, *holmankhanti* p. 150 spp. n.; *staudingeri* subsp. n. *utana* p. 149; *masina* subsp. n. *malaya* p. 152 figs., CORBET & PENDLEBURY J. F.M.S. Mus. 13.

MORPHIDAE.

Morpho hecuba subsp. n. *polyxena* Colombia-Brazil frontier p. 46, BIEDERMANN Bull. Soc. ent. Fr. 41.—*M. hecuba perseus* parallel variations pp. 293-296 figs., ROUSSEAU-DECELLE Livre Jubil. Bouvier 1936.—*M. helena* f. n. *demissa* Peru p. 63, STICHEL Mitt. dtsh. ent. Ges. 6.

BRASSOLIDAE.

Opsiphanes tamarindi incolumis f. n. *profana* Peru; *t. corrosus* f. n. *spadix* Ecuador p. 63, STICHEL Mitt. dtsh. ent. Ges. 6.

NYMPHALIDAE.

Acidalia cybele see *Neoacidalia*.

Actinote discussion of type p. 56, HEMMING Proc. R. ent. Soc. Lond. (B) 5.—*A.* revision of Argentine spp. pp. 93-97, *equatoria* f. n. *pseudequatoria* p. 93; *pellenea* ff. n. *calymmoides* p. 94, *lulesa* p. 95, *xanthobrunnea*; *pyrrha* f. n. *illimis* p. 96; *surima* f. n. *punctata* p. 97 figs., HAYWARD Rev. Soc. ent. argent. 7 1935.

Acraea caecilia subsp. n. *kulal* p. 154; *ansorgei* ff. n. *rufoniger*, *luteiflava*, *tricolor*, *flavipuncta*, *adaurantica*, *chrysipoides* p. 168, *flaveola* p. 169 E. Africa

figs., VAN SOMEREN J. E. Afr. Ug. n.H. Soc. 12.—*A. natalica* var. n. *oatesi* Victoria Falls p. 123 figs., VAN SON Ann. Transv. Mus. 17.—*A. althoffi* ff. n. *albicans*, *albireducta*, *ochra-reducta* p. 2, *ochramaculata*, *heliconioides* p. 3 Uganda; *a. f. ochrafasciata* n. n. for *ochreate* Eltringham nec Grünb. p. 2 no. 27; *iturinoides* sp. n. p. 1; *iturina* f. n. *sinepeduncles*; *uvui* f. n. *subsuffusa* E. Africa; *lycoa* f. *mediafra* n. n. for *l. f. media* Eltrm. nec *media* Cram. p. 2 no. 28, STONEHAM Bull. Stoneham Mus.—*A. kalinzu* sp. n. p. 161 (with var. n. *albipicta* p. 163) Uganda figs., CARPENTER Proc. R. ent. Soc. Lond. (B) 5.—*A.* variation, STONEHAM Bull. Stoneham Mus. no. 27 3 pp.

Adelpha abia f. n. *ampla* Argentina p. 189 fig., HAYWARD Rev. Soc. ent. argent. 7 1935.

Aglais urticae, ♂ genital armature and variations and phylogeny pp. 461-482; f. n. *strandi* Vendée p. 481, VERITY Festschr. E. Strand 1.

Agrias pericles-rubella ff. n. *aspasia* p. 134, *pentheseilea* p. 136 Amazons figs., BIEDERMANN Livre jubil. Bouvier 1936.—*A. claudia* subsp. *claudina* f. n. *jactator* Brazil p. 175 figs., BIEDERMANN Rev. franç. Ent. 3.

Anaea sthenio f. n. *coerulescens* Argentina p. 59 fig., KIVIRIKKO Ann. ent. fenn. 2.—*A. troglodyta* subsp. n. *minor* p. 277, HALL Entomologist 69.

Apatura ilia subsp. n. *gracilis* Manchuria p. 346, *pusilla* Shantung, *herastituta* Kansu p. 347, BANG-HAAS Ent. Z. 50.

Araschnia levana f. *porrima* Hb. (= *porima* Ochs.) p. 123, HEMMING Proc. R. ent. Soc. Lond. (B) 5.

Argynnis adippe r. *mainalia* ff. n. *neclinae* Scandinavia, *alpiummixta* Anzasca Valley sep. p. 84, VERITY Ent. Rec. 48.—*A. dia* f. n. *albomaculata* Poland p. 197 fig., BEDNIK Polsk. Pismo ent. 13.—*A. latonia postlatonia* ab. *secunda* r. n. *prima* Ukraine p. 641, OBRAZTSOV Festschr. E. Strand 1.—*A. eurynome* r. *clio* tr. f. n. *gunderi* Montana p. 23, FIELD J. Ent. Zool. 28.—*A. ino* subsp. n. *ciscaucasica* N. Caucasus p. 47, OBRAZTSOV Z. öst. EntVer. 21.

Argyronome laodice from *Eudaphne* p. 374, REUSS Ent. Z. 50.

Basilarchia arthemis f. n. *virithemis*; *lorquini* ff. n. *gunderi*, *powelli* U.S.A.; *l. r. burrisoni* f. n. *maynardi* Canada p. 24, FIELD J. Ent. Zool. 28.

Bematistes aganice subsp. n. *ugandae* Uganda p. 152 fig., VAN SOMEREN J. E. Afr. Ug. nat. H. Soc. 12.—See *Planema*.

Brenthis selene ab. n. *striata* Holland p. 269, LEMPKE Tijdschr. Ent. 79.—*B. hana* sp. n. Peru p. 257 figs., CLARK Proc. U.S. nat. Mus. 83 no. 2982.

Callithea darisii f. n. *praedives* Peru p. 64, STICHEL Mitt. dtsh. ent. Ges. 6.

Catagramma discrepans sp. n. Peru; *lyca salamis* f. n. *lycaonis* Colombia p. 64, STICHEL t.c.

Charaxes eupale subsp. n. *schultzei* p. 575; *dubiosus* p. 576, *angusticaudatus* p. 578 Kamerun, *tiridatinus* Uganda p. 577 spp. n.; *doubledayi* ab. n. *viridis* no locality p. 576; *richelmanni* n. n. for *fallax* Richelm. (praeocc.) p. 578 figs., RÖBER Ent. Rdsch. 53.—*C. castor* f. n. *flavimarginatus* Kenya p. 2; *anticlea* f. n. *horatianus* Uganda p. 3, STONEHAM Bull. Stoneham Mus. no. 29.—*C. xiphares* subsp. n. *vumbui* S. Rhodesia p. 201 figs., VAN SON Proc. R. ent. Soc. Lond. (B) 5.—*C. xiphares* subsp. n. *elatias* W. Pondoland, *draconis* p. 331; *druceanus* subsp. n. *moerens* p. 333 Transvaal, JORDAN Novit. zool. 39.—*C. lactitinctus* f. n. *jacksonianus* p. 174; *castor* f. n. *godarti* p. 177; *etesipe* subsp. n. *gordoni* p. 198 figs., VAN SOMEREN J. E. Afr. Ug. n. H. Soc. 12.

Chlorippe felderi f. n. *caesita* Argentina p. 190, HAYWARD Rev. Soc. ent. argent. 7 1935.

Chlosyne saundersi f. n. *infusca* Argentina p. 186, HAYWARD t.c.

Colaenis julia subsp. n. *warneri* St. Kitts p. 276, HALL Entomologist 69.

Cupha erymanthis ab. n. *sadaichii* Japan p. 223 [author and descr. in Japanese] Zephyrus, Fukuoka 6.

Cymothoe herminia f. n. *dunkeli* Ruwenzori p. 703 fig., AUDEOUD Mitt. schweiz. ent. Ges. 16.

Dynamine egaea subsp. n. *calais* Cuba p. 226, BATES Mem. Soc. cubana H. n. 9.—*D. coenus* f. n. *ambicoenus* Argentina p. 188, HAYWARD Rev. Soc. ent. argent. 7 1935.

Eudaphne laodice see *Argyronome*.

Euphydryas editha identity, type locality p. 1, McDUNNOUGH Bull. S. Calif. Acad. Sci. 35.—*E. cynthia* Denis & Schiff. (= *mysia* Hb.) p. 123, HEMMING Proc. R. ent. Soc. Lond. (B) 5.

Euptoieta claudia tr. ff. n. *fumosa* p. 22, *albicaudia* 23 U.S.A., FIELD J. Ent. Zool. 28.

Euryphene sophus subsp. n. *audeoudi* Uganda p. 702 fig., RILEY Mitt. schweiz. ent. Ges. 16.—*E. aurora* f. n. *eos* Kamerun p. 580 figs., RÖBER Ent. Rdsch. 53.

Euvanesa antiopa ab. n. *chlapowskia* Poland p. 5, WIZE Motyle Okolic Jezewa, Posnan 1917 (cf. *Lambillionea* 36 p. 183).

Heliconius charithonia subsp. n. *punctata* St. Kitts p. 276, HALL Entomologist 69.—*H. burneyi* f. n. *miraculosa* Amazonas p. 198 fig., KOTZSCH Ent. Rdsch. 53.

Hestina assimilis f. n. *hirayamai* Formosa p. 127 fig., MATSUMURA Ins. mats. 10.

Issoria lathonia from *Rathora* p. 374, REUSS Ent. Z. 50.

Limenitis sibylla subsp. n. *asamaensis* Japan p. 175 figs., WATABI Zephyrus, Fukuoka 6.

Melitaea cinxia subsp. n. *karavajevi*; *trivia* subsp. n. *paula* p. 640 Kiev; *dictynna* subsp. n. *lebedevi* Ukraine p. 641 figs., OBRATZSOV Festschr. E. Strand 1.—*M. spp.* variation p. 465, HÖRHAMMER Ent. Z. 49.—*M. cynthia* ab. n. *latevittata* Engadine p. 24, PIONNEAU Echange 52.—*M. snyderi* sp. n. Japan p. 178, SEOK Zephyrus, Fukuoka 6.

Mynes marpesina sp. n. New Guinea p. 578 figs., RÖBER Ent. Rdsch. 53.

Neoacidalia cybele from *Acidalia* p. 374, REUSS Ent. Z. 50.

Neptis okazimai sp. n. [in Japanese] Japan p. 60 figs., SEOK Zool. Mag. 48.

Nymphalis californica r. n. *herri* Washington p. 121, FIELD Ent. News 47.

Pantoporia selenophora subsp. n. *latifascia* Siam p. 57, TALBOT Entomologist 69.

Phyciodes liriopoe synonymy, distribution Argentina of ff. pp. 219-223, *l. f. claudina* ab. n. *immaculata* Argentina p. 23, HAYWARD Rev. Soc. ent. argent. 7 1935.—*P. nycteis* v. *drusus* tr. f. n. *hewitsoni* Arizona p. 23, FIELD J. Ent. Zool. 28.

Planema poggei key to subsp. p. 21; *poggei* subsp. n. *paragoga* Uganda, *amela* Mukenge p. 22, HERING Mitt. dtsh. ent. Ges. 7.—See *Bematistes*.

Polygonia hylas f. n. orpheus Colorado p. 197, CROSS Pan-Pacific Ent. 12.

Precis coena f. n. rubro suffusa Kansas p. 23, FIELD J. Ent. Zool. 28.—*P. lavinia* ab. n. *obscurata* Argentina p. 55 fig., KIVIRIKKO Ann. ent. fenn. 2.

Prepona præneste f. n. abrupta Peru p. 125, BIEDERMANN Bull. Soc. ent. Fr. 41.

Proclossiana eunomia Esper (= *aphirape* Hb.) p. 374, REUSS Ent. Z. 50.

Pyrameis dejeani subsp. n. *mounseyi* Philippines p. 112, TALBOT Entomologist 69.

Rathora lathonia see *Issoria*.

Vanessa polychloros ab. n. *supinska* Poland p. 106, WIZE Polsk. Pismo ent. 13.—*V. antiopa* ab. n. *albomarginata* Holland p. 263, LEMPKE Tijdschr. Ent. 79.

LIBYTHEIDAE.

Libythea lepita ab. n. *minomcensis* Japan p. 357 figs. [author and descr. in Japanese] Zephyrus, Fukuoka 6.

ERYCINIDAE (RIODINIDAE).

Nemeobiid butterflies, KISHIDA Kontyû 10 pp. 1-24, 1 pl. 2 figs.

Alesa prema morphology pp. 252-258, f. n. *sapphirina* Amazon p. 258, BIEDERMANN Bull. Soc. ent. Fr. 41.

Euselasia opalescens subsp. n. *onyx* Peru p. 65, STICHEL Mitt. dtsh. ent. Ges. 6.

Mimocastnia egeria sp. n. Fr. Guiana P. 258 figs., BIEDERMANN Bull. Soc. ent. Fr. 41.

Zemeros phlegyas allica f. n. pullus Siam p. 58, TALBOT Entomologist 69.

LYCAENIDAE.

Genera of Lycaenopsini, CORBET Proc. R. ent. Soc. Lond. (B) 5 pp. 185-186.

Catalogue of Lycaenidae, I, DRAESEKE Lep. Cat. 72 pp. 1-48.

Systematics of Palaearctic Lycaenae, FORSTER Mitt. münchn. ent. Ges. 26 pp. 41-149, 15 pls. 7 figs.

Lycaenidae of Sta. Catharina, HOFFMANN Ent. Rdsch. 53 pp. 278-279, 287-288.

Anthene talboti sp. n. Natal p. 283, STEMPFFER Bull. Soc. ent. Fr. 41.—*A. musagetes* subsp. n. *elgonensis* p. 135; *contrastata* subsp. n. *turkana* p. 137 Mt. Elgon; *pitmani* sp. n. Kenya p. 139 (with subsp. n. *somalina* Somaliland p. 140) figs., STEMPFFER Rev. franç. Ent. 3.

Aricia genital armature of *medon* group pp. 111-116 figs., BAYARD Livre jubil. Bouvier 1936.—*A. montensis* r. n. *macedonica* Macedonia sep. p. 7, VERITY Ent. Rec. 48.

Cocyreus virilis a good sp. p. 283; *audeoudi* sp. n. Kenya p. 284, STEMPFFER Bull. Soc. ent. Fr. 41.

Celastrina Tutt (= *Notarthrinus* Chapm.) p. 186, *marata* n. n. for *marginata* Moore nec Edw. p. 185, CORBET Proc. R. ent. Soc. Lond. (B) 5.

Chrysophanus dorilis ab. n. *splendens* Poland p. 107, WIZE Polsk. Pismo ent. 13.—*C. dispar rutilus* in Germany p. 518, GLEICHAUF Ent. Z. 49.—*C. dispar. r. batavus* discussed p. 217, LEMPKE Ent. Ber. 9.—*C. hippothoe* abb. n. *delunata* France, *semiobscurior* Pyrenees; *alci-phron* ab. n. *cecilia* Germany; *a. gordius magnifica* n. n. for *a. g. villaceus* Pion. p. 24, PIONNEAU Echange 52.—See *Lycaena*, *Heodes* and *Rumicia*.

Epamera aethria Karsch (= *mirabilis* Dru. ♀) p. 705 fig., AUDEOUD Mitt. schweiz. ent. Ges. 16.

Epitola rileyi sp. n. Ruwenzori p. 704 figs., AUDEOUD t.c.

Everes comyntas dimorphic blue ♀ p. 620, MEINERS Ann. ent. Soc. Amer. 29.

Glaucopsyche arion subsp. n. *sergeji* p. 47 (with ab. n. *suprapuncta*); *alexis aeruginosa* ab. n. *subalexis* p. 48 Cherson, OBRAZTSOV Z. öst. EntVer. 21.—*G. lygdamus* var. n. *arizonensis* Arizona p. 113, McDUNNOUGH Canad. Ent. 68.

Heodes hippothoe ab. n. *parvipuncta* p. 292; *tityrus* ab. n. *intermedia* p. 295 Holland, LEMPKE Tijdschr. Ent. 79.—*H. dispar* see *Chrysophanus*.

Heliothorus *ila* subsp. n. *malaya* Malaya p. 183, PENDLEBURY J. F. M. S. Mus. 13.

Horaga *rarasana* sp. n. Formosa p. 207 fig., SONAN *Zephyrus* 6.

Leptotes *marina* f. n. *reakirti* Arizona p. 26, FIELD J. Ent. Zool. 28.

Lycacides *argyrognomon* discussed p. 9, BEURET *Lambillionea* 36; subsp. n. *batavana* Holland p. 268, BEURET Ent. Ber. 9.

Lycæna spp. inter-relationships based on ♂ genitalia pp. 154-170 figs., KLOTS Bull. Brooklyn ent. Soc. 31; notes on specific grouping pp. 277-279 figs., FREEMAN Canad. Ent. 63; spp. copulatory organs compared p. 53 figs., GOTTHARDT Ent. Rdsch. 54.—*L. alcon* abb. n. *crassipuncta*, disco-elongata p. 307; *euphemus* abb. n. *griseus*, centro-elongata p. 308 Holland, LEMPKE Tijdschr. Ent. 79.—*L. optilete* var. *cyparissus* ab. n. *nigrostriata* Finland p. 7 fig., LINGONBLAD Notul. ent. 16.—*L. cleobis* *kenteana* abb. n. *cleobella*, *limbata*; *chinensis* subsp. n. *sibiricanus* p. 23; *lycormas* ab. n. *lada* p. 24; *supremus* *splendens* ab. n. *pseudobajuaricus* p. 25 Siberia, KOZHANCHIKOV Folia zool. hydrobiol. 9.—*L. allous* & ff. pp. 58-60 figs., OBRAZTSOV t. c.—*L. icarus* ab. n. *rufotincta* Ukraine p. 48, OBRAZTSOV Z. öst. EntVer. 21.—*L. imanishii* sp. n. Japan p. 355 fig., TAKEUCHI *Zephyrus* 6.—*L. editha* r. n. *montana* p. 122; *heteronea* r. n. *klotsi* p. 123 U.S.A., FIELD Ent. News 47.—*L. editha* r. *montana* f. n. *meadi*; *dorcas* r. *florus* ff. n. *hulbirti* p. 25, sternitzkyi p. 26 U.S.A., FIELD J. Ent. Zool. 28.—*L. thersites* subspp. n. *sheljuzhkoiana* Greece p. 12, *zhicharevi* Kharkov p. 13, *hypanica* (with abb. n. *caeruleocellata*, *punctifera*) Bug, *ardavdana* Crimea, *karatshaica* Caucasus p. 15, *rjabovi* Daghestan, *narzana* Caucasus p. 16, *gandzhana* (with ab. n. *nigrovenata*) Gandzha, *ketshevana* Ketshevan p. 17, OBRAZTSOV *Lambillionea* 36.—*L. optilete* ab. n. *nigrostriata* Lapland p. 237, LINGONBLAD t. c.—*L. amphidamas* subsp. n. *leonina* Bernese Jura p. 272, BEURET t. c.—*L. elusis* systematics pp. 323-327 figs., STEMPFFER Livre jubil. Bouvier 1936.—*L. turcmenica* sp. n. Transcaspia p. 55; *argyrognomon* Brgstr. (= *ismenias* Meig. = *insularis* auct. nec Leech); *idas* L. (= *argus* Schiff. nec L. = *argyrognomon* auct.

nec Brgstr.) p. 63; *argyrognomon* subsp. n. *caspiica* S. Urals p. 74, *buchara* Bucharra p. 75, *sinica* Sztet-schwan p. 77, *ussurica* Ussuri p. 79; *christophi* subsp. n. *nanshanica* Kansu p. 84; *idas* subspp. n. *bavarica* Bavaria p. 90, *altarmena* Armenia p. 103, *tshingana* Turkestan p. 104; *argus* subsp. n. *sultana* Asia Minor p. 128, *tsherkessica* Caucasia p. 131 (with f. n. *georgica* Georgia Rep. p. 132), *wolgensis* Volga valley p. 133, *obensis* W. Siberia p. 135, *pamira* Pamir p. 138 figs., FORSTER Mitt. münchen. ent. Ges. 26.

Lycæna *admirabilis* p. 163 (with subsp. n. *midare* p. 166), *mirificus* p. 167 spp. n. *Corea* figs., SUGITANI *Zephyrus* 6.

Lysandra *corona* sp. n. Persia p. 106; *escheri* r. n. *olympena* Macedonia sep. p. 8, VERITY Ent. Rec. 48.

Neochrysois *cinerea* subsp. n. *kitale* Kenya p. 284, STEMPFFER Bull. Soc. ent. Fr. 41.

Notarthrinus see *Celastrina*.

Plebeius *argus* r. n. *magnagraeca* Macedonia sep. p. 6, VERITY Ent. Rec. 48.

Polyommatus *parameleager* sp. n. Persia p. 130, VERITY t. c.—*P. webbianus* f. n. *brunnea* Canary Is. p. 7, NORDMAN Comment. biol. 6 1935 No. 4.—*P. icarus* ab. n. *cometa* Poland p. 7, WIZE Motyle Okolic Jezewa, Posnan 1917 [cf. *Lambillionea* 36 p. 183].

Rapala *varuna* ab. n. *kuraruna* Formosa p. 231 [author and descr. in Japanese] *Zephyrus*, Fukuoka 6.

Rumicia *phlaeas* *cyrenaica* f. n. *aestiva* Cyrenaica p. 57, TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Semanga *superba* subsp. n. *siamensis* Siam p. 58, TALBOT Entomologist 69.

Spindasis *vingia* Hew. (= *hiendlmayrii* de Nic.) subsp. n. *davidsoni* Siam p. 59, TALBOT t. c.

Strymon *melinus* f. n. *youngi* Florida p. 25, FIELD J. Ent. Zool. 28.—*S. ilicis* ab. n. *pseudomas* Holland p. 36, LEMPKE *Lambillionea* 36.

Syntarucus revision of Ethiopian spp., pp. 219-240; *jeanneli* p. 232, *babaulti* p. 235 spp. n. Kenya figs. STEMPFFER Miss. Sci. Omo 2 1935.

Thecla dicaeoides p. 229, *elegans* p. 230, *demilineata* p. 231, *angusta*, *talboti* p. 232 Paraguay, *peruviana* p. 229, *maculata*, *obliterata* p. 230, *confusa* (= *epopea* Hew. ♀) p. 231 Peru, *inornata* Brazil p. 229, *albolineata* Rio Aquata, *violacea* Amazon; *larseni*, *restricta* Argentine p. 230, *cinerea* Rio Grande do Sul, *variegata* Bogota, *bouvieri*, *lineata* Ecuador p. 231, *trinitatis* Trinidad, *dubiosa* locality unknown p. 232 spp. n.; *xorema* subsp. n. *xoremoides* Paraguay p. 231 figs., LATHY Livre jubil. Bouvier 1936.—*T. loxurina* ff. n. *rufanalis*, *quadrifus* Argentina p. 191, HAYWARD Rev. Soc. ent. argent. 7 1935.

Turanana baton f. n. *anteschiffermülleri* Macedonia sep. p. 5, VERITY Ent. Rec. 48.

Zephyrus notes [in Japanese] 'on Japanese, Korean and Formosan spp., ESAKI *Zephyrus* 6 pp. 195–204, 1 pl.—*Z. quercus* ab. n. *caeruleascens* Holland p. 289, LEMPKE Tijdschr. Ent. 79.—*Z. ginzi* sp. n. [in Japanese] Japan p. 60 figs., SEOK Zool. Mag. 48.—*Z. butleri* ab. n. *connexa*; *attilia* ab. n. *sayamensis* Japan p. 189, WATARI *Zephyrus*, Fukuoka 6.

PIERIDAE.

Annotated list and keys of Nigerian Pieridae, HAIG Nigerian Field 5 pp. 114–128, 11 figs.

Anthocharis charltonia r. n. *thessalica* Macedonia p. 35, METZGER Lambillionea 36.—*A. cethura* interrelationship p. 3 figs., RUDKIN Bull. S. Calif. Acad. Sci. 35.—*A. euphenoides apicalis-suffusa* n. n. for *e. obscurata* Pion. nec Obthr. p. 23, PIONNEAU Echange 52.

Appias drusilla subsp. n. *monomorphia* St. Kitts p. 275, HALL Entomologist 69.—*A. nero* subsp. n. *yamazakii* Formosa p. 295 fig., SONAN *Zephyrus* 6.

Archonias occurrence of a costal vein p. 143 figs., CHADWICK Canad. Ent. 68.

Colias chrysotheme subsp. n. *ksienzhopolskii* Ukraine p. 43, OBRAZTSOV Folia zool. hydrobiol. 9.—*C. electo croceus* ab. n. *rubroandroconiata* Kherson p. 46, OBRAZTSOV Z. öst. EntVer. 21.—*C. cocandica* subsp. n. *culminicola* p. 44, ab. n. *xantha*; *wiskotti* subsp. n.

aurea, ab. n. *blanda* p. 45 Hindu Kush, KOTZSCH Ent. Rdsch. 54.—*C. electo* subsp. *croceus* varr. *arbutisconi*, *helicina* notes p. 94; *croceus* rr. n. *croceoviridis*, *leucos*, *xanthina*, *auriflua* Caucasus p. 200, BERGER Lambillionea 36.—*C. hyale* ab. n. *parisiensis* France p. 90, OBERTHÜR t. c.; ff. pp. 70–82, 102, etc. abb. n. *venata* p. 76, *pupillata* p. 103 Belgium, LEMPKE t. c.; ab. n. *candida* Belgium p. 125, DERENNE t. c.; var. n. *cleopatra* France p. 149, LATIER Proc. verb. Soc. linn. Bordeaux 86 1935.—*C. palaeno* abb. n. *viridis* p. 17, *subobsoleta* p. 18 Sweden 51; *hyale* ab. n. *subobsoleta* no locality p. 23 52, PIONNEAU Echange.—*C. chlorocoma* subsp. n. *tkatschukovi* Russian Armenia p. 287; *eogene francesca* ab. n. *mahdii* Baltistan p. 346, BANG-HAAS Ent. Z. 50.

Euchloë cardamines ab. n. *pupillata* Holland p. 250, LEMPKE Tijdschr. Ent. 79; ab. n. *ochracea* Regensburg p. 159, SÄLZL Iris 49.—*E. ausonides* r. n. *andrewsi* California p. 94, MARTIN Bull S. Calif. Acad. Sci. 35; r. *coloradensis* tr. f. n. *hemiflava* Utah p. 19, FIELD J. Ent. Zool. 28.

Eurema nicippe tr. f. n. *callae* Texas p. 20, FIELD t. c.

Gonepteryx rhamni ab. n. *flavescens* Holland p. 256, LEMPKE Tijdschr. Ent. 79.

Hebomoia divizi sp. n. Brazil p. 118 figs., DE TOLEDO PIZA Rev. Ent. Rio de J. 6.

Huphina nadina f. n. *hirayamai* Formosa p. 127 fig., MATSUMURA Ins mats. 10.

Leptidea croatica in Poland p. 194, TOLL Polsk. Pismo ent. 13.—*L. duponcheli* ab. n. *griseomaculata* Provence p. 18 PIONNEAU Echange 51.

Mancipium brassicae cyniphia abb. n. *aestivalis*, *hiemalis* Cyrenaica p. 56, TURATI Mem. Soc. ent. ital. 15. See *Pieris*.

Nathalis iole ff. n. *pallida*, *immaculata* Kansas p. 20, FIELD J. Ent. Zool. 28.

Pieris rapae ab. n. *divisa* Holland p. 247, LEMPKE Tijdschr. Ent. 79; abb. n. *nigrae*, *songdoensis* Japan p. 338 figs., SEOK Zool. Mag. 48.—*P. napi* subsp. *bryoniae* Carpathians ff. pp. 213–236 fig., NIESTOŁOWSKI Ann. Mus.

Zool. polon. 11.—*P. manni* f. *rossii* ab. n. *praeterita* Macedonia p. 35 MEZGER Lambillionea 36.—*P. bryoniae* Hb. discussed p. 123, HEMMING Proc. R. ent. Soc. Lond. (B) 5. See *Manicipium*.

Pontia protodice occurrence, breeding, forms pp. 37-47, QUERCI Trans. Amer. ent. Soc. 62.

Prioneris thestylis subsp. *formosana* f. n. *shirotai* Formosa p. 74 fig., TANAKA Trans. Kansai ent. Soc. no. 6 1935.

Teracolus दौरा nouna abb. n. *suffusa*, *impuncta*, minor Algeria p. 18, PIONEAU Exchange 51.

Terias revision of American spp. pp. 11-54, 189-347, *rubricata* n. n. for *rubella* Klots nec d'Alm. p. 34; *xystra* sp. n. Ecuador p. 35 figs., d'ALMEIDA Mem. Inst. Oswaldo Cruz 31.—*T. jordani* ♂ p. 168, CORBET Proc. R. Ent. Soc. Lond. (B) 5.—*T. leuce* subsp. n. *antillarum* St. Kitts p. 275, HALL Entomologist 69.

PAPILIONIDAE (BARONIIDAE,

PARNASSIIDAE, TEINOPALPIDAE).

Notes on and figures of swallowtail butterflies, CLARK Rep. Smithson. Instn. 1935 pp. 383-408, 14 pls.

Annotated list and key of Nigerian Papilionidae, HARG Nigerian Field 5 pp. 12-28, 10 figs.

Agehana gen. n. type *Papilio maraho* Shir. & Son. p. 86 fig., MATSUMURA Ins. mats. 10.

Iphiclides embrikstrandii sp. n. Brazil p. 510 figs., d'ALMEIDA Festschr. E. Strand 1.—*I. marcellus* gen. aest. *lecontei* tr. f. n. *nigrosuffusa* Kansas p. 19, FIELD J. Ent. Zool. 28.—*I. podalirius* ab. n. *isnardi* Alpes-maritimes p. 247 fig., DE PUYSEGUR Lambillionea 36.

Papilio external genitalia of N. Argentina spp. pp. 1-8 figs., SCHREITER Bol. Mus. H.n. Univ. Tucumán 2 1930 no. 5.—*P. argentinus* sp. n. N. Argentina p. 8 figs., JÖRGENSEN t.c.—*P. fuscus* subsp. n. *nomus* Torres I.; *memnon memnon* ff. n. *walteri* Billiton I., eos Kangean I. p. 281; *polyctor* subsp. n. *stockleyi* Siam p. 282, GABRIEL Entomologist 69.—*P. polydamas* subsp. n. *christopheranus* St. Kitts p. 274, HALL t.c.—*P. mechowianus* ab. n.

lagai; *gallienus* abb. n. *vreuricki*, *ochreata* Belgian Congo; *demodocus* abb. n. *juncta*, *semijuncta* Ivory Coast p. 40, *mathieui* Sudan, Congo, *houzeau* Congo p. 41; *chaon* abb. n. *tripunctata*, *pseudochaonulus* Sikkim; *fuscus* f. *rotalita* ab. n. *obliterata* Aru I.; *tynderaeus* ab. n. *incompleta* Belgian Congo p. 42, DUFRAINE Lambillionea 36.—*P. alcinous* ab. n. *koishi-kawaensis* [descr. and locality in Japanese] p. 286 figs., IMAIZUMI Ent. World, Tokyo 4.—*P. asterius* and var. *americus* notes p. 269, MEINERTS Ent. News 47.—*P. pausanias* f. n. *celulata* Amazons p. 106 figs., ROSA Bol. Mus. nac. Rio de J. 10 1934.—*P. bacchus* subsp. *chryso-melus* f. n. *silenus* Peru p. 174 figs., BIEDERMANN Rev. franç. Ent. 3.—*P. dardanus* genetics pp. 435-466, f. n. *poultoni* Kenya p. 465 figs., FORD Trans. R. ent. Soc. Lond. 85.—*P. polytes* subsp. n. *takahashii* Formosa p. 205 fig., SONAN Zephyrus 6.—*P. andraemon* subsp. n. *hernandezi* Cuba p. 333 fig., DE LA TORRE Mem. Soc. cubana H.n. 10.—*P. sarpedon* ab. n. *tanakai* p. 76 fig., TOSAWA Trans. Kansai ent. Soc. no. 6 1935.—*P. priapus* subsp. n. *carolinae* Sumatra p. 55, TOXOPEUS Ent. Med. Ned.-Ind. 2.—*P. porthaon* subsp. n. *vernayi* N. Bechuanaland Prot. p. 138 fig., VAN SON Ann. Transv. Mus. 17.—*P. helenus* *nicconicolens* ab. n. *grandis* Japan p. 190 figs., WATARI Zephyrus, Fukuoka 6.—*P. nobilis* subsp. n. *crippsianus* Uganda p. 2, STONEHAM Bull. Stoneham Mus. no. 30.—*P. antimachus* subsp. n. *coffea* Ivory Coast p. 113, TALBOT Entomologist 69.—*P. cuneifera* subsp. n. *paeninsula* p. 178; *nepheus* subsp. n. *annulus* p. 180 Malaya, PENDLEBURY J. F.M.S. Mus. 13.—*P. machaon* races and geographical distribution 96 pp. figs., ELLER Die Rassen von *Papilio machaon*; abb. n. *analidilatata* Zurich, *subintacta* Cherson, Germany p. 46, OBRAZTSOV Z. öst. EntVer. 21; abb. n. *sciata*, *karckzewskia* Poland, p. 260, WIZE Suppl. Cat. Lep. Jezewa, Poznan 1922 [cf. Lambillionea 36 p. 182].—*P. maraho* see *Agehana*.

Parnassius critical review of N. American spp. dealt with by Bryk in "Das Tierreich" pt. 65 pp. 216-225; *smintheus* r. *smintheus* (=r. *manitobaensis* Bryk & Eism.) p. 43; var. n. *sternitzkyi* U.S.A. p. 273 fig., McDUNNOUGH Canad.

Ent. 68.—*P. autocrator* a good sp. p. 50; **abb. n. privatus**, *eminens* Hindu Kush p. 52 figs., KOTZSCH Ent. Rdsch. 54.—*P. phoebus* subsp. n. *gazeli* St. Martin Vesubie p. 266, PRAVIEL Bull. Soc. Ent. Fr. 41.—*P. bremeri* subsp. n. *aino* Japan p. 333 fig., NAKAHARA Ent. Z. 50.—*P. mnemosyne* subsp. n. *bulgarica* Bulgaria p. 9; *orleans* subsp. n. *augur*, f. n. *ocellodivisa*; *jacquemontii* f. n. *in picta* China p. 14, EISNER Parnassiana 4.—*P. epaphus* subsp. n. *nanchanicus* f. n. *nigricans* Burchan p. 10; subsp. *phariensis* ff. n. *albomaculata*, *ocellodivisa* Phari Jong; *hillensis* ff. n. *rhomboides*, *fermata* Bashar States p. 13; subsp. n. *shilangensis* Tibet p. 14, BRYK & EISNER t.c.—*P. honrathi* subsp. n. *pseudalburnus* p. 4; *jacquemonti* subsp. n. *nuksanica*; *delphius* subsp. n. *ruth*, *eva* p. 5; *charltonius* subsp. n. *wernickei* p. 6 Hindukusch figs., KOTZSCH t.c.—*P. bremeri* subsp. n. *ellenae*, f. n. *bachmatjevi*; *stubben-dorfii* subsp. n. *laotsei* p. 2; *glacialis* subsp. n. *anachoreta* p. 3 China figs., BRYK t.c.

Thais hypermnestra variations Maritime Alps pp. 56–64 figs., DE PUYSÉGUR Amat. Papill. 8.

Troides victoriar-regis f. n. *ponceleti* Bougainville p. 307, ROTHCHILD Ann. Mag. n.H. (10) 17.

HESPERIIDAE.

Revision of Argentine Pyrrhopyginae, HAYWARD Rev. Soc. ent. argent. 5 1935 pp. 123–129, 1 pl.

Notes and additions to HesperIIDae of Argentina, HAYWARD Rev. Soc. ent. argent. 7 1935 pp. 131–137.

Catalogue of Pyrginae IV (74 pp. 561–579); Euschemoninae, Trapezitinae (77 35 pp.), SHEPARD Lep. Cat.

Adopaea flava r. n. *maxima* Macedonia sep. p. 3, VERITY Ent. Rec. 48.

Aguna williamsi sp. n. Argentina p. 132, HAYWARD Rev. Soc. ent. argent. 7 1935.

Ampittia maro subsp. n. *matsumurai* Formosa p. 213 Formosa, SONAN Zephyrus 6.

Augiades bouddha subsp. n. *niitakana* Formosa p. 213 figs., SONAN t.c.

Carcharodus alchymillae Hb. (= *altheae* Hb., *imperator* Hemm.) p. 124, HEMMING Proc. R. ent. Soc. Lond. (B) 5.

Chondrolepis cynthia sp. n. Belgian Congo p. 703 fig., EVANS Mitt. schweiz. ent. Ges. 16.

Coladenia sadakoe sp. n. Japan p. 184, SONAN & MITONO Zephyrus, Fukuoka 6.

Dubiella gen. n. type *Papilio dubius* Stoll p. 55, EVANS Proc. R. ent. Soc. Lond. (B) 5.

Hesperia key to centr. European spp. p. 183, GOTTHARDT Ent. Rdsch. 53.—*H. orbifer* subsp. n. *murasaki* Corea p. 155 figs., SUGITANI Zephyrus 6.

Heteropteris morpheus notes p. 211, LEMPKE Ent. Ber. Amsterdam 9; r. n. *minutus* Holland p. 310, LEMPKE Tijdschr. Ent. 79.

Lobocla kodairai sp. n. Formosa p. 209, fig., SONAN Zephyrus 6.

Lycas argenteus ab. n. *albomarginata* Argentina p. 63 fig., KIVIRIKKO Ann. ent. fenn. 2.

Miltomiges obrepta sp. n. Argentina p. 61 fig., KIVIRIKKO Ann. ent. fenn. 2.

Pamphila palaemon ab. n. *bolleni* France p. 63, DERENNE Lambillionea 36.

Parnara kotoshona p. 214, *ranrunna* p. 215, spp. n. Formosa figs., SONAN Zephyrus 6.

Pyrgus armoricanus r. n. *postpersica* Macedonia sep. p. 3, VERITY Ent. Rec. 48.

Pyrrhopyge margimmiscus p. 124, *subnubilus* p. 125, spp. n. Argentina, HAYWARD Rev. Soc. ent. argent. 7 1935.

Rhabdoides cellus distribution p. 9, keys to varr. p. 13, to eggs p. 47, to larvae p. 48, morphology of all stages pp. 25–42, biology pp. 24, 35–38 figs., CLARK Smithson. misc. Coll. 95 no. 7.

Spialia hibiscæ Hb. (= *sertorius* Hoffm.) p. 124, HEMMING Proc. R. ent. Soc. Lond. (B) 5.

Tagiades menaka subsp. n. *kotoshona* Formosa p. 212 fig., SONAN Zephyrus 6.

Thanaos tages var. *cervantes* in Portugal p. 80 fig., da SILVA CRUZ Brotéria Ci. nat. 32.

Heterocera.

Microlepidoptera of Sardinia, AMSEL Veröff. dtsch. kol. Mus. Bremen 1 pp. 344-365, 1 pl. 4 figs.

Notes on Swiss Lepidoptera, BIRCHLER Mitt. schweiz. ent. Ges. 16 pp. 672-676.

Microlepidoptera of N.W. Germany, BRINKMANN & AMSEL Mitt. ent. Ver. Bremen 23 1935 pp. 8-20.

Lepidoptera of Shantung Province, CARADJA & MEYRICK Iris 50 pp. 135-144, 1 map.

List of the Heterocera of State of Minas Geraes, HAMBLETON & FORBES Arch. Inst. Biol. São Paulo 6 1935 pp. 213-256.

Heterocera of Regensburg district (contd.), METSCHL & SÄLZL Iris 49 pp. 145-161.

Microlepidoptera from Venezuela, MEYRICK Veröff. dtsch. kol. Mus. Bremen 1 pp. 321-334, 1 pl.

Microlepidoptera of Dresden and district, MÖBIUS Iris 50 pp. 101-134.

Notes on moths collected in Canton, NG Lingnan Sci. J. 15 pp. 121-124.

Microlepidoptera of Marasch [contd.], OSTHELDER Mitt. münchn. ent. Ges. 25 pp. 67-90.

Microlepidoptera of Sardinia, SCHAWERDA Z. öst. EntVer. 21 pp. 60-64, 65 etc.

Heterocera of central Tunis, SCHNEEUR Ent. Z. 50 pp. 190-194.

Heterocera collected at Darjeeling [contd.], SEVASTOPULO J. Darjeeling n.H. Soc. 10 pp. 134-145; 11 pp. 28-30.

SYNTOMIDAE.

List of Syntomidae of Sta Catharina, HOFFMANN Ent. Rdsch. 53 pp. 435-439, 446-452.

Abnormipterus gen. n. type *Sphecosoma abnormis* Hmpn. p. 177, ORFILA Rev. Soc. ent. argent. 7 1935.

Amata ff. according to number of spots discussed pp. 38-39, 46-48, 116, OBRAZTSOV Ent. Anz. 16.—*A. phegea* races discussed pp. 184-187; *p. bessarabica* ab. n. *anticipiuspuncta* p.

186; *p. b. f. n. kijevana* p. 187; *p. b. k. abb. n. plinioides* p. 200, *cuprea*, *magnimaculata*, *longimacula* Bessarabia, *viridescens*, *violascens*, *circumcingulata* no locality p. 201; *herthula* discussed p. 305; *ragazzii* *ragazzii* abb. n. *circumcingulata* p. 306, *semicaeca*, *semicaecaposticipiuspuncta*, *posticipiuspuncta*, *anticipiuspuncta* p. 308 Italy figs., OBRAZTSOV Ent. Rdsch. 53.

Ceryx godarti ab. n. *interrupta* Tonkin; *jottrandii* p. 127, *carpentieri* p. 128 spp. n. Belgian Congo, DUFRANE Bull. Ann. Soc. ent. Belg. 76.

Ciseps n. n. for *Scepsis* Wlk. 1854 nec 1850 (Dipt.) p. 275, FRANCLEMONT Ent. News 47.

Euchromia polymena ab. n. *vitrea* Tonkin p. 130, DUFRANE Bull. Ann. Soc. ent. Belg. 76.—*E.* revision of Ethiopian spp. pp. 1-21; *schorutedeni* sp. n. p. 8; *guineensis* var. n. *jullieni* p. 13; *lethe* ab. n. *fava* p. 16 Belgian Congo figs., DEBAUCHE Bull. Mus. H.n. Belg. 12 no. 25.

Melisa hancocki sp. n. Uganda p. 292 figs., JORDAN Novit. zool. 39.

Pheia costalis morphology p. 323 fig., LICHY Bol. Soc. venez. Ci. nat. 3.

Pleurosoma gen. n. for *Sphecosoma angustatum* Möschl. (type) and others p. 178, ORFILA Rev. Soc. ent. argent. 7 1935.

Scepsis see *Ciseps*.

Sphecos gen. n. for *Sphecosoma arctatum* Walker (type) & others p. 181, ORFILA Rev. Soc. ent. argent. 7 1935.

Sphecosoma revision of Neotropical spp. pp. 177-182, ORFILA t.c.—*S. angustatum* see *Pleurosoma*; *abnormis* see *Abnormipterus*; *arctatum* see *Sphecos*.

Syntomis chariessa sp. n. N.-E. Rhodesia p. 293, JORDAN Novit. zool. 39.—*S. tergomas* sp. n. China p. 7, HERING Ark. Zool. 27A no. 32.

ARCTIDAE (including HYPSIDAE AND PERICOPIDAE).

Arctiidae of Auvergne, DUFOUR Bull. Soc. H.n. Auvergne 1 1922 pp. 25-33, 1 fig.

Notes and criticisms on Brazilian Arctiidae in Seitz, HOFFMANN Ent. Rdsch. 53 pp. 493-496, 540-544, 571-572.

Notes on Spilosominae, WILLIAMS
Proc. S. Lond. ent. Nat. Hist. Soc.
1935-36 pp. 93-96.

Amsacta paolii sp. n. Italian Somali-
land p. 27 fig., BERIO Boll. Soc. ent.
ital. 68.

Apantesis ungemachi abb. n. *divisa*
p. 98, *conjuncta*, *insulata*, *impunctata*,
confluens, *flavescens* p. 99, Morocco
SCHWINGENSCHUSS Mem. Soc. Sci. nat.
Maroc 42 1935.

Arctia villica ab. n. *bruyanti* France
p. 29 fig., DUFOUR Bull. Soc. H.n.
Auvergne 1 1922.—*A. caja* & ff. pp.
178-183 figs., TYKAŮ Acta Soc. ent.
Cech. 33; ab. n. *planckii* Poland p. 113,
WIZE Polsk. Pismo ent. 13.

Asura triangularis p. 588, *simillima*
New Guinea, *obscurodiscalis* Good-
enough I., *medioscacia* New Hanover,
eichhorni New Ireland p. 489 spp. n.;
luzonica subsp. n. *pardalina* Philip-
pines p. 490, ROTHSCHILD Ann. Mag.
n.H. (10) 17.—*A. furcata* Darjeeling
p. 418, *violacea* Punjab p. 419 spp. n.,
REICH Ent. Rdsch. 53.

Automolis strigata Colombia p. 422,
dissimulata Brazil p. 423, spp. n.,
REICH t.c.

Caprimima shawmayeri, *punctata*
p. 1, *simillima*, *pseudaffinis* New
Guinea, *peculiaris* New Ireland (with
subsp. n. *flavidiol* New Britain) p. 2
spp. n.; *albicollis* subsp. n. *reducta*
New Ireland; *coeruleomarginata* subsp.
n. *insularis* Goodenough I. p. 1,
ROTHSCHILD Novit. zool. 40.

Celama dürcki sp. n. Morocco p. 95
fig., SCHWINGENSCHUSS Mém. Soc. Sci.
nat. Maroc 42 1935.

Chionaema nigromarginata New Bri-
tain p. 485, *basiflava*, *scintillans* New
Ireland p. 486, *tripunctata* Andamans,
pellucida Java, *postgriseus* Celebes
p. 487, *stresemanni* Perak p. 488,
spp. n., ROTHSCHILD Ann. Mag. n.H.
(10) 17.

Cissura bilineata sp. n. Paraguay p.
226, ORFILA Rev. Soc. ent. argent. 7
1935.

Cisthene australis sp. n. Argentina p.
225, ORFILA t.c.

Coscinia striata ff. discussed pp. 2-6,
14-15 figs., WARNECKE & GOLTZ Ent.
Z. 50; subsp. n. *strandii*, ab. n. *lavata*
Trans-Dnepre p. 239, OBRAZTSOV
Festschr. E. Strand 2.

Diacrisia leopardinula (Strand) n. n.
for *leopardina* Mén. nec Koll. p. 347;
leopardinula subspp. n. *sinensis* Kansu,
mandschurica Manchuria p. 348, BANG-
HAAS Ent. Z. 50.

Diaphora mendica subsp. n. *malatiana*
Kurdistan sep. p. 2, BYTINSKI-SALZ
Ent. Rec. 48.

Estigmene bayoni sp. n. Uganda p.
26, BERIO Ann. Mus. Genova 59 1935.

Euryptidia nigra sp. n. Brazil p. 421,
REICH Ent. Rdsch. 53.

Eutelesia variegata sp. n. Brazil p.
422, REICH t.c.

Hoplarctia hodeva varr. n. *lugubris*
p. 63, *confluens* p. 64 Mexico, HOFFMANN
An. Inst. Biol. Mexico 7.

Ilema lurideola subsp. n. *kansuensis*
China p. 5, HERING Ark. Zool. 27A no.
32.

Illice uni-plaga sp. n. Paraguay p.
421, REICH Ent. Rdsch. 53.

Ischnocampa rubrosignata sp. n.
Colombia p. 423, REICH t.c.

Lithosia notes on some Finnish spp.
pp. 32-38, *pallifrons* ab. n. *sericeola*
Finland p. 36 figs., KANERVA Ann.
ent. fenn. 1 1935.

Macroptila elongata sp. n. Brazil p.
421, REICH Ent. Rdsch. 53.

Miltochrista erubescens sp. n. Assam;
euprepia ab. n. *lutescens* Java p. 490,
ROTHSCHILD Ann. Mag. n.H. (10) 17.

Mintopola dipartita sp. n. Brazil p.
422, REICH Ent. Rdsch. 53.

Neochera contraria sp. n. New Heb-
rides p. 419, REICH t.c.

Pelosia muscerda ab. n. *simonensis*
France p. 120 fig., LEGRAND Amat.
Papillons 8.

Phragmatobia joiceyi ab. n. *interrupta*
Morocco p. 98, SCHWINGENSCHUSS
Mém. Soc. Sci. nat. Maroc 42 1935.—
P. fuliginosa ab. n. *obscura* Ukraine p.
642, OBRAZTSOV Festschr. E. Strand 1.

Roeselia bilineata, *stigmatica* spp. n.
Brazil p. 420, REICH Ent. Rdsch. 53.

Rhodogastria femina Kamerun p. 26,
uniformis Principe I. p. 27, spp. n.,
BERIO Ann. Mus. Genova 59 1935.

Spilosoma urticae ab. n. *aestiva*
Poland p. 113, WIZE Polsk. Pismo
Ent. 13.

Stigmatophora grisea sp. n. China p. 5, HERING Ark. Zool. 27A no. 32.

Zygaenosia flavoplagiata Goodenough l. (with subsp. n. *restricla*), *suffusa* New Guinea, *affinis* St. Mathias Is. p. 484 spp. n.; *fumigata* subsp. n. *nigr escens* New Hanover; *papua* subsp. n. *eximia* New Guinea p. 485, ROTHSCILD Ann. Mag. n.H. (10) 17.

AGARISTIDAE.

Chinese Agaristids, MELL Stettin. ent. Ztg. 97 pp. 1-43, 161-188, 1 pl. 18 figs.

Aucula hilzingeri var. n. *albirubra* Argentina p. 73 fig., KÖHLER Physis 12.

Eusemia lectrix subspp. n. *szechuanensis*, *hönei* p. 29, *sauteri* p. 30 figs., MELL Stettin. ent. Ztg. 97.

Exsula dentatrix albomaculata f. n. *flavomaculata* China p. 167, MELL t.c.

Gerra lunata sp. n. Argentina p. 71 fig., KÖHLER Physis 12.

Mystrocephala storniana, *denieri* spp. n. Argentina p. 72 figs., KÖHLER t.c.

Seudyra interposita subsp. n. *kuangtungensis* p. 182; *venusta* var. n. *yunnana* p. 183 China figs., MELL Stettin. ent. Ztg. 97.

Syfanía dubernardi subsp. n. *taipeishanis* China p. 185, MELL t.c.

NOCTUIDAE (PHALAEINIDAE).

Revision of American Noctuidae, DRAUDT in SEITZ Macrolep. Wld. (Engl. edn.) 7 pp. 381-396 6 pls.

Revision of Palaearctic Agrotinae (Euxoinae), DRAUDT in SEITZ Suppl. 3 217-240.

Catalogue of African Noctuidae, GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 15 pp. 159-254, 15 pls.

Morphological notes on Chilean Cucullianae, ORFILA Rev. chil. H.n. 37 1933 pp. 82-85.

Generic synopsis of Erebiniae, RICHARDS Rev. Ent. Rio de J. 6 pp. 338-374, 16 figs.

Additions to Tutt's list of British Noctuidae (contd.), TURNER Ent. Rec. 48 sep. pp. 25-72.

Noctuidae of Portugal, WATTISON Mem. Mus. zool. Univ. Coimbra (I) no. 87 1935 104 pp.

Acronicta pasiphae sp. n. Asia Minor p. 457 fig., DRAUDT Ent. Rdsch. 53.—*A. psi*, *tridens*, *cuspsis* critical analysis pp. 219-224, 229-233 figs., GROSSE Ent. Z. 50.

Agrotis segetum ab. n. *unicolor* Hungary p. 187, PILLICH Rovart. Lap., Budapest 16 1909.—*A. puta* list of varr. p. 108, ff. n. *golegnosa* N. Africa p. 77, *unica*, *uncta*, *perfusa* p. 90, *cremea* p. 91, *pheroa* p. 92, *erythrosimilis* p. 93, *umbra* p. 94, *uniformis*, *paupera* p. 96, *transiens* p. 97, *extrema* p. 98, *venata* p. 99 Italy, *algerina* Algeria p. 91, *toisca* Tripoli p. 92, *tutti*, *obscurina*, *agenjoi* p. 93, *debilis* p. 94, *feratra* p. 98, *composita* Spain, *transfixa* p. 94, *puro-lymbata* p. 97 Cyprus, *tricolor* p. 95, *monochroma* p. 96, *lignosina* p. 99, Tunisia, *masculina* Bulgaria p. 97 figs., BERIO Ann. Mus. Genova 59.—*A. wiltsherei* sp. n. Iraq p. 224, BOURSIN Bull. Soc. ent. Fr. 41.—*A. rubi* ab. n. *borealis* Lapland p. 239, LINGONBLAD Lambillionea 36.—*A. comes*, *subsequana* names discussed pp. 542-543, BOLDT Ent. Z. 49.—*A. renigera* subsp. n. *ochridana* p. 6; *decora* subsp. n. *macedonia* p. 13 Macedonia, TURNER Z. öst. EntVer. 21.—*A. clafivera* f. *pseudovalligera* n. n. for *valligera* Hb. nec Borkh. sep. p. 29; *obelisca* f. *rurisqueenei* n. n. for *ruris* Gn. nec Hb. sep. 31; *nigricans* abb. n. *subradiata*, *radiata* England sep. p. 40, TURNER Ent. Rec. 48.—*A. juvenis* Stgr. (= *clarivenosa* Cti. i. l. (fig. in Seitz)) p. 461; *anastasia* p. 462, *illauta* p. 465, *zukunftskyi* p. 466, *figulina* spp. n.; *insignata* subspp. n. *columbina* Asia Minor, *fuliginosa* Armenia p. 467 figs. DRAUDT Ent. Rdsch. 53.—*A. exclamations* ab. n. *nigrescens* Morocco p. 52, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Allophosoma pallidula sp. n. Queensland p. 40, TURNER Proc. roy. Soc. Qd. 47.

Amathes hypotaenia sep. p. 3 (with var. n. *wiltsherei* sep. p. 4) sp. n. Lebanon, BYTINSKI-SALZ Ent. Rec. 48.

Amblyzancle gen. n. (Erastrinae), *declivis* sp. n. Queensland p. 34, TURNER Proc. roy. Soc. Qd. 47.

Ammetopa duseutrei subsp. n. *agnellus* Morocco p. 58, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Aneureta gen. n. p. 66, *eureka* sp. n. Cyrenaica p. 67 (with f. n. *vernalis* p. 68) figs., TURATI & KRÜGER Mem. Soc. ent. ital. 85.

Anomis steremochla sp. n. N. Australia p. 42, TURNER Proc. roy. Soc. Qd. 47.

Anomogyna rhaetica subsp. n. *fennica* Finland p. 459, BRANDT Ent. Z. 49.

Apatela lepusculina-leporina series revision pp. 145-155, *leporina* subsp. n. *catantoides* Colorado p. 155, BENJAMIN Pan-Pacific Ent. 11.

Apopestes spectrum ab. n. *nigra* Capri p. 225, DRAUDT in SEITZ Suppl. 3.

Archanara wiltshirei sep. p. 4 (with f. n. *brunnea* sep. p. 5) sp. n. Syria, BYTINSKI-SALZ Ent. Rec. 48.

Arsilonche albovenosa f. n. *tjurana* Asia Minor p. 457 fig., DRAUDT Ent. Rdsch. 53.

Asyneda subgen. n. see *Forsebia*.

Athetis zernyi Asia Minor p. 87 (with subspp. n. *debilis* Iraq, *signata* Armenia), *asymmetrica*, *eurinospila* p. 88, *filipjevi* p. 89, *salzi* p. 90, *sogdiana* Turkestan, *agenjoi* Taurus, *draudti* p. 89, *rjabovi* p. 91 Armenia, *turatii* p. 90, *warnecke* Centr. Asia, *hedychroa* Lebanon p. 91, *parvaspersa*, *wiltshirei* Iraq p. 92, *heptarchia* Yunnan p. 93, *amse*li Palestine p. 225 spp. n.; *vicina* subsp. n. *rosea* Lebanon; *gilva* subsp. n. *orientalis* Anatolia; *clara* subsp. n. *barbarica* Oran p. 93, *armeniaca* Armenia; *bodenheimeri* subsp. n. *chlorotica* Iraq; *wulschlegeli* subsp. n. *schwingenschussi* Boli p. 94, BOURSIN Bull. Soc. ent. Fr. 41.—*A. albersi* sp. n. Centr. Asia p. 21 figs., WARNECKE Ent. Rdsch. 54.—*A. boursini* sp. n. N. Persia p. 74, WAGNER Z. öst. EntVer. 21.

Autophila parnassicola Greece p. 225, *amse*li Taurus p. 226, spp. n. figs., DRAUDT in SEITZ Suppl. 3.

Bertula nyctiphanta sp. n. N.S. Wales p. 44, TURNER Proc. roy. Soc. Qd. 47.

Blenina friederici sp. n. Lake Albert p. 188, fig., GAEDE in SEITZ 15.

Boryzops gen. n. for *Iscadia purissima* Dyar p. 369 figs., RICHARDS Rev. Ent. Rio de J. 6.

Bryophila atlantis p. 55, *squamosa* p. 56, spp. n. Morocco figs., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.—*B. ravula* f. n. *mediocracea*

Beirut sep. p. 3, BYTINSKI-SALZ Ent. Rec. 48.—*B. gea* Schaw. good species p. 458, fig., DRAUDT Ent. Rdsch. 53.

Bulia revision pp. 431-437, *similaris* sp. n. U.S.A. p. 433 figs., RICHARDS Ann. ent. Soc. Amer. 29.

Calophasia lunula subsp. n. *anatolica* Asia Minor p. 491 fig., DRAUDT Ent. Rdsch. 53.

Caradrina eupolia sp. n. Queensland p. 32, TURNER Proc. roy. Soc. Qd. 47.

Cardiosace chiaromonte sp. n. Italian Somaliland p. 28 fig., BERIO Boll. Soc. ent. ital. 68.

Catoblemma trigonographa sp. n. Queensland p. 33, TURNER Proc. roy. Soc. Qd. 47.

Catocala distribution, China p. 52, *fraxini* subsp. n. *yunnanensis* p. 65; *nupta* subspp. n. *japonica* p. 67, *likiangensis* p. 69; *proxeneta* f. n. *confluens* p. 75 China figs., MELL Iris 50.—*C. grisatra* sp. n. p. 96; *amica* f. n. *curvifascia* p. 97 U.S.A., BROWER Bull. Brooklyn ent. Soc. 31.

Cerapteryx graminis subsp. n. *friesica* Sylt I. p. 159; g. f. n. *radiata* no locality p. 160 figs., BRYK Ent. Rdsch. 53.—*C. graminis* *friesica* determination discussed pp. 188-190, HEYDEMANN t.c.

Chasmina lispodes sp. n. N.W. Australia p. 32, TURNER Proc. roy. Soc. Qd. 47.

Cirphis ursula p. 242, *inermis* p. 244, *calidior* p. 245, spp. n. U.S.A. figs., FORBES J. N.Y. ent. Soc. 44.

Cleophana diffluens subsp. n. *coerulelescens* Morocco p. 62 fig., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1936.

Corgatha molybdophaes, *ancistrodes*, *pleuroplaca* spp. n. Australia p. 35, TURNER Proc. roy. Soc. Qd. 47.

Cortyia dallonii sp. n. Tibesti p. 86 fig., LE CERF Mém. Acad. Sci. Paris (2) 62.

Cylogramma griseata n. n. (= *simplex* Hmps.) p. Africa p. 215 fig., GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 15.

Dysapura gen. n. (Sarrothripinae), *xanthosticha* sp. n. Queensland p. 39, TURNER Proc. roy. Soc. Qd. 47.

Earias irakana sp. n. Baghdad p. 239, WILTSHIRE Entomologist 69.

Ecnomia gen. n. (Erastrinae) p. 33,
hesychima sp. n. Queensland p. 34,
 TURNER Proc. roy. Soc. Qd. 47.

Enargia regina f. n. *badiofasciata*
 Kurdistan p. 493, DRAUDT Ent. Rdsch.
 53.

Ephesia longipalpalis p. 80, *hönei* p.
 81, *infasciata* p. 87 spp. n.; *helena*
 subsp. n. *beicki* p. 83; *largeteau*
 subsp. n. *yunnana* p. 85 China figs.,
 MELL Iris 50.

Epia evestigata sp. n. Turkey in
 Asia p. 490, DRAUDT Ent. Rdsch. 53.

Epigrypodes gen. n. (Ophiderinae),
amplipennis sp. n. Queensland p. 42,
 TURNER Proc. roy. Soc. Qd. 47.

Eremobia ochroleuca subsp. n.
asiatica Asia Minor p. 492, DRAUDT
 Ent. Rdsch. 53.

Eublemma albida varr. n. *alpina*,
grisea, *marginata* Morocco p. 65,
 SCHWINGENSCHUSS Mém. Soc. Sci. nat.
 Maroc 42 1935.—*E. stereoscia* sp. n.
 Queensland p. 33, TURNER Proc. roy.
 Soc. Qd. 47.—*E. chamila* sp. n. Turkes-
 tan p. 493 fig., DRAUDT Ent. Rdsch.
 53.

Eupanychis spinosae Guen. (= *camina*
 Smith); *scissoides* sp. n. U.S.A. p. 196,
 BENJAMIN Bull. S. Calif. Acad. Sci.
 34.

Euxanthis anticyphas sp. n. Syria p.
 23, MEYRICK Exot. Micr. 5.

Euxoa aquilina, *distinguenda* dis-
 tribution, variability pp. 288–297 figs.
 KOZHANCHIKOV Rev. Ent. U.R.S.S.
 25 1935.—*E. distinguenda* subsp. *ast-*
falleri ab. n. *pseudoeruta* Vinschgau
 p. 42, HARTIG Z. öst. EntVer. 21.—
E. camalpa subsp. n. *manca* p. 198;
inyoca p. 199, *pleuriticoides* p. 203
 spp. n.; *brunneigera* subsp. n. *latebra*
 p. 201; *bifasciata* subsp. n. *lowensis*,
bisagittifera p. 202 U.S.A., BENJAMIN
 Bull. S. Calif. Acad. Sci. 34.—*E.*
mendelis subsp. n. *anatolica* p. 459;
vintrufa, *anaemica* spp. n.; *robiginosa*
 subsp. n. *intensor* p. 460 Asia Minor
 figs., DRAUDT Ent. Rdsch. 53.

Forsebia gen. n. p. 264, type *Melipotis*
perlaeta Edw. (*Forsebia*, *Asyneda*
 subgen. n.) p. 265; *mendozina* Hmps. n.
 from *Syneda* p. 267 figs., RICHARDS
 Canad. Ent. 67.

Gigantoceras curvilinea sp. n. Adamaoua
 p. 177 fig., GAEDE in SEITZ 15.

Graptolitha lepida subsp. n. *adipel*
 New Jersey p. 107, BENJAMIN Bull. S.
 Calif. Acad. Sci. 34.

Harmodia clarescens sp. n. p. 470;
caesia subsp. n. *transiens* p. 471 Asia
 Minor figs., DRAUDT Ent. Rdsch. 53.

Heliocontia speciosa sp. n. Mexico
 p. 387 fig., DRAUDT in SEITZ Macrolep.
 Wld. (Engl. Edn.) 7.

Heliolonche carolus sp. n. California
 p. 45, McDUNNOUGH Canad. Ent. 68.

Heliosea pictipennis subsp. n. *defas-*
ciata; *celeris* subsp. n. *melicleptrioides*
 California p. 195, BENJAMIN Bull. S.
 Calif. Acad. Sci. 34.

Hermينيا gryphalis f. n. *romana*
 Italy p. 235, DRAUDT in SEITZ Suppl.
 3.—*H. simplicicornis* sp. n. Morocco
 p. 70 fig., ZERNY Mém. Soc. Sci. nat.
 Maroc 42 1935.

Heterographa tumulorum sp. n. Rus-
 sian Turkestan p. 17 figs., BOURSIN
 Ent. Rdsch. 54.

Hydroecia cervago f. n. *argillago*
 Kurdistan p. 492, DRAUDT Ent. Rdsch.
 53.

Hypertrocta pallida sp. n. Queensland
 p. 45, TURNER Proc. roy. Soc. Qd.
 47.

Iscadia monte sp. n. Brazil p. 44
 figs., DA COSTA LIMA O Campo 7 Jan.
 pt.—*I. purissima* see *Boryzops*.

Lathraeolis gen. n. (Sarrothripinae)
spodochroa sp. n. Queensland p. 38,
 TURNER Proc. roy. Soc. Qd. 47.

Lita poschiavensis p. 2, *improvisella*
 p. 3 spp. n. Switzerland figs., REBEL Z.
 öst. EntVer. 21.

Luperina eversmanni sp. n. Siberia
 p. 27, KOZHANCHIKOV Folia zool. hydro-
 biol. 9.

Mammifrontia rileyi sp. n. California
 p. 208, BENJAMIN Bull. S. Calif. Acad.
 Sci. 34.

Meganephria bimaculosa subsp. n.
pontica Asia Minor p. 492 fig., DRAUDT
 Ent. Rdsch. 53.

Melipotis perlaeta see *Forsebia*.

Metasada pleurosticta, *sideropasta*
 spp. n. Queensland p. 36, TURNER
 Proc. roy. Soc. Qd. 47.

Metopodicha gen. n. (nr. *Derthisa*) p.
 491, *ernesti* sp. n. Asia Minor p. 492
 figs., DRAUDT Ent. Rdsch. 53.

Mormonia haitzi sp. n. Kansu p. 109, BANG-HAAS Ent. Z. 50.

Naarda coelopsis sp. n. Queensland p. 45, TURNER Proc. roy. Soc. Qd. 47.

Nanaguna orbiculigera sp. n. Queensland p. 38, TURNER t.c.

Niphosticta gen. n. (Ophiderinae), *apicipuncta* sp. n. Queensland p. 43, TURNER t.c.

Oedibrya boursini sp. n. Kurdistan p. 459 fig., DRAUDT Ent. Rdsch. 53.

Ogygia forcipula subsp. n. *atlantis* p. 51 Morocco fig., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Orrhodia vaccinii f. n. *elegans* Bavaria p. 359, HÖRHAMMER Ent. Z. 50.

Orthosia macilenta var. n. *rufa* Bavaria p. 359, HÖRHAMMER t.c.

Oruza crocotoschema, *maerens* spp. n. Queensland p. 37, TURNER Proc. roy. Soc. Qd. 47.

Papaipema stenoscelis in eastern U.S.A. p. 119, BIRD Canad. Ent. 68.

Parachalciope rotundata sp. n. Kamerun, Togo p. 247, GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 15.

Pediarcha gen. n. (Eriastriinae), *singularis* sp. n. Queensland p. 37 TURNER Proc. roy. Soc. Qd. 47.

Phytometra generosa f. n. *malatyana* Kurdistan sep. p. 5, BYTINSKI-SALZ Ent. Rec. 48.

Plecopterodes clytie sp. n. E. Africa p. 251 fig., GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 15.

Plusia notes on Chilean spp. pp. 291-297, *gammoides* var. n. *chilensis* Chile p. 296 fig., URETA Rev. chil. H.n. 39.

Polia draudti sp. n. N. Persia p. 73, WAGNER Z. öst. EntVer. 21.

Porphyrinia albida f. n. *peralbida* Cyrenaica p. 66, TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Praestilbia armeniaca f. n. *designata* Lebanon sep. p. 4, BYTINSKI-SALZ Ent. Rec. 48.

Prionopterina modesta sp. n. Queensland p. 44, TURNER Proc. roy. Soc. Qd. 47.

Propsalta enigmatica sp. n. Cyrenaica p. 64 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Protopocis orthogramma sp. n. N.S. Wales p. 41, TURNER Proc. roy. Soc. Qd. 47.

Pseudalea gen. n. (Acontiinae) p. 30, *macrogastris* sp. n. Queensland p. 40, TURNER Proc. roy. Soc. Qd. 47.

Raparna luteoflaveola sp. n. Cyrenaica p. 63 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Rhyacia pseudolatens sp. n. p. 51; *dyris* ab. n. *rosea* p. 50 Morocco figs., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.—*R. scruposa* sp. n.; *latens* subsp. n. *pontica* p. 468; *elegans* subsp. n. *anatolica*; *alpestris* subsp. n. *ponticola*; *cuprea* subsp. n. *pertexta* p. 469 Asia Minor figs., DRAUDT Ent. Rdsch. 53.—*R. senna* subsp. *eisenbergeri* fig. p. 43, HARTIG Z. öst. EntVer. 21.—*R. rafidain* Iraq p. 224, *iobaphes* Lebanon p. 225, BOURSIN Bull. Soc. ent. Fr. 41.—*R. senna* subsp. *eisenbergeri* Htg. 1934 emended to *eisenbergeri* p. 16, HARTIG Boll. Soc. ent. ital. 68.

Sarobela gen. n. (Hypeninae) *spectabilis* sp. n. Queensland p. 44, TURNER Proc. roy. Soc. Qd. 47.

Scotogramma genital armature p. 152, *stigmosa* discussed p. 151 figs., BOURSIN Livre jubil. Bouvier 1936.—*S. epiphleps* sp. n. Cyrenaica p. 61 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Sidemia zollikoferi internigrata in Czechoslovakia, first European record p. 327 fig., PEKARSKY Ent. Rdsch. 53.

Stenoprora eurycycla sp. n. Queensland p. 41, TURNER Proc. roy. Soc. Qd. 47.

Stenosoma elongata sp. n. Cyrenaica p. 62 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Stictoptera poecilosoma f. *nigrifascia* n. n. for *subobliqua* Saalm. p. 176, GAEDE in SEITZ 15.

Syneda mendozina see *Forsebia*.

Tapinostola zernyi sp. n. Morocco p. 59 fig., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Thalatha hippolopha, *artificiosa* spp. n. Australia p. 31, TURNER Proc. roy. Soc. Qd. 47.

Trichospolas gen. n. (nr. *Onychestra*), *arterialis* sp. n. Daghestan p. 470 fig., DRAUDT Ent. Rdsch. 53.

Ulothrichopus tessmanni sp. n. Kame-run, E. Africa p. 210 fig., GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 15.

Xestia enargiaris sp. n. Turkey p. 469 fig., DRAUDT Ent. Rdsch. 53.

LYMANTRIIDAE.

Lymantriidae from N. Yunnan, COLLENETTE Ann. Mag. n.H. (10) 17 pp. 329-346, 1 pl.

Aclonophlebia xuthomene, *atectonipha* spp. n. Angola p. 152 figs., COLLENETTE Novit. zool. 40.

Amphikes gen. n. p. 332, *gymna* sp. n. N. Yunnan p. 333 fig., COLLENETTE Ann. Mag. n.H. (10) 17.

Arctornis cecconimena, *xanthochila* p. 330, *gelasphora*, *cloanges* p. 331, spp. n. N. Yunnan figs., COLLENETTE t.c.

Bracharoa ragazzii sp. n. Ethiopia p. 42 fig., BERIO Ann. Mus. Genova 59.

Cadurca moco sp. n. Angola p. 148 fig., COLLENETTE Novit. zool. 40.

Casama leporina sp. n. Morocco p. 47 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Cropera celanogyia sp. n. Angola p. 148 fig., COLLENETTE Novit. zool. 40.

Crorema jordani sp. n. Angola p. 149 fig., COLLENETTE t.c.—*C. sandoa* sp. n. Belgian Congo p. 250 fig., COLLENETTE Rev. Zool. Bot. afr. 28.

Dasychira stygis sp. n. Belgian Congo p. 405 fig., COLLENETTE t.c.—*D. andulo* p. 150, *dasyballa*, *hyphasma* p. 151 Angola, *iodnephys* p. 156, *chalcoptera* p. 157, *zonobathra* p. 158, *olsoufieffae*, *disjunctifascia* p. 159, *junctifascia*, *leucopicta* p. 160, *cyrtozona*, *albilunula* p. 161, *mnara*, *lichenodes*, *phloeodes* p. 162, *uteles*, *melissograptia*, *hexamitobalia* p. 163, *belessichares*, *hedilacea* p. 164 Madagascar spp. n. figs., COLLENETTE Novit. zool. 40.—*D. anophota*, *oxygnatha* spp. n. Yunnan p. 90, COLLENETTE Ent. mon. Mag. 72.—*D. jacksoni* sp. n. Kenya, Uganda p. 180, COLLENETTE Entomologist 69.—*D. simiolus*, *polysphena* p. 338, *hoenei* p. 340, *psolobalia* p. 341, *pilodes* p. 342, *planozona* p. 343 spp. n. ; *feminula* subsp. n. *likiangensis* p. 339 N. Yunnan figs., COLLENETTE Ann. Mag. n.H. (10) 17.

Euproctis glaphyra p. 333, *schaliphora* p. 334, *electrophaes*, *brachychlaena* p.

335, *conistica* p. 336, *callichlaena* p. 337, spp. n. N. Yunnan figs., COLLENETTE t.c.—*E. conionipha* Angola p. 150, *oxyptera* Madagascar p. 155 spp. n. figs., COLLENETTE Novit. zool. 40.

Lacipa xuthoma sp. n. Belgian Congo p. 251 fig., COLLENETTE Rev. Zool. Bot. afr. 28.

Laelia andricela p. 251, *orthra* p. 404, spp. n. Belgian Congo figs., COLLENETTE t.c.—*L. polia*, *conioptera* spp. n. Madagascar p. 156 figs., COLLENETTE Novit. zool. 40.

Lymantria gen. n. p. 153, *epelytes* sp. n. Madagascar p. 154 fig., COLLENETTE t.c.

Lymantria polycyma, *lamda* p. 167, *leucophaes* spp. n. ; *velutina* ♀ p. 168 Madagascar figs., COLLENETTE t.c.—*L. servula* p. 244, *argyrochroa* p. 345, spp. n. N. Yunnan figs., COLLENETTE Ann. Mag. n.H. (10) 17.—*L. monacha* genitalia pp. 161-168 figs., BRANDT Zool. Anz. 114.—*L. diversa* sp. n. Queensland p. 46, TURNER Proc. roy. Soc. Qd. 47.—*L. dispar* see *Porthetria*.

Marblepsis chionoptera sp. n. Madagascar p. 153 fig., COLLENETTE Novit. zool. 40.

Noliproctis lithoides sp. n. Madagascar p. 155 fig., COLLENETTE t.c.

Olapa brachycerca, *macrocerca* spp. n. Angola p. 147 figs., COLLENETTE t.c.

Paraproctis calamolopha sp. n. Uganda p. 178 figs., COLLENETTE Entomologist 69.

Perinetia gen. n. p. 165, *leucocloea* sp. n. Madagascar p. 166 fig., COLLENETTE Novit. zool. 40.

Pirgula stictogonia Angola p. 149, *melanoma* Madagascar p. 154, spp. n. figs., COLLENETTE t.c.

Porthesia similis ab. n. *wilczyniskia* Poland p. 108, WIZE Polsk. Pismo Ent. 13.

Porthetria (*Lymantria*) *dispar* and ff. pp. 227-236, 257-263, LEMPKE Lam-billionea 36.

Pterodoa crystalloides sp. n. Belgian Congo p. 249 fig., COLLENETTE Rev. Zool. Bot. afr. 28.

Stracena kamengo sp. n. Uganda p. 178, COLLENETTE Entomologist 69.

ANTHELIDAE.

Anthela euryphrica sp. n. N.S. Wales
p. 46, TURNER Proc. roy. Soc. Qd.
47.

SPHINGIDAE.

Sphingidae from Venezuela, GEHLEN
Veröff. dtsh. kol. Mus. Bremen 1
pp. 305-306.

Descriptions, biology and migration
of Argentine Sphingidae, SCHREITER
Bol. Mus. H.n. Univ. Tucuman 1
1926 no. 9, 24 pp. 23 pls.

Callambulyx rubricosa subsp. n. indo-
chinensis Fr. Indo-China p. 84, CLARK
Proc. New Engl. zool. Cl. 15.

Celerio livornica ab. n. *perlimbata*
France p. 20 fig., ABBAYES Bull. Soc.
sci. Bretagne 8 1931.—*C. euphorbiae*
subsp. n. *filippewi* Tianshan p. 255;
centralasiae subsp. n. *transcaspica*,
Transcaspiia p. 256, BANG-HAAS Ent.
Z. 50.—*C. euphorbiae mauretanica* var.
n. *gratiosissima* Cyrenaica p. 57,
TURATI & KRÜGER Mem. Soc. ent. ital.
15.

Clanis bilineata subsp. n. *sumatrana*
Sumatra p. 75, CLARK Proc. New Engl.
zool. Cl. 15.

Compsogene mansonii subsp. n. *for-*
mosana Formosa p. 72, CLARK t.c.

Erinnyis domingonis subsp. n. *palles-*
cens Jamaica p. 84, CLARK Proc. New
Engl. zool. Cl. 15.

Langia zenzeroides subsp. n. *formo-*
sana Formosa p. 83, CLARK t.c.

Leucophrisia lineata subsp. n. *formo-*
sana Formosa pp. 76, 86, CLARK t.c.

Macroglossum glaucoptera separated
according to locality, *glaucoptera* Ceylon
obscuripes Butl. (= *lepsha* Butl.) Malay
p. 90, CLARK t.c.

Marumba dyras subsp. n. *tonkinensis*
Tonkin p. 81; *omeii* sp. n. Mt. Omei p.
82, CLARK t.c.—*M. tigrina* sp. n.
Sumatra p. 461 fig., GEHLEN Ent. Z.
49.

Oxyambulyx sericeipennis subsp. n.
subrufescens Fr. Indo-China; *kuang-*
tungensis subsp. n. *formosana* Formosa
p. 73; *johnsoni* n. n. for *liturata johnsoni*
Clark p. 91, CLARK Proc. New Engl.
zool. Cl. 15.

Pergesa porcellus ab. n. *flavocincta*
Poland p. 7, WIZE Motyle Okolic Jezewa,

Posnan 1917 [cf. *Lambilliona* 36 p.
183].

Platysphinx lemoulti sp. n. Belgian
Congo p. 74, CLARK Proc. New Engl.
zool. Cl. 15.

Polyptychus aurora p. 76, *penumbra*
p. 78, *springerae* p. 81, spp. n. Belg.
Congo; *rosea* subsp. n. *orientalis*
Sudan p. 77; *baxteri* subsp. n. *jansei*
S. Rhodesia p. 79, CLARK t.c.

Protoparce convolvuli ab. n. *fasciata*
Hungary p. 187, PILLICH Rovart.
Lap., Budapest 16 1909.

Rhagastis confusa subspp. n. *chinensis*
S. China p. 89, *peeti* N.W. India p. 90,
CLARK Proc. New Engl. zool. Cl. 15.

Sesia titan subsp. n. *cubana* Cuba p.
85, CLARK t.c.

Sphinx drupiferarum subsp. n. *margin-*
alis Manitoba p. 71, CLARK t.c.—*S.*
caligeneus subsp. n. *hakodoensis* Corea
p. 254, BANG-HAAS Ent. Z. 50.

Temnora viridis p. 86, *congoi* p. 88
spp. n.; *natalis* subsp. n. *kafakumbae*
p. 87 Belgian Congo, CLARK Proc. New
Engl. zool. Cl. 15.

THYATRIDAE (CYMATOPHORIDAE).

Classification of Thyatiridae, FORBES
Ann. ent. Soc. Amer. 29 pp. 779-803, 3
pls. 3 figs.

Revision of Cymatophoridae of
America, GAEDE in SEITZ, Macrolep.
Wld. (Engl. Edn.) 6 pp. 1171-1175.

Psidopaloides minutus sp. n. China p.
785 figs., FORBES Ann. ent. Soc. Amer.
29.

NOTODONTIDAE.

Cerura höferi sp. n. Kurdistan sep. p.
2, BYTINSKI-SALZ Ent. Rec. 48.

Parameces gen. n., *glauca* sp. n.
Queensland p. 29, TURNER Proc. roy.
Soc. Qd. 47.

Pygaera pigra var. *ferruginea* f. n.
flavidior Kurdistan sep. p. 3, BYTINSKI-
SALZ Ent. Rec. 48.

Rhegmatochloa vinculum sp. n. China
p. 4, HERING Ark. Zool. 27A no. 32.

GEOMETRIDAE (OENOECHROMIDAE).

Revision of Caberini of Amur-Ussuri
region, DJAKONOV Trav. Inst. zool.
Acad. Sci. U.S.S.R. 3 pp. 475-531, 11
pls.

American Geometridae, PROUT in SEITZ Macrolep. Wld. (Engl. edn.) 8 pp. 73-104.

Geometridae of the World (contd.), PROUT in SEITZ Suppl. 4 pp. 57-64.

Abraxas flavimarginaria see *Dia-prepes*.

Acidalia bimaculata p. 68, *barcearia* p. 69 spp. n. Cyrenaica figs., TURATI & KRÜGER Mem. Soc. ent. ital. 15.—*A. herbariata* f. n. *teutoburgensis* Germany p. 146, SCHULTZ Ent. Rdsch. 54.—*A. emutaria* distribution on North Sea coast p. 61, WARNECKE Mitt. dtsh. ent. Ges. 7.—*A. contiguarua* nomenclature pp. 1-4; distribution pp. 4-6; ff. discussed pp. 7-32; ff. n. *aurata* p. 10, *griseocens* p. 19, *melaina* p. 20, *consersa* p. 22 Alps, *griseospersa* Bohemia p. 29; c. subsp. n. *austriacae* p. 21, *hercyniae* p. 24 Austria, *britanniae* England p. 30 figs., MÜLLER Mitt. münchn. ent. Ges. 26.

Acrodonis aenigma subsp. n. *hunana* Hunan p. 126, WEHRLI Ent. Rdsch. 54.

Allocotesia gen. n. (nr. *Cabera*) p. 564, *chiphora* sp. n. China p. 565 fig., WEHRLI Ent. Rdsch. 53.

Amnesicoma vicina sp. n. China p. 16 fig., DJAKONOV Ark. Zool. 27A no. 39.

Anaitis simpliciata f. n. *balcanica* Balkans p. 69, ZÜLLICH Z. öst. EntVer. 21.—*A. plagiata* notes on varr. pp. 39-40 figs., VASSAL Bull. Soc. linn. Lyon (n. s.) 5.

Anisodes portenta Carabaya p. 98, *temperata* Colombia, *silomera*, *violens* Peru, *ptochopoea* p. 103 (with subsp. n. *gaudebunda* Peru) Brazil, *dicycla* Carabaya p. 104 spp. n.; *gigantula* subsp. n. *cratospia* Costa Rica; *griseomixta* subsp. n. *immixta* p. 98; *punctulosa* abb. n. *atristigma*, *subcolorata* Bolivia, Peru; *mezclata* abb. n. *metriopepla*, *perdecorata*, *nigrinotata*; *scintillans* ab. n. *maculata* p. 100; *bipartita* subsp. n. *montana*, ab. n. *maculata* Peru; *aequalipunctata* ab. n. *pallascens* Carabaya p. 101; *zeuctospila* ab. n. *spuria* Venezuela p. 102; *seposita* ab. n. *discata* Peru p. 104 figs., PROUT in SEITZ Macrolep. Wld. (Engl. edn.) 8.

Apocolotois gen. n. for *Himera arnoldiaria* Oberth. p. 144, WEHRLI Ent. Rdsch. 54.

Apopetelia gen. n. for *Petelia morosa* Btlr. (type), *chlororhynodes* p. 567, *erythroides* p. 568, spp. n. China figs., WEHRLI Ent. Rdsch. 53.

Arichanna magna p. 32, *hummeli* p. 34, spp. n. China figs., DJAKONOV Ark. Zool. 27A no. 39.—*A. concinnum* see *Leptepistomion*.

Asellodes lacunata subsp. n. *bahiana* Brazil p. 92; *bivitraria* sp. n. Peru, Bolivia p. 93 figs., PROUT in SEITZ Macrolep. Wld. (Engl. edn.) 8.

Astegania gen. n. for *Lomographa honesta* Prout pp. 490, 512 figs., DJAKONOV Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Bapta nivea sp. n. Ussuri p. 503 figs., DJAKONOV t.c.—*B. prohypophaea* Tibet, *anoxys*, *poliotaeniata* p. 514, *gigantodes* p. 562, *chekiangensis*, *epixantha*, *phaedra* (= *distans* auct.) p. 563 China, spp. n. figs., WEHRLI Ent. Rdsch. 53.

Biston achyra sp. n. Turkey p. 35 fig., WEHRLI Mitt. münchn. ent. Ges. 26.

Boarmia bistortata German varr. pp. 340-341 figs., LINDNER & SCHNEIDER Ent. Rdsch. 53.—*B. phoeniciaria* p. 72, *jugurthina* p. 73, spp. n. Cyrenaica figs., TURATI & KRÜGER Mem. Soc. ent. ital. 15.—*B. humaria* sp. n. Morocco p. 88 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Brachyglossina pseudoranaria sp. n. Morocco p. 79 fig., ZERNY t.c.

Cabera leptographa sp. n. Bukhara p. 564, WEHRLI Ent. Rdsch. 53.

Calothyasnis amaturaria ab. n. *effusaria* N. America p. 94, PROUT in SEITZ Macrolep. Wld. (Engl. edn.) 8.

Campaea margaritata ab. n. *zawiszae* Poland p. 14, WIZE Motyle Okolic Jezewa, Posnan 1917 [cf. *Lambillionaea* 36 p. 183].

Chloroclystis embolosoma sp. n. Queensland p. 25, TURNER Proc. roy. Soc. Qd. 47.

Chrysocraspeda eumeles sp. n. Queensland p. 26, TURNER Proc. roy. Soc. Qd. 47.

Cidaria nebulata f. n. *pirinica* Bulgaria p. 70, ZÜLLICH Z. öst. EntVer. 21.—*C. albicillata* subsp. n. *negromarginata*; *alternata* subsp. n. *pseudotristata* Siberia p. 38 figs., HEYDEMANN

Iris 50.—*C. avilaria* sp. n. p. 108; *nebulata* subsp. n. *pirenica* p. 135 Sierra de Gredos figs., REISSER Ent. Rdsch. 53.—*C. bilineata* ♀ p. 112, PRAVIEL Bull. Soc. ent. Fr. 41.—*C. truncata* subsp. *sinensis* f. n. *rufescens* p. 18; *tristis* p. 19, *hummeli* p. 21, *exempta* p. 26 spp. n. China; *pendearia* Oberth. (= *phaiosata* Stgr.) p. 23 figs., DJAKONOV Ark. Zool. 27A no. 39.—*C. prattiarria* see *Exangerona*.

Coenotephria vastremata sp. n. Cyrenaica p. 71 fig., TURATI & KRÜGER Mém. Soc. ent. ital. 15.

Colotois pennaria ab. n. *chobauti* France pp. 95, 140, TESTOUT Bull. Soc. linn. Lyon (n. s.) 5.

Corypha ergodes sp. n. Tatsienlu p. 128, WEHRLI Ent. Rdsch. 54.

Cosymbia dataria f. n. *microps*; *packardi* p. 95, *benjamini*, *mossi* p. 96 U.S.A. spp. n. figs., PROUT in SEITZ Macrolep. Wld. (Engl. edn.) 8.

Crocallis (*Dzhugesia* subgen. n.), *ryabovi* sp. n. Transcaucasia p. 145, WEHRLI Ent. Rdsch. 54.

Diaprepes gen. n. for *Abraxas flavimarginaria* Brem. p. 513, WEHRLI Ent. Rdsch. 53.

Discoloxia apicistrigaria sp. n. China p. 29 fig., DJAKONOV Ark. Zool. 27A no. 39.

Dyscia atlantica ab. n. *variegata* Morocco p. 94, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.—*D. conspersaria* subsp. n. *sultanica* Anatolia p. 36 fig., WEHRLI Mitt. münchen. ent. Ges. 26.

Dzhugesia subgen. n. see *Crocallis*.

Earoxyptera gen. n. for *Hybernia buraetica* Stgr. pp. 492, 515, DJAKONOV Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Empriononyx n. n. for *Priononyx* Wrl. nec Dahlbom (Hym.) p. 37, WEHRLI Mitt. münchen. ent. Ges. 26.

Enconista mischii sp. n. Cyrenaica p. 74 fig., TURATI & KRÜGER Mém. Soc. ent. ital. 15.

Ennomos fuscantaria ab. n. *glabra* Poland p. 184, WIZE Polsk. Pismo ent. 13.

Ephalaenia gen. n. for *Pericallia variaria* Leech (type) p. 4, *xylina* sp. n. China p. 5 figs., WEHRLI Ent. Rdsch. 54.

Epione semenovi sp. n. China p. 45 fig., DJAKONOV Ark. Zool. 27A no. 39.—*E. vespertaria* ab. n. *dereticularia* Finland p. 26 fig., RUDOLPH Notul. ent. 16.

Euchloris kansuensis sp. n. China p. 3, DJAKONOV Ark. Zool. 27A no. 39.

Euphyia propinqua, *phaulophanes* spp. n. W. Australia p. 26, TURNER Proc. roy. Soc. Qd. 47.

Eupithecia spp. synonymy pp. 257–259, McDUNNOUGH Canad. Ent. 68.—*E. pini* ab. *constricta* in Carpathians p. 154 figs., GROSSE Acta Soc. ent. Cech. 33.—*E. distinctaria* 8th abdominal segment of ♂ fig. p. 167, CURTIS J. Soc. Br. Ent. 1.—*E. pimpinellata* subsp. n. *variata* Morocco p. 85, SCHWINGENSCHUSS Mém. Soc. Sci. Nat. Maroc 42 1935.

Exangerona gen. n. for *Cidaria prattiarria* Leech p. 145, WEHRLI Ent. Rdsch. 54.

Fascellina chromataria subsp. n. *subchromaria*; *plagiata* subspp. n. *subvirens*, *icteria* China p. 126 fig., WEHRLI t. c.

Fidonia concolor sp. n. Morocco p. 91 fig., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Garaeus subsparvus p. 5, *ustapex*, *niveivertex*, *chamaeleon* p. 6, *punctigerus* p. 7, spp. n. China figs., WEHRLI Ent. Rdsch. 54.

Gnophos kansuensis sp. n. p. 56; *lineolaria* f. n. *plumbeata* p. 64 China DJAKONOV Ark. Zool. 27A no. 39.—*G. porphyrius* sp. n. Morocco p. 89 figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*G. avilaria* sp. n. p. 136; *mucidarius* subsp. n. *nubilarius* p. 145; *myrtillatus* subsp. n. *androgynus* p. 146 Sierra de Gredos figs., REISSER Ent. Rdsch. 53.—*G. stachyphorus* sp. n. Iran p. 278; *pollinaria* subspp. n. *talyshensis* p. 279, *kendevani* p. 280; *annubilata* subspp. n. *persula* p. 280 Transcaucasia, *aethalodes* Iran p. 281, WEHRLI Lambillionea 36.—*G. nannodes* Kurdistan p. 151, *asymmetra* Transcaucasia p. 153 spp. n.; *certhiatus* subsp. n. *minorasiaticus* Asia Minor p. 154, WEHRLI Amat. Papill. 8.—*G. wanensis* sp. n. Kurdistan p. 36 fig., WEHRLI Mitt. münchen. ent. Ges. 36.—*G. pentheri* subsp. n. *petrina* Macedonia p. 14, REBEL Z. öst. EntVer. 21.

Gonodontis blaisa Punjab, hypopolia Szechuan p. 128, (*Paragonodontis* subgen. n.) *postobscura* Yunnan, (*Lioptilesia* subgen. n.) p. 129, *prolita* Tatsienlu p. 130 fig., WEHRLI Ent. Rdsch. 54.

Harpicostia subgen. n. see *Ligia*.

Hashtaresia gen. n. p. 278, *jodes* sp. n. Iran p. 276, WEHRLI Lambillionea 36.

Hemerophila strictaria subsp. n. *variegata* China p. 47, DJAKONOV Ark. Zool. 27A no. 39.

Hemipterodes subrotundata Surinam, *selaostigma* spp. n.; *curviplena* subsp. n. *subvinacea* Dutch and Fr. Guiana, *grisea* Bolivia p. 89 figs., PROUT in SEITZ Macrolep. Wld. (Engl. edn.) 8.

Heterolocha symmetrica sp. n. China p. 43 figs., DJAKONOV Ark. Zool. 27A no. 39.

Himera arnoldiaria see *Apocolotois*.

Hybernia buraetica see *Earoxyptera*.

Lampropteryx tunkinskata sp. n. Siberia p. 26 figs., HEYDEMANN Iris 50.

Larentia autumnata ab. n. *bifasciata*; *molluginata* ab. n. *nigrescens*; *obliterata* ab. n. *deletata*; *corylata* ab. n. *dissecta*; *taeniata* ab. n. *zinadai* p. 149; *inexpectata* var. n. *seraphimae* p. 150 Russia, KOLOSSOW Ent. Nachr. 10.—*L. silacea* ab. figured p. 536, FEICHTENBERGER Ent. Z. 49.—*L. bilineata* f. n. *wettsteini* Carpathos I. p. 31, REBEL S.B. Akad. Wiss. Wien 145 Abt. 1.—*L. didymata* f. n. *koehni* Faroe Is. p. 420, WARNECKE Ent. Z. 50.

Leptepistomion gen. n. for *Arichanna concinnum* WATT. p. 513, WEHRLI Ent. Rdsch. 53.

Leptomiza prochlora sp. n. Tatsienlu p. 127 fig., WEHRLI Ent. Rdsch. 54.

Ligia (*Harpicostia* subgen. n.) *extratenebrosa* sp. n. China p. 515 fig., WEHRLI Ent. Rdsch. 53.

Lioptilesia subgen. n. see *Gonodontis*.

Lithina scutularia morphology p. 277, subsp. n. *exoglypha* Maritime Alps p. 279 figs., PRAVIEL Livre jubil. Bouvier 1936.

Lithostegia griseata ab. n. *stöckli* Hungary p. 86, PILlich ROVART. Lap., Budapest 16 1909.

Lomaspilis opis subsp. n. *nigrita* Finland pp. 510–512, 522–524 figs., HEYDEMANN Ent. Z. 49.

Lomographa honesta see *Astegania*; *pulverata* see *Neobapta*.

Lygris prunata ab. n. *decolorata* Russia p. 149, KOLOSSOW Ent. Nachr. 10.

Lythria purpuraria ab. n. *gawerdowskaja* Russia p. 149, KOLOSSOW t.c.—*L. purpuraria* varr. pp. 98–104, f. *deceptaria* ab. n. *rubrilinearia* p. 101; f. *purpuraria* abb. n. *grisearia*, *extremaria*, *signaria*, *trilinearia* p. 102, *furcaria*, *pulveraria* p. 103 Poland figs., OBRAZTSOV Polsk. Pismo ent. 13.—*L. purpuraria* subsp. n. *staudingeri* Russia p. 99, abb. n. *posticilinearia* Daghestan, *translinearia* Podolia; *purpurata* abb. n. *pulverata*, *bifasciata* p. 101, *monofasciata*, *latifasciata*, *confluefasciata* p. 102 Germany, OBRAZTSOV Lambillionea 36.—*L. purpuraria*, *purpurata* additions to notes on ff. pp. 37–39, LEMPKE Lambillionea 36.—*L. purpurata* ab. *communiarea* Rom. distinct from *ruberrima* Hann. p. 64, ROMANISZYN Z. öst. EntVer. 21.—*L. purpuraria*, *purpurata* all stages compared, biology, distribution pp. 159–164, 173 etc. figs., HEYDEMANN Ent. Z. 50.

Metrocampa dehaliaria p. 2, *paralela* p. 4, spp. n. China, WEHRLI Ent. Rdsch. 54.

Microlochia saturata subsp. n. *crassilineata* Morocco p. 71 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Neobapta gen. n. for *Lomographa pulverata* Prout p. 505 figs., DJAKONOV Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Neolythria sven-hedini sp. n. China p. 35 fig., DJAKONOV Ark. Zool. 27A no. 39.

Neuralla gen. n., *albata* sp. n. China pp. 59, 66 figs., DJAKONOV t.c.

Nothomiza melanographa sp. n. China; (*Organomiza* subgen. n.) *formosa* Btlr. (type) p. 2 figs., WEHRLI Ent. Rdsch. 54.

Nychiodes obscuraria subsp. n. *atlantica* Morocco p. 86, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Obeidia epiphleba sp. n. Hunan p. 514, WEHRLI Ent. Rdsch. 53.

Organomiza subgen. n. see *Nothomiza*.

Ourapteryx subvirgatula sp. n. W. China p. 146, WEHRLI Ent. Rdsch. 54.—*O. malatyensis* sp. n. Bythinia p. 33 fig., WEHRLI Mitt. münchn. ent. Ges. 26.

Oxyphanes gen. n., *thiobapta* sp. n. Queensland p. 27, TURNER Proc. roy. Soc. Qd. 47.

Paragonodontis subgen. n. see *Gonodontis*.

Pericallia variaria see *Ephalaenia*.

Petelia paobia sp. n. China p. 567, WEHRLI Ent. Rdsch. 53.—*P. morosa* see *Apopetelia*.

Phaselia deliciosaria subsp. n. *gigantaria* Morocco p. 87, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Phrixocomes gephyrea p. 28, *hedrasticha* p. 29, spp. n. Queensland, TURNER Proc. roy. Soc. Qd. 47.

Priononyx see *Empriononyx*.

Proteostrenia eumimeta sp. n. China p. 1, WEHRLI Ent. Rdsch. 54.

Pseudoterpna pruinata ab. n. *albida* Russia p. 149, KOLOSSOW Ent. Nachr. 10; ab. n. *unilineata* Holland p. 290, LEMPKE Ent. Ber. 9.

Scopula manes p. 6, *sjöstedti* p. 8, spp. n. China figs., DJAKONOV Ark. Zool. 27A no. 39.

Selenia trigona sp. n. China p. 4 fig., WEHRLI Ent. Rdsch. 54.

Selidosema colpogramma sp. n. N. Zealand p. 281, MEYRICK Trans. roy. Soc. N.Z. 66.

Semaepus permanata Guatemala, *argocosma* Jamaica p. 78 spp. n.; *illimitata* ab. n. *parvidiscata* Paramba p. 79; *pustulata* subsp. n. *vivata* Colombia; *caecaria* ab. n. *obliterata* America p. 80; *fuscicosta* f. n. *mesembrina* Rio Grande do Sul p. 89, PROUT in SEITZ 8.

Semiothisa suleiman sp. n. Mts. Elburs p. 152, WEHRLI Amat. Papill. 8.

Sterrrha allongata f. n. *paulusi* Jerusalem p. 58; *infirmaria* f. n. *mitescens* Algeria p. 60; *helianthemata* ab. n. *depravata* no locality; *ostrinaria* abb. n. *lutea*, *euclines* Morocco p. 61, PROUT in SEITZ Suppl. 4.—*S. cervantaria* subsp. n. *carneotincta* Morocco p. 77, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—

S. margaritacea sp. n. Cyrenaica p. 70 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Synegia phaiotaeniata, *obliquifasciata* spp. n. China p. 566 figs., WEHRLI Ent. Rdsch. 53.

Synopsia leonilaria sp. n. Mexico p. 59 figs., HOFFMANN An. Inst. Biol. Mexico 7.—*S. mexicanaria* p. 65, *leonilaria* p. 73 morphology biology figs., VAZQUEZ t.c.

Tasta epargyra sp. n. China p. 565, WEHRLI Ent. Rdsch. 53.

Taxeotis euryzona p. 27, *notosticta* p. 28, spp. n. Queensland, TURNER Proc. roy. Soc. Qd. 47.

Tephroclystia sinuasaria ab. n. *dilutaria* Russia p. 150, KOLOSSOW Ent. Nachr. 10.—*T. aegistriaria* p. 71, *acutula* p. 72, spp. n. Cyrenaica figs., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Tephronia dürcki ab. n. *infuscata* Morocco p. 89, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Thalera fimbrialis ab. n. *ochracea* Perm p. 149, KOLOSSOW Ent. Nachr. 10.

Thamnonema wauaria ab. n. *dealbaria* Russia p. 150, KOLOSSOW t.c.

Timandra amata f. n. *atropurpurea* Bohemia p. 472 fig., MICHEL Ent. Z. 49.

Tricentra spilopera p. 73, *neomysta* Santarem p. 74, *subnexa* Fr. Guiana, *irregularis* Amazon spp. n.; *percrocea* f. n. *supercrocea* Para p. 76; *angulisigna* subsp. n. *pyrbola* St. Catharina; *flavimarginata* subsp. n. *ascotista*; *vinosata* subsp. n. *cnephodamus* Jaragua do Sul; *mimula* ab. n. *ablisignata* Peru p. 74 figs., PROUT in SEITZ 8.

Trygodes ovipara sp. n.; *solaniferata* subsp. n. *tarapotensis* Peru; *dissuasa* ab. n. *maculifera*; *glaucoerrhanis* sp. n. Ecuador p. 91 figs., PROUT in SEITZ t.c.

Xanthorhoe majorata sp. n. Transbaikalia p. 36 figs., HEYDEMANN Iris 50.

Zamacra rjabovi sp. n. Kurdistan p. 34 figs., WEHRLI Mitt. münchn. ent. Ges. 26.

Zernyia maroccana ab. n. *roseonitens* Morocco p. 91, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

SATURNIIDAE (including

CERCOPHANIDAE, OXYTENIDAE).

Catalogue of Cercophanidae, SCHÜSSLER Lep. Cat. 76 12 pp.

Catalogue of Oxytenidae, SCHÜSSLER Lep. Cat. 75 20 pp.

Actias laotiana sp. n. Fr. Indo-China p. 39 fig., TESTOUT Ann. Soc. linn. Lyon (n.s.) 79.—*A. artemis* subsp. n. *jordani* W. China p. 35, figs., NIEPALT Ent. Z. 50.

Antheraea rhythmica sp. n. Queens-land p. 25, TURNER Proc. roy. Soc. Qd. 47.

Attacus cynthia in Gironde p. 115, TAREL Proc. verb. Soc. linn. Bordeaux 86 1935.

Automeris biology Argentina pp. 79–81, *coresus* ab. n. *roseus*, *mirabilis* p. 85; *amanda* var. *tucumana* ab. n. *conjuncta*; *irene* ab. n. *nigrosignata* p. 86; *aspera* ab. n. *distincta*, *tristis* p. 90 figs., KOHLER Rev. Soc. ent. argent. 7 1935.—*A. stawarskii* sp. n. Brazil sep. p. 7 fig., GAGARIN Rev. syniatrix 1936 no. 1–2.

Caligula boisduvalii subsp. n. *chinganensis* Manchuria p. 108, BANG-HAAS Ent. Z. 50.

Coscinocera hercules f. n. *amputata* New Guinea p. 559 fig., NIEPALT Ent. Z. 49.

Drepanoptera bouvieri p. 40, *aequatorialis* p. 43, *gabonensis* p. 45, *lecerfi* p. 46, *boursini* p. 50, spp. n. Equatorial Africa figs., TESTOUT Ann. Soc. linn. Lyon (n.s.) 79.

Neoris huttoni subsp. n. *sveni-hedini* China p. 2, HERING Ark. Zool. 27A no. 32; subsp. n. *alatareica* Ala Tau Mts. p. 109, BANG-HAAS Ent. Z. 50.

Saturnia pyri morphology pp. 314–319, FABBRI Rev. Ent. U.R.S.S. 25 1935; ab. n. *aigleri* Hungary p. 85, PILICH ROVART. Lap., Budapest 16 1909.—*S. pavonia* var. n. *lapponica* Lapland p. 239, LINGONBLAD Lam-billionea 36; p. 8 figs., LINGONBLAD Notul. ent. 16.

CERATOCAMPIDAE (SYSSPHINGIDAE).

Catalogue of Syssphingidae, SCHÜSSLER Lep. Cat. 70 230 pp.

Dysdaemonia fosteri ab. n. *undulata*, *trilineata* p. 55, *inexpectata*, *pulcherrima* p. 56, *decolorata*, *fulvescens*, *multi-fasciata* p. 57, *spinivittata*, *infuscata* p. 58, *mendax*, *signata* p. 59, *trilineata*, *amabilis*, *stellans* p. 60, *prae-fulgens* p. 61 S. America figs., ORFILA Rev. Soc. ent. argent. 7 1935.

BOMBYCIDAE.

Reprints of papers on silkworms, Annu. Staz. bacol. sper. Padova 48 832 pp.

EPIPLEMIDAE.

Epiplemidae of America, GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 6 pp. 1141–1170, 5 pls.

Bicavernosa gen. n., *albilunata* sp. n. Brazil p. 1146 fig., GAEDE in SEITZ 6.

Epiplema rubrofasciata p. 1157, *alpina* Bolivia, *aequidistans* Haiti p. 1159, spp. n. figs., GAEDE in SEITZ 6.

Hypophysaria gen. n., type *integrata* Gn. p. 1145 fig., GAEDE in SEITZ 6.

Psamathia placidaria f. n. *fuscomarginata* Venezuela etc. p. 1143 fig., GAEDE in SEITZ 6.

Skaphion gen. n., *lilacina* (type) Venezuela, Brazil, *plagifasciata* Itaituba p. 1144, spp. n. figs., GAEDE in SEITZ 6.

Syngricides genaria sp. n. Brazil p. 1149 fig., GAEDE in SEITZ 6.

Tricolpia flava sp. n. Brazil p. 1144 fig., GAEDE in SEITZ 6.

PSYCHIDAE.

Revision of American Psychidae, GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 6 pp. 1177–1186, 1 pl.

Amicta maliarda sp. n. Cyrenaica p. 59 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Episcioptera subgen. n. see *Lepidoscioptera*.

Lepidoscioptera dellabeffai p. 35, *scioptarella*, *turatii* p. 37 spp. n. Italy; *Parascioptera*, *Episcioptera* subgenn. n. p. 41 figs., HARTIG Mem. Soc. ent. ital. 15.

Pachytelia gracilis sp. n. Cyrenaica p. 59 fig., TURATI & KRÜGER t.c.

Parascioptera subgen. n. see *Lepidoscioptera*.

Solenobia thomanni sp. n. Switzerland p. 11 fig., REBEL Z. öst. EntVer. 21.

Thyridopteryx seitzi sp. n. Brazil p. 1182, GAEDE in SEITZ Macrolep. Wld. (Engl. edn.) 6.

COSSIDAE.

Dyspessa cossoides subsp. n. *tsingana* Turkestan p. 537, ZUKOWSKY Ent. Rdsch. 53.

Holcocerus arenicola subsp. n. *transcaucasica* Armenia; *bolshoji* sp. n. Turkestan p. 535 fig., ZUKOWSKY t.c.

Hypopta sheljuzhkoii sp. n. Turkestan p. 536 figs., ZUKOWSKY t.c.

Xyleutes spilota, *riparia* spp. n. Queensland p. 49, TURNER Proc. roy. Soc. Qd. 47.

LASIOCAMPIDAE.

Artace randa, *pelia* p. 53, *thelma*, *etta* p. 54, *melanda*, *athoria* p. 55 Brazil, *schreiteria* Argentina p. 56, spp. n., SCHAUS Ann. Mag. n.H. (10) 17.

Beralade quirimbo Angola (with subsp. n. *exocyrta*) p. 97, *jordani* p. 96 S.W. Africa, spp. n. figs., TAMS Novit. zool. 40.

Catalebeda elegans subsp. n. *meridionalis* Angola p. 99 fig., TAMS t.c.

Chrysopsyche mirifica subsp. n. *leptophyes* Angola p. 95 figs., TAMS t.c.

Crexa macqueeni sp. n. Queensland p. 47, TURNER Proc. roy. Soc. Qd. 47.

Digglesia diamphidia sp. n. Queensland p. 48, TURNER t.c.

Diplura argentifera sp. n. China p. 3, HERING Ark. Zool. 27A no. 32.

Eremaneptia gen. n. p. 47, *agrapta* sp. n. Australia p. 48, TURNER Proc. roy. Soc. Qd. 47.

Eucraera gemmata subsp. n. *asaphes* p. 107; *aphrasta* sp. n. p. 108 Angola fig., TAMS Novit. zool. 40.

Euglyphis tapajozza p. 56, *petronella* p. 59, *coda* p. 60, *zingua*, *manaosa* p. 62, *luciana* p. 200, *amatura* p. 203, *aenigia* p. 206 Amazons, *tirmina* p. 57, *medinensis* p. 61, *patchetti* p. 194, *isolina* p. 198, *hyaescens* (also Bolivia) p. 199, *teramba* p. 200, *asapha* p. 208 Colombia, *agdara* p. 58, *campinata* p. 63, *mulieraria* p. 64, *oslacia*, *viridisuffusa* p. 192, *nennia* p. 195, *cantella*, *moridens* p. 197, *indrosia* p. 198, *lucedia* p. 201, *flaviana* p. 202, *tamira*, *tupmilla* p. 204, *rearensis* p. 205,

metrana p. 206, *lillia* p. 209 Brazil, *terasita* p. 58, *resina* p. 59, *huacamaya* p. 65, *yahuarmaya* p. 196, *marica* p. 207, *pumayaca* p. 208 Peru, *cachaca* p. 63, *cochabamba* p. 65, *zenona* p. 209 Bolivia, *godeberti* p. 193, *lascorina* p. 194 Fr. Guiana, *geroides* Paraguay p. 202, *olivetta* Trinidad p. 203, spp. n., SCHAUS Ann. Mag. n.H. (10) 17.

Gloveria balloui sp. n. Costa Rica p. 47, SCHAUS t.c.

Mimopacha jordani sp. n. Angola p. 108 figs., TAMS Novit. zool. 40.

Nadisa jordani p. 100, *quirimbo* p. 101, *pamphenges* p. 102, *amphilecta*, *toryncteta* p. 103, *sminthocara* p. 104 Angola, *pancala* S.W. Africa p. 100, *jansei* Transvaal p. 101, *oinopa* p. 102, *pachyla* Belgian Congo, *amblycalymma* Ivory Coast p. 103, spp. n. figs., TAMS t.c.

Odontocheilopteryx triodonta sp. n. Angola p. 98 figs., TAMS t.c.

Opisthodontia jordani, *rothschildi* spp. n. Angola p. 111 figs., TAMS t.c.

Pachypasa pyrrocorsa p. 105, *papyroides* p. 106 spp. n. Angola figs., TAMS t.c.—*P. madelineae* sp. n. French Congo p. 160 fig., TAMS Entomologist 69.

Philotherma melambela sp. n. Angola p. 98 fig., TAMS Novit. zool. 40.

Pseudometa jordani p. 109, *plinthochroa*, *caiala*, *miona* p. 110, spp. n. Angola figs., TAMS t.c.

Titya cain, *fraternans* spp. n. Brazil p. 52, SCHAUS Ann. Mag. n.H. (10) 17.

Tolyte erisa Costa Rica, *quiescens* p. 48, *melascens* p. 50, *frenata*, *janeirensis* p. 51, *marynita* p. 52 Brazil, *songoaria* p. 49, *damnata* p. 50 Bolivia, *cydona* Fr. Guiana p. 49, spp. n., SCHAUS t.c.

ENDROMIDAE.

Endromis versicolora ab. n. *fenestrella* Poland p. 183, WIZE Lambilliona 36.

LIMACODIDAE (COCHLIDIONIDAE).

Cnidocampa flavescens 'cocoon' pp. 83-87 figs., TANAKA Ent. World Tokyo 4.

Parasa symphonistis sp. n. Queensland p. 48, TURNER Proc. roy. Soc. Qd. 47.

CASTNIIDAE.

Castnia notes on some Argentine spp. pp. 207-208, BREYER Rev. Soc. ent. Argent. 7 1935.—*C. licus licoides* ab. n. *obliterella* Br. Guiana p. 121, DUFRANE Bull. Ann. Soc. ent. Belg. 76.

ZYGAEINIDAE (including
HETEROGYINIDAE).

Catalogue of Zygaenidae, II, BRYK Lep. Cat. 71 pp. 95-332.

Occurrence, biology and distribution of Zygaenids, SEITZ Ent. Rdsch. 53 pp. 291-294, 302-304, 384-387, 397-400, 1 fig.

Aglaope labasi abb. n. *latemarginata*, *aurantiaca*, *lutea* Morocco p. 104, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Artona gephyra sp. n. China p. 1, HERING Ark. Zool. 27A no. 32.

Biezankoia n. n. for *Polymorpha* Burg. nec Soldani p. 167, STRAND Folia zool. hydrobiol. 9.

Cyclosia papilionaris abb. n. *pallida*, *obsoleta* Tonkin p. 122, DUFRANE Bull. Ann. Soc. ent. Belg. 76.

Eterusia pulchella ab. n. *unipunctata* Tonkin p. 122, DUFRANE t.c.

Herpa basiflava see *Panherpina*; *eupoma* see *Herpidia*.

Herpidia gen. n. type *Herpa eupoma* p. 229, BRYK Lep. Cat. 71.

Hyala see *Yasumatsuia*.

Panherpina gen. n. type *Herpa basiflava* Oberth. p. 192, BRYK Lep. Cat. 71.

Piarosoma albicinctum ♂ p. 123, DUFRANE Bull. Ann. Soc. ent. Belg. 76.

Polymorpha see *Biezankoia*.

Yasumatsuia n. n. for *Hyala* Burg. nec Adams p. 167, STRAND Folia zool. hydrobiol. 9.

Zygaena discussion of ff. and morphological characters pp. 47-58 figs., ROCCI Mem. Soc. ent. ital. 14 1935; nomenclature of genus discussed pp. 321-324, 334 etc. HOLIK Ent. Z. 50.—*Z. johannae* ab. n. *latestrigata* p. 102, *interrupta*, *rubribasalis*, *aurantiaca*, *flava* p. 103 Morocco, SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.—*Z. purpuralis* subspp. n. *kislovodskana*

p. 14, *strandiana*, *sanguinalis* p. 15, *dagestana* p. 16; *alpherakyi* sp. n. p. 17; *achilleae* subspp. n. *karatshaica*, *narzanica* p. 19; *filipendulae* subspp. n. *ciscaucasica* p. 20, *borzhomensis*, *karsiana* p. 21 Caucasasia, SHELJUZHSKO Folia zool. hydrobiol. 9.—*Z. ludmilae* ab. n. *lato-cingulata* p. 36; *ephiatles* abb. n. *strandii*, *sexmacula*, *carnea* p. 37, *albobasimaculata*, *coloretincta*, *basiuminaculata* p. 38 Ukraine, OBRATZSOV t.c.—*Z. fausta* var. n. *laeta* Catalonia p. 26, NAVÁS Aix. Inst. Cienc. 8 (1920) 1923.—*Z. thérnyi* subspp. n. *mercyi* (with f. n. *trimacula*) Algiers p. 48 figs., LE CHARLES Bull. Soc. ent. Fr. 41.—*Z. transpamiriana* sp. n. Pamir p. 40; *manlia* subspp. n. *pseudomanlia*, *araxis* p. 41 (with abb. n. *hedwigi*, *pseudoturkmenica* p. 42) Asia figs., KOCH Iris 50.—*Z. corycia* rr. n. *wiltshirei* sep. p. 1, *amseii* sep. p. 2 Palestine, BYTINSKI-SALZ Ent. Rec. 48.—*Z. rhadamanthus grisea* ab. n. *subconfluens* France p. 124; *achillae* ab. n. *juncta* Belgium p. 123, DUFRANE Bull. Ann. Soc. ent. Belg. 76.—*Z. transalpina* r. *hispana* discussed p. 163 67 1935; *hippocrepididis* f. n. *rupicola* p. 41; *transalpina* ff. n. *hartigi* p. 42, *misurinae*, *tonalensis*, *nambinica* p. 43, *subjugi* p. 44, *mauriae*; *maritima* ff. n. *subemendata* p. 45, *macromaritima* p. 46 Italy 68, ROCCI Boll. Soc. ent. ital.—*Z.* spp. systematic notes on Asiatic rr. pp. 398-401; *achilleae* Armenian and Transcaucasian rr. pp. 17-20, KOCH Ent. Z. 50.—*Z.* notes on some French rr. pp. 43-51; nomenclature pp. 108-117, 127-136; notes on some ff. and abb. pp. 167-169; *carniolica* ff. discussed pp. 174-182, var. n. *gaumaisiensis* Torgny p. 182; *occitanica* morphology, rr. pp. 190-196; *corsica* subspp. n. *sardiniensis* Sardinia p. 226, HOLIK Lambillionea 36.—*Z. nevadensis falleriana* abb. n. *amplomaculata*, *confluens*; *sarpedon hispanica* var. n. *escorialica*; s. subspp. n. *lusitanica* p. 30, *zapateri* p. 57, abb. n. *quinquepuncta*, *rubrior*, *pseudo-hispanica*, *pseudovariabilis* p. 58; *contaminei* subspp. n. *asturica*, *almanzorica* p. 59; *achilleae aragonensis* ab. n. *rubescens*; *rhadamanthus* subspp. n. *gedosica* p. 60; *lavandulae* subspp. n. *barcelonica* (with ab. n. *octonata*) p. 71, *teruelensis*; *hilaris* subspp. n. *lucifera* p. 72; l. abb. n. *pseudocatalonica*, *exarcuata*, *inversa*, *gelpkei* p. 73; *filipendulae* subspp. n. *kricheldorffiana*; k. abb. n. *geminoides* p. 75, *paupera* p. 75;

trifolii barcelonensis var. n. *noguerensis*, *guadarramica* p. 89; *caerulescens* var. n. *altivolans*, *espuñnica* p. 90; *transalpina* subsp. n. *asturiensis* p. 91 Spain; *dorycnii* subsp. n. *teberdensis* Centr. Caucasia, *grusica* Kars p. 103 figs., REISS Ent. Rdsch. 54.—*Z. cynarae* nomenclature of races pp. 405-408, HOLIK Ent. Rdsch. 53.—*Z. carniolica* subsp. n. *demavendi* Elbur Mts. p. 7; *c. rocci* f. n. *stoechadoides* no locality; *c. transiens* f. n. *azona* no locality p. 9, HOLIK op. cit. 54.

THYRIDIDAE.

Revision of Thyrididae of America, GAEDÉ in SEITZ 6 pp. 1187-1213, 2 pls.

Belonoptera excessiva sp. n. Brazil p. 1207 fig., GAEDÉ in SEITZ 6.

Draconia denticulata f. n. *drassiorata* Brazil p. 1209; *lineigera* sp. n. Upper Amazon R. p. 1210 figs., GAEDÉ in SEITZ 6.

Hypolamprus elaphropa sp. n. Belgian Congo p. 26, MEYRICK Exot. Micr. 5.

Rhodoneura configurata sp. n. Brazil p. 1196 fig., GAEDÉ in SEITZ 6.

Risama satellifera sp. n. Brazil p. 1207 fig., GAEDÉ in SEITZ 6.

Thyris nigra subsp. n. *euxina* Caucasus p. 637, OBRAZTSOV Festschr. E. Strand 1.

PYRALIDAE.

Notes on Pyralidae, VAN DEURS Ent. Medd. 19 pp. 411-414, 1 fig.

Notes on Egyptian Pyralidae, HAYWARD Ent. Rec. 48 sep. pp. 1-4.

Pyralidae of Lyons district, RIEL Bull. Soc. linn. Lyon (n.s.) 5 pp. 106-108.

Pyralidae of Klewer Province, SOVINS'KII Trav. Mus. zool. Kiev no. 15 1935 pp. 47-139, 4 figs.

Achroia grisella characters pp. 1055-1058 figs., HAYES J. econ. Ent. 29.

Actenia brunnealis subsp. n. *hilaralis* Morocco p. 121, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Ancylolomia drosogramma sp. n. Belgian Congo p. 20, MEYRICK Exot. Micr. 5.

Anerastidia bipunctella Wilem. (= *dissocentra* Meyr.) p. 22, MEYRICK t.c.

Aphomia pimelodes sp. n. S. Rhodesia p. 22, MEYRICK t.c.

Argyractis lithorma, *euryzantha* p. 7, *lithocharis* p. 8, spp. n. Belgian Congo, MEYRICK t.c.—*A. holocycla* p. 321, *hemilitha* p. 322, spp. n. Venezuela figs., MEYRICK Veröff. dtsch. kol. Mus. Bremen 1.

Aulacodes methodica sp. n. Peru p. 98, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Auradisa dryospila sp. n. Bolivia p. 95, MEYRICK t.c.

Botys auralis see *Pagyda caritalis*.

Cataclysta midas morphology p. 529, TSUDA Annot. Zool. Jap. 15.

Catastia marginata var. *auriciliella* abb. n. *pseudomarginea*, *intermedia* Switzerland p. 666, WEBER Mitt. schweiz. ent. Ges. 16.

Celetostola gen. n. (nr. *Ocydina*), *psilograpta* sp. n. Belgian Congo p. 5, MEYRICK Exot. Micr. 5.

Cirrhocrista chionosticha sp. n. Solomon Is. p. 28, MEYRICK t.c.

Cledeobia atlantalis sp. n. Morocco p. 122 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Crambus perlellus subsp. n. *flavonitellus* Morocco p. 108, ZERNY t.c.—*C. chrysocrossis* Lebanon p. 18, *generosus*, *trichelites* Belgian Congo p. 19, spp. n. MEYRICK Exot. Micr. 5.

Crocidophora thyronoma sp. n. Bolivia p. 102, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Cymoriza isorrhoea sp. n. Witu Is. p. 7, MEYRICK Exot. Micr. 5.

Earoctenis gen. n. (Pyralidae), *miosema* sp. n. Bolivia p. 96, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Elaphernis gen. n. type *funerea* Wlk. p. 1, MEYRICK Exot. Micr. 5.

Ephedrophila lucasi f. n. *nigripennis* Morocco p. 119, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Eudiopsis aclista sp. n. Peru p. 100, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Eurrhyarodes diffracta sp. n. Peru p. 98, MEYRICK t.c.

Euzopherodes nigrolineella sp. n. Morocco p. 113 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Evergestis caesialis subsp. n. mellealis Morocco p. 124, ZERNY t.c.

Galleria mellonella characters pp. 1055-1058 figs., HAYES J. econ. Ent. 29.

Glyphidomarpis gen. n. (Pyraustinae) p. 9, *pyrochlaena* sp. n. Belgian Congo p. 10, MEYRICK Exot. Micr. 5.

Hednota ocyptes, *thologramma* spp. n. New South Wales p. 94, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Hedylepta chloromochla sp. n. Belgian Congo p. 14, MEYRICK Exot. Micr. 5. —*H. vulpina* sp. n. Porto Rico p. 100, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Homoeosoma nimbella discussed p. 250; *pseudonimbella* sp. n. Holland p. 251, BENTINCK Lambillionia 36.

Homophysa pentascia sp. n. Venezuela p. 323 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Hyalea glaucopidalis (= *boliviensis*) see *Sylepta*.

Hyperparachma butyropis sp. n. Venezuela p. 327 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Ichthyoptila gen. n. (Pyraustinae), *stenothyris* sp. n. Panama p. 99, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Isocentris porphyroxantha sp. n. Belgian Congo p. 16, MEYRICK Exot. Micr. 5.

Jocara bryoxantha sp. n. Bolivia p. 97, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Lamacha stereogramma sp. n. Belgian Congo p. 5, MEYRICK Exot. Micr. 5.

Liopasia athlophora sp. n. Brazil p. 102, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Loxophantis diaplecta sp. n. Belgian Congo p. 21, MEYRICK Exot. Micr. 5.

Loxostege citrodoxa sp. n. Venezuela p. 326, fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1. —*L. callipeda* sp. n. Belgian Congo p. 16, MEYRICK Exot. Micr. 5.

Lygropia rheumatica sp. n. Belgian Congo p. 13, MEYRICK t.c.

Macronomeutis gen. n. (Pyraustidae), *heterospila* sp. n. Bolivia p. 103, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Margaronia sphenodonetis, *thalassarcha* Peru, *saturniana* Panama, spp. n. p. 101, MEYRICK t.c. —*M. xanthonota* p. 12, *pentaphragma* p. 13, spp. n. Belgian Congo, MEYRICK Exot. Micr. 5. —*M. mnesigramma* sp. n. Venezuela p. 325 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Mecyna hemiclista sp. n. Belgian Congo p. 16, MEYRICK Exot. Micr. 5.

Megasia pempheliella sp. n. Morocco p. 114 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Melissoblaptis opticogramma sp. n. Lebanon p. 22, MEYRICK Exot. Micr. 5.

Metasia ophialis subsp. n. *goundafalis* Morocco p. 126 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Mnesictena trichoglossa sp. n. Bolivia p. 102, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Nausinoe aphrospila sp. n. Belgian Congo p. 11, MEYRICK Exot. Micr. 5.

Neoschoenobia eoa sp. n. Iraq p. 28, MEYRICK t.c.

Niphopyralis sinceris ♂ p. 27 MEYRICK t.c.

Nymphula interruptalis p. 525, *turbata* p. 527, *vitalis* p. 528 morphology, TSUDA Annot. Zool. Jap. 15. —*N. ophiaula* sp. n. Belgian Congo p. 8, MEYRICK Exot. Micr. 5.

Ocydina gen. n. (nr. *Hypotia*), *syngrammarula* sp. n. Belgian Congo p. 6, MEYRICK t.c.

Oeobia leptorrhaptia, *iospora* p. 17, Belgian Congo, *borboraula* Argentina p. 18, spp. n., MEYRICK t.c. —*O. antinephes* sp. n. Bolivia p. 102, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Oneida antilocha sp. n. Brazil p. 96, MEYRICK t.c. —*O. selenographa* sp. n. Belgian Congo p. 1, MEYRICK Exot. Micr. 5.

Pagyda caritalis Wlk. (= *Botys auralis* Snell.) p. 14, MEYRICK t.c.

Paractenia telacroas Belgian Congo, *obstans* Java spp. n. p. 4, MEYRICK t.c.

Phlyctaenia lenta sp. n. Venezuela p. 327 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Phostria pallas sp. n. Belgian Congo p. 10, MEYRICK Exot. Micr. 5.

Phycita salitella sp. n. Morocco p. 117 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Phyratocosma gen. n. (nr. *Cybolomia*), *trypheropa* sp. n. Venezuela p. 323 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Pilocrocis microbathra sp. n. Venezuela p. 324 fig., MEYRICK t.c.—*P. omophanes* sp. n. Surinam p. 99, MEYRICK Arb. morph. tax. Ent. Berl. 3.—*P. ingeminata* ♀ p. 13, MEYRICK Exot. Micr. 5.

Pionea nordmani sp. n. Canary Is. p. 19 figs., REBEL Comment. biol. 6 1935 no. 4.

Platytes atlantivolella sp. n. Morocco p. 109 figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Polyocha epischniella sp. n. Morocco p. 110 figs., ZERNY t.c.

Prionopteryx spasmatia, *nephalia* spp. n. Argentina p. 20, MEYRICK Exot. Micr. 5.

Protaphomia gen. n. (Galleriidae), *haplodoxa* sp. n. Brazil p. 97, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Psara duplicatrix Belgian Congo, *velitaris* India, spp. n. p. 15, MEYRICK Exot. Micr. 5.

Psorosa predotai sp. n. Sardinia p. 92, REBEL Iris 50.

Pycnarmon leucodoce sp. n. Belgian Congo p. 9, MEYRICK Exot. Micr. 5.

Pygospila macrogastra sp. n. Belgian Congo p. 12, MEYRICK t.c.

Pyralis licnospila, *heliocrossa*, *cyamospila* p. 2, *chrysomima*, *compsodryas* p. 3, spp. n. Belgian Congo, MEYRICK t.c.—*P. isidora* sp. n. Venezuela p. 329 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Pyrausta diplothaera sp. n. Venezuela p. 327 fig., MEYRICK t.c.—*P. tachdirtalis* sp. n. Morocco p. 127 figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Rhodophaea praefectella sp. n. Morocco p. 118 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Sacada paraxantha sp. n. Belgian Congo p. 4, MEYRICK Exot. Micr. 5.

Salebria piperitella sp. n. Morocco p. 116 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Scaeocerandra gen. n. (nr. *Oeobia*), *suspensa* sp. n. Venezuela p. 326 figs., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Schoenobius parabolistes sp. n. Brazil p. 98, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Scirpophaga occidentella ♂ p. 28, MEYRICK Exot. Micr. 5.

Scoparia coprasta sp. n. Lebanon p. 18, MEYRICK t.c.—*S. staudingeralis* f. n. *fuscularis* Sardinia p. 347 figs., AMSEL Veröff. dtsh. kol. Mus. Bremen 1.

Scybalista polyorma sp. n. Venezuela p. 322 figs., MEYRICK t.c.

Selagia spadicella subsp. n. *isabellella* Morocco p. 115, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Staudingeria rufulella sp. n. Biskra p. 43 fig., HARTIG Z. öst. EntVer. 21.

Stemmatophora chloe sp. n. Belgian Congo p. 3, MEYRICK Exot. Micr. 5.

Stenia punctalis subsp. n. *gigantalis* Morocco p. 123, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Surattha obeliscota sp. n. Syria p. 21, MEYRICK Exot. Micr. 5.

Sylepta secreta, *batrachina* p. 10, *agilis* spp. n. Belgian Congo; *glauco-pidalis* Guen. (= *boliviensis* Dogn.) from *Hyalea* p. 11, MEYRICK t.c.—*S. isozona* sp. n. Bolivia p. 100, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Syngamia convulsa sp. n. Belgian Congo p. 14, MEYRICK Exot. Micr. 5.

Tetrastichis idioneura sp. n. Venezuela p. 328 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Teucronoma gen. n. (nr. *Casuarina*), *toxocrossa* sp. n. Venezuela p. 328 figs., MEYRICK t.c.

Tharsanthes gen. n. (Pyralinae), *synchlisias* sp. n. Brazil p. 95, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Tirathaba leucotephros sp. n. Malaya p. 21, MEYRICK Exot. Micr. 5.

Titanio orphnolyca sp. n. Morocco p. 609, MEYRICK Exot. Micr. 4.

Triphassa senior sp. n. Belgian Congo p. 6, MEYRICK Exot. Micr. 5.

PTEROPHORIDAE (ALUCITIDAE).

Plume moths of Palau Is., HORI Mushi 9 pp. 14-16, 2 figs.

Notes on British plume moths, WAKELY Proc. S. Lond. ent. n.H. Soc. 1935-36 pp. 97-99.

Alucita calamodactyla sp. n. Morocco p. 129 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Marasmarcha leucocrossa sp. n. Iraq p. 64, MEYRICK Exot. Micr. 5.

Oidematophorus notes on Canadian spp. pp. 63-69 fig., McDUNNOUGH Canad. Ent. 68.

Oxyptilus anthites sp. n. Uganda p. 63, MEYRICK Exot. Micr. 5.

Platyptilia heterolicma sp. n. Belgian Congo p. 64, MEYRICK t.c.—*P. emarginata* notes pp. 17-22 [in Japanese] figs., HORI Mushi 9.

Pterophorus haplistes Java p. 626 4, *terrenus* Iraq p. 64 5, spp. n., MEYRICK Exot. Micr.

Stenoptilia stigmatodactyla subsp. n. atlantica Morocco p. 130, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*S. reisseri* sp. n. Spain p. 11, REBEL Z. öst. EntVer. 20 1935.

Trichoptilus dryites sp. n. Java p. 625, MEYRICK Exot. Micr. 4.—*T. esakii* sp. n. Luchu Is. p. 88 figs., HORI Bult. sci. Fak. terk. Kjušu Univ. 7.

AEGERIIDAE (SESIIDAE).

Revision of Aegeriidae of America, ZUKOWSKY in SEITZ 6 pp. 1215-1240, 1 pl.

Chamaesphexia pluto sp. n. Brazil p. 1240 fig., ZUKOWSKY in SEITZ 6.—*C. atlantis* sp. n. Morocco p. 106 fig., SCHWINGENSCHUSS Mém. Soc. Sci. nat. Maroc 42 1935.

Dipsosphexia strandi sp. n. Siberia p. 26, KOZHANCHIKOV Folia zool. hydrobiol. 9.—*D. hymenopteriformis* ab. n. fulvovororcula Sicily p. 534, ZUKOWSKY Ent. Rdsch. 53.

Synanthedon asema p. 1219, *lati-craspedontis* p. 1220, *martenii* p. 1224, *hemigymna* p. 1226, *scythropa*, *tineosphexia* p. 1232, *flavostigma* p. 1233, *semitrista*, *aerosa* p. 1236 Brazil,

xanthoneura Paraguay p. 1220, *plagiophleps* Bolivia p. 1222, spp. n. figs., ZUKOWSKY in SEITZ 6.

TINEIDAE (s.l.).

Genitalia of Tineidae of Br. Isles, PIERCE & METCALFE, Oundle 1935 xxii + 116 pp. 68 pls.

Revision of Australian Oecophoridae, TURNER Proc. Linn. Soc. N.S. Wales 61 pp. 298-317.

Acritotilpha gen. n. (Tineidae) p. 156, *siliginella* sp. n. Morocco p. 157 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Acrocercops heptadeta Formosa, *argodesma* p. 34, *naplocosma*, *erebopa* p. 35, *diplacopa*, *chalinosema*, *mararauges*, *dinosticha* p. 36 Java, *symbolopsis* Siam p. 35, spp. n., MEYRICK Exot. Micr. 5.

Aemylurgis gen. n. (Hyponomeutidae) p. 107, *xanthoclina* sp. n. Brazil p. 108, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Aeolanthes sagulata ♀ p. 26, MEYRICK Exot. Micr. 5.

Agonopteryx clarkei sp. n. California p. 10 fig., KEIFER Bull. S. Calif. Acad. Sci. 35.

Anacamptis polychromella see Schützeia.

Anomozancla gen. n., type *scopariella* Wlk. p. 317, TURNER Proc. Linn. Soc. N.S. Wales 61.

Archimetzneria gen. n. (nr. *Metzneria*), *santolinella* sp. n. Sardinia p. 355 figs., AMSEL Veröff. dtsh. kol. Mus. Bremen 1.

Aretascetis gen. n. (Gelechiidae), *endopercna* sp. n. Iraq p. 47, MEYRICK Exot. Micr. 5.

Argyresthia anthocephala sp. n. Japan p. 622, MEYRICK Exot. Micr. 4.

Argyrolacia gen. n., *bifida* sp. n. U.S.A. p. 243 figs., KEIFER Bull. Dep. Agric. Calif. 25.

Aristotelia eldorada sp. n. California p. 18 fig., KEIFER Bull. S. Calif. Acad. Sci. 35.

Arrhetopista gen. n. (Plutellidae) p. 622, *arachnodeta* sp. n. Java p. 623, MEYRICK Exot. Micr. 4.

Asbolistis gen. n. (Gelechiidae) p. 48, *ekhoniopa* sp. n. Iraq p. 49, MEYRICK Exot. Micr. 5.

Astaropola gen. n. (Hyponomeutidae), *magicosema* sp. n. N.S. Wales p. 107, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Asterostoma see *Phepsalostoma*.

Asthenica gen. n. (Oecophoridae), *stenopolia* sp. n. Queensland p. 303, TURNER Proc. Linn. Soc. N.S. Wales 61.

Atractoceros gen. n. (Glyphipterygidae), type *xanthoprocta* Meyr. p. 40, MEYRICK Exot. Micr. 5.

Atteva sphaerotrocha sp. n. N. Caledonia p. 41, MEYRICK t.c.

Batrachedra pistior sp. n. Formosa p. 31, MEYRICK t.c.

Blastobasis leucozyga sp. n. Venezuela p. 332 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.—*B. atlantella* sp. n. Morocco p. 144 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Borkhausenia aurivitella sp. n. Morocco p. 145 fig., ZERNY t.c.—*B. luctuosella* subsp. n. *sardiniella* Sardinia p. 359 fig., AMSEL Veröff. dtsh. kol. Mus. Bremen 1.—*B. ophiodyras* sp. n. N. Zealand p. 282, MEYRICK Trans. Roy. Soc. N.Z. 66.—*B. osthelderi* sp. n. N. Syria p. 82, REBEL Mitt. münchn. ent. Ges. 25.—*B. predotai* sp. n. Albarracin p. 43 fig., HARTIG Z. öst. EntVer. 21.

Brachyzancla gen. n. (Oecophoridae), *pallidula*, *cretosa*, *lissodes* (type) p. 314, *strongyla*, *celanopa* p. 315, spp. n. Australia, TURNER Proc. Linn. Soc. N.S. Wales 61.

Bryotropha terrella var. n. *sardoterella* Sardinia p. 80, SCHAWERDA Z. öst. EntVer. 21.

Bucculatrix eremospora p. 619, *hypocypsa* p. 620, spp. n., MEYRICK Exot. Micr. 4.

Catabrachmia gen. n. (Gelechiidae) p. 143, *rozsekella* (type) p. 144, *csornensis* p. 145 spp. n. Hungary figs., REBEL Rovart. Lap., Budapest 16 1909.

Cerostoma (= *Pycnopogon* Chrét.) *approbata* n. n. for *scabrella* Chrét. nec L. p. 623, MEYRICK Exot. Micr. 4.—*C. falcella* ab. n. *unicolor* Switzerland p. 668, WEBER Mitt. schweiz. ent. Ges. 16.

Chrysoclista lathamella n. n. for *bimaculella* Haw. nec Thunb. p. 505, FLETCHER Festschr. E. Strand 1.

Cnismorectis gen. n. (Tineidae), *choritica* sp. n. Bolivia p. 109, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Coleophora albotitae sp. n. N. Syria p. 86, REBEL Mitt. münchn. ent. Ges. 25.—*C. argyrophlebella* sp. n. Sardinia p. 98, REBEL Iris 50.—*C. atlanticolella* sp. n. Morocco p. 151, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*C. directella* Zell. (= *scolopacipennella* Wallengr.) p. 26 figs., BENANDER Opusc. ent. Lund 1.—*C. sosisperma* p. 621, *tholoneura* Japan, *stimuligera* Tunisia p. 622 4, *cerinaula* Iraq p. 63 5, spp. n., MEYRICK Exot. Micr.—*C. sylvaticella* in Germany, new to Continent p. 295 fig., GOTTHARDT Ent. Rdsch. 53.

Coniogenes gen. n. (Blastobasidae), *contempta* sp. n. Formosa p. 41, MEYRICK Exot. Micr. 5.

Cophomantis artonoma sp. n. Belgian Congo p. 48, MEYRICK t.c.

Copocentra notopyrsa sp. n. Peru p. 106, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Cronodoxa stichograptia sp. n. Iraq p. 54, MEYRICK Exot. Micr. 5.

Cryptolechia microglyptis sp. n. Venezuela p. 333 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.—*C. sanctificata* sp. n. India p. 53, MEYRICK Exot. Micr. 5.

Ctenocompa hygropis sp. n. Belgian Congo p. 57, MEYRICK t.c.

Decadarchis ioloza Japan p. 621 4, *trichalca* Solomons p. 58 5, spp. n., MEYRICK Exot. Micr.

Depressaria delphinias Morocco p. 624 4, *obolucha* Iraq p. 51 5, spp. n., MEYRICK Exot. Micr.—*D. frustratella*, *sardoniella* spp. n. Sardinia p. 97, REBEL Iris 50.—*D. iliensis* sp. n. Sardinia p. 96, REBEL Iris 50.

Dichomeris ochthophora Formosa p. 46, *paranthes* China p. 47, spp. n., MEYRICK Exot. Micr. 5.

Dissoctena ellisoni, *ochraceella* spp. n. Morocco p. 152 figs., REBEL Mém. Soc. Sci. nat. Maroc 42 1935.

Dryanassa gen. n. (Copromorphidae) p. 40, *erebactis* sp. n. Tahiti p. 41, MEYRICK Exot. Micr. 5.

Eccrita gen. n. (Oecophoridae),
phaeozysta sp. n. Tasmania p. 317,
 TURNER Proc. Linn. Soc. N.S. Wales 61.

Elachista fuscogrisella sp. n. Sardinia
 p. 100, REBEL Iris 50.

Elaphromorpha gen. n. (Oecophoridae),
glycymilicha sp. n. Queensland p. 302,
 TURNER Proc. Linn. Soc. N.S. Wales,
 61.

Enscepastra tanyleuca Tunisia p. 621
 4, *machinopsis* Iraq p. 63 5, spp. n.,
 MEYRICK Exot. Micr.

Epicephala vermiformis sp. n. Java
 p. 33, MEYRICK Exot. Micr. 5.

Epigraphia osthelderi sp. n. N. Syria
 p. 79, REBEL Mitt. Münchn. ent. Ges.
 25.

Epitheatia sphecephila Trinidad p.
 624 4, *phaeomicta* Belgian Congo p. 42
 5, spp. n., MEYRICK Exot. Micr.

Eretmocera haemogastra sp. n. Belgian
 Congo p. 62, MEYRICK Exot. Micr. 5.

Eriocottis maraschensis sp. n. N.
 Syria p. 90, REBEL Mitt. Münchn. ent.
 Ges. 25.

Eucordylea huntella sp. n. California
 p. 16 figs., KEIFER Bull. S. Calif. Acad.
 Sci. 35.

Eutechria colonialis sp. n. Formosa p.
 50, MEYRICK Exot. Micr. 5.

Euplocamus anthracinalis subsp. n.
amanalis N. Syria p. 89, OSTHELDER
 Mitt. Münchn. ent. Ges. 25.

Eusceletaula gen. n. (Tineidae), *im-*
modica sp. n. Malaya p. 56, MEYRICK
 Exot. Micr. 5.

Eustaintonia phragmitidella sp. n.
 Sicily p. 97, larva p. 101 fig., MARIANI
 Boll. Soc. ent. ital. 68.

Eutorna annosa sp. n. China p. 51,
 MEYRICK Exot. Micr. 5.

Gelechia confidella sp. n. N. Syria p.
 73, REBEL Mitt. Münchn. ent. Ges.
 25.—*G. pulverosella* sp. n. Morocco p.
 137 fig., ZERNY Mém. Soc. Sci. nat.
 Maroc 42 1935.—*G. eldorada* p. 240
dammersi p. 242, spp. n. California figs.,
 KEIFER Bull. Dep. Agric. Calif. 25.—
G. langei sp. n. California p. 20 fig.,
 KEIFER Bull. S. Calif. Acad. Sci. 35.—
G. ochrocorys Belgian Congo, *bathro-*
sticta Iraq, *argodoris* p. 43, *pagicola*,
sciocrypta, *digrapta* p. 44 China spp. n.
 MEYRICK Exot. Micr. 5.—*G. xylobathra*

p. 331, *elephantopsis* p. 332, spp. n.
 Venezuela figs., MEYRICK Veröff. dtsh.
 kol. Mus. Bremen 1.

Glyphidocera abiasta sp. n. Vene-
 zuela p. 332 fig., MEYRICK t.c.

Gnathosaristis gen. n. (Tineidae),
conio-grapha sp. n. Tanganyika p. 54,
 MEYRICK Exot. Micr. 5.

Gnorimoschema potentella p. 238,
neopetrella p. 239, *elmorei* p. 349, spp. n.
 U.S.A. figs., KEIFER Bull. Dep. Agric.
 Calif. 25.

Gracilaria alchimiella subsp. n. sardi-
 nella Sardinia p. 362 figs., AMSEL
 Veröff. dtsh. kol. Mus. Bremen 1.—*G.*
chrysolampra Formosa p. 38, *zonotarsa*
 India, *zopherotarsa* China p. 39, spp. n.,
 MEYRICK Exot. Micr. 5.

Gymnobathra origenes sp. n. N.
 Zealand p. 282, MEYRICK Trans. roy.
 Soc. N.Z. 66.

Haemangela gen. n. (Heliodinidae),
vindicatrix sp. n. Solomon Is. p. 619,
 MEYRICK Exot. Micr. 4.

Haploptilia kalmiella sp. n. Canada
 p. 53; *duplicis* Braun discussed p. 54
 figs., McDUNNOUGH Canad. Ent. 68.

Hapsifera psapharogma sp. n. Belgian
 Congo p. 55, MEYRICK Exot. Micr. 5.

Homaloxestis notolychna sp. n.
 Formosa p. 48, MEYRICK t.c.

Idiozancle gen. n. (Oecophoridae),
pyncnosticha (type) p. 315, *spumifera*,
colacma p. 316, spp. n. Australia,
 TURNER Proc. Linn. Soc. N.S. Wales
 61.

Imma transjecta Malaya p. 616 4,
mesosphena Amboina p. 39 5, spp. n.,
 MEYRICK Exot. Micr.

Ischnophanes gen. n. (type *thrypti-*
copa Meyr.), *macromita* p. 299, *semi-*
dalota, *symmicta*, *idiotropa* p. 200,
elaphropa, *capnopleura*, *euthemon*, *suffusa*
 p. 301, *atelesta*, *potheta* p. 302, spp. n.
 Australia, TURNER Proc. Linn. Soc.
 N.S. Wales 61.

Isophrictis revision of Palaearctic
 spp. pp. 369-376; *corsicella* sp. n.
 Corsica p. 373, AMSEL Veröff. dtsh.
 kol. Mus. Bremen 1.

Lactura quadrifrenis sp. n. Brazil p.
 108, MEYRICK Arb. morph. tax. Ent.
 Berl. 3.

Limnoecia copidobathra sp. n. Syria
 p. 30, MEYRICK Exot. Micr. 5.

Lita divisella sp. n. N. Syria p. 74, REBEL Mitt. münchn. ent. Ges. 25.—*L. bosalella* sp. n. Sardinia p. 94, REBEL Iris 50.

Lithocolletis key to French spp. pp. 83–118 figs., LE MARCHAND Amat. Papill. 8.—*L. triplacomis* Formosa, bascanaula Java p. 32, *locozona* Uganda p. 33, spp. n., MEYRICK Exot. Micr. 5.

Lyonetia pyrrhoplaca Java, *anthemopa* Formosa, spp. n. p. 58, MEYRICK Exot. Micr. 5.

Macrobathra crococephala sp. n. Belgian Congo p. 50, MEYRICK t.c.

Macronemata consimilis, *argochroa*, p. 304, *pauromorpha*, *aphaurophanes*, *semidalis*, *leptogramma* p. 305, *stoechodes*, *proscedes*, *stenodes*, *rhadinodes* p. 306, *araeoptera*, *pleurocapna*, *pleurosticha*, *amalopectera* p. 307, *pusilla*, *filifera*, *omospila* p. 308, *basisticha*, *perangusta*, *abrithes* p. 309, *delotypa*, *asthenospila*, *didymospila*, *glaberrima* p. 310, *cyrtoloma*, *stramenticia*, *pentasticta* p. 311, *mesoscia*, *epiconia*, *dyspines*, *litopis* p. 312, *commoda*, *phaeogramma*, *megalospora*, *achlyopa* p. 313, spp. n. Australia, TURNER Proc. Linn. Soc. N.S. Wales 61.

Melasina holoxyla sp. n. Belgian Congo p. 57, MEYRICK Exot. Micr. 5.

Mesophleps arnaldi sp. n. Cyrenaica p. 76 fig., TURATI & KRÜGER Mém. Soc. ent. ital. 15.

Myrmecozela pentatma sp. n. Morocco p. 53, MEYRICK Exot. Micr. 5.—*M. tribulella* sp. n. Sardinia p. 100, REBEL Iris 50.

Nemotois antilyca sp. n. Iraq p. 42, MEYRICK Exot. Micr. 5.

Nepticula leaf-mining habits, Bozen district pp. 194–211, *crataegella* p. 200, *naturcella* p. 205, *mahalebella* p. 207, *sativella* p. 208, spp. n. Austria-Italy figs., KLIMESCH Stettin. ent. Ztg. 97.—*N.* food-plants pp. 61–84, *malivora* p. 70, *quercifoliae* p. 71, *suberosella* p. 76 spp. n. Poland figs., TOLL Polsk. Pismo ent. 13.—*M. zermattensis* p. 668, *utensis* p. 669 spp. n. Switzerland; *pseudoplatanella* imago p. 671 figs., WEBER Mitt. Schweiz. ent. Ges. 16.—*N. fulvomacula* sp. n. Austria p. 79, SKALA Z. öst. EntVer. 21.

Nothris kalevalaella sp. n. Finland p. 16 figs., KANERVA Ann. ent. fenn.

2.—*N. thuriferella* sp. n. Hautes-Alpes p. 48 figs., CLÉU Amat. Papill. 8.

Odites perissopis sp. n. Japan p. 27, MEYRICK Exot. Micr. 5.

Oedematopoda semirubra sp. n. Japan p. 619, MEYRICK Exot. Micr. 4.

Onebala delocosma sp. n. Japan p. 46, MEYRICK Exot. Micr. 5.

Opogona loxophanta Formosa, *echodes* Java, spp. n. p. 620, MEYRICK Exot. Micr. 4.

Orneodes idiocrossa sp. n. Java p. 625, MEYRICK t.c.

Pachyrhabda citrinacma Formosa, *inanis* Java, spp. n. p. 617, MEYRICK t.c.

Parascaeas gen. n. (Xylorictidae), *cyanolampra* sp. n. Panama p. 105, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Parectopa geometropis Formosa, *game-lia* Java p. 37, *aletreuta* Tanganyika p. 38, spp. n. MEYRICK Exot. Micr. 5.

Penestoglossa tauricella sp. n. N. Syria p. 88, REBEL Mitt. münchn. ent. Ges. 25.—*P. dardoinella* ab. n. *nigrella* Sardinia p. 82, SCHAWERDA Z. öst. EntVer. 21.

Periacma pontiseca sp. n. Formosa p. 52, MEYRICK Exot. Micr. 5.

Persicoptila leucosarca sp. n. Formosa p. 30, MEYRICK t.c.

Phepsalostoma n. n. for *Asterostoma* Meyr. nec Agass. p. 626, MEYRICK Exot. Micr. 4.

Phloeocetis gen. n. (Oecophoridae) p. 298, *virgea* sp. n. Queensland p. 299, TURNER Proc. Linn. Soc. N.S. Wales 61.

Phthorimaea nigrostriella p. 137, *curtipennis* p. 138, spp. n. Morocco figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Phyllocnistis tectonivora, *temperatior* spp. n. Java p. 31, MEYRICK Exot. Micr. 5.

Placoptila semioceros ♀ p. 29, MEYRICK t.c.

Pleurota alexandrina sp. n. Iraq p. 50, MEYRICK t.c.—*P. goundafella*, *insignella* spp. n. Morocco p. 146 figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Proteodes metographa MEYR. (= *varia* Philp.) p. 283, MEYRICK Trans. roy. Soc. N.Z. 66.

Psecadia lactistrigella sp. n. Cyrenaica p. 75 fig., TURATI & KRÜGER Mém. Soc. ent. ital. 15.—*P. bipunctella* sp. n. N. Syria p. 80, REBEL Mitt. münchen. ent. Ges. 25.

Psittacastis pyrsophanes sp. n. Peru p. 104, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Ptilogenes amblystoma sp. n. Brazil p. 106, MEYRICK t.c.

Pycnopogon see *Cerostoma*.

Pyramidobela angelorum sp. n. California p. 13 fig., KEIFER Bull. S. Calif. Acad. Sci. 35.

Pyroderces holotherma, *orphnographa* spp. n. Belgian Congo p. 29, MEYRICK Exot. Micr. 5.

Recurvaria syrichtis sp. n. Japan p. 43, MEYRICK t.c.

Rhinophyllis gen. n. (Tineidae), *dasychiras* sp. n. Bengal p. 55, MEYRICK t.c.

Schiffermuelleria tetractis sp. n. Morocco p. 623, MEYRICK Exot. Micr. 4.

Schützzeia languidella sp. n. Palestine p. 366; *polychromella* Rbl. from *Anacamptis* p. 367 figs., AMSEL Veröff. dtsh. kol. Mus. Bremen 1.

Scythris aritzoella sp. n. Sardinia p. 360 fig., AMSEL t.c.—*S. ciliatella*, *jugicolella* p. 148, *cremorella* p. 149, spp. n. figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*S. persephone* sp. n. India p. 63, MEYRICK Exot. Micr. 5.—*S. discimaculella* p. 83, *pfeifferella* p. 84 spp. n. N. Syria, REBEL Mitt. münchen. ent. Ges. 25.

Semnolecha gen. n. (Gelechiidae), *pachysticta* sp. n. Japan p. 49, MEYRICK Exot. Micr. 5.

Sisyroctenis gen. n. (Glyphipterygidae), *hemicamina* sp. n. Peru p. 106, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Spermanthrax gen. n. (Gelechiidae) p. 624, *pyncostoma* sp. n. Algeria p. 625, MEYRICK Exot. Micr. 4.

Stigmatophora niphosticta sp. n. Japan p. 30, MEYRICK Exot. Micr. 5.

Stathmopoda trigonella sp. n. Morocco p. 149 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*S. horrida*, *philaromia*

Java, *eucorystis* Belgian Congo, *tetrazyga* Solomon Is., spp. n. p. 618, MEYRICK Exot. Micr. 4.

Stenoma orthroptila sp. n. Peru p. 104, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Stigmatoptera gen. n. (Hyponomeutidae) (author's note "if pre-occupied substitute *Stigmasophronia*") p. 44, *dumonti* sp. n. Tunis p. 45, HARTIG Z. öst. EntVer. 21.

Stomopteryx diplodoza sp. n. Tunisia p. 624, MEYRICK Exot. Micr. 4.—*S. flavoclavella*, *speciosella* spp. n. Morocco p. 139 figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Symmoca umbrinella, *profanella* p. 142, *mobilella*, *retustella* p. 143, spp. n. Morocco figs., ZERNY t.c.

Talaeporia atactopis sp. n. Iraq p. 56, MEYRICK Exot. Micr. 5.

Tesquea gen. n., *hawleyana* sp. n. New Mexico p. 4 figs., KLOTS Amer. Mus. Nov. no. 867.

Thermocrates gen. n. (Lyonetiidae) p. 620, *epischista* sp. n. Japan p. 621, MEYRICK Exot. Micr. 4.

Thiotricha acrophantis Formosa, *synodonta* Japan, spp. n. p. 45, MEYRICK Exot. Micr. 5.

Tinea marianii sp. n. Zappulla p. 23, REBEL Z. öst. EntVer. 21.—*T. chalcopeterella* p. 154, *trichophagoides* p. 155 spp. n. Morocco figs., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*T. diarthrotu* India, *malthacopis* China, spp. n. p. 53, MEYRICK Exot. Micr. 5.

Tischeria pulverescens Tanganyika, *pyrrhochyta* Java, spp. n. p. 57, MEYRICK Exot. Micr. 5.

Tonica nigricostella ♀ p. 51, MEYRICK t.c.

Tortyra chrysoprasitis sp. n. Solomon Is. p. 617, MEYRICK Exot. Micr. 4.

Trachyntis holarga sp. n. Queensland p. 317, TURNER Proc. Linn. Soc. N.S. Wales 61.

Trachypepla oneropis sp. n. N. Zealand p. 282, MEYRICK Trans. roy. Soc. N. Zealand 66.

Urodus procridias, *pamprophyra* p. 108, *aphrogama* p. 109, spp. n. Brazil, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Xystophora sardicolella sp. n. Sardinia p. 80, SCHAWERDA Z. öst. EntVer. 21.—*X. minimella* sp. n. Sardinia p. 95, REBEL Iris 50.

TORTRICIDAE (s.l.).

Tortricids of Piedmont, DELLA BEFFA Mem. Soc. ent. ital. 14 1935 pp. 17-40.

Tortricidae of Poland, KREMKY Fragm. Fn. Mus. Zool. polon. 2 pp. 327-393.

Acala notes on some Swiss spp. pp. 658-660, MÜLLER-RUTZ Mitt. schweiz. ent. Ges. 16.—*A. ferrugana*, *fissurana*, *ferrumixtanina* in Finland p. 141, KANERVA Ann. ent. fenn. 1 1935.—*A. variegana* ab. n. *uniformis* Sardinia; *literana* subsp. n. *sardivola*, ab. n. *multi-punctata*, *trimaculata*, *saturata* p. 66, SCHAWERDA Z. öst. EntVer. 21.

Acroclita iridorphna Formosa p. 609, *vulturina* p. 610 4, *dissoplaca* Java p. 23, *melanomochla* Formosa p. 24 5, spp. n., MEYRICK Exot. Micr.

Ancylis achatana F. synonymy p. 267, FILIP'EV Lambillionea 36.—*A. micro-phthora* sp. n. Java p. 609, MEYRICK Exot. Micr. 4.—*A. siculana* ab. n. *alpina* Switzerland p. 667, WEBER Mitt. schweiz. ent. Ges. 16.

Argyroploce camarotis Bengal, *ptarmicopa* (also China) p. 612, *protocyma*, *semodryas* p. 613, *heteraspis*, *temenopsis* Formosa, *streblota* Panama, Guatemala p. 614, spp. n., MEYRICK Exot. Micr. 4.

Atopomima gen. n., *philocosma* sp. n. Solomons p. 61, MEYRICK Exot. micr. 5.

Cacoecia gelophodes sp. n. Venezuela p. 329 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Capua melanophragma Belgian Congo *zapyrrha* Samoa, spp. n. p. 59, MEYRICK Exot. Micr. 5.

Cnephasia morphology, Polish distribution pp. 263-294 figs., ADAMCZEWSKI Ann. Mus. zool. polon. 11.—*C. och-nosema* sp. n. N. Zealand p. 281, MEYRICK Trans. roy. Soc. N.Z. 66.—*C. incertana*, *abrasana* see *Cnephasiella*.

Cnephasiella gen. n. for *Cnephasia incertana* Tr. p. 268 (type), *C. abrasana* Dup. p. 270, ADAMCZEWSKI Ann. Mus. Zool. polon. 11.

Crocidosema compsoptila sp. n. Venezuela p. 331 fig., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Doloploca schawerdai sp. n. Sardinia p. 93, REBEL Iris 50.

Eucosma notanthes Formosa, *eutechna* Malaya p. 610, *melanochluena* Java p. 611, spp. n., MEYRICK Exot. Micr. 4.—*E. hazelana* sp. n. Colorado p. 1 figs., KLOTS Amer. Mus. Nov. no. 867.—*E. tornimaculana* sp. n. Morocco p. 133, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.

Eulia mabilliana ab. n. *straminea* Sardinia p. 67, SCHAWERDA Z. öst. EntVer. 21.—*E. sclerophracta*, *orthoscia*, *moniliata* spp. n. Venezuela p. 330 figs., MEYRICK Veröff. dtsh. kol. Mus. Bremen 1.

Euxanthia cinnamomella sp. n. Cyrenaica p. 75 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.

Homona fatalis Malaya p. 59, *amphigona* Sumatra, *myriosema* Belgian Congo p. 60, spp. n., MEYRICK Exot. Micr. 5.

Laspeyresia aeologlypta Japan, *uranatma* p. 615, *pycnograpta* p. 616 Java 4, *exosticha* Lebanon, *euryteles* Belgian Congo p. 25 5, spp. n., MEYRICK Exot. Micr.—*L. pfeifferi* sp. n. N. Syria p. 70, REBEL Mitt. münchn. ent. Ges. 25.

Nephodesme nubilana synonymy p. 267, FILIP'EV Lambillionea 36.

Phalonia contractana var. n. *taurini-ana* Italy p. 31, DELLA BEFFA Mem. Soc. ent. ital. 14 1935.—*P. hygrodes* sp. n. Japan p. 22, MEYRICK Exot. Micr. 5.—*P. nubivagana* sp. n. Morocco p. 132 fig., ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*P. rutilans* morphology p. 327, subsp. n. *tatricana* Tatra p. 332 figs., ADAMCZEWSKI Ann. Mus. Zool. polon. 11.

Phtheochroa psychrodora sp. n. Syria p. 23, MEYRICK Exot. Micr. 5.

Polycrosis mechanodes sp. n. China p. 611, MEYRICK Exot. Micr. 4.—*P. schmidtii* sp. n. Andalusia p. 22, REBEL Z. öst. EntVer. 21.

Pseudatteria dictyanthes sp. n. Ecuador p. 104, MEYRICK Arb. morph. tax. Ent. Berl. 3.

Schoenotenes cremnotoma sp. n. Java p. 62, MEYRICK Exot. Micr. 5.

Semasia albicostella sp. n. Cyrenaica p. 75 fig., TURATI & KRÜGER Mem. Soc. ent. ital. 15.—*S. hypericana* var. n. *sardiniana* Sardinia p. 79, SCHAWERDA Z. öst. EntVer. 21.—*S. sardoënsis* sp. n. Sardinia p. 94, REBEL Iris 50.

Sparganothis hydeana sp. n. New Mexico p. 2 figs., KLOTS Amer. Mus. Nov. no. 867.

Tortrix croceana f. n. *basana* Morocco p. 132, ZERNY Mém. Soc. Sci. nat. Maroc 42 1935.—*T. steineriana* var. n. *caprana* Italy p. 27, DELLA BEFFA Mem. Soc. ent. ital. 14 1935.—*T. illustrana* sp. n. N. Finland p. 24 fig., KROGERUS Notul. ent. 16.—*T. liotoma* sp. n. China p. 60, MEYRICK Exot. Micr. 5.

HEPIALIDAE.

Revision of Australian Hepialidae, III, TINDALE Rec. S. Aust. Mus. 5 1935 pp. 275–332, 129 figs.

Elhamma Wlk. (= *Perissectis* Meyr.) p. 275, TINDALE Rec. S. Aust. Mus. 5 1935.

Hepialus bertrandi sp. n. France p. 290 figs., LE CERF Bull. Soc. ent. Fr. 41.

Jeana gen. n. p. 279, *delicatula* sp. n. Australia p. 280 figs., TINDALE Rec. S. Aust. Mus. 5 1935.

Oxycanus key to Australian spp. p. 283, *waterhousei* p. 292, *lyelli* p. 293, *perditus* p. 296, *janeus* p. 297, *silvanus* p. 298, *carus*, *herdus* p. 299, *ballux*, *aurifex* p. 302, *naïas* p. 303, *gelidus*, *goldfinchi* p. 305, *rosaceus* p. 306, *hamatus* p. 307, *stellans* p. 308, *spadix* p. 310, *laesus* p. 311, *occidentalis* p. 312, *poeticus* p. 313, *promiscuus* p. 314, *nuptialis* p. 317, *incanus* p. 318, *barnardi* p. 319, *goodingi* p. 321, *sirpus* p. 322, *lamnus* p. 325, spp. n. Australia figs., TINDALE t.c.

Perissectis see *Elhamma*.

MICROPTERYGIDAE (s.l.).

Micropteryx nuraghella, *limbarella* spp. n. Sardinia p. 364 figs., AMSEL Veröff. dtsch. kol. Mus. Bremen 1.

TRICHOPTERA.

A treatise on Trichoptera, HANDLIRSCH & BEIER in KÜKENTHAL Handb. Zool. 4 Hfte 2 Lief. 6 pp. 1491-1553, 69 figs.

Catalogue of Trichoptera of France, BERLAND & MOSELY Ann. Soc. ent. Fr. 105 pp. 111-144.

Trichoptera of L. Balaton, BOGA Arb. ung. biol. Forsch.-Inst. 8 pp. 9-14.

Immature stages of Minnesota Trichoptera, ELKINS Ann. ent. Soc. Amer. 29 pp. 656-681, 6 pls.

Notes on some Netherlands Trichoptera, FISCHER Ent. Ber. 9 pp. 195-197.

List of Trichoptera of N. Norway, FORSSLUND Tromsø Mus. Årsheft 52 1932 no. 2, 19 pp. 1 map.

Trichoptera new to Holland, GELSKES Ent. Ber. 9 pp. 261-264.

British Trichoptera in 1935, KIMMINS J. Soc. Br. Ent. 1 pp. 149-151.

Trichoptera of the Kuriles, KUWAYAMA Ins. mats. 10 pp. 160-163, 1 fig.

Classification of Trichoptera, LAMERE Précis de Zool. 5 pp. 49-70, 29 figs.

S. African Trichoptera and distribution of trans-African spp., LESTAGE Bull. Ann. Soc. ent. Belg. 76 pp. 165-192.

Trichoptera of Czechoslovakia, MAYER Sborn. Kl. přír. Brně 18 pp. 41-47.

Indian Trichoptera [contd.], MARTYNOV Rec. Ind. Mus. 38 pp. 239-306, 74 figs.

Trichoptera of Arctic Russia, MARTYNOV Arctica 4 pp. 179-194, 3 figs.

New Trichopterous larvae from L. Balaton, MESCHKAT Arb. ung. biol. Forsch.-Inst. 8 pp. 101-105, 15 figs.

Studies in N. American Trichoptera, 3 (with much synonymy), MILNE Cambridge, Mass. pp. 56-128, 2 pls.

Synonymy in Leptoceridae, MILNE Stud. N. Amer. Trichopt. 3 p. 59.

New or little-known Italian Trichoptera, MORETTI Boll. Soc. ent. ital. 68 pp. 156-160.

Some records of British Trichoptera in 1933, MOSELY Entomologist 69 pp. 87-89.

Revision of Indian Trichoptera, IV, MOSELY J. Bombay n.H. Soc. 28 pp. 447-478, 18 pls. 16 text-figs.

Tasmanian Trichoptera, MOSELY Proc. zool. Soc. London 1936 pp. 395-424, 72 figs.

Revision of Triplectidinae, MOSELY Trans. R. ent. Soc. Lond. 85 pp. 91-130, 98 figs.

Trichoptera of the Balkans, RADOVANOVICH Verh. int. Ver. Limnol. 7 1935 pp. 100-105.

Food of Trichopterous larvae, SLACK J. Anim. Ecol. 5 pp. 105-115, 2 figs.

Some Trichopterous larvae from Hokkaido, TSUDA Kontyû 10 pp. 99-102, 2 figs.

Adicella biramosa sp. n. Assam p. 279 figs., MARTYNOV Rec. Ind. Mus. 38.

Agapetus marlo, *boulderensis* spp. n. N. America p. 108, MILNE Stud. N. Amer. Trichopt. 3.

Anisocentropus fijianus sp. n. Fiji p. 29, BANKS Psyche 43.—*A. kemp* sp. n. S. India p. 245 figs., MARTYNOV Rec. Ind. Mus. 38.

Apataniana gen. n. (Limnophilidae), *hutchinsoni* sp. n. W. Tibet p. 475 figs., MOSELY J. Bombay n.H. Soc. 38.

Apatelina gen. n. (Limnophilidae), *incerta* sp. n. India p. 300 fig., MARTYNOV Rec. Ind. Mus. 38.

Apatidea brevis sp. n. India p. 477 figs., MOSELY J. Bombay n.H. Soc. 38.

Aphilorheithrus gen. n. (Philorheithridae) p. 417, *stepheni* sp. n. Tasmania p. 418 figs., MOSELY Proc. zool. Soc. Lond. 1936.

Asotocerus flexuosus p. 241, *sinuatus* p. 243, spp. n. S. India figs., MARTYNOV Rec. Ind. Mus. 38.

Astenophylina gen. n. (Limnophilidae), *kashmirus* sp. n. Kashmir p. 473 figs., MOSELY J. Bombay n.H. Soc. 38.

Astenophylodes gen. n. (Limnophilidae), p. 458, *burmanus* sp. n. Burma p. 459 figs., MOSELY t.c.

Astratodina gen. n. (Limnophilidae), *inermis* sp. n. W. Tibet p. 450 figs., MOSELY t.c.

Astratus tricalcaratus sp. n. W. Tibet p. 453 figs., MOSELY t.c.

Atanotolica gen. n. (Leptoceridae) for *Mystacides brasiliannus* Brauer p. 123 fig., MOSELY Trans. R. ent. Soc. Lond. 85.

Athripsodes erraticus sp. n. Canada p. 58, MILNE Stud. N. Amer. Trichopt. 3.

Atomyia frosti p. 119, *roafi* p. 120, spp. n. U.S.A., MILNE t.c.

Atomyiella gen. n. (Sericostomatidae) p. 400, *japonica* sp. n. Japan p. 401 figs., TSUDA Annot. zool. jap. 15.

Atriplectides gen. n. (Leptoceridae) p. 119, *dubia* sp. n. Tasmania p. 120 figs., MOSELY Trans. R. ent. Soc. Lond. 85.

Brachycentrus punctatus sp. n. China p. 11 fig., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.—*B. notabulus* p. 112, *dimicki* p. 113, spp. n. U.S.A., MILNE Stud. N. Amer. Trichopt. 3.

Cheumatopsyche capitata sp. n. China p. 131 fig., NAVÁS Notes Ent. chin., Mus. Heude 3.—*C. urema* sp. n. Kenya p. 436 figs., MOSELY Ann. Mag. n.H. (10) 17.

Chimarrha cara, *leta* Kamerun p. 448, *tamsi* São Thomé p. 450, spp. n. figs., MOSELY t.c.—*C. signata* sp. n. Fiji p. 35 fig., BANKS Psyche 43.

Conoesucus gen. n. (Sericostomatidae) p. 408, *fromus* sp. n. Tasmania p. 409, figs., MOSELY Proc. zool. Soc. Lond. 1936.

Costora gen. n. (Sericostomatidae) p. 401, *iena* sp. n. Tasmania p. 403 figs., MOSELY t.c.

Dicosmoecus fulvicollis sp. n. China p. 18 fig., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.—*D. atripes* Hagen thoracic sclerites of pupa pp. 57–64 figs., GOODRICH Trans. Amer. micr. Soc. 54 1935.

Dinarthrella betteri sp. n. E. Himalayas p. 286 figs., MARTYNOV Rec. Ind. Mus. 38.

Dinarthrodes inequalis sp. n. W. Himalayas p. 284 figs., MARTYNOV t.c.

Dinarthrum (*Indodinarthrum* subgen. n.) p. 281, *punjabicum* p. 282, *latum* p. 283, spp. n. Punjab figs., MARTYNOV t.c.

Diplectrona doringa sp. n. U.S.A. p. 68, MILNE Stud. N. Amer. Trichopt. 3.

Dipseudopsis noricis Gold Coast p. 438, *longispina* Madagascar p. 439, spp. n. figs., MOSELY Ann. Mag. n.H. (10) 17.

Dipseudopsodes gen. n. (Polycentropidae) p. 170, LESTAGE Bull. Ann. Soc. ent. Belg. 76.

Dolophilodes cercata sp. n. China p. 126 fig., NAVÁS Notes Ent. chin., Mus. Heude 3.

Ecnomus gerus p. 441, *leonus* p. 442, spp. n. Sierra Leone figs., MOSELY Ann. Mag. n.H. (10) 17.—*E. tropicus* see *Psychomyiellodes*.

Eothremma hindustana sp. n. Punjab p. 296 figs., MARTYNOV Rec. Ind. Mus. 38.

Episetodes gen. n. (Leptoceridae), *angustipennis* sp. n. Bewa p. 265 figs., MARTYNOV t.c.

Farula gen. n. (Sericostomatidae), *rainieri* sp. n. U.S.A. p. 116, MILNE Stud. N. Amer. Trichopt. 3.

Flura n. n. for *Neuropsychyche* Carp. nec Till. p. 118, MILNE t.c.

Glossosoma traviatum sp. n. Washington p. 266 fig., BANKS Arb. morph. tax. Ent. Berl. 3.

Halesinus maculatus sp. n. China p. 20 fig., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.

Heteroptectron indecisum Wlk. (= *Molanna rufa* Hag.) p. 57, MILNE Stud. N. Amer. Trichopt. 3.

Holocentropus grellus sp. n. U.S.A. p. 87, MILNE t.c.

Homilia malia Sierra Leone p. 429, *lomia* S. Africa p. 432, spp. n. figs., MOSELY Ann. Mag. n.H. (10) 17.

Hudsonema gen. n. (Leptoceridae) for *Tetracentron amabilis* McL. (type) p. 110, *Triplectides flaminii* Nav. p. 111, *T. discolor* Nav. p. 114, figs., MOSELY Trans. R. ent. Soc. Lond. 85.

Hummelia gen. n. (Sericostomatidae), *unica* sp. n. China p. 12 figs., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.

Hydropsyche hedini p. 5, *plana* p. 6, spp. n. China figs., FORSSLUND t.c.—*H. colonica* internal anatomy pp. 151–179 figs., GLASGOW Quart. J. micr. Sci.

(N. S.) **79.**—*H. colonica*, *philpotti* biology pp. 122–128 figs., GLASGOW Proc. R. ent. Soc. Lond. (A) **11.**—*H. palpalis* sp. n. Madagascar p. 108 fig., NAVÁS Rev. Acad. Cienc. Zaragoza **19.**—*H. maroccana* Morocco p. 95, *fezana* Fez p. 96, spp. n. figs., NAVÁS Bol. Soc. ent. Esp. **18.**

Hydropsychodes fausta p. 129, *fusca* p. 130, spp. n. China figs., NAVÁS Notes Ent. chin., Mus. Heude **3.**

Hydroptila gunda sp. n. U.S.A. p. 76, MILNE Stud. N. Amer. Trichopt. **3.**

Indocrunoecia gen. n. (Serico-stomatidae) *heterolepidia* sp. n. E. Hima-layas p. 293 figs., MARTYNOV Rec. Ind. Mus. **38.**

Indodinarthrum subgen. n. see *Dinar-thrum*.

Jenortha gen. n. (Serico-stomatidae) *cascadensis* sp. n. Br. Columbia p. 119, MILNE Stud. N. Amer. Trichopt. **3.**

Kitagamiidae fam. n. (for *Kitagamia* Iwata, type *montana* Iw.) p. 394, TSUDA Annot. zool. jap. **15.**

Leptocellodes flaveola Ulm. (= *Notana-tolica poujadei* Nav.) p. 107, MOSELY Trans. R. ent. Soc. Lond. **85.**

Leptocerina ugandanus Ulm. (= *furcata* Mos.) from *Leptocerus* p. 429, MOSELY Ann. Mag. n.H. (10) **17.**

Leptocero-des gen. n. (Leptoceridae) type *Leptocerus scramasax* Barn. p. 179, LESTAGE Bull. Ann. Soc. ent. Belg. **76.**

Leptocerus distinguendus p. 251, *forcipatus* p. 253, spp. n. Rewa figs., MARTYNOV Rec. Ind. Mus. **38.**—*L. indistinctus*, *sinensis* p. 8, *forcipatus* p. 9 spp. n. China figs., FORSSLUND Ark. Zool. **27A** (sep. dated 1935) no. 31.—*L. ugandanus* see *Leptocerina*; *scramasax* see *Leptocero-des*; *L. oppositus* see *Loti-cana*.

Limnophilus anadyrensis sp. n. Ana-dyr, Arctic Russia p. 192 figs., MARTYNOV Arctica **4.**

Lingora gen. n. (Serico-stomatidae) p. 406, *aurata* sp. n. Tasmania p. 407 figs., MOSELY Proc. zool. Soc. Lond. **1936.**

Loticana gen. n. (Leptoceridae) for *Leptocerus oppositus* Wlk. p. 121 figs., MOSELY Trans. R. ent. Soc. Lond. **85.**

Maniconeura indica sp. n. S. India p. 289 figs., MARTYNOV Rec. Ind. Mus. **38.**

Marilia simulans sp. n. China p. 7 fig., FORSSLUND Ark. Zool. **27A** (sep. dated 1935) no. 31.—*M. nobscia* sp. n. Texas p. 79, MILNE Stud. N. Amer. Trichopt. **3.**—*M. ceylanica* sp. n. Ceylon p. 248 figs., MARTYNOV Rec. Ind. Mus. **38.**

Matasia gen. n. (Serico-stomatidae), *satana* sp. n. Tasmania p. 411 figs., MOSELY Proc. zool. Soc. Lond. **1936.**

Micrasema larvae pp. 214–219 figs., LESTAGE Bull. Ann. Soc. ent. Belg. **76.**—*M. minimum* see *Micrasemodes*.

Micrasemodes gen. n. for *Micrasema minimum* McL. p. 213, LESTAGE t.c.

Micropterna indica sp. n. India p. 454 figs., MOSELY J. Bombay n.H. Soc. **38.**

Molanna cinerea Hag. (= *musetta* Bet.), *uniophila* Vorh. (= *tryphena* Bet., *cinerea* Bet. nec Hag.) p. 57, MILNE Stud. N. Amer. Trichopt. **3.**—*M. rufa* see *Heteroplectron indecisum*.

Mormomyia sackeni sp. n. U.S.A. p. 267, BANKS Arb. morph. tax. Ent. Berl. **3.**

Mystacides indica sp. n. W. Hima-layas p. 280 figs., MARTYNOV Rec. Ind. Mus. **38.**—*M. brasiliensis* see *Atanato-lica*.

Neoseverinia crassicornis larva p. 403 figs., TSUDA Annot. zool. jap. **15.**

Neuropsyche see *Flura*.

Notalina gen. n. (Leptoceridae), *parkeri* (type) sp. n. Tasmania p. 114; *delicatula* Ulm. p. 115, *flava* Ulm. p. 117 from *Triplectides* figs., MOSELY Trans. R. ent. Soc. Lond. **85.**

Notanatolica pallida sp. n. Fiji p. 30 fig., BANKS Psyche **43.**—*N.* see *Tri-plectides*; *N. poujadei* see *Leptocellodes flaveola*.

Oecetinella pulchella sp. n. Fiji p. 32, BANKS Psyche **43.**

Oecetis aganda n. n. for *punctata* Mos. nec Nav. p. 429, MOSELY Ann. Mag. n. H. (10) **17.**—*O. bengalica* Bihar p. 266, *scutulata* Rewa p. 268, *biramosa* Orissa p. 269, spp. n. figs., MARTYNOV Rec. Ind. Mus. **38.**—*O. caudata* sp. n. Kenya p. 127 fig., NAVÁS Mém. Mus. H.n. Paris **4.**

Olemyra pluvialis sp. n. N. America p. 117, MILNE Stud. N. Amer. Trichopt. **3.**

Paduniella africana Ulm. genitalia p. 444 figs., MOSELY Ann. Mag. n.H. (10) 17.

Palaeagapetus nearcticus sp. n. Washington p. 265 figs., BANKS Arb. morph. tax. Ent. Berl. 3.

Paraphlegopteryx compositus sp. n. E. Himalayas p. 291 figs., MARTYNOV Rec. Ind. Mus. 38.

Parapsyche elsis sp. n. N. America p. 66, MILNE Stud. N. Amer. Trichopt. 3.

Philopotamus pallidipes sp. n. Washington p. 267, BANKS Arb. morph. tax. Ent. Berl. 3.

Philorheithridae fam. n., MOSELY Proc. zool. Soc. Lond. 1936 p. 413.

Phylocentropus rabilis sp. n. U.S.A. p. 84, MILNE Stud. N. Amer. Trichopt. 3.

Platycentropus asiaticus sp. n. China p. 17 figs., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.

Plectrocnemia clinei sp. n. U.S.A. p. 87, MILNE Stud. N. Amer. Trichopt. 3.

Plectrotarsus tasmanicus sp. n. Tasmania p. 396 figs., MOSELY Proc. zool. Soc. Lond. 1936.

Polycentropus halidus sp. n. N. Mexico p. 86, MILNE Stud. N. Amer. Trichopt. 3.

Polymorphanisus taoninus sp. n. China p. 128 fig., NAVÁS Notes Ent. chin., Mus. Heude 3.

Polyplectropus manni p. 33, *fijianus* p. 34, spp. n. Fiji figs., BANKS Psyche 43.

Pseudohalesus aberrans sp. n. W. Tibet p. 464 figs., MOSELY J. Bombay n.H. Soc. 38.

Pseudopotamorites gen. n. (Limnophilidae), *peniculus* sp. n. China p. 19 figs., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.

Pseudostenophylax hirsutus p. 13, *striatus* p. 15, *obscurus* p. 16, spp. n. China figs., FORSSLUND t.c.—*P. martynovi* sp. n. Tibet p. 456 figs., MOSELY J. Bombay n.H. Soc. 38.

Psychomyia flavida see *Quissa*.

Psychomyiellodes tropicus Ulm. from *Ecnomus* p. 446, MOSELY Ann. Mag. n.H. (10) 17.

Quisilo gen. n. (Sericostomatidae) type *Silo griseus* Hag. p. 118, MILNE Stud. N. Amer. Trichopt. 3.

Quissa gen. n. (Psychomyidae) type *Psychomyia flavida* Hag. p. 89, MILNE t.c.

Rhyacophila verrula p. 90, *vetina*, *vagrita* p. 91, *viguaea*, *vemna* p. 92, *vao*, *vu* p. 93, *vobara*, *vohina*, *vaccua* p. 94, *vofixa* p. 95, *vaefes*, *vepula* p. 96, *vedra*, *vuzana* p. 97, *vuphipes*, *vujuna* p. 99, *vocala*, *valuma*, *vinura* p. 100, *vibox*, *visor* p. 101, spp. n. N. America; *carpenteri* n. n. for *nigrita* Carp. nec Bks. p. 98, MILNE t.c.—*R. pubescens* larva, pupa p. 230 fig., GEISKES Tijdschr. Ent. 79.—*R. cruciata* p. 2, *elegantissima* p. 3, *maxima* p. 4, spp. n. China figs., FORSSLUND Ark. Zool. 27A (sep. dated 1935) no. 31.—*R. atlantica* p. 93, *oreina* p. 94, spp. n. Morocco figs., NAVÁS Bol. Soc. ent. Esp. 18.—*R. atomaria* sp. n. China p. 125 fig., NAVÁS Notes Ent. chin., Mus. Heude 3.—*R. gemella* p. 21, *germana* p. 22, spp. n. Barcelona figs., NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.

Setodellina indivisa Burma p. 272, *tenuis* Rewa p. 273, *angustipennis* Bihar p. 274, spp. n. figs., MARTYNOV Rec. Ind. Mus. 38.

Setodes inlensis Burma p. 254, *unispina* p. 257, *tenuifalcata* p. 259 Chota Nagpur, *bimaculata* Bihar p. 261, *sternalis* Rewa p. 262, spp. n. figs., MARTYNOV t.c.—*S. holocerca* sp. n. Catalonia p. 20 figs., NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.—*S. acuta* p. 98, *montana* p. 99, spp. n. Morocco figs., NAVÁS Bol. Soc. ent. Esp. 18.—*S. ignitus* see *Triacnodes*.

Silo griseus see *Quisilo*.

Stenophylax comes sp. n. Barcelona p. 17 figs., NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.

Stenophylaxella gen. n. (Limnophilidae) p. 471, *kashmirensis* sp. n. Kashmir p. 472 figs., MOSELY J. Bombay n.H. Soc. 38.

Stenophylina gen. n. (Limnophilidae) *mitchelli* sp. n. Kashmir p. 13, MOSELY Entomologist 69.

Stenopsyche uncinata sp. n. China p. 127 fig., NAVÁS Notes Ent. chin., Mus. Heude 3.

Symphitoneuria exigua ♂ genitalia p. 119 figs., MOSELY Trans. R. ent. Soc. Lond. 85.

Synagapetus dubitans larva, pupa p. 231 figs., GELSKES Tijdschr. Ent. 79.

Tamasia gen. n. (Sericostomatidae) p. 399, *variegata* sp. n. Tasmania p. 401 figs., MOSELY Proc. zool. Soc. Lond. 1936.

Taschorema gen. n. (Rhyacophilidae), *asmana* sp. n. Tasmania p. 422 figs., MOSELY t.c.

Tasimia gen. n. (Sericostomatidae) p. 404, *palpata* sp. n. Tasmania p. 405 figs., MOSELY t.c.

Tasmanthrus gen. n. (Philorheithridae), *angustipennis* sp. n. Tasmania p. 414 figs., MOSELY t.c.

Tetracentron amabilis see *Hudsonema*.

Thremminae subfam. n. p. 150, MARTYNOV Annot. zool. jap. 14 1933.

Tinodes spinosus sp. n. Spain p. 19 figs., NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.

Triaenodes manni sp. n. Fiji p. 31 fig., BANKS Psyche 43.—*T. insularis* sp. n. Madagascar p. 109, NAVÁS Rev. Acad. Cienc. Zaragoza 19.—*T. alluaudi* sp. n. Morocco p. 97 fig., NAVÁS Bol. Soc. ent. Esp. 18.—*T. mephita* n. n. for *Setodes ignitus* Hag. nec Wlk. p. 59, MILNE Stud. N. Amer. Trichopt. 3.—*T. darfurica* sp. n. W. Darfur p. 434 figs., MOSELY Ann. Mag. n.H. (10) 17.—*T. indica* sp. n. S. India p. 278 figs., MARTYNOV Rec. Ind. Mus. 38.

Trichophylax gen. n. (Limnophilidae) p. 461, *rotundipennis* sp. n. Punjab p. 462 figs., MOSELY J. Bombay n.H. Soc. 38.

Trichosetodes composita sp. n. Chota Nagpur p. 263 figs., MARTYNOV Rec. Ind. Mus. 38.

Tripletides fulvescens sp. n. China p. 132 fig., NAVÁS Notes Ent. chin., Mus. Heude 3.—*T.* Kol. (= *Notanatolica* McL.), key p. 93, *obsoleta* p. 94, *magna* p. 100, *cephalotes*, *gilolensis* p. 104 ♂ genitalia; *nigripennis* Argentina, Chile p. 97, *latipennis* New Hebrides p. 98, *ceylanicum* Ceylon p. 103 spp. n. figs., MOSELY Trans. R. ent. Soc. Lond. 85.—*T.* Till. see *Tripletidina*.—*T. flaminii*, *discolor* see *Hudsonema*; *delicatula*, *flava* see *Notalina*.

Tripletidina n. n. for *Tripletides* Till. nec Kol. (type *oreolimnitis* Till.) p. 107; *nigricornis* sp. n. Tasmania p. 109 figs., MOSELY t.c.

MEGALOPTERA.

Revision of Nearctic Raphidiodea, CARPENTER Proc. Amer. Acad. Arts Sci. 71 pp. 89–157, 2 pls. 13 figs.

Aquila modesta Utah p. 119, *banksi* p. 120, *unicolor* p. 121, *directa* p. 124, *occidentalis* p. 129, *bractea* p. 130, *singularis*, *neglecta* p. 132 California, *flexa* New Mexico p. 125, spp. n. figs., CARPENTER Proc. Amer. Acad. Arts Sci. 71.

Chauliodes formosanus musculature, nervous system pp. 117–243 figs., MAKI Mem. Fac. Sci. Agric. Taihoku Univ. 16.

Inocellia sinensis sp. n. China p. 60 figs., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Protosialis afra sp. n. Madagascar p. 105 fig., NAVÁS Rev. Acad. Cienc. Zaragoza 19.

Rhaphidia oteroi sp. n. Spain p. 71 figs., NAVÁS Bol. Soc. ent. Esp. 18.

Sialis lutaria embryonal determination pp. 519–523, DU BOIS Rev. suisse Zool. 43.

NEUROPTERA.

Biology of Myrmeleonidae, ADAMS Aust. Mus. Mag. 6 pp. 22–25, 5 figs.

Neuroptera of Bulgaria, BURESCH Mitt. bulg. ent. Ges. Sofia 9 pp. 135–150.

Neuroptera of Italian Sahara, ESBEN-PETERSEN Boll. Soc. ent. ital. 68 pp. 71–74.

Neuroptera from Canary Is., ESBEN-PETERSEN Comment. biol. 6 no. 6, 5 pp. 3 figs.

A treatise on Pterygonea (part), HANDLIRSCH & BEIER in KÜKENTHAL Handb. Zool. 4 Hfte. 2 Lief. 6 pp. 1437-1466, 45 figs.

Mantispidæ of Douglas Lake Region, Michigan, HUNGERFORD Ent. News 47 pp. 69-72, 85-88, 1 pl.

Preliminary list of Neuroptera of Iowa, JAKES Proc. Iowa Acad. Sci. 42 1935 pp. 185-187, 3 figs.

Monograph of British Neuroptera, KILLINGTON Ray Soc., London Vol. 1, xix + 269 pp. 15 pls. 68 figs.

List of Neuroptera of N. Hebrides, KIMMINS Ann. Mag. n.H. (10) 18 p. 82.

Coniopterygidae of Canary Is., KLINGSTEDT Comment. biol. 6 no. 8, 4 pp., 1 pl.

Neuropteroidea of Kurile Is., I, KUWAYAMA Ins. mats. 10 pp. 107-110.

Chrysopids of N. Nippon, KUWAYAMA Zool. Mag. 48 pp. 811-820, 4 figs.

Biology of Hemerobiidae, LAIDLAW Ent. mon. Mag. 72 pp. 164-174, 1 pl. 3 graphs.

Classification of Neuroptera, LAMEERE Précis de Zool. 5 pp. 25-49, 32 figs.

Further notes on the Neuroptera of Kintyre, MORTON Ent. mon. Mag. 72 pp. 79-82.

Scottish Chrysopidae in 1935, MORTON J. Soc. Br. Ent. 1 pp. 154-155.

Neuroptera of the Belgian Congo, NAVÁS Rev. Zool. Bot. afr. 28 pp. 333-361 figs.

Neuroptera collected by the scientific mission to Omo, NAVÁS Mém. Mus. H.n. Paris 4 pp. 101-124, 19 figs.

Ahlersia palmensis sp. n. Canary Is. p. 3 figs., KLINGSTEDT Comment. biol. 6 no. 8.

Ancylopteryx elgonica sp. n. Kenya p. 117 figs., NAVÁS Mém. Mus. H.n. Paris 4.—*A. overlaeti* sp. n. Belgian Congo p. 352 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Archaeomicromus characters, *modestus* sp. n. Nyanza p. 350 fig., NAVÁS t.c.—See *Eumicromus*.

Ascalaphus ottomanus revision pp. 133-144, subsp. *expansus* var. n. *tuleskovi* Grecian Bulgaria p. 138;

subsp. n. *klapálecki* S. France p. 139 figs., TÁBORSKY Sborn. ent. odd. Nár. Mus. Praze 14.—*A. rhomboideus, ottomanus* in Greece p. 152; notes on some Czechoslovakian spp. p. 164, TÁBORSKY Acta Soc. ent. Cech. 33.

Banytus lituratus sp. n. Belgian Congo p. 338 figs., NAVÁS Rev. Zool. Bot. afr. 28.—*B. balli* sp. n. Belgian Congo p. 1 figs., ESBEN-PETERSEN Bull. Mus. H.n. Belg. 11 no. 35.

Berotha squamulata sp. n. S. Ethiopia p. 120 fig., NAVÁS Mém. Mus. H.n. Paris 4.

Bordus gen. n. (Myrmeleonidae) p. 165, *temeratus* sp. n. S.W. Africa p. 166, NAVÁS Brotéria 32.

Chrysopa escomeli further description p. 194; *oscillans* var. n. *zarauzi* Peru p. 195; *bullocki* sp. n. Chile p. 230 fig., NAVÁS Rev. chil. H.n. 37 1933.—*C. basalis* ♂ genitalia fig. p. 86; *maculithorax* sp. n. N. Hebrides p. 87 figs., KIMMINS Ann. Mag. n.H. (10) 18.—*C. kichijoi* sp. n. Japan p. 811 figs., KUWAYAMA Zool. Mag. 48.—*C. vulgaris* biology pp. 94-100 figs., FRANKENBERG Biol. Zbl. 56.—*C. prasina* var. n. *gemina* Saragossa p. 8, NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.—*C. turkanensis, incerta* p. 115, *socia* p. 116, spp. n. Kenya fig., NAVÁS Mém. Mus. H.n. Paris 4.—*C. burgeonina* sp. n. Belgian Congo p. 351 fig., NAVÁS Rev. Zool. Bot. afr. 28.—*C. bineura* p. 52, *cephalica* p. 53, *postica* p. 54, spp. n. China figs., NAVÁS Notes Ent. chinoise, Mus. Heude 3.—*C. mimeuri* p. 85, *ifranina* p. 86, *irrolella* p. 87, spp. n. Barbary figs., NAVÁS Bol. Soc. ent. Esp. 18.

Cintameva nothochrysodes sp. n. France p. 69 fig., NAVÁS t.c.—*C. decolor* p. 55, *kulingensis, chemoensis* p. 56, spp. n. China fig., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Climacia basalis sp. n. Brazil p. 196 fig., NAVÁS Rev. chil. H.n. 37 1933.

Climaciella necopina p. 102, *olsufievi* p. 104, spp. n. Madagascar figs., NAVÁS Rev. Acad. Cienc. Zaragoza 19.—*C. brunnea* var. *occidentalis* habits p. 202, HOFFMANN Bull. Brooklyn ent. Soc. 31.—*C. alberti, elisabethae* spp. n. Belgian Congo p. 360, NAVÁS Rev. Zool. Bot. afr. 28.

Congoleon gen. n. (Myrmeleonidae), *sociatus* sp. n. Belgian Congo p. 337 fig., NAVÁS t.c.

Creoleon tarsalis sp. n. Belgian Congo p. 346, NAVÁS t.c.—*C. chappuisi* sp. n. Kenya p. 112 fig., NAVÁS Mém. Mus. H.n. Paris 4.—*C. languescens* sp. n. Tibesti p. 73 fig., NAVÁS Mém. Acad. Sci. Paris (2) 62.

Cueta stichoptera further description p. 49 fig., NAVÁS Bol. Soc. ent. Esp. 18.

Dendroleon pantherinus biology p. 172, ROUBAL Acta Soc. ent. Cech. 33.

Entatoneura congensis sp. n. Belgian Congo p. 359 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Eumicromus Nakah. (= *Archaeomicromus* Krüg. & Esb.-Pet.) p. 88, KIMMINS Ann. Mag. n.H. (10) 18.

Formicaleo scolius var. n. *strigatus* p. 200; *romieuxi* sp. n. p. 201 Belgian Congo figs., ESBEN-PETERSEN Rev. suisse Zool. 43.—*F. striolatus* sp. n. Belgian Congo p. 345 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Gandulus tenuis p. 339, *iners* p. 340, *lentus* p. 341, *varius* p. 342, spp. n. Belgian Congo figs., NAVÁS t.c.

Ganussa lodwarina p. 108, *podagrica* p. 109, spp. n. Kenya figs., NAVÁS Mém. Mus. H.n. Paris 4.

Gepus curvatus further description p. 45; *tersus* sp. n. Tunisia p. 48 figs., NAVÁS Bol. Soc. ent. Esp. 18.

Grocus wismani Arabia p. 162, *uniformis* p. 163, *melanurus* p. 164 S.W. Africa, spp. n., NAVÁS Brotéria Ci. nat. 32.

Gymnocnemia kristenseni see *Navasius*.

Gymnoleon nubifer sp. n. Belgian Congo p. 345 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Haarupiella see *Nusalala*.

Hemerobius abyssinicus further description p. 348; *disparilis* sp. n. Belgian Congo p. 349, NAVÁS Rev. Zool. Bot. afr. 28.—*H. obscuratus* sp. n. Kenya p. 118 fig., NAVÁS Mém. Mus. H.n. Paris 4.—*H. exoterus*, *lacunaris* spp. n. China p. 51 fig., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Heoclisis sinensis ♂ p. 48 fig., NAVÁS t.c.

Hypsoleon gen. n. (nr. *Myrmeleon*), *chappuisinus* sp. n. Kenya p. 103 fig., NAVÁS Mém. Mus. H.n. Paris 4.

Kempynus falcatus ♂ p. 180, NAVÁS Rev. chil. H.n. 40.

Kulinga gen. n. (Hemerobiidae) p. 49, *pielina* sp. n. China p. 50 figs., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Laurhervasia kriegi sp. n. S.W. Africa p. 161, NAVÁS Brotéria, Ci. nat. 32.

Macronemurus reticulatus, *sandoanus* spp. n. Belgian Congo p. 343 figs., NAVÁS Rev. Zool. Bot. afr. 28.—*M. lacroizi*, *hedigeri* see *Nemurius*.

Mantispa interrupta biology pp. 85–87 fig., HUNGERFORD Ent. News 47.—*M. axillata* sp. n. Belgian Congo p. 354 fig., NAVÁS Rev. Zool. Bot. afr. 28.—*M. nubeculosa* sp. n. Costa Rica p. 196 fig., NAVÁS Rev. chil. H.n. 37 1933.

Mantispilla viridata further description p. 197, NAVÁS t.c.—*M. simplex*, *kibumbana* p. 355, *honestia* p. 356, *tristis* p. 357, *tristella* p. 358, spp. n. Belgian Congo figs., NAVÁS Rev. Zool. Bot. afr. 28.

Megalomus serrinus sp. n. Costa Rica p. 168, NAVÁS Brotéria 32.—*M. atomarius* sp. n. Barbary p. 84, NAVÁS Bol. Soc. ent. Esp. 18.

Mesochrysa gen. n. (Chrysopidae), *stigmata* sp. n. S.W. Africa p. 169, NAVÁS Brotéria 32.

Micromus zonarius sp. n. Madagascar p. 101 fig., NAVÁS Rev. Acad. Cienc. Zaragoza 19.—*M. canariensis* sp. n. p. 3 (with var. n. *curvatus* p. 4) Canary Is. figs., ESBEN-PETERSEN Comment. biol. 6 no. 6.

Mizoleon gen. n. (Myrmeleonidae) p. 335, *leroyanus* sp. n. Belgian Congo p. 336 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Myrmeleon quedenfeldti see *Nemurius*.

Navasius gen. n. (Myrmeleonidae) p. 202, *elegantulus* (type) p. 203, *carinifrons* p. 204 spp. n. Belgian Congo; *kristenseni* Esb.-Pet. from *Gymnocnemia* p. 206 figs.; ESBEN-PETERSEN Rev. suisse Zool. 43.

Necyla stenostigma sp. n. Belgian Congo p. 358 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Nelees princeps p. 106, *tristictus* p. 107, spp. n. Kenya figs., NAVÁS Mém. Mus. H.n. Paris 4.

Nelneja gen. n. (Myrmeleonidae) p. 104, *guttata* sp. n. Kenya p. 106 fig., NAVÁS t.c.

Nemurius gen. n. for *Macronemurus lacroixi* Nav. (type), *M. hedigeri* Nav. p. 83, *Myrmeleon quedenfeldti* Kolbe p. 82, NAVÁS Bol. Soc. ent. Esp. 18.

Nenus Nav. generic diagnosis corrected; *parallelus* sp. n. Kenya p. 119 figs., NAVÁS Mém. Mus. H.n. Paris 4.

Nina berlandi sp. n. Kenya p. 113 fig., NAVÁS t.c.

Nobra nevermanni sp. n. Costa Rica p. 167, NAVÁS Brotéria 32.

Nodalla lineata p. 121, *striatella* p. 122, spp. n. Kenya figs., NAVÁS Mém. Mus. H.n. Paris 4.

Notiobiella lombassina sp. n. Mombasa p. 347 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Nusalata Nav. (= *Haarupiella* Esb.-Pet.); *erecta* wing fig. p. 569; *navási* n. n. for *gradata* Nav. 1930 nec 1925; *championi* Guatemala, Panama p. 570, *uncata* Panama p. 572 spp. n.; *rhegmatica* genitalia fig. p. 574, list of spp. p. 576 figs., KIMMINS Ann. Mag. n.H. (10) 17.

Omoleon gen. n. (nr. *Dendroleon*), *jeanneli* sp. n. S. Ethiopia p. 110 figs., NAVÁS Mém. Mus. H.n. Paris 4.

Osmylus chrysops morphology, biology pp. 151-206 figs., DAVID Z. Morph. Oekol. Tiere 31.

Palparellus obscuripennis ♂ p. 334 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Palpares hispanus larva p. 78 fig., NAVÁS Bol. Soc. ent. Esp. 18.

Podallea gen. n. (nr. *Costachillea*) p. 122, *seriata* sp. n. S. Ethiopia p. 123 figs., NAVÁS Mém. Mus. H.n. Paris 4.

Polyphleba gen. n. (Chrysopidae) p. 88, *punctata* sp. n. Morocco p. 89 fig., NAVÁS Bol. Soc. ent. Esp. 18.

Psectra morphology of a sp. in New Forest pp. 252-257 figs., MORTON Ent. mon. Mag. 72.—*P. diptera* morphology pp. 97-101 figs., TJEDER Notul. ent. 16.

Puren further description, *modestum* described p. 179 fig., NAVÁS Rev. chil. H.n. 40.

Takulus sordidatus sp. n. Kenya p. 113 fig., NAVÁS Mém. Mus. H.n. Paris 4.

MECOPTERA.

A treatise on Pterygogenea (part), HANDLIRSCH & BEIER in KÜKENTHAL Handb. Zool. 4 Hfte. 2 Lief. 6 pp. 1437-1490, 39 figs.

Classification of Mecoptera, LAMEERE Précis de Zool. 5 pp. 5-16, 14 figs.

Bittacus pيلي ♂ p. 65 fig., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Boreus key to ♀♀ p. 61, CARPENTER Psyche 43.

Leptopanorpa revision of Malaysian spp. pp. 271-320, *filicauda* p. 294, *robusta* p. 304, *erythrura* p. 305, *inconspicua* p. 308, *sarangana* p. 311, *peterseni* p. 317 spp. n.; *pi* subsp. n. *decorata* p. 314 Java figs., LIEFTINCK Treubia 15.

Neopanorpa pielina sp. n. China p. 58 fig., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Panorpa centralis sp. n. China p. 3 figs., TJEDER Ark. Zool. 27A no. 33.—*P. flexa* p. 56, *banksi* p. 58, *acuta* p. 59 ♀♀, CARPENTER Psyche 43.—*P. nuptialis* biology p. 113, HETRICK Proc. Louisiana Acad. Sci. 2 1935.

DIPTERA.

Diptera of Belgium in Meigen's "Syst. Besch. Europ. Zweifl. Ins.," COLLART Bull. Ann. Soc. ent. Belg. 76 pp. 273-294.

Keys to genera and species of Diptera of Central Europe, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi, 259 pp. 317 figs.

Revision and ecology of the Diptera of Canary Is., FREY ET AL. Comment. biol. 6 no. 1, 237 pp. 12 pls. 4 graphs.

A treatise on Diptera, HENDEL & BEIER in KÜKENTHAL Handb. Zool. 4 Hfte 2 Lief. 8, 9, 10 pp. 1729-1980, 304 figs.

Connection between geographical distribution and systematic arrangement in Diptera, HENNIG Zool. Anz. 116 pp. 161-175, 3 figs.

Diptera Brachycera of Pomerania, KARL Stettin. ent. Ztg. **97** pp. 108-136, 318-330.

Classification of Diptera, LAMEERE Précis de Zool. **5** pp. 71-160, 110 figs.

Some Nematocera from S. Kuriles, OKADA Ins. mats. **10** pp. 99-103, 1 fig.

Some Diptera of Mariupolian region, Ukraine, PARAMONOV Trav. Mus. zool. Kiev no. **16** pp. 113-123, 6 figs.

Notes on Diptera of Lyons district, PARENT Bull. Soc. linn. Lyon (n. s.) **5** pp. 94-95.

Diptera of Azores, SÉGUY Ann. Soc. ent. Fr. **105** pp. 11-26, 2 figs.

CECIDOMYIIDAE (ITONIDIDAE).

Cecidomyiids of Kamennaja Steppe, DOMBROVSKAYA Trav. Inst. zool. Acad. Sci. U.R.S.S. **3** pp. 409-428, 5 figs.

Cecidomyiids from Czechoslovakia, VIMMER Sborn. ent. odd. Nár. Mus. Praze **14** pp. 167-178, 16 figs.

Asphondylia xanthii sp. n. Texas p. 231, FELT Ent. News **47**.

Asteromyia phragmites sp. n. U.S.A. p. 9, FELT J. N.Y. ent. Soc. **44**.

Bainidiplosis gen. n. p. 427, *championi* sp. n. India p. 428 figs., MANI Rec. Ind. Mus. **37** 1935.

Camptoza gen. n. for *Joannisia kiefferiana* Enderl. and *palustris* Kieff. p. 62 fig., ENDERLEIN Tierwelt Mitteleur. **6** iii Teil, 2 Lief., xvi.

Cecidomyia eragrostisae sp. n. India p. 196, MANI Rec. Ind. Mus. **38**.

Colpodia dhakae sp. n. India p. 430 fig., MANI op. cit. **37** 1935.

Contarinia venturii sp. n. Italy p. 146, VIMMER in VENTURI Boll. Ist. Ent. Univ. Bologna **8**; (*bayeri* in key) Italy p. 28, VIMMER Acta Soc. ent. Csl. **33**.

Dasyneura armoraciae sp. n. Czechoslovakia, Rumania, p. 134, VIMMER t.c.—*D. lini* sp. n. India p. 273, BARNES Ann. Mag. n.H. (10) **17**.

Feltomyia gen. n. p. 12, *polymera* sp. n. Panama p. 14, ALEXANDER Bull. Brooklyn ent. Soc. **31**.

Gongromastix gen. n. (nr. *Lestremia*) *andorrana* sp. n. Pyrenees p. 60 figs., ENDERLEIN Tierwelt Mitteleur. **6** iii Teil, 2 Lief., xvi.

Haplodiplosis equestris and galls pp. 3-6, NOURY Marcellia **29**.

Horidiplosis mathuri sp. n. India p. 440 fig., MANI Rec. Ind. Mus. **37** 1935.

Hyperdiplosis triticina sp. n. Kenya p. 275, BARNES Ann. Mag. n. H. (10) **17**.

Itonida pinifoliae sp. n. U.S.A. p. 7, FELT J. N.Y. ent. Soc. **44**.—*I. paspalumi* sp. n. India p. 196, MANI Rec. Ind. Mus. **38**.

Joannisia kiefferiana, *palustris* see *Camptoza*.

Lestremia ugandae sp. n. Uganda p. 279, BARNES Ann. Mag. n. H. (10) **17**.

Meinertomyia aequipalpis, *inaequipalpis* spp. n. India p. 426 fig., MANI Rec. Ind. Mus. **37** 1935.

Misopatha tamaricis sp. n. India p. 432 fig., MANI t.c.

Mycodiplosis radialis sp. n. Alabama p. 232, FELT Ent. News **47**.

Neolasioptera cephalandrae ♂ p. 193, MANI Rec. Ind. Mus. **38**.

Odinadiplosis gen. n. p. 435, *odinae* sp. n. India p. 436 figs., MANI op. cit. **37** 1935.

Plocimas gen. n. (nr. *Anarete*), *hirsutus* sp. n. Germany p. 59, ENDERLEIN Tierwelt Mitteleur. **6** iii Teil, 2 Lief., xvi.

Schizomyia cheriani sp. n. India p. 194, MANI Rec. Ind. Mus. **38**.

Stephodiplosis nothofagi sp. n. New Zealand p. 276, BARNES Ann. Mag. n.H. (10) **17**.

Stictodiplosis moringae sp. n. India p. 195, MANI Rec. Ind. Mus. **38**.

MYCETOPHILIDAE (FUNGIVORIDAE)

including

LYCORIDAE, SCIARIDAE.

Sciarids of E. Baltic, LAOKSCHEWITZ KorrespBl. naturf. Ver. Riga **61** 1934 pp. 151-155.

Mycetophilidae of N. and S. Carolina, SHAW & TOWNES Bull. Brooklyn ent. Soc. **31** pp. 204-208.

Allodia variabilis sp. n. Canary Is. p. 12 fig., STORÅ Comment. biol. **6** no. 1.

Bolitophila oclusa see *Chlopiisa*.

Bradysia soudeki sp. n. Czechoslovakia p. 162, KRATOCHVÍŘ Sborn. ent. odd. Nár. Mus. Praha 14.

Clipisa gen. n. for *Bolitophila oclusa* Edw. p. 11, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Diadocidia ferruginosa f. n. thoracica Japan p. 22 fig., OKADA Ins. mats. 11.

Dynatosoma malaisei sp. n. Kamchatka p. 15 fig., EDWARDS Ark. Zool. 28A 1935 no. 7.

Leia fasciata sp. n. Canary Is. p. 10 fig., STORÅ Comment. biol. 6 no. 1.

Mycetophila santosiana sp. n. Canary Is. p. 13 fig., STORÅ t.c.

Neosciara carbonaria f. n. asiatica China p. 1, LENGERSDORF Ark. Zool. 27B (sep. dated 1933) no. 5.—*N. impar* p. 208, *sibirica* p. 209, spp. n. Siberia figs., LENGERSDORF Decheniana 91 1935.—*N. longiseta*, *luteofusca* p. 106, *brunnea*, *latiforceps* p. 107, *curviforceps*, *multispina* p. 108, *bistrispina*, *dentata* p. 109, *longicornis*, *minutula* p. 110, *dentiforceps*, *longiforceps* p. 111, spp. n. Crimea figs., BUKOWSKI & LENGERSDORF Konowia 15.—*N. cochleata* new to Germany p. 191, LENGERSDORF Beitr. Biol. Glatzer Schneeberges, Breslau 2.

Schmitzia soudeki see *Soudekia monocalarata*.

Sciara insularis p. 14, *nanella* p. 15, *silvestris*, *dentifera* p. 16 spp. n. Canary Is. figs., FREY Comment. biol. 6 no. 1.

Soudekia gen. n. for *Schmitzia monocalarata* n. n. for *soudeki* Vimmer p. 23, VIMMER in SOUDEK Bull. Ec. sup. Agron. Brunn (D) 8 1928.

Symmerus antennalis sp. n. Japan p. 58 fig., OKADA Ins. mats. 11.

Vimmeria gen. n., *subdetrita* sp. n. (with varr. n. *monospina* p. 160, *bispina*, *trispina* p. 161) Czechoslovakia p. 158 figs., KRATOCHVÍŘ Sborn. ent. odd. Nár. Mus. Praha 14.

BIBIONIDAE, SCATOPSIDAE.

Bibio alexanderi p. 1, *painteri*, *atripilosia* p. 2, *monstri* p. 3, *pingreensis*, *macateei* p. 4, *similis*, *curtipes* p. 5, *kansensis* p. 6, spp. n. U.S.A., JAMES Amer. Mus. Nov. no. 832.

Dicrostolis gen. n. for *Scatopse falcinervis* Duda p. 55, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Dilophrus hummeli sp. n. China p. 2, EDWARDS Ark. Zool. 27A (sep. dated 1935) no. 30.

Orthanapausis gen. n. for *Scatopse inermis* Ruthe p. 55, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Rhaeboza gen. n. for *Scatopse fuscipes* Meig. p. 55 fig., ENDERLEIN t.c.

Rhegmoclemina gen. n. for *Scatopse vaginata* Lundstr. p. 55, ENDERLEIN t.c.

Rhexoza gen. n., *zacheri* sp. n. Central Europe p. 55 fig., ENDERLEIN t.c.

Scatopse freyi sp. n. Canary Is. p. 18 fig., DUDA Comment. biol. 6 no. 1.—*S. inermis* see *Orthanapausis*; *falcinervis* see *Dicrostolis*; *fuscipes* see *Rhaeboza*; *vaginata* see *Rhegmoclemina*.

SIMULIIDAE.

Uganda Simuliidae, GIBBINS Trans. R. ent. Soc. Lond. 85 pp. 217–242, 24 figs.

Simuliidae of E. Canada, TWINN Canad. J. Res. 14 pp. 97–130, 131–150, 15 figs.

Acropogon punctativentris, *nigrifemur* Chile p. 118, *rufidorsum* Costa Rica p. 119, spp. n., ENDERLEIN S.B. Ges. nat. Fr. Berl. 1936.

Chelocnetha gen. n., *biroi* sp. n. Australia p. 117, ENDERLEIN t.c.

Cryptectemnia gen. n., *laticax* sp. n. Rumania p. 114, ENDERLEIN t.c.

Metomphalus latipollex sp. n. Transvaal p. 127, ENDERLEIN t.c.

Miodasia gen. n., *opalinipennis* sp. n. Central Europe p. 39, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Odagmia tenuifrons sp. n. Mexico p. 130, ENDERLEIN S.B. Ges. nat. Fr. Berl. 1936.

Pliodasina gen. n., *guttata* sp. n. Paraguay p. 124, ENDERLEIN t.c.

Psaroniocompsa mendozana Argentina p. 123, *cuneata* Paraguay p. 124, spp. n., ENDERLEIN t.c.

Pselaphochir gen. n. p. 120, *oculata* sp. n. New Guinea p. 121, ENDERLEIN t.c.

Psilozia gen. n. p. 113, *groenlandica* sp. n. W. Greenland p. 114, ENDERLEIN t.c.

Pternaspatha albilineata p. 115, *prodeazargenteus* p. 116 spp. n. Peru, ENDERLEIN t.c.

Schoenbaueria arctica Norway p. 119, *aldrichiana* Ithaca p. 120, spp. n., ENDERLEIN t.c.

Simulium multidentatum p. 106, *gibsoni* p. 108, *decemarticulatum* p. 110, *browni* p. 113, *quebecense* p. 117, *rivuli* p. 120, *baffinense* p. 121, *lascivum* p. 127, *fibrinflatum* p. 141, *nigroparvum* p. 142, *ottawaense* p. 146, *corbis* p. 147, spp. n. Canada figs., TWINN Canad. J. Res. 14.—*S. gerstaeckeri* sp. n. Austria p. 41, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.—*S. duodecimum* p. 223, *tentaculum* p. 228, *brachium* p. 230, *simplex* p. 232, *rotundum* p. 241, spp. n. Uganda figs., GIBBINS Trans. R. ent. Soc. Lond. 85.—*S. impukane* p. 208, *tisiphone* p. 210, *pseudomedusaeformis* p. 212, spp. n. S. Africa figs., DE MEILLON Pub. S. Afr. Inst. med. Res. no. 38.—*S. Congo* spp. pp. 133–150, *bequaerti* p. 133, *hissetteum* p. 138 spp. n. Congo; *violaceum* Pom. a sp. p. 144 figs., GIBBINS Ann. trop. Med. Parasit. 30.

Thyrsopelma argentata Peru p. 125, *longiunguis* Formosa p. 126, spp. n., ENDERLEIN S.B. Ges. nat. Fr. Berl. 1936.

Trichodagmia haarupiana Argentina p. 127, *latidigitus* Colombia p. 129, spp. n., ENDERLEIN t.c.

BLEPHAROCERIDAE.

Cardiocreps gen. n. for *Liponeura brevirostris* Loew p. 8, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief. xvi.

Dioptopsis gen. n. for *Philorus djordjevici* Komarek (type) p. 43, ENDERLEIN Mitt. dtsh. ent. Ges. 7.

Liponeura vogesiaca in Pyrenees p. 91; *decipiens* Bez. (= *belgica* Bisch.); *bischoffi* Edw. (= *decipiens* Bisch. nec Bez.) p. 92, EDWARDS Proc. R. ent. Soc. Lond. 10.—*L. brevirostris* see *Cardiocreps*.

Pelmia gen. n. for *Philorus yosemite* Ost.-Sack. (type) p. 42, ENDERLEIN Mitt. dtsh. ent. Ges. 7.

Philorus djordjevici see *Dioptopsis*; *yosemite* see *Pelmia*.

CERATOPOGONIDAE.

S. African Ceratopogonidae, DE MEILLON Pub. S. Afr. Inst. med. Res. no. 38 pp. 136–207, 28 pls.

Ceratopogonidae of Hungary, SEBESS v. ZILAH Acta Univ. Szeged Biol. 4 pp. 39–45, 3 figs.

List of Ceratopogonidae of L. Balaton, SEBESS v. ZILAH Arb. ung. biol. Forsch.-Inst. 8 pp. 196–206, 4 figs.

Alluaudomyia maculosa p. 172, *senta* p. 175, spp. n. S. Africa figs., DE MEILLON Pub. S. Afr. Inst. med. Res. no. 38.

Atrichopogon montium sp. n. Canary Is. p. 34 fig., STORÅ Comment. biol. 6 no. 1.—*A. flaveolus* sp. n. L. Balaton p. 201 figs., SEBESS v. ZILAH Arb. ung. biol. Forsch.-Inst. 8.—*A. helion* sp. n. Zululand p. 177 fig., DE MEILLON Pub. S. Afr. Inst. med. Res. no. 38.

Bezzia vacuinae p. 180, *sibayae* p. 183, spp. n. S. Africa figs., DE MEILLON t.c.—*B. radialis* sp. n. Belgium p. 323 fig., GOETGHEBUER Bull. Ann. Soc. ent. Belg. 76.

Ceratopogon palustris see *Cryptoscena*.

Cryptoscena gen. n. for *Ceratopogon palustris* Meig. p. 51, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief. xvi.

Culicoides dewulfi sp. n. Belgium p. 320 fig., GOETGHEBUER Bull. Ann. Soc. ent. Belg. 76.—*C. peliliouensis* sp. n. Palau Is. p. 55 (TOKUNAGA), biology pp. 56–57 (ESAKI) figs., TOKUNAGA & ESAKI Mushi 9.—*C. pictipennis* var. n. *maculatus* L. Balaton p. 199, SEBESS v. ZILAH Arb. ung. biol. Forsch.-Inst. 8.—*C. zuluensis* p. 145, *alexis* p. 147, *ravus*, *meeserellus* p. 151, *hysipyles* p. 156, spp. n. S. Africa figs., DE MEILLON Pub. S. Afr. Inst. med. Res. no. 38.

Dasyhelea joycei p. 193, *larundae* p. 195, *tugelae* p. 197, *thompsoni* p. 202, spp. n. S. Africa figs., DE MEILLON t.c.—*D. minima* p. 41, *sziladyi* p. 42 spp. n.; *fascigera* var. n. *bifida* p. 44 Hungary figs., SEBESS v. ZILAH Acta Univ. Szeged Biol. 4.—*D. flavoscutellata* var. n. *canariensis* Canary Is. p. 36 fig., STORÅ Comment. biol. 6 no. 1.—*D. nclusa* see *Dicryptoscena*.

Dicryptoscena **gen. n.** for *Dasyhelea inclusa* Kieff. p. 51 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Forcipomyia diversipes **sp. n.** Belgium p. 319 fig., GOETGHEBUER Bull. Ann. Soc. ent. Belg. 76.—*F. eques* ♂ ♀ pp. 85–88 figs., TJEDER Notul. ent. 16.—*F. freyi* **sp. n.** Canary Is. p. 32 fig., STORÅ Comment. biol. 6 no. 1.—*F. intrepida* Peru p. 228, *tipulivora* Dutch N. Guinea p. 230, **spp. n.** figs., MACFIE Proc. R. ent. Soc. Lond. (B) 5.—*F. statirae* p. 165, *hesiones* p. 167, *iphias* p. 169, **spp. n.** S. Africa figs., DE MEILLON Pub. S. Afr. Inst. med. Res. no 38.

Jenkinshalea polyxenae **sp. n.** Zululand p. 189 fig., DE MEILLON t.c.

Kempia appendiculata see *Psilokempia*.

Lasiohelea natalia **sp. n.** Zululand p. 158 figs., DE MEILLON Pub. S. Afr. Inst. med. Res. no 38.

Leptoconops dixi **sp. n.** S. Africa p. 141, fig., DE MEILLON t.c.

Macroptilum meeseri **sp. n.** Zululand p. 204 fig., DE MEILLON t.c.

Palpomyia cinnae **sp. n.** S. Africa p. 185 fig., DE MEILLON t.c.—*P. calderana* **sp. n.** Canary Is. p. 37 figs., STORÅ Comment. biol. 6 no. 1.

Psilokempia **gen. n.** for *Kempia appendiculata* Goetgh. p. 49 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Pterobosca paludis England p. 63, *aërobates* Assam p. 64, *latipes* p. 227, *fidens* p. 228 China **spp. n.** figs., MACFIE Proc. R. ent. Soc. Lond. (B) 5.—*P. odonatiphila* mouth-parts pp. 1–3 figs., MAYER Arb. morph. taxon. Ent. Berl. 3.

Serromyia bispinosa **sp. n.** Belgium p. 321, key p. 322 figs., GOETGHEBUER Bull. Ann. Soc. ent. Belg. 76.

Sphaeromyias griseus **sp. n.** Hungary p. 44 fig., SEBESS v. ZILAH Acta Univ. Szeged Biol. 4.

CHIRONOMIDAE.

Catalogue of Palaearctic Chironomidae, GOETGHEBUER in LINDNER Flieg. pal. Reg. 13b 81 pp. 6 pls. 100 figs.

Chironomidae of flood basins of left bank of R. Kama at Okhansk, OBOMOV Bull. Inst. Rech. biol. Perm 10 pp. 239–249.

Chironomid studies, II, PAGAST Stettin. ent. Ztg. 97 pp. 270–278.

Systematic list of Chironomidae of Garmisch, THIENEMANN Arch. Hydrobiol. 30 pp. 167–262, 6 pls. 20 figs.

Diamesinae from Japan, TOKUNAGA Philipp. J. Sci. 59 pp. 525–552, 4 pls. 4 figs.

Chironomidae of High Tatra, ZAVŘEL Verh. int. Ver. Limnologie 7 1935 pp. 439–448.

Ablabesmyia puncticollis **sp. n.** Bavaria p. 178 fig., GOETGHEBUER Arch. Hydrobiol. 30.—*A. eggeri* p. 32, *miki* p. 34, **spp. n.** Austria, GOETGHEBUER in LINDNER Flieg. Pal. Reg. 13b.

Akiewferiella **gen. n.** for *Trichocladius coeruleus* Kieff. p. 198 fig., THIENEMANN Arch. Hydrobiol. 30.

Cardiocladius freyi **sp. n.** Canary Is. p. 23 fig., STORÅ Comment. biol. 6 no. 1.

Chironomus hypoboreus morphology, biology pp. 209–221 figs., REMPEL J. biol. Board Canada 2.—*C. bitensis* morphology p. 1; *nelumbus* **sp. n.** Japan p. 4 figs., TOKUNAGA & KURODA Trans. Kansai ent. Soc. no. 6 1935.—*C. enteromorphae* p. 71 (with **var. n.** *pacificus*), *kiensis* p. 76, *setonis* p. 78, *basitibialis* p. 81, *octoguttatus* p. 83, **spp. n.** Japan figs., TOKUNAGA Philipp. J. Sci. 60.—*C. tendipediformis* morphology p. 270, PAGAST Stettin. ent. Ztg. 97.—*C. chambiensis* p. 464, *schoutedeni*, *regalis* p. 465, *collarti* p. 466, *ugandae* p. 468, *acutus* p. 470, *bellus* p. 471, *bipustulatus* p. 472, *bredoi*, *caligans* p. 473, *congolensis* p. 474, *duboisii*, *henrardi* p. 475, *reginae*, *schwetzi* p. 476, *seydeli* p. 477, *surdellus*, *vaneyeni* p. 478, *vitshumbiensis* p. 479, **spp. n.** Trop. Africa figs., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Collartiella **gen. n.** p. 457, *hirsuta* **sp. n.** Belgian Congo p. 458 fig., GOETGHEBUER t.c.

Corynoneura key to Japanese **spp. p.** 33, *nipponica* p. 38, *flaviscutella* p. 39, *tenuistyla* p. 44, *vitalis* p. 45, *yoshimurai* p. 46, *cuspidis* p. 48, *longipennis* p. 50, **spp. n.** Japan figs., TOKUNAGA Tenthredo 1.

Cricotopus key to Japanese spp. p. 11, *bifascia* p. 20, *metatibialis* p. 21, *polyannulatus* p. 23, *yoshimurai* p. 25, *bimaculatus* p. 27, *flavibasalis* p. 28, *montanus* p. 29, *flavipunctatus* p. 31, spp. n. Japan figs., TOKUNAGA t.c.—*C. edwardsi* sp. n. Canary Is. p. 22 fig., STORÅ Comment. biol. 6 no. 1.

Cryptochironomus sp. morphology p. 273, PAGAST Stettin. ent. Ztg. 97.

Diamesa nigatana p. 537, *alpina* p. 539, *japonica* p. 542, *astyla* p. 545, *tsutsuii* p. 546, *plumicornis* p. 548, spp. n. Japan figs., TOKUNAGA Philipp. J. Sci. 59.

Dyscamptocladius keys pp. 49–54, THIENEMANN Mitt. dtsch. ent. Ges. 7.

Endochironomus ituriensis sp. n. Belgian Congo p. 461 fig., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Eukiefferiella fusicornis sp. n. Alsace Lorraine p. 172 fig., GOETGHEBUER Rev. franç. Ent. 3.—*E. atlantica* var. n. *grancanariensis* Canary Is. p. 27 fig., STORÅ Comment. biol. 6 no. 1.—*E.* morphology pp. 43–50, *discoloripes* p. 51, *graciliella* (GOETGHEBUER) p. 56, *cyanea* p. 61, spp. n. Germany figs., THIENEMANN Stettin. ent. Ztg. 97.

Glyptotendipes disparilis sp. n. Belgian Congo p. 462 fig., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Henrardia gen. n., *quadrspinosa* sp. n. Belgian Congo p. 455 fig., GOETGHEBUER t.c.

Hulstaertiella gen. n., *caloptera* sp. n. Belgian Congo p. 456 fig., GOETGHEBUER t.c.

Kribiomimus longiventris sp. n. Belgian Congo p. 452, figs., GOETGHEBUER t.c.

Metriocnemus dewulfi sp. n. Belgian Congo p. 491 fig., GOETGHEBUER t.c.

Orthocladius commutatus sp. n. Canary Is. p. 26 fig., STORÅ Comment. biol. 6 no. 1.—*O. bathophilus* see *Parakiefferiella*.

Parakiefferiella gen. n. for *Spaniotoma coronata* Edw. (type) p. 195 and *Orthocladius bathophilus* Kief. p. 196 figs., THIENEMANN Arch. Hydrobiol. 30.

Paratendipes violaceus sp. n. Belgian Congo p. 458 fig., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Pentaneura monilis hypopygium fig. p. 152, HINCKS J. Soc. Br. Ent. 1.

Polypedilum dickebuschense sp. n. Belgium p. 325 fig., GOETGHEBUER Bull. Ann. Soc. ent. Belg. 76.—*P. aequatoris*, *album* p. 482, *bicinctum*, *deletum* p. 483, *dewulfi*, *duodecimpustulatum* p. 484, *fenestratum*, *griseovittatum* p. 485, *incoloripenne* p. 486, *kibatiense*, *laterale* p. 487, *obsoletum*, *quatuordecimpunctatum* p. 488, *quatuordecimpunctatum* p. 489, spp. n. Trop. Africa figs., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Procladius bifasciatus, *cinereus* Belgium, *zernyi* Austria p. 13 spp. n.; *lundströmi* n. n. for *barbitarsis* (Lund.) Kieff. nec Zett. (Edw.) p. 11, GOETGHEBUER Flieg. Pal. Reg. 13b.

Prodiamesa sp. morphology figs., MORETTI Boll. Soc. ent. ital. 67 1935.—*P. brevitarsis* sp. n. Japan p. 528 fig., TOKUNAGA Philipp. J. Sci. 59.

Smittia maculipennis sp. n. Belgian Congo p. 492 fig., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Spaniotoma littoralis p. 303, *nemalionae* p. 305, *bifurcata* p. 310, *endocladiae* p. 312, *yukawana* p. 314, spp. n. Japan figs., TOKUNAGA Philipp. J. Sci. 60.—*S. coronata* see *Parakiefferiella*.

Stenochironomus micronyx sp. n. Belgian Congo p. 460 fig., GOETGHEBUER Rev. Zool. Bot. afr. 28.

Syndiamesa lanceolata p. 530, *takatensis* p. 531, *montana* p. 532, *kashimae* p. 534, *nivis* p. 535, spp. n. Japan figs., TOKUNAGA Philipp. J. Sci. 59.

Tanytarsus sinuatus sp. n. Bavaria p. 185 fig., GOETGHEBUER Arch. Hydrobiol. 30.—*T. atrocinctus* sp. n. Belgian Congo p. 490 fig., GOETGHEBUER Rev. Zool. Bot. afr. 28.—*T. scirpeti* sp. n. Belgium p. 324 fig., GOETGHEBUER Bull. Ann. Soc. ent. Belg. 76.—*T.* key to Arctic larvae p. 39; *longisetosa* p. 40, *antennata* p. 42, *karica* p. 43, *petschorica* p. 44, *atrolabrata* p. 45, *diversidens* p. 46, *pedicillifera* p. 47, *variegata* p. 48 larvae spp. n. Arctic Russia figs., BIRULA Int. Rev. Hydrobiol. 33.

Trichocladius holosericeus, *gouini* spp. n. Alsace Lorraine p. 167 fig., GOETGHEBUER in GOUIN Rev. franç. Ent. 3.—*T. coerulescens* see *Akiefferiella*.

CULICIDAE.

Notes on mosquitoes from Juquia, Brazil, AYROZA GALVÃO & LANE Rev. Biol. Hyg., S. Paulo 6 1935 pp. 113-120, 8 figs.

List of Culicidae of Charkow, BIRYUKOV Trav. Soc. Nat. Charkow 53 1930 pp. 13-17.

Some mosquitos from Manchuria, CHIN Peking n.H. Bull. 11 pp. 23-25.

Morphology of exotic Chaoborinae, ECKSTEIN Arch. Hydrobiol. 14 pp. 484-504, 15 figs.

Culicidae of Fernando Po, GIL COLLADO Eos 11 pp. 311-329, 8 figs.

Mosquitos of the Ethiopian region, larval bionomics and taxonomy of Culicine larvae, HOPKINS Mosq. Ethiop. Reg. 1936 250 pp. 158 figs.

Culicids of Siberia, KISSILEVA Mag. Parasit. Moscow 5 pp. 220-240.

Mosquitos of Taimyr Pen., KISELEVA Trav. Inst. sci. Biol. Tomsk 2 pp. 132-135.

Culicids of Rifaina, Brazil, LANE Rev. Biol. Hig. 6 1935 pp. 74-78, 1 fig.

Culicidae of Matto Grosso, LANE Rev. Mus. paul. 20 pp. 173-206, 4 pls.

Notes on the morphology of Culicine larvae in Hangchow, LI & WU Yearb. Bur. Ent. Hangchow 1934 1935 pp. 95-120, 18 pls.

Larvae of mosquitos of Russia and neighbouring countries, MONTSCHADSKY Tabl. analyt. Faune U.R.S.S. 24 383 pp. 162 figs.

Classification of Formosan Anophelines with key, MORISHITA Trans. n.H. Soc. Formosa 26 pp. 347-355.

Critical notes [in Japanese] on Formosan Anophelines, MORISHITA Zool. Mag. 48 pp. 573-579.

Methods of studying blood-sucking mosquitos, PAVLOVSKI Moscow Zool. Acad. Sci. U.R.S.S. no. 14 (Instruct. Collect.) 1935 176 pp. 77 figs.

Culicidae from Yucatan, PEARSE Pub. Carnegie Instn. Wash. 457 pp. 51, 53.

Mosquitos of Martinique, SENEVET Arch. Inst. Pasteur Algérie 14 pp. 123-134, 5 figs.

Culicids of Algeria, SENEVET Arch. Inst. Pasteur Algérie 14 pp. 432-448, 3 figs.

Aedes hopkinsi p. 49, *mutilis*, *insolens*, *leptolabis* (also Belgian Congo) p. 51 Uganda, *mixtus* Gold Coast, S. Rhodesia p. 49, *microstictus* Transvaal, *bedfordi* Zululand, *longiseta* Belgian Congo p. 50, *pachyurus*, *subdentatus* S. Africa p. 51, *monotrichus* Nigeria, *pogonurus* Belgian Congo, *bolensis* Gold Coast, *contiguus* S. Rhodesia, Transvaal, *taylori* Nigeria, Tanganyika spp. n.; *palpalis* varr. n. *carteri*, *maculicosta* Nigeria p. 52; *deboeri* var. n. *demeilloni* Zululand p. 55, EDWARDS Proc. R. ent. Soc. Lond. (B) 5.—*A. dominicii* male, larva; (*Soperia* subgen. n. p. 71) *pseudodominicii* sp. n. Colombia p. 75 figs., KOMP Proc. ent. Soc. Wash. 38.—*A. vittatus* nymph p. 442 fig., SENEVET Arch. Inst. Pasteur Algérie 14.—*A. sticticus* larva pupa pp. 199-202 figs., ROMAN Bull. Soc. ent. Fr. 41.—*A. boneti* p. 323, *trinidad* p. 326, spp. n. Fernando Po figs., GIL COLLADO Eos 11.

Anopheles spp. key to and notes on 4th instar larvae of Kwangtung Prov. pp. 1-10, 265-274, figs., WU Lingnan Sci. J. 15; eggs of some Chinese spp. pp. 261-273 figs., WU Ent. & Phytopath 4; key to adult Palaearctic African spp. pp. 148-150, key to adult Asiatic spp. pp. 279-282 fig., TREILLARD Bull. Soc. Path. exot. 29; notes on eggs in Algeria pp. 109-118 figs., SERGENT Arch. Inst. Pasteur Algérie 14; distribution and biology Crete I. 44 pp., PAPADAKIS Thesis, Univ. Athens; epipharynx of larvae pp. 352-362 figs., SHIPITZINA Med. Parasit. Dis. 5; key to Philippine adults pp. 15-64 figs., RUSSELL & BAISAS Philipp. J. Sci. 59; maxillary indices pp. 631-636 figs., GASCHEN Bull. Soc. méd.-chir. Indochine 14; pupal characters of *Myzorchynchus* and *Neocellia* groups pp. 291-339 figs., BAISAS Mon. Bull. Bur. Hlth. Philipp. I. 15 1935.—*A. maculipennis* European rr. pp. 207-216, TAGLIABUE & PERILLI Riv. Malariol. 15; pp. 427-447 map, ZOTTA Arch. roum. Path. exp. Microbiol. 8 1935; pp. 157-163, WEYER Jh. Ver. vaterl. Naturk. 91 1935; pp. 629-630, JATZENKO & TISHTCHENKO Med. Parasit. parasit. Dis. 5; pp. 942-949, POKROVSKIĭ & MURAMOVA Med. Parasit.

parasit. Dis. 5; pp. 101-103, GIL COLLADO An. Asoc. esp. Progr. Cienc. 1 1934; pp. 109-117 maps, DIEMER & VAN THIEL Proc. Acad. Sci. Amst. 39; pp. 48-57, HACKETT Riv. Malariol. 14 1935 Suppl.; wing nervures pp. 518-521 figs., BALI Bull. Soc. Path. exot. 29; rr. *occidentalis*, *aztecus* discussed pp. 403-411, HOFFMANN Rev. Parasit. Clin. Lab. La Habana 2; r. n. *cam-bournaci* Portugal p. 730 figs., ROUBAUD & TREILLARD Bull. Soc. Path. exot. 29.—*A. cristatus* sp. n. p. 80; *leucosphyrus* var. n. *riparis* p. 83 Mindanao figs., KING & BAISAS Proc. ent. Soc. Wash. 38.—*A. annularis* Wulp (= *fuliginosus*); *candidiensis* Koidz. a var. of *jeyporiensis* James; *lindesaii* Giles (= *pleccau* Koidz.) pp. 888-897, MORISHITA J. med. Ass. Formosa 35.—*A. gilesi* ♂ p. 197, LANE Rev. Mus. paul. 20.—*A. listeri* systematic position p. 129; *coustani* and var. *tenebrosus* eggs p. 131; *gambiae*, *funestus* distribution in Natal p. 133 figs., DE MEILLON Pub. S. Afr. Inst. med. Res. no. 38.—*A. leucosphyrus* group pupal and adult characters pp. 65-84, var. n. *balabacensis* Philippines p. 65; *gateri* sp. n. Palawan p. 78 figs., BAISAS Philipp. J. Sci. 59.—*A. elutus* egg pp. 514-516 figs., AKALIN Arch. Schiffs- u. Tropenhyg. 40.—*A. marshalli* and var. *pitchfordi* adult, larva, pupa pp. 45-55 figs., DE MEILLON, EVANS & LEESON Ann. trop. Med. Parasit. 30.—*A. costalis* melanica inland race p. 275 fig., GIBBINS t.c.—*A. funestus* var. *rivulorum* discussed, morphology pp. 511-518 figs., EVANS & GARNHAM t.c.—*A. harperi* p. 533, *macmahoni* p. 538, spp. n. Kenya figs., EVANS t.c.—*A. habibi* sp. n. Baluchistan p. 68, bionomics p. 71 figs., MULLIGAN & PURI Rec. Malar. Surv. Ind. 6.—*A. gigas* var. *baileyi* larva p. 27, RICE, DATTA & BELL t.c.—*A. sinensis*, *sineroides*, *koreicus*, *edwardsi* morphology, biology Chosen pp. 191-210 figs., YAMADA Keijo J. Med. 7.—*A. subpictus* eggs from salt and fresh water breeding places pp. 394-422 figs., WALCH & WALCHSÖRGDRAGER Geneesk. Tijdschr. 76.—*A. sacharovi*, *maculipennis* head pattern 8 pp., PAPADAKIS Prakt. Akad. Athen. 10 1935 pp. 457-462; Tatr.-Athens (Med. Athens) no. 88 1936 8 pp.—*A. quadrimaculatus* rr. U.S.A. pp. 303-309, HINMAN Amer. J. trop. Med. 16.—*A. boliviensis* male, larva p. 415 figs., KOMP & OSORNO M. Ann. ent. Soc.

Amer. 29.—*A. floreti* sp. n. Fernando Po p. 313, 318 figs., GIL COLLADO Eos 11.—*A. chiriquiensis* Panama p. 156, *anomalphyllus* Panama, Costa Rica p. 163, spp. n. figs., KOMP Proc. ent. Soc. Wash. 38.

Culex vexillifer p. 320, *quadrifolius* p. 322, *flabellifer* p. 323, *browni* p. 326, *elephas* p. 328, *paracrybda* p. 330 Canal Zone, *limacifer* Costa Rica p. 325, *lucifugus* p. 331, *amitis* p. 333 Venezuela, spp. n. figs., KOMP t.c.—*C. rooti* larva, adult p. 266 figs., ROZEBOOM t.c.—*C. fatigans*, *pipiens* var. *pallens* comparative notes on larval characters pp. 613-626 figs. CHANG & CHEN Lingnan Sci. J. 15.—*C. abnormalis* sp. n. Matto Grosso p. 189 fig., LANE Rev. Mus. paul. 20.—*C. pipiens* autogenous and anaautogenous rr. p. 4, JOBLING Trans. R. Soc. trop. Med. Hyg. 30.—*C. madininiensis* sp. n. Martinique p. 129; *hortensis* nymph re-described p. 438 figs., SENEVET Arch. Inst. Pasteur Algérie 14.

Eretmapodites intermedius Belgian Congo, Uganda, Tanganyika, *forcipulatus* Gold Coast, Liberia, *argyrurus* Nigeria spp. n. p. 53, EDWARDS Proc. R. ent. Soc. Lond. (B) 5.

Ficalbia femorata Uganda, *flavopicta* Kenya, spp. n. p. 54, EDWARDS t.c.

Goeldia luederwaldti sp. n. Brazil p. 6, LANE Bol. Inst. Hyg. S. Paulo no. 60.

Heizmannia lili nom. nud. p. 463, Wu Ent. & Phytopath. 4.

Megarhinus evansae sp. n. Sierra Leone p. 53, EDWARDS Proc. R. ent. Soc. Lond. (B) 5.

Orthopodomys alba sp. n. Ithaca p. 1 figs., BAKER Proc. ent. Soc. Wash. 38.

Soperia subgen. n. see *Aedes*.

Taeniorhynchus flavocinctus Belgian Congo p. 54, *wahlbergi* S. Africa p. 55, spp. n., EDWARDS Proc. R. ent. Soc. Lond. (B) 5.

Uranotaenia bilineata var. n. *obsoleta*; *chorleyi* sp. n.; *ornata* var. n. *musarum* Uganda p. 54, EDWARDS t.c.—*U. burkii* sp. n. Matto Grosso p. 194 figs., LANE Rev. Mus. paul. 20.

DIXIDAE.

Dixa of N. Europe pp. 117-127 figs., PEUS Norsk ent. Tidsskr. 4.—*D. obscura* see *Dixina*.

Dixina gen. n. for *Dixa obscura* Loew p. 30 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

ORPHNEPHILIDAE (THAUMALEIDAE).

Orphnephila nigra see *Orphnephilina*.

Orphnephilina gen. n. for *Ornephila nigra* Loew p. 96 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Prothaumalea gen. n. for *Thaumalea caudata* Bezzi p. 96, ENDERLEIN t.c.

Thaumalea caudata see *Prothaumalea*.

PSYCHODIDAE.

Grecian species of sandflies and their distribution, PAPADAKIS All Greece Malaria Congr. 2 1935 reprint 11 pp.

Psychodinae of Philippines, DEL ROSARIO Philipp. J. Sci. 59 pp. 553-571, 2 pls. 4 figs.

Phlebotomus spp. morphology pp. 305-316 figs., NAJERA ANGULO Primer Congr. nac. Sandidad 1934 1935; diagnosis of specific classification pp. 198-201, PARROT in Paras., transmett. anim.-venim. 1935; spp. biology, taxonomy pp. 29-51 figs., PERFIL'EV Trud. Tadzhih Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935; Algerian spp. pp. 145-149, PARROT Bull. Soc. H.n. Afr. N. 26 bis (Vol. jubil.) 1935; systematics and list of N. Indo-China spp. pp. 235-311 figs., RAYNAL Arch. Inst. Pasteur Indochine 6 1935.—*P. (Flebotomus) rickardi* sp. n. Brazil p. 288 figs., DA COSTA LIMA Rev. med.-Cirurg. Brazil 44.—*P. (Flebotomus) arthuri* p. 324, *alphabeticus* p. 327, spp. n. Brazil figs., DA FONSECA Rev. Ent. Rio de J. 6.—*P. diabolicus* sp. n. Texas p. 28 fig., HALL Proc. ent. Soc. Wash. 38.—*P. khawi* sp. n. N. China p. 530 figs., RAYNAL Ann. Parasit. hum. comp. 14.—*P. keshishiani* sp. n. Pamirs p. 892 figs., SHURENKOVA Med. Parasit. parasit. Dis. 5.—*P. ariasi* spermotheca pp. 308-319 figs., NAJERA ANGULO Med. Paises calid. 9.—*P. langeroni* var. n. *orientalis* p. 30; *viduus* p. 34, *martini* p. 35 spp. n.; *schwetzi* var. n. *aethiopicus* p. 39; *africanus* varr. n. *longior* p. 40, *ater* p. 43 Ethiopia; *ariasi* in Algeria p. 48; spp. of Crete p. 50; *langeroni* var. *longicuspis* morphology p. 137; *perniciosus* copulatory valve p. 144; in Dept.

Indre p. 427; *sergenti* var. *alexandri* in Algeria, morphology p. 428 figs., PARROT Arch. Inst. Pasteur Algérie 14.—*P. perniciosus* in Toulouse p. 426, RISTORICELLI t.c.

Psychoda revision of N. American spp. pp. 85-148, key p. 90, *marylandana* p. 111, *uniformis* p. 113, *snowhilli* p. 140, *bishoppi* p. 141 spp. n.; *superba* var. n. *conspicua* p. 125 U.S.A.; *sigma* Kinc. (= *surcoufi* Tonn.) p. 114; *autumnalis* Banks (= *littoralis* Dyar, *aldrichana* Dyar) p. 125; *baguioensis* p. 560, *zigzagensis* p. 562, *banksi* p. 563, *musae* p. 564, *alabangensis* p. 566, *manilensis* p. 567, *makati* p. 568, spp. n. Philippines figs., DEL ROSARIO Philipp. J. Sci. 59.

TRICHOCERIDAE (PETAURISTIDAE).

Trichocera borealis sp. n. Spitsbergen p. 3; *arctica* p. 5, *lutea* p. 7 descriptions figs., LACKSCHEWITZ Tromsø Mus. Årsheft 54 1934 no. 1.

TIPULIDAE.

Tipulidae of New England, fourth supplement, ALEXANDER Occ. Pap. Boston Soc. nat. Hist. 8 pp. 273-292, 4 figs.

New or little-known Tipulidae from E. Asia, XXVIII-XXXI, ALEXANDER Philipp. J. Sci. 58 1935 pp. 385-426, 4 pls.; 59 pp. 225-257, 2 pls.; 60 pp. 165-204, 3 pls. pp. 323-360, 4 pls.

Tipulidae of New Guinea, II, ALEXANDER Proc. Linn. Soc. N.S.W. 61 pp. 169-183, 322-340, 27 figs.

List of Tipulidae of N. Norway, LACKSCHEWITZ Tromsø Mus. Årsheft 54 1935 no. 4, 27 pp. 1 map, 5 figs.

Biology and morphology of Tipulids SELLEKE Z. wiss. Zool. 148 pp. 465-555, 43 figs.

Tipulids new to Sweden, TJEDER Ent. Tidskr. 57 p. 135.

Adelphomyia (*Paradelphomyia* subgen. n.) *crossospila* p. 184, *cerina* p. 341, *majuscula* p. 244, spp. n. China figs., ALEXANDER Philipp. J. Sci. 60.

Alfredia imanishii sp. n. Japan p. 198 figs., TOKUNAGA Annot. zool. jap. 15 1935.—See *Trichocera*.

Amalopsis transversa see *Olecrano-pelma*.

Anisomera nubeculosa see *Trima-cromera*.

Antocha spicata Japan p. 238, *picturata* China p. 415, **spp. n. figs.**, ALEXANDER Philipp. J. Sci. 58 1935.

Astelobia bullocki **sp. n.** Chile p. 163, ALEXANDER Rev. chil. H.n. 39.

Austrolimnophila fluxa p. 322, *interjecta* p. 323, **spp. n.** New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S. Wales 61.

Chionea gracilistyla **sp. n.** E. Siberia Japan p. 187 figs., ALEXANDER Philipp. J. Sci. 60.—*C. alpina* discussed p. 40, MANEVAL Bull. Soc. ent. Fr. 41.—*C. lutescens* **var. n. bohemia** p. 245; *hraběi* **sp. n.** p. 247 Czechoslovakia figs., KRATOCHVIL Bull. Soc. ent. Fr. 41.—*C. lutescens* pupae, adults pp. 8-91, EDWARDS Proc. R. ent. Soc. Lond. 10. See *Niphadobata*.

Coreozelia **gen. n.** for *Penthoptera cimicoides* Scop. p. 22 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Ctenacroscelis nimbus **sp. n.** China p. 389 fig., ALEXANDER Philipp. J. Sci. 58 1935.

Ctenophora yezoana **subsp. n. nigrobasalis** E. Siberia p. 171; *femur-rubra* **sp. n.** Saghalien p. 172 figs., ALEXANDER op. cit. 60.

Dactylolabis pemetica **sp. n.** New Hampshire p. 288 figs., ALEXANDER Occ. Pap. Boston Soc. n.H. 8.

Dasymolophilus jubatus China p. 199, *kibunensis* Japan p. 200 **spp. n. figs.**, ALEXANDER Philipp. J. Sci. 60.

Dicranota tuberculata Japan p. 241, *biloba* China p. 242 59, *angulata* p. 182, *nebulipennis* p. 183, Japan 60, **spp. n. figs.**, ALEXANDER op. cit.

Dictenidia luteicostalis **sp. n.** China p. 228, fig., ALEXANDER op. cit. 59.

Dolichopeza tayloriana p. 171, *percurveata* p. 173, **spp. n.** New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S.W. 61.

Elephantomyia handschini **sp. n.** Flores p. 94 fig., ALEXANDER Rev. suisse Zool. 43.

Epiphragma suboboleta **sp. n.** China p. 245 fig., ALEXANDER Philipp. J. Sci. 59.—*E. fuscodiscalis* p. 323, *gloriola* p. 324, **spp. n.** New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S. Wales 61.

Erioptera albidibasis **sp. n.** New Guinea p. 331 fig., ALEXANDER t.c.—*E. quadrivittata* hypopygium p. 114 figs., LACKSCHEWITZ Norsk ent. Tidsskr. 4.—*E. forsslundi* **sp. n.** Sweden p. 132 figs., TJEDE Ent. Tidsskr. 57.—*E. tridenticulata* p. 21, *praelata* p. 22, **spp. n.** China figs., ALEXANDER Ark. Zool. 27A (sep. dated 1934) no. 17.—*E. pallidclavata* **sp. n.** Kashmir p. 421 58 1935; *alboguttata* **subsp. n. darsenica**; *lactipennis* p. 252 59, *holoxantha* Japan p. 190, *nigrostylata* p. 191, *postrema* p. 350 China 60, **spp. n. figs.**, ALEXANDER Philipp. J. Sci.

Franckomyia **gen. n.** p. 345, *discalis* **sp. n.** China p. 346 figs., ALEXANDER op. cit. 60.

Gonomyia luteipleura Japan p. 248 59, *funesta* p. 188, *justifica* p. 189, *amicula* p. 348, *octospinosa* p. 349, China 60, **spp. n. figs.**, ALEXANDER op. cit.—*C. sana* **sp. n.** Paraguay p. 763, ALEXANDER Ann. ent. Soc. Amer. 29.—*G. jurata* Papua p. 127, *nigridorsata* p. 329 (with **subsp. n. pleurostriata**), *acus* p. 330, New Guinea, **spp. n. figs.**, ALEXANDER Proc. Linn. Soc. N.S. Wales 61.

Gynoplistia scimitar p. 326, *attrita* p. 327, *luteoannulata* p. 328, **spp. n.** New Guinea figs., ALEXANDER t.c.

Habromastix exempta p. 10, *nigroabdominalis* p. 12, **spp. n.** Brazil, ALEXANDER Rev. Ent. Rio de J. 6.

Helius auranticolor p. 182, *melanosoma* p. 183, **spp. n.** New Guinea, figs., ALEXANDER Proc. Linn. Soc. N.S.W., 61.—*H. albogeniculatus* Brazil p. 751, *leucoplaca* Peru p. 752, **spp. n.** ALEXANDER Ann. ent. Soc. Amer. 29.

Hexatoma jurata p. 759, *propinqua* p. 760, *variegata* p. 761, **spp. n.** Brazil, ALEXANDER t.c.—*H. luxuriosa* **sp. n.** Siam p. 419 fig., ALEXANDER Philipp. J. Sci. 58 1935.—*H. timorensis* **sp. n.** Timor p. 91 figs., ALEXANDER Rev. suisse Zool. 43.—*H. perrara* p. 15, *vittinervis* p. 17, **spp. n.** Brazil, ALEXANDER Rev. Ent. Rio de J. 6.

Holorusia zikáni **sp. n.** Brazil p. 14, ALEXANDER t.c.

Ilisia occoecata **sp. n.** Wales p. 219, EDWARDS Entomologist 69.—*I. obscuripes*, *zonata* morphology pp. 111, 114 figs., LACKSCHEWITZ Norsk ent. Tidsskr. 4.

Limnophila nigrilunae sp. n. Japan p. 196 (1935) fig., TOKUNAGA Annot. zool. jap. 15.—*L. lilliputina* Japan p. 246, *pilosula* China p. 247, 59, *yamamotoi* p. 186 spp. n.; *ussuriana* subsp. n. *iwatensis* p. 187 60 Japan figs., ALEXANDER Philipp. J. Sci.—*L. eutheta* sp. n. Chile p. 102 fig., ALEXANDER Rev. chil. H.n. 39.

Limonia protrusa China p. 412, *tricuspidata* Kashmir p. 414, 58 1935, *arthritica* Java p. 232, *nominata* p. 233, *penita* p. 234, *hypomelania* p. 236 China, *isospilota* Japan p. 235 59, *omniflora* p. 336, *tessellatipennis* p. 337, *sternolobata* p. 339 China 60, spp. n. figs., ALEXANDER Philipp. J. Sci.—*L. longeantennata* p. 122, *onobana* p. 123, *clintoni* p. 124, *expedita*, *hollandi* p. 175, *consona* p. 177, *spathulifera* p. 179, *procella* p. 180, *evanescens* p. 181, spp. n. New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S.W. 61.—*L. bipartita* p. 5, *willowsi* p. 6, *ephippiata* p. 7 Solomons *cruzi* p. 8, *spathulata* p. 10 Santa Cruz, *fuscolata* Bellona I. p. 9, spp. n. ALEXANDER Proc. Calif. Acad. Sci. (4) 22.—*L. flabelliformis* subsp. n. *brachynema* Brazil p. 15, ALEXANDER Rev. Ent. Rio de J. 6.—*L. kinensis* p. 17, *sjostedti* p. 18, spp. n. China figs., ALEXANDER Ark. Zool. 27A (sep. dated 1934) no. 17.—*L. contradistincta* p. 752, *multisignata* p. 753, *breviramosa* p. 754, *neglecta* p. 755, *improperata* Brazil, *pervincta* Argentina p. 757, *brevisector* Brazil p. 761, spp. n., ALEXANDER Ann. ent. Soc. Amer. 29.—*L. samoensis* subsp. n. *baliensis* Bali p. 89, *idjensis* E. Java p. 90, ALEXANDER Rev. suisse Zool. 43.—*L. pacifica* p. 194 14 1935, *medidorsalis* p. 460, *halobia* p. 465 15 spp. n. Japan figs., TOKUNAGA Annot. zool. jap.

Molophilus stenopterus sp. n. Chile p. 104, ALEXANDER Rev. chil. H. n. 39.—*M. angustior* sp. n. Brazil p. 21, ALEXANDER Rev. Ent. Rio de J. 6.—*M. unistylus* p. 333, *taylorinus* p. 334, *concussus* p. 335, *aterrimus* p. 336, spp. n. New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S. Wales 61.—*M. (Trichomolophilus* subgen. n.), *multisetosus* sp. n. Brazil p. 768, ALEXANDER Ann. ent. Soc. Amer. 29.—*M. polycanthus* p. 254 59, *okadai* p. 201 60 spp. n. Japan, figs., ALEXANDER Philipp. J. Sci.

Neolimnophila fuscocubitalis sp. n. China p. 20 fig., ALEXANDER Ark. Zool. 27A (sep. dated 1934) no. 17.

Nephrotoma guttipleura sp. n. Bougainville I. p. 2, key to Solomon Is. spp. p. 3, *solomonis* subsp. n. *malaitana*, *guadalcanarana* Solomons p. 4, ALEXANDER Proc. Calif. Acad. Sci. (2) 22.—*N. flavoposticata* p. 169, *kaviengensis* p. 170, spp. n. New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S.W. 61.—*N. drakanæ* p. 14, *perobliqua* p. 16, spp. n. China figs., ALEXANDER Ark. Zool. 27A (sep. dated 1934) no. 17.—*N. inconsequens* Celebes p. 403, *parascutellata* Java p. 405, *meraca* p. 407, *trilobulata* p. 408, *irrevocata* p. 410 Kashmir spp. n. figs., ALEXANDER Philipp. J. Sci. 58 1935.—*N. tenggerensis* p. 75, *effrena* p. 76 E. Java, *baliana* Bali p. 79, *nigrocotalis* p. 80, *handschiniana* p. 83, *kelimotensis* p. 85, *floresensis* p. 87 Flores, spp. n. figs., ALEXANDER Rev. suisse Zool. 43.

Niphadobata gen. n. for *Chionea lutescens* Lundstr. p. 19, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Olecranopelma gen. n. for *Amalopsis transversa* Meig. p. 23, ENDERLEIN t.c.

Oreophila sootryeni sp. n. N. Norway p. 8 figs., LACKSCHWITZ Tromsø Mus. Årsheft 54 1935 no. 4.

Orimarga basalis Kashmir p. 416 58 1935, *distalis* Japan p. 239 59, *streptocerca* China p. 181 60, spp. n. figs., ALEXANDER Philipp. J. Sci.—*O. papuicola* sp. n. New Guinea p. 181 fig., ALEXANDER Proc. Linn. Soc. N.S.W. 61.

Ormosia seclusa Japan p. 422 58 1935, *biannulata* p. 250 59, *nigripennis* p. 192, *tenuispinosa* p. 193, *fixa* p. 195, *profesta* p. 196, *officiosa* p. 197, *affixa* p. 198, *lataurata* p. 351, *angustaurata* p. 353, *curvispina* p. 354, *solita* p. 355, China 60 spp. n. ALEXANDER Philipp. J. Sci.

Paradelphomyia subgen. n. see *Adelphomyia*.

Penthoptera cimicoides see *Coreozelia*.

Phyllolabis laudata p. 342, *vulpecula* p. 344, spp. n. China figs., ALEXANDER Philipp. J. Sci. 60.

Pilaria harrisoni sp. n. New Hampshire p. 291 fig., ALEXANDER Occ. Pap. Boston Soc. n.H. 8.

Pselliophora stabilis p. 226, *lauta* p. 227, spp. n. China figs., ALEXANDER Philipp. J. Sci. 59.

Pseudolimnophila apicinigra sp. n. Kashmir p. 47 fig., ALEXANDER op. cit. 58 1935.

Ptychoptera sumatrensis sp. n. Sumatra p. 165, ALEXANDER op. cit. 60.

Rhabdomastix lapponica sp. n. Lapland p. 133 fig., TJEDER Ent. Tidskr. 57.

Sacandaga rufescata sp. n. Lapland p. 116, LACKSCHEWITZ Norsk ent. Tidsskr. 4.

Sigmatomera varicornis sp. n. Brazil p. 18, ALEXANDER Rev. Ent. Rio de J. 6.

Stibadocerella omeiensis sp. n. China p. 335 fig., ALEXANDER Philipp. J. Sci. 60.

Styringomyia angustipennis sp. n. China p. 356 fig., ALEXANDER t.c.—*S. spinicaudata* sp. n. New Guinea p. 339, ALEXANDER Proc. Linn. Soc. N.S. Wales 61.

Tanypremna invaripes sp. n. Brazil p. 749, ALEXANDER Ann. ent. Soc. Amer. 29.—*T. cognata* sp. n. China p. 225 59; *jozana* subsp. n. *unilineata* E. Siberia p. 174 60 figs., ALEXANDER Philipp. J. Sci.

Tasiocera papuana p. 336, *tarsalba* p. 337, spp. n. New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S. Wales 61.

Teucholabis invaripes sp. n. Brazil p. 19, ALEXANDER Rev. Ent. Rio de J. 6.—*T. nigrocoxalis* p. 764, *inulta* p. 765, *dedecora* p. 766, spp. n. Brazil, ALEXANDER Ann. ent. Soc. Amer. 29.

Tipula lustralis sp. n. Brazil p. 750 ALEXANDER t.c.—*T. hutchinsonae* p. 390, *irrequieta* p. 392, *baltistanica* p. 393, *venerabilis* p. 395, *icarus* p. 397, *submarmoratipennis* p. 398, *hypovalvata* p. 400, *xanthocera* p. 402 Kashmir 58 1935, *cladomera* p. 230 59, *hopeiensis* p. 175, *pingi* p. 176, *hoi* p. 180 China, *platyglossa* Siberia p. 178, *longifimbriata* p. 323, *mallophora* p. 325, *membranifera* p. 326, *dissociata* (with subsp. n. *timenda*) p. 328, *forticauda* p. 329, *subintacta* p. 330, *avicularoides* p. 331, *prolongata* p. 333 60, spp. n. China figs., ALEXANDER Philipp. J. Sci.—*T. hummeli*

p. 2, *hedini* p. 4, *pertinax* p. 5, *capitosa*, *minensis* p. 7, *dolosa* p. 9, *finitima* p. 10, *absconsa* p. 12, *macarta* p. 13, spp. n. China figs., ALEXANDER Ark. Zool. 27A (sep. dated 1934) no. 17.—*T. trimarginata* sp. n. Chile p. 99, ALEXANDER Rev. chil. H.n. 39.—*T. serrulata* Andorra, England p. 110, *subvastra* France p. 111, *wollastoni* spp. n.; *rufina* var. n. *maderensis* p. 112 Madeira figs., LACKSCHEWITZ Proc. R. ent. Soc. Lond. (B) 5.—*T. of Arctic Regions* pp. 245–312, *hirsutipes* Siberia p. 256, *sintensis* Sweden p. 265, *stackelbergiana* Polar Urals, Siberia p. 265, *middendorffi* Arctic Russia p. 272, *freyana* Finland p. 292, spp. n., key p. 303 figs., LACKSCHEWITZ Trav. Inst. zool. Acad. Sci. 4.—*T. virgulata* sp. n. Azores p. 118 figs., LACKSCHEWITZ Proc. R. ent. Soc. Lond. (B) 5.—*T. gutticellula* sp. n. Brazil p. 13, ALEXANDER Rev. Ent. Rio de J. 6.

Toxorhina maculipennis sp. n. Brazil p. 22, ALEXANDER t.c.—*T. fumipennis* p. 327, *trilineata* p. 338, *suttoni* p. 339, spp. n. New Guinea figs., ALEXANDER Proc. Linn. Soc. N.S. Wales 61.

Trentepohlia platyleuca Formosa p. 249 59, *enervata* China p. 347 60 spp. n. figs., ALEXANDER Philipp. J. Sci.—*T. lucrifera*, p. 125, *longisetosa* p. 126, *nigrescens* New Guinea p. 329, spp. n. figs., ALEXANDER Proc. Linn. Soc. N.S. Wales 61.—*T. tucumana* sp. n. Argentina p. 762, ALEXANDER Ann. ent. Soc. Amer. 29.—*T. amphileuca* sp. n. W. Java p. 96 fig., ALEXANDER Rev. suisse Zool. 43.—*T. solomonensis* sp. n. Solomon Is. p. 11 fig., ALEXANDER Proc. Calif. Acad. Sci. (4) 22.

Trichocera imanishii Tok. from *Alfredia* p. 468, TOKUNAGA Annot. zool. jap. 15.—*T. alticola* p. 385, *glacialis* p. 386, *abieticola* p. 388, spp. n. Kashmir figs., ALEXANDER Philipp. J. Sci. 58 1935.

Trichomolophilus subgen. n. see *Molophilus*.

Trichoneura javanensis sp. n. Java p. 240 figs., ALEXANDER Philipp. J. Sci. 59.

Trimacromera gen. n. for *Anisomera nubeculosa* Burm. p. 23 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Uta provesta sp. n. China p. 243 fig.,
ALEXANDER Philipp. J. Sci. 59.

XYLOPHAGIDAE (ERINNIDAE).

Erinna Finnish spp. pp. 106-107,
TIENSUU Ann. ent. fenn. 1 1935.

Solva nigriritibialis var. n. *minuta*
Canary Is. p. 40, FREY Comment.
biol. 6 no. 1.

STRATIOMYIIDAE.

A proposed classification of Nearctic
Stratiomyiinae, JAMES Trans. Amer.
ent. Soc. 62 pp. 31-36, 2 figs.

Stratiomyiidae of Colorado and Utah,
JAMES J. Kans. ent. Soc. 9 pp. 33-48.

Revision of Nearctic Geosarginae,
JAMES Canad. Ent. 67 pp. 267-275.

Revision of Palaearctic Stratiomyiidae
LINDNER Flieg. pal. Reg. 18 pp. 1-48,
38 figs.

Stratiomyiids of Madagascar, LIND-
NER Konowia 15 pp. 33-50, 7 figs.

Acanthinomyia pulchella sp. n. Mexico
p. 54, JAMES Psyche 43.

Actina diadema sp. n. Ussuri p. 28
fig., LINDNER Flieg. pal. Reg. 18.

Alopecuroceras gen. n., *coloratum* sp.
n. Madagascar p. 43 fig., LINDNER
Konowia 15.

Anoamya javana sp. n. Java p. 86,
JAMES Pan-Pacific Ent. 12.

Anoplodonta gen. n. for *Odontomyia*
nigrirostris Loew p. 35, JAMES Trans.
Amer. ent. Soc. 62.

Chordonota geniculata sp. n. Costa
Rica p. 157, LINDNER Stettin. ent. Z.
97.

Chrysochroma venustulum sp. n. Costa
Rica p. 156, LINDNER t.c.

Chrysonotus nigricornis see *Isosargus*.

Eutalia tabanoides sp. n. Madagascar
p. 42 fig., LINDNER Konowia 15.

Euparyphus pardalinus p. 87, sabro-
skyi p. 88, vanduzeei, *flaviventris* p. 89,
spp. n. U.S.A., JAMES Pan-Pacific Ent.
12.

Evaza solomensis p. 12, *incidens*,
whitneyi p. 13, spp. n. Solomons,
CURRAN Proc. Calif. Acad. Sci. (4) 22.

Geosargus Bez. synonymy p. 268,
key p. 270, *perpulcher* sp. n. Washington

p. 271, JAMES Canad. Ent. 67.—*G.*
maculatus sp. n. Cyprus p. 42, LINDNER
Flieg. pal. Reg. 18.

Hermetia illucens in Mediterranean
district p. 335, LINDNER Zool. Anz.
113.

Hoplodonta madagascariensis sp. n.
Madagascar p. 44, LINDNER Konowia
15.

Isosargus gen. n. type *Chrysonotus*
nigricornis Lw., key to spp. p. 273;
similis sp. n. U.S.A. p. 274, JAMES
Canad. Ent. 67.—*I. lateralis* sp. n.
Panama p. 52, JAMES Psyche 43.

Lampetiopus gen. n. p. 48, *umbrosus*
sp. n. Madagascar p. 49 figs., LINDNER
Konowia 15.

Macrosargus see *Pedicella*.

Madagascara gen. n., *seyrigi* sp. n.
Madagascar p. 46 figs., LINDNER
Konowia 15.

Merosargus banksi sp. n. Panama p.
53, JAMES Psyche 43.

Microchrysa nigricoxa sp. n. Mada-
gascar p. 41, LINDNER Konowia 15.—
M. abdominalis sp. n. Panama, Guate-
mala, Costa Rica p. 51, JAMES Psyche
43.

Microptecticus gen. n., *dimidiatus* sp.
n. Madagascar p. 40, LINDNER Konowia
15.

Monacanthella gen. n. p. 49, *gracilis*
sp. n. Costa Rica p. 50 figs., JAMES
Psyche 43.

Nemotelinus gen. n. for *Nemotelus*
nigrinus Fall. p. 79, ENDERLEIN Tier-
welt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Nemotelus sven-hedini sp. n. China p.
3, LINDNER Ark. Zool. 27B (sep. dated
1933) no. 4.—*N. albimarginatus* p. 86,
knowltoni p. 89, *montanus* p. 90 spp. n.
U.S.A.; *fulvicornis* n. n. for *flavicornis*
James nec Johnson, key p. 87, JAMES
Bull. Brooklyn ent. Soc. 31.—*N.*
nigrinus see *Nemotelinus*.

Odontomyia revision of American spp.
north of Mexico pp. 517-550, *bellula* p.
528, *painteri* p. 530, *colei* p. 532,
borealis p. 537, *confusa* p. 543, *occi-*
dentalis p. 545, *discolorata* p. 548 spp.
n. U.S.A.; *hirtocculata* n. n. for
pacifica Curr. nec Mg. p. 540 figs.,
JAMES Ann. ent. Soc. Amer. 29.—*O.*
nigrirostris see *Anoplodonta*.

Oxycera grancanariensis p. 40, *beckeriana* p. 41, spp. n. Canary Is., FREY Comment. biol. 6 no. 1.

Pedicella Big. (= *Macrosargus* Big.) type *tenebrifer* Wlk. p. 268, JAMES Canad. Ent. 67.

Plecticus abditus p. 37, *maculipennis*, *brunneus* p. 38, *magnicornis* p. 39, *gracilipes* p. 40, spp. n. Madagascar, LINDNER Konowia 15.

Rhaphiocerina gen. n. type *hakiensis* Mats. p. 32 fig., LINDNER Flieg. pal. Reg. 18.

Taurocera gen. n. p. 91, *pontica* sp. n. Bulgaria p. 92 fig., LINDNER Mitt. naturw. Inst. Sofia 9.

TABANIDAE.

Systematic revision of Tabanidae of Chile, FRAGA Com. Mus. Concepcion 1 pp. 19-27, 30-37, 56 etc.

Revision of Italian Tabanidae, GHIDINI Arch. zool. (ital.) 22 pp. 371-493, 72 figs.

Preliminary list of Chinese Tabanidae, HWANG Ent. & Phytopath. 4 pp. 612-615.

Notes on certain males of N. American Tabanidae, PHILIP Bull. Brooklyn ent. Soc. 31 pp. 189-197.

Pangoniinae of Utah, ROWE & KNOWLTON Ohio J. Sci. 36 pp. 253-258, 1 pl.

List of Tabanidae of Greece, SHANNON & HADJINICOLAOU Acta Inst. Mus. zool. Univ. Athen. 1 pp. 160-172.

Anacimas geropogon sp. n. N. Carolina p. 222 figs., PHILIP Ent. News 47.

Atylotus hadjinicolaoui sp. n. Greece p. 39, KRÖBER Acta Inst. Mus. zool. Univ. Athen. 1.

Bombylopsis juxtalesonina sp. n. Brazil p. 175, LUTZ & DE OLIVEIRA CASTRO Mem. Inst. Oswaldo Cruz 31.

Catachlorops borgmeieri sp. n. Brazil p. 70, LANE Folia Clin. Biol., S. Paulo 8.

Chrysochiton gen. n. type *Erephopsis auricincta* L. & N.; *bocainensis* sp. n. Brazil p. 172, LUTZ & DE OLIVEIRA CASTRO Mem. Inst. Oswaldo Cruz 31.

Chrysops biology, taxonomy of New York spp. pp. 51-78, 125-154, SEGAL J. N.Y. ent. Soc. 44.—*C.* revision of *furcatus* group of Western N. America

pp. 153-161, key p. 160, *proclivis* varr. n. *imfurcatus*, *piceus* p. 157; *luteopennis* sp. n. p. 159, PHILIP Proc. ent. Soc. Wash. 37.—*C. dilatus* sp. n. Utah p. 256, fig., ROWE & KNOWLTON Ohio J. Sci. 36.

Chrysosoma pandazisi sp. n. Greece p. 43, key to Palaearctic spp. p. 45, KRÖBER Acta Inst. Mus. zool. Univ. Athen. 1.—*C. crassicornis* var. n. *maculata* p. 420; *pluvialis* var. n. *minima* p. 425 Italy, GHIDINI Arch. zool. (ital.) 22.—See *Haematopota*.

Erephopsis auricincta see *Chrysochiton*.

Fidena atra p. 180, *chrysopyga* p. 181, spp. n. Pernambuco, LUTZ & DE OLIVEIRA CASTRO Mem. Inst. Oswaldo Cruz 31.

Haematopota gallii sp. n. Belgian Congo p. 512, BOUVIER Rev. Zool. Bot. afr. 28.—See *Chrysosoma*.

Heterostomus notes pp. 278-281 fig., FRAGA Rev. chil. H.n. 39.

Hinea jacoti sp. n. Belgian Congo p. 510, BOUVIER Rev. Zool. Bot. afr. 28.

Melpia key to allied genn. p. 170, LUTZ & DE OLIVEIRA CASTRO Mem. Inst. Oswaldo Cruz 31.

Poeciloderas frater ♂ p. 221, *antennarum*, *paraguayensis* spp. n. Paraguay p. 222, KRÖBER Arb. morph. tax. Ent. Berl. 3.

Scaptia auriflua biology pp. 1-9 figs., FULLER Proc. Linn. N.S.W. 61.

Tabanus variations of seasonal cycle pp. 589-592, SCHWARDT Ann. ent. Soc. Amer. 29.—*T. bovinus* var. n. *auratus* Italy p. 439, GHIDINI Arch. zool. (ital.) 22.—*T. tenuistria* p. 33, *shannonella* p. 36, *velutinus* p. 38 spp. n.; *paradozus* var. n. *macedonicus* p. 35 Greece figs., KRÖBER Acta Inst. Mus. zool. Univ. Athen. 1.—*T. itasca* p. 149, *laticallus* p. 150, *orbicallus* p. 157 U.S.A., *hearlei* p. 150, *liorhinus* p. 152 Br. Columbia spp. n.; *insuetus* var. n. *tinguareus* Montana p. 159; *procyon* p. 153, *typhus* p. 154, *hirtulus* p. 155, *insuetus* p. 159 ♂♂, PHILIP Canad. Ent. 68.—*T. longus* notes on group pp. 149-156, *zythicolor* p. 152, *abactor* p. 153 spp. n.; *fulvulus* var. n. *pallidescens* p. 150, PHILIP Ohio J. Sci. 36.—*T. subfronto* sp. n. N. Carolina p. 100, PHILIP J. Kans. ent. Soc. 9.—*T. schoutedeni* sp. n. Belgian Congo p. 511, BOUVIER Rev.

Zool. Bot. afr. **28**.—*T. fortunatus* sp. n. Canary Is. p. 43, FREY Comment. biol. **6** no. 1.—*T. rubidus, striatus* early stages pp. 230–255 figs., NIESCHULZ Arch. Naturgesch. (N. F.) **5**.

LEPTIDAE (RHAGIONIDAE).

Chrysopilus aldrichi, arciventris spp. n. Colorado p. 343, JAMES J. N.Y. ent. Soc. **44**.

THEREVIDAE.

Therevidae of Belgian Congo, KRÖBER Rev. Zool. Bot. afr. **28** pp. 255–258, 3 figs.

Actorthia atlantica sp. n. Canary Is. p. 52 fig., FREY Comment. biol. **6** no. 1.—*A. ahngerii* see *Gyrophthalminus*.

Gyrophthalminus gen. n. for *Actorthia ahngerii* Frey p. 52, FREY Comment. biol. **6** no. 1.

Parachia gen. n. for *Psilocephala imberberis* Fall. p. 88, ENDERLEIN Tierwelt Mitteleur. **6** iii Teil, 2 Lief., xvi.

Psilocephala coloradensis sp. n. Colorado p. 341, JAMES J. N. York ent. Soc. **44**.—*P. imberberis* see *Parachia*.

Schoutedenomyia gen. n. p. 256, *congoensis* sp. n. Belgian Congo p. 257 figs., KRÖBER Rev. Zool. Bot. afr. **28**.

Thereva teydea sp. n. Canary Is. p. 53 fig., FREY Comment. biol. **6** no. 1.

SCENOPINIDAE (OMPHRALIDAE).

Omphralidae of Belgian Congo, KRÖBER Rev. Zool. Bot. afr. **28** pp. 253–254.

Scenopinus hatteralis sp. n. Canary Is. p. 53 fig., FREY Comment. biol. **6** no. 1.

NEMESTRINIDAE.

Fossil and living Nemestrinidae compared, BEQUAERT & CARPENTER J. Paleont. **10** pp. 395–409, 11 figs.

Nemestrinus candicans sp. n. China p. 12, VILLENEUVE Ark. Zool. **27A** no. 34.

CYRTIDAE.

Revision of Palaearctic Cyrtidae, SACK in LINDNER Flieg. Pal. Reg. **21** 36 pp. 3 pls.

Acrocera cabreræ sp. n. Canary Is. p. 45, FREY Comment. biol. **6** no. 1.

Atomella cretensis sp. n. Crete p. 31 fig., SACK in LINDNER Flieg. Pal. Reg. **21**.

Oncodes hirtus sp. n. Kurdistan p. 20 fig., SACK in LINDNER t.c.

Paracropera bacchulus sp. n. Canary Is. p. 45, FREY Comment. biol. **6** no. 1.

MYDAIDAE.

Syllegomydas dallonii sp. n. Tibesti p. 88 figs., SÉGUY Mém. Acad. Sci. Paris (2) **62**.

ASILIDAE.

Additions to Ohio Asilidae, III, BROMLEY Ohio J. Sci. **36** pp. 130–131.

Ancylorrhynchus generic synonymy p. 133; key to S. African spp. p. 134; *funebis, munroi, pretoriensis* p. 135, *braunsi, magnificus* p. 136, *splendens, insignis, zonalis* p. 137, spp. n. S. Africa, BROMLEY Ann. Transv. Mus. **18**.

Bactria (= *Promachus*) Ethiopian spp. of fasciata group pp. 182–199, 231–249, 274–278, *niveicincta* p. 195, *acuminata* p. 232, *conradi* p. 233, *neavei* p. 234, *mixta* p. 235, *entebensis, crassifemorata* p. 237, *carpenteri* p. 238, *venatrix, promiscua, wollastoni* p. 239, *cornuta* p. 240, *erythroscelus* p. 241, *rufotibialis* p. 242, *versicolor, hastata* p. 243, *calcarata* p. 245, *zenkeri* p. 246, *speiseri* p. 248, *mesacantha* p. 249, *mesorrhachis* p. 274, spp. n. Centr. and Tropical Africa figs., HOBBY Ent. mon. Mag. **72**.

Callinicus vittatus sp. n. California p. 209, WILCOX Ent. News **47**.

Cyrtopogon revision of N. American spp. pp. 1–94, *vandykei* p. 27, *aureipilosus* p. 30, *jemezi* p. 47, *basingeri* p. 49, *aldrichi* p. 51, *stenofrons* p. 52, *planitarsus* p. 61, *swezeyi* p. 64, *fumipennis* p. 71, *curtipennis* p. 74, *vanduzeei* p. 76, *raineri* p. 77, *banksi* p. 79, *idahoensis* p. 82, *albifrons* p. 83, *beameri* p. 84 spp. n.; *semitarius* subsp. n. *californicus* p. 37; *callipedilus* subsp. n. *nigritarsus* p. 39 U.S.A. figs., WILCOX & MARTIN Ent. amer. **16**.—*C. cerussatus* see *Nannocyrtopogon*.

Diogmites key to U.S.A. spp. p. 228, *esuriens* p. 230, *properans* p. 232, *crudelis, salutans* p. 233, *contortus*,

fragilis p. 235, *grossus* p. 236, *pritchardi* p. 237, **spp. n.** U.S.A., BROMLEY J. N.Y. ent. Soc. 44.

Erax status discussed p. 277, HOBBY Ent. mon. Mag. 72.

Eucyrtopogon limpidipennis p. 204, *kelloggi* p. 205 **spp. n.** U.S.A., WILCOX Pan-Pacific Ent. 12.

Itolia **gen. n.** p. 201, *maculata* **sp. n.** Arizona p. 202 fig., WILCOX t.c.

Laphria sackeni **sp. n.** N. America p. 8; *vultur* p. 7, *rapax* p. 10 characters figs., WILCOX Canad. Ent. 68.

Leptogaster crockeri **sp. n.** Solomons p. 14, CURRAN Proc. Calif. Acad. Sci. (4) 22.—*L. fragilissima* **sp. n.** Canary Is. p. 58, FREY Comment. biol. 6 no. 1.

Maira whitneyi Florida I. p. 16, *willowsi* Bellona I. p. 17, **spp. n.**, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Nannocyrtopogon **gen. n.** for *Cyrtopogon cerussatus* O. S. p. 7, WILCOX & MARTIN Ent. amer. 16 (Feb.); *vanduzeei* p. 451, *oculatus* p. 452, *monrovia* p. 453, *lestomyiformis* p. 454, *minutus* p. 455, *atripes* p. 456, **spp. n.** U.S.A. figs., WILCOX & MARTIN Ann. ent. Soc. Amer. 29.

Neolaparus key p. 138; *metallica*, *atrox*, *pollinosus* p. 141, *fulvipennis*, *munroi*, *fugax* p. 142, *pulchellus*, *ornatus* p. 143, *dimidiatus*, *singularis*, *apicalis*, *niger* p. 144, *solus*, *rufus*, *braunsi* p. 145, *esuriens* p. 146, **spp. n.** S. Africa, BROMLEY Ann. Transv. Mus. 18.

Neolophonotus key to subgen.; *grossus* p. 130, *vansonii* p. 131, *gembrock* p. 132, **spp. n.** S. Africa figs., BROMLEY t.c.

Ommatius key p. 172, *beameri*, *baboquivari* **spp. n.** Arizona p. 174 figs., WILCOX Bull. Brooklyn Ent. Soc. 31.—O. key to S. African spp.; *pulchellus* p. 126, *munroi*, *senex* p. 127, *neglectus*, *cingulatus* p. 128, *terminalis*, *minutus* p. 129, **spp. n.** S. Africa, BROMLEY Ann. Transv. Mus. 18.

Promachus key to Canary Is. spp. p. 55; *gomeræ* p. 56, *palmensis* p. 57, **spp. n.** Canary Is. figs., FREY Comment. biol. 6 no. 1.—See *Bactria*.

Protophanes status discussed p. 277, HOBBY Ent. mon. Mag. 72.

Stichopogon arenicola **sp. n.** Arizona p. 207, key p. 210, WILCOX Pan-Pacific Ent. 12.

Telejoneura Rond. status p. 276, HOBBY Ent. mon. Mag. 72.

Tolmerolestes brethesi **sp. n.** Argentina p. 43 figs., GEMIGNANA Rev. chil. H.n. 39.

BOMBYLIIDAE.

Bombyliidae of Kalahari, HESSE Ann. Transv. Mus. 17 pp. 161–184, 5 figs.

Revision of Palaearctic Bombyliidae, ENGEL in LINDNER Flieg. pal. Reg. 25 pp. 401–560, 1 pl. 64 figs.

Anthrax revision pp. 3–31, *decertorum* (as *desertorum* p. 20) p. 5, *macrocerus*, *submacrocerus*, *laevipennis*, *arenophilus* p. 8, *actuosus* p. 9, *shelkovnikovi*, *transcaspicus* p. 10, *laetus* p. 13, *stepensis*, *repetekianus* p. 14, *turanicus*, *nanellus* p. 15, *erythrogaster* p. 16 Transcaspia, *bezzianus* Syria, *efflatouni* p. 7, *cairensis* p. 10, *hassani* p. 11, *ramsesi*, *pharaonis*, *nanus*, p. 15, *aegypticola* p. 16 Egypt, *mongolicus* Mongolia p. 8, *kiritshenkoi* N. Persia, Morocco, *uralensis* Orenburg, *jazykovi* p. 9, *pargrisesens* p. 14, *oophagus* (with **var. n.** *parva*) p. 15 Turkestan, *chivaensis* Khiva p. 9, *incitus*, *alagozicus* p. 11, *armeniacus* p. 13, Armenia, *sacki*, *comptus*, p. 12, *bucharensis* p. 13, *grisesens*, *turkmenorum* p. 14 Bukhara **spp. n.**; *pilosulus* **var. n.** *tadzhikorum* Turkestan p. 13, PARAMONOV Trav. Mus. zool. Kiev no. 16.—*A. intermedius* **sp. n.** Kalahari p. 173, HESSE Ann. Transv. Mus. 17.

Antonia persicana **sp. n.** N. Persia p. 27, PARAMONOV Mitt. dtsh. ent. Ges. 7.

Bombylius vansonii **sp. n.** p. 161; *eurhinatus* **var. n.** *bechuanus* p. 163 Bechuanaland, HESSE Ann. Transv. Mus. 17.

Conophorus greeni **sp. n.** Cyprus p. 181, AUSTEN Ann. Mag. n.H. (10) 18.

Eurycarenus cingulatus **sp. n.** Bechuanaland p. 167, HESSE Ann. Transv. Mus. 17.

Exoprosopa zonata N. Transvaal p. 176, *bechuana* p. 175, *pterosticha* p. 178, *ceuthodonta* p. 180, *mira* p. 181, *pleroxantha* p. 183 Kalahari, **spp. n.** figs.,

HESSE t.c.—*E. guttipennis* n. n. for *punctipennis* Ricardo nec Macq. p. 483 ENGEL in LINDNER Flieg. pal. Reg. 25.—*E. dulcis* Baluchistan p. 199, *pictipennis* Algeria p. 201, spp. n. figs., AUSTEN Ann. Mag. n.H. (10) 18.

Geron hesperidum p. 47, *corcyreus* p. 48, spp. n. Canary Is. figs., FREY Comment. biol. 6 no. 1.—*G. bechuanus* sp. n. Bechuanaland p. 170, HESSE Ann. Transv. Mus. 17.

Glabellula canariensis sp. n. Canary Is. p. 47, FREY Comment. biol. 6 no. 1.

Gonarthrus culiciformis, *kalaharicus* (with var. n. *venustus* p. 169), spp. n. p. 168 Kalahari, HESSE Ann. Transv. Mus. 17.

Hyperalonia ussuriensis sp. n. Ussuri p. 2, PARAMONOV Ark. Zool. 27A (sep. dated 1934) no. 26.

Hyperusia nivea sp. n. Kalahari p. 170, HESSE Ann. Transv. Mus. 17.

Lomatia albata sp. n. Kalahari p. 172, HESSE t.c.

Oestranthrax zimini Turkestan p. 5, *rubriventris* Turkmenia p. 6, spp. n. PARAMONOV Ark. Zool. 27A (sep. dated 1934) no. 26.

Paranthracina n. n. for *Paranthrax* Param. nec Big. p. 31, PARAMONOV Mitt. dtsh. ent. Ges. 7.

Paranthrax see *Paranthracina*.

Paratoxophora gen. n. p. 39, *cuthbertsoni* sp. n. S. Rhodesia p. 40 figs., ENGEL Occ. Pap. Rhod. Mus. no. 5.

Systoechus bechuanus p. 163, *kalaharicus* p. 165, *eremophilus* p. 166, spp. n. Kalahari, HESSE Ann. Transv. Mus. 17.

Thyridanthrax albosegmentatus p. 528, *leucolaeniatus* p. 539, *semifuscus* p. 549 spp. n.; *vagans* var. n. *unistriata* p. 555 Egypt figs., ENGEL in LINDNER Flieg. pal. Reg. 25.—*T. venustulus* Algeria p. 186, *montanorum* p. 188, *noscibilis* p. 191 Tibet, *albicingula* Syria, Cyprus p. 193, *innocens* Cyprus p. 195, *nitidifrons* Baluchistan p. 197, spp. n. figs., AUSTEN Ann. Mag. n.H. (10) 18.

Villa multibalteata sp. n. Cyprus p. 183 fig., AUSTEN t.c.—*V.* key to Canary Is. spp. p. 50; *albiventris* sp. n. Canary Is. p. 51, FREY Comment. biol. 6 no. 1.

EMPIDAE.

Ariasella pieltaini sp. n. Spain p. 191 figs., GIL COLLADO Eos 11.

Bicellaria Finnish spp. pp. 74–85, *sulcata* subsp. n. *vanella* p. 82; *bisetosa* sp. n. p. 84 Finland figs., TUOMIKOSKI Ann. ent. fenn. 2.

Chersodromia colliniana sp. n. Canary Is. p. 63, FREY Comment. biol. 6 no. 1.

Ctenempis subgen. n. see *Rhamphomyia*.

Drapetis stordii, *disparilis* p. 61, *flavicoxalis* p. 62, spp. n. Canary Is. figs., FREY Comment. biol. 6 no. 1.—*D. confusa*, *crockeri* spp. n. Solomons p. 20, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Empis pachymorion p. 4, *vicaria*, *kamchatica*, *sjöstedti* p. 5, spp. n. Kamchatka, FREY Ark. Zool. 28A 1935 no. 10.

Hilara ragasides p. 6, *galactoptera* p. 7, spp. n. Kamchatka, FREY t.c.

Leptodromiella gen. n. for *Oropezella crassisetata* Turner p. 187, TUOMIKOSKI Ann. ent. fenn. 2.

Oropezella crassisetata see *Leptodromiella*.

Rhamphomyia albibasis p. 1, (*Ctenempis* subgen. n.) *malaisei* p. 2, spp. n. Kamchatka, FREY Ark. Zool. 28A 1935 no. 10.

Stilpon appendiculatum sp. n. Canary Is. p. 63, FREY Comment. biol. 6 no. 1.

Syneches matema sp. n. Santa Cruz I. p. 19, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Trichina Finnish spp. pp. 95–101, *picipes* sp. n. Finland p. 99 figs., TUOMIKOSKI Ann. ent. fenn. 1 1935.

DOLICHOPODIDAE.

Achradocera ealensis sp. n. Belgian Congo p. 9, PARENT Bull. Mus. H.n. Belg. 12 no. 15.—*A. wolffi* sp. n. Belgian Congo p. 323, PARENT Rev. Zool. Bot. afr. 28.

Agastoplax gen. n. for *Psilopus flavicinctus* Loew p. 114, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Chaetosphyria gen. n. for *Poecilobothrus regalis* Meig. p. 109, ENDERLEIN t.c.

Chrysosoma praecipuum sp. n. Belgian Congo p. 319 fig., PARENT Rev. Zool. Bot. afr. 28.—*C. disjunctum* p. 1, *ghesquieri* p. 2, *piliseta* p. 4, spp. n. Belgian Congo; key p. 5 figs., PARENT Bull. Mus. H.n. Belg. 12 no. 15.

Dactylodiscia gen. n. for *Psilopus calceolata* Loew (type) and *vialis* Radd p. 114, ENDERLEIN Tierwelt Mitteleur., 6 iii Teil, 2 Lief., xvi.

Dactylorhipis gen. n. for *Psilopus bellus* Loew p. 114, ENDERLEIN t.c.

Dolichopoda palpata morphology 20 pp. figs., VARRICCHIO Ann. Mus. zool. Univ. Napoli 6 1935 no. 19.

Glyphidocerus gen. n. for *Hydrophorus bisetus* Loew p. 109, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Hercostomus umbricola sp. n. Belgian Congo p. 8 fig., PARENT Bull. Mus. H.n. Belg. 12 no. 15.

Hydrophorus bisetus see *Glyphidocerus*.

Medetera storai sp. n. Canary Is. p. 68, FREY Comment. biol. 6 no. 1.—*M. ealensis* p. 10, *hamata* p. 11, *luteoscutata*, *polita* p. 12 spp. n. Belgian Congo; key p. 13 figs., PARENT Bull. Mus. H.n. Belg. 12 no. 15.—*M. belgica* sp. n. Belgium p. 1 fig., PARENT op. cit. no. 20.—*M. caffra* see *Saccopheronta*.

Placantichir gen. n. for *Psilopus nervosus* Lehm. p. 114 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Poecilobothrus regalis see *Chaetosphyria*.

Psilopus flavicinctus see *Agastoplax*; *bellus* see *Dactylorhipis*; *calceolata*, *vialis* see *Dactylodiscia*; *nervosus* see *Placantichir*.

Saccopheronta quinta sp. n. Belgian Congo; key p. 16; *caffra* Curr. from *Medetera* p. 17 figs., PARENT Bull. Mus. H.n. Belg. 12 no. 15.

Sciopus arduus p. 6, *tenuicauda* p. 7, spp. n. Belgian Congo figs., PARENT t.c.—*S. sven-hedini* sp. n. China p. 2 fig., PARENT Ark. Zool. 27B (sep. dated 1933) no. 6.

Syntormon brevicornis sp. n. Canary Is. p. 67, FREY Comment. biol. 6 no. 1.

Thinophilus annulitarsis p. 323, *quadrisetus* p. 324, spp. n. Dar-es-Salaam, key to ♀♀ of Ethiopian Region p. 325 fig., PARENT Rev. Zool. Bot. afr. 28.

Vaalimya maculata sp. n. Belgian Congo p. 323 fig., PARENT t.c.

PHORIDAE.

Phoridae from Hendaya (French-Spanish border), SCHMITZ Tijdschr. Ent. 79 pp. 222–228, 1 pl. 1 fig.

Phoridae from Mt. Apo, Mindanao, BRUES Proc. Amer. Acad. Arts Sci. 70 pp. 365–466, 28 figs.

Chonocephalus list of spp., *punctifasciata* sp. n. Brazil p. 257 figs., BORGMEIER Arch. Inst. Biol. veg. 2 1935.

Conicera sobria sp. n. Canary Is. p. 71, SCHMITZ Comment. biol. 6 no. 1.—*C. philippensis* sp. n. Mindanao p. 370, BRUES Proc. Amer. Acad. Arts Sci. 70.

Diploneura evanescens sp. n. Mindanao p. 368, BRUES t.c.

Ecitomyia spinosa see *Rhabdomyia*.

Ecituncula (*Labiduncula* subgen. n.) *halterata* sp. n. Costa Rica p. 32, BORGMEIER Rev. Ent. Rio de J. 6.

Johowia setosissima sp. n. Mindanao p. 464, BRUES Proc. Amer. Acad. Arts Sci. 70.

Labiduncula subgen. n. see *Ecituncula*.

Megaselia nigrifemorata Santos new description p. 72; *patula* p. 73, *umbrata* p. 74, *aequilateralis* p. 75, *angustata* p. 76, *angustina* p. 77, *apozona* p. 78, *bistruncata* p. 79, *parumlevata* p. 80, spp. n. Canary Is. figs., SCHMITZ Comment. biol. 6 no. 1.—*M.* key to Philippine spp. p. 372; *scopifera* p. 380, *labialis* p. 381, *baroringensis*, *nocturnal* p. 383, *claggi* p. 384, *trisepta* p. 385, *inflatus* p. 386, *antennalis* p. 388, *costipennis* p. 389, *cultrata* p. 391, *latuensis* p. 392, *galogensis* p. 393, *alata* p. 394, *mainitensis* p. 395, *sibulanensis* p. 396, *perspinosa* p. 397, *quadrispinosa* p. 399, *bakeri* p. 400, *pectinata* p. 401, *pilifera* p. 402, *humeralis* p. 403, *tinctipennis* p. 404, *umbrosa* p. 405, *curtipes* p. 406, *debilitata* p. 407, *conspicua* p. 408, *fulvicauda* p. 409, *pallidicauda* p. 410, *brevineura* p. 411,

aristata p. 412, *apoënsis* p. 414, *textilis* p. 415, *turbulenta* p. 416, *repetenda* p. 417, *calianensis* p. 418, *equivocata* p. 420, *bulbosa* p. 421, *dimidiata* p. 422, *quadrata*, *maculipennis* p. 423, *brevi-secta* p. 425, *linoënsis* p. 426, *setifrons* p. 427, *tubulata* p. 428, *montana*, *translocata* p. 430, *mediata* p. 431, *mutata* p. 433, *bihamulata* p. 434, *appendiculata* p. 435, *directa* p. 436, *incompleta* p. 437, *politifrons* p. 439, *bisecta* p. 440, *uniseta* p. 441, *vapidicornis* p. 442, *equisecta* p. 443, *clavipedella* p. 445, *barbata* p. 446, *digressa* p. 447, *extensifrons* p. 448, *apposita* p. 449, *reversa* p. 450, *patellipes* p. 451, *deflexa* p. 453, *inflaticornis* p. 454, *tecënsis* p. 455, *perumbrata* p. 456, *spp. n.* Mindanao figs., BRUES Proc. Amer. Acad. Arts Sci. 70.—*M. grisaria* *sp. n.* China p. 3, SCHMITZ Ark. Zool. 27B (sep. dated 1933) no. 2.—*M. collapsa* p. 226, *pilifera* p. 227, *spp. n.* Hendaya (French-Spanish border) figs., SCHMITZ Tijdschr. Ent. 79.—*M. schüttli* p. 190, *engelberti* p. 191 Silesia, *devia* Holland p. 193, *laticor* Belgium p. 194, *spp. n.* figs., SCHMITZ Konowia 15.

Melaloncha ronnai *sp. n.* Brazil p. 262 figs., BORGMEIER Arch. Inst. Biol. veg. 2 1935; biology pp. 1-8 figs., RONNA Rev. Ent. Rio de J. 6.

Metopina pileata *sp. n.* Finland p. 115, SCHMITZ Natuurh. Maandbl. 25.

Paraneurina *gen. n.* for *Phora lugubris* Mg. p. 117, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Paraspiniphora apicalis *sp. n.* Mindanao p. 366 figs., BRUES Proc. Amer. Acad. Arts Sci. 70.

Phalacrotophora key to Malayan *spp.* p. 457; *scutata* p. 458, *pallidicornis* p. 460, *irregularis* p. 461, *spp. n.* Mindanao fig., BRUES t.c.

Phora capillosa *sp. n.* China p. 1 fig., SCHMITZ Ark. Zool. 27B (sep. dated 1933) no. 2.—*P. coronatus*, *ocellatus* see *Tristichothyrsus*; *lugubris* see *Paraneurina*.

Placophora *gen. n.*, *obtecta* *sp. n.* Costa Rica p. 30 fig., BORGMEIER Rev. Ent. Rio de J. 6.

Plastophora dubitata *sp. n.* Mindanao p. 462, BRUES Proc. Amer. Acad. Arts Sci. 70.

Psilotriphleba *gen. n.* for *Triphleba admirabilis* Schm. p. 117, ENDERLEIN, Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Rhabdomyia *gen. n.* for *Ecitomyia spinosa* Brues p. 29, BORGMEIER Rev. Ent. Rio de J. 6.

Thalloptra nevermanni Costa Rica p. 24, *bisinuosa* p. 26, *sebastiani* p. 27, *socialis* p. 28 Brazil, *spp. n.* figs., BORGMEIER t.c.

Triphleba admirabilis see *Psilotriphleba*.

Tristichothyrsus *gen. n.* for *Phora coronatus* Beck. and *ocellatus* Schm. p. 118, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Xanionotum smithii *sp. n.* Mississippi p. 69, BRUES Bull. Brooklyn ent. Soc. 31.

Zikania schmidtii *sp. n.* Costa Rica p. 35, BORGMEIER Rev. Ent. Rio de J. 6.

TERMITOXENIIDAE.

Afrozenia *gen. n.* for *Termitoxenia jägerskiöldi* Wasm. p. 39 figs., KEMNER Opusc. Ent. Lund 1.

Ceylonoxenia *gen. n.* type *Termitoxenia butteli* Wasm. pp. 38, 40, SCHMITZ Natuurh. Maandbl. 25.

Indoxenia *gen. n.* type *Termitoxenia heimi* Wasm. pp. 38, 40, SCHMITZ t.c.

Syntermitoxenia *gen. n.* type *Termitoxenia pseudonanna* Schm. pp. 39, 40 figs., SCHMITZ t.c.

Termitophilomyia *gen. n.* type *Termitoxenia braunsi* Wasm. pp. 38, 40, SCHMITZ t.c.

Termitoscrofa *gen. n.*, *pinguissima* *sp. n.* Tanganyika p. 38 fig., SCHMITZ t.c.

Termitostroma mergelsbergi *sp. n.* Tanganyika p. 38, SCHMITZ t.c.

Termitoxenia pseudonanna see *Syntermitoxenia*; *braunsi* see *Termitophilomyia*; *heimi* see *Indoxenia*; *butteli* see *Ceylonoxenia*; *jägerskiöldi* see *Afrozenia*.

PIPUNCULIDAE.

Cephalosphaera *gen. n.* for *Pipunculus campestris* Latr. p. 129 fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Jassidophaga gen. n. for *Verrallia pilosa* Zett. and *villosa* v. Ros. p. 129, ENDERLEIN t.c.

Pipunculus matema sp. n. Solomons p. 22, CURRAN Proc. Calif. Acad. Sci. (4) 22.—*P. campestris* see *Cephalosphaera*.

Verrallia pilosa, villosa see *Jassidophaga*.

PLATYPEZIDAE (CLYTHIIDAE).

Calomyia fortunata sp. n. Canary Is. p. 82, FREY Comment. biol. 6 no. 1.

Microsania ghesquieri sp. n. Belgian Congo p. 555 figs., COLLART Mém. Mus. H.n. Belg. (2) 3.

SYRPHIDAE.

Check list of Syrphidae of Australia and regional islands, HULL J. F.M.S. Mus. 13 pp. 190–212.

Notes on Syrphidae, KABOS Levende Natuur 41 pp. 78–81, 13 figs.

Systematic notes on Syrphidae, SMIRNOV Bull. Soc. Nat. Moscou (N. S.) 45 Sect. Biol. pp. 249–255, 2 figs.

Allograpta key to American spp. p. 12; *flupei* Cuba p. 13, *neotropica* p. 14, *alta* p. 15 Colombia, spp. n., CURRAN Amer. Mus. Novit. no. 882.—*A. fasciata* see *Fazia*.

Baccha summa p. 59, *arx* p. 60, spp. n. Brazil figs., FLUKE J. Kans. ent. Soc. 9.—*B. lanei* sp. n. Brazil p. 16, CURRAN Amer. Mus. Novit. no. 882.

Cacoceria n. n. for *Cacomylia* Hull preocc. p. 227, HULL Ent. News 47.

Cacomylia see *Cacoceria*.

Ceria conopoides see *Styloceria*.

Chaetochilosia gen. n. for *Chilosia mutabilis* Fall. p. 125, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Chilosia drenowskii sp. n. Bulgaria p. 67, SZILÁDY Mitt. bulg. ent. Ges. Sofia 9 1936.—*C. variabilis* see *Dasychilosia*; *C. mutabilis* see *Chaetochilosia*.

Dasychilosia gen. n. for *Chilosia variabilis* Panz. p. 125, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Fazia fasciata Curr. from *Allograpta* p. 13, CURRAN Amer. Mus. Novit. no. 882.

Lampetia armipes ♀ discussed p. 165 Kiev no. 15 1935; revision pp. 3–13, *sacki* sp. n. Spain p. 3; *geniculata* subsp. n. *fractipes* Rhode I. p. 9 no. 17, PARAMONOV Trav. Mus. zool. Kiev.

Melanostoma lanei sp. n. Brazil p. 61 figs., FLUKE J. Kans. ent. Soc. 9.

Meromacrus key p. 1, *bruneri* Cuba p. 2, *flupei* St. Vincent, W.I. p. 3, *anna* Panama p. 4, spp. n., CURRAN Amer. Mus. Novit. no. 834.

Microdon key p. 1; *flupei* p. 2, *lanei, mus* p. 5, *nero, barbiellinii* p. 6, *marceli* p. Brazil, *hermetia* Barro Colorado I. p. 3, *beebei* Br. Guiana p. 4, spp. n., CURRAN op. cit. no. 882.

Platychirus latimanus p. 6, *melanopsis* p. 7 ♂♂ figs., GAUNITZ Ent. Tidskr. 57.—*P.* notes on Swedish spp. pp. 1–3, *argentatus* sp. n. Sweden p. 3 figs., RINGDAHL Opusc. ent. Lund 1.

Rohdendorfia hedickei sp. n. Hungary p. 212, REINIG Dtsch. ent. Z. 1935.

Styloceria gen. n. for *Ceria conopoides* L. p. 127, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Tachinosyrphus gen. n., *pseudotachina* sp. n. Peru p. 167, HULL Proc. ent. Soc. Wash. 38.

Temnostoma apiforme var. n. *carens* Lapland p. 8, GAUNITZ Ent. Tidskr. 57.

Volucella key p. 8; *bequaerti* p. 9, *mocana* Guatemala, *lanei* p. 11, *flupei* p. 10 Brazil, spp. n., CURRAN Amer. Mus. Novit. no. 882.

Xanthandrus cubana sp. n. Cuba p. 63 figs., FLUKE J. Kans. ent. Soc. 9.

CONOPIDAE.

Catalogue and key to Palaearctic Conopidae, KRÖBER Acta Inst. Mus. zool. Univ. Athen. 1 pp. 121–159.

Conopidae of Belgian Congo, KRÖBER Rev. Zool. Bot. afr. 28 pp. 258–86, 22 figs.

Key to Holarctic Conopidae, SÉGUY Livre jubil. Bouvier 1936 pp. 300–302.

Discussion of Ctenostylidae, SOUZA LOPES Arch. Inst. Biol. veg. 2 1935 p. 250.

Anticonops gen. n., *abdominalis* sp. n. Belgian Congo p. 285 fig., KRÖBER Rev. Zool. Bot. afr. 28.

Conops key p. 275, *insularis* S. Thomé p. 278, *pallidemarginatus* Belgian Congo p. 282, spp. n. figs., KRÖBER t.c. — *C. bouvieri* sp. n. Morocco p. 299 fig., SÉGUY Livre jubil. Bouvier 1936.

Occemyia flavicornis sp. n. Belgian Congo p. 258 fig., KRÖBER Rev. Zool. Bot. afr. 28.

Physocephala key p. 263, *halterata* var. n. *congoënsis* p. 206; *intermedia* p. 266, *curta* p. 268, *gigantea* p. 271, *caenostylatus* p. 271, *pilitarsis* p. 274 spp. n. Belgian Congo; *ugandae* ♂ p. 269 figs., KRÖBER t.c.

Stylogaster obscurinotum p. 260, *nitidula* p. 262, spp. n. Belgian Congo figs., KRÖBER t.c.

Muscidae Calyptratae.

Manual of Myiology, TOWNSEND São Paulo, Townsend and Filhos Part 2 pp. 291–296; Part 3 294 pp.

Notes on parasitic Diptera of Upper Hesse, VOGEL Ber. oberhess. Ges. Giessen (N. F.) 16 1935 pp. 49–57, 2 figs.

OESTRIDAE.

Hypoderma spp. morphology pp. 453–468 figs., PATTON Ann. trop. Med. parasit. 30.

TACHINIDAE.

Tachinidae of Czechoslovakia, JACENTKOVSKÝ Bull. Inst. nat. agron. Brunn (D) 20 1933, 7 pp.

Tachinidae of Masarykuv Les, Czechoslovakia, JACENTKOVSKÝ Bull. Inst. nat. agron. Brunn (D) 22 1934, 38 pp., 1 map 5 figs.

Tachinidae of the forest region of Rafajna, Carpathians, JACENTKOVSKÝ Acta Soc. ent. Čsl. 33 pp. 76–90.

Tachinidae of Brno district, JACENTKOVSKÝ Sborn. Kl. přír. Brně 18 pp. 84–90.

Tachinidae of Bulgaria, JACENTKOVSKÝ Mitt. naturw. Inst. Sofia 9 pp. 109–134, 3 tables 1 fig.

Notes on Utah Tachinidae, KNOWLTON Proc. Utah Acad. Sci. Arts Lett. 13 pp. 241–244.

Key, morphology and biology of Tachinid parasites of *Loxostege sticticalis* in Russia, RODENDORF Bull. Acad. Sci. U.R.S.S. 1935 1935 pp. 753–780, 21 figs.

Tachinids of Carpathians, SUSTER Ann. Sci. Univ. Jassy 22 pp. 159–176.

Acemyia acuticornis characters p. 322; *calloti* sp. n. Tunisia p. 324 figs., SÉGUY Ann. Parasit. hum. comp. 14.

Actia exsecta, *comitata* p. 416, *longiseta*, *nitidella* p. 417, spp. n. Uganda, VILLENEUVE Bull. Ann. Soc. ent. Belg. 76.—*A. quadriseta* sp. n. Australia p. 20, MALLOCH Proc. Linn. Soc. N.S.W. 61.

Aldrichocyptera gen. n. for *Cylindromyia alticola* Aldr. p. 488, TOWNSEND Rev. Ent. Rio de J. 6.

Alusomyia griseascens sp. n. Nigeria p. 6, VILLENEUVE Bull. Mus. H.n. Belg. 12 no. 4.

Amesioclea gen. n. (nr. *Microphthalma*), *cincta* sp. n. Cape Colony p. 1, VILLENEUVE t.c.

Anthracomyia melanoptera var. n. *crassitarsis* China p. 7, VILLENEUVE Ark. Zool. 27A no. 34.

Apatalina n. n. for *Apatelia* Stein nec Wall. p. 233, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Apatelia see *Apatalina*.

Cestonia canariensis sp. n. Canary Is. p. 145, VILLENEUVE Comment. biol. 6 no. 1.

Chaetexorista solomonensis sp. n. Solomon Is. p. 101, BARANOV Ann. Mag. n.H. (10) 17.

Chaetocyptera gen. n. for *Ocyptera bicolor* Oliv. p. 242, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Chaetogaster viridis, *argentifera* spp. n. Australia p. 19, MALLOCH Proc. Linn. Soc. N.S.W. 61.

Clytiomyia pellucens see *Menevillea*.

Craspedothricha gen. n. for *Craspedothrix veniseta* Stein p. 236, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Craspedothrix veniseta see *Craspedothricha*.

Cylindromyia synonymy of Aldrich's grouping in 1926 p. 488, TOWNSEND Rev. Ent. Rio de J. 6.—*C. alticola* see *Aldrichocyptera*.

Dexiatrix gen. n., *longipennis* sp. n.
China p. 330, VILLENEUVE Bull. Soc.
ent. Egypte 20.

Dinera griseescens var. n. *longirostris*
China p. 6, VILLENEUVE Ark. Zool.
27A no. 34.

Echinomyia magna synonymy, distri-
bution Palaearctic Region pp. 308-313
fig., ZIMIN Rev. Ent. U.R.S.S. 25
1935.—*E. trigonata*, *hedini* p. 3, *genu-*
rufa p. 4, spp. n. China, VILLENEUVE
Ark. Zool. 27A no. 34.

Ernestia minor see *Eucompsa*.

Erycia nigricosta Solomon Is. p. 99,
rufofemorata Java, *nymphalidophaga*
India p. 112, *palpata* Formosa p. 113,
spp. n., BARANOV Ann. Mag. n.H. (10)
17.

Eutachina aurichalcea Solomon Is. p.
100, *aureifrons* (with subsp. n. *suma-*
trana) Java, Sumatra p. 107, *rusticella*
Formosa, *ladelli* Siam p. 108, spp. n.
fig., BARANOV Ann. Mag. n.H. (10)
17.

Exorista aplomyiodes sp. n. China p.
4, VILLENEUVE Ark. Zool. 27A no.
34.—*E. affinis* see *Paraxorista*.

Frauenfeldia sinensis sp. n. China p.
7, VILLENEUVE Ark. Zool. 27A no. 34.

Hamaxia mutata sp. n. S. Africa p. 6,
VILLENEUVE Bull. Mus. H.n. Belg. 12
no. 4.

Hilarella helarella var. n. *laeta* Canary
Is. p. 140, VILLENEUVE Comment. biol.
6 no. 1.

Hyalomyia cuthbertsoni p. 8, *victoria*,
negator p. 11 S. Rhodesia, *munroi* S.
Africa p. 10, spp. n., CURRAN Amer.
Mus. Nov. no. 836.

Lasiopleura griseovittata sp. n.
Australia p. 25, MALLOCH Proc. Linn.
Soc. N.S.W. 61.

Latiginella gen. n. (nr. *Hyperestina*),
rufogrisea sp. n. E. Africa p. 4, VILLE-
NEUVE Bull. Mus. H.n. Belg. 12 no. 4.

Macquartia chalconota see *Proteremo-*
plax.

Metopia deficiens sp. n. S. Africa p.
5, VILLENEUVE Bull. Mus. H.n. Belg.
12 no. 4.

Micropales maculosa sp. n. Palestine
p. 155, VILLENEUVE Konowia 15.

Myiobia hirtula sp. n. Nigeria p. 5,
VILLENEUVE Bull. Mus. H.n. Belg. 12
no. 4.

Nemoraea key to African spp. p. 12,
fortuna Tanganyika, Congo p. 14,
completa Uganda, S. Rhodesia p. 16,
incerta Kamerun p. 17, spp. n., CURRAN
Amer. Mus. Nov. no. 836.

Ocyptera deserta Nigeria, *aberrans* p. 2,
cribrata p. 3 Belgian Congo, spp. n.,
VILLENEUVE Bull. Mus. H.n. Belg. 12
no. 12.—*O. bicolor* see *Chaetocyptera*;
pilipes see *Thyrococyptera*; *coarctata* see
Psilaubaea.

Pachyophthalmus pridei sp. n. Para-
guay p. 89 fig., RICHARDS Proc. R. ent.
Soc. Lond. (B) 5.

Paraphoranthia peruviana sp. n. Peru
p. 488, TOWNSEND Rev. Ent. Rio de J.
6.

Paraxoristina gen. n. for *Exorista*
affinis Fall. p. 229, ENDERLEIN Tier-
welt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Peletieria enigmatica sp. n. China p.
2, VILLENEUVE Ark. Zool. 27A no. 34.

Pezomyia picta sp. n. Nigeria p. 7,
VILLENEUVE Bull. Mus. H.n. Belg. 12
no. 4.

Phorocera imperator, sp. n. S. Celebes
p. 109; *magna* f. n. *maxima* Formosa
p. 105, BARANOV Ann. Mag. n.H. (10)
17.

Phorocerosoma anomala sp. n. Solo-
mon Is. p. 99, BARANOV t.c.

Phyto discrepans see *Protochaeta*.

Phytomyptera rufescens sp. n. S.
Africa p. 3, VILLENEUVE Bull. Mus.
H.n. Belg. 12 no. 4.

Phytomyzoneura aristalis sp. n. Cape
Colony p. 2, VILLENEUVE t.c.

Platerycia gen. n. (nr. *Erycia*) p. 110,
compressa sp. n. Formosa p. 111,
BARANOV Ann. Mag. n.H. (10) 17.

Platychira consobrina var. n. *atri-*
palpis China p. 5, VILLENEUVE Ark.
Zool. 27A no. 34.

Protachaeta gen. n. for *Phyto discre-*
pans Pand. p. 225, ENDERLEIN Tier-
welt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Proteremoplax gen. n. for *Macquartia*
chalconota Meig. p. 240, ENDERLEIN
t.c.

Psilaubaea gen. n. for *Ocyptera*
coarctata Loew p. 242, ENDERLEIN t.c.

Salia synonymy, keys pp. 270-273, *mageritensis* sp. n. Spain p. 274; *rondaniana* further description p. 275, VILLENEUVE & MESNIL Bull. Soc. ent. Fr. 41.

Sarrorkhina gen. n. (nr. *Pyrrhosia*) p. 1, *pupilla* sp. n. S. Africa p. 2, VILLENEUVE Bull. Mus. H.n. Belg. 12 no. 4.

Stomatomyia acuminata ♀ p. 418, VILLENEUVE Bull. Ann. Soc. ent. Belg. 76.—*S. acuminata* var. n. *approximata* Canary Is. p. 145, VILLENEUVE Com-ment. biol. 6 no. 1.

Synamphichaeta gen. n. (nr. *Amphi-chæta*), *trivincta* sp. n. Canary Is. p. 146, VILLENEUVE t.c.

Tachina vivipara see *Stiraulax*; *oblonga* see *Codium*.

Tachinomima multisetosa sp. n. Ruwenzori p. 7, VILLENEUVE Bull. Mus. H.n. Belg. 12 no. 4.

Thyrsocyptera gen. n. for *Ocyptera pilipes* Loew p. 242, ENDERLEIN Tier-welt. Mitteleur. 6 iii Teil, 2 Lief., xvi.

Trixiceps gen. n., *aegyptiaca* sp. n. Egypt p. 329, VILLENEUVE Bull. Soc. ent. Egypte 20.

Zenillia roseanella sp. n. New Britain p. 104, BARANOV Ann. Mag. n.H. (10) 17.

Zoramsceus gen. n. for ? *erichsoni* Engel p. 416, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

CALLIPHORIDAE

(including SARCOPHAGIDAE).

Classification of Rutiliinae, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1 pp. 397-446.

Calliphoridae of Bulgaria, JACENTKOVSKY Mitt. naturw. Inst. Sofia 9 pp. 109-134.

Notes on some Utah flesh flies, KNOWLTON Proc. Utah Acad. Sci. Arts Lett. 13 pp. 237-239.

British species of Sarcophaginae with illustrations of terminalia, PATTON & WAINWRIGHT Ann. trop. Med. Parasit. 30 pp. 187-201, 8 figs. pp. 337-350, 8 figs.

Key to female Sarcophaginae, ROHDENDORF Bull. Soc. Nat. Moscow (N. S.) 45 Sect. Biol. pp. 279-284.

Paratypes of Brazilian Sarcophagids of Townsend in Mus. Paulista, DE SOUZA LOPES Mus. Univ. São Paulo 21 pp. 839-853, 4 pls.

Agalmia gen. n. for *Rutilia albopicta* Thoms. p. 433, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Alaccoprosopa apicalis ♂ p. 76 figs., DE SOUZA LOPES Arch. Inst. Biol. veg. Rio de J. 3.

Amenia leonina ab. n. *chaetameniina* p. 443; *imperialis* ab. n. *chaetameniina* p. 444, Australia, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.—*A. chrysame*, *nigromaculata* see *Chaetamenia*.

Amobia africa S. Rhodesia p. 5, capensis Natal, Pretoria p. 6, spp. n., CURRAN Amer. Mus. Nov. no. 836.

Bothrostira gen. n. (Rutiliini), *prisca* sp. n. New Pomerania p. 413, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Chaetamenia gen. n. for *Amenia chrysame* Wlk. (type) and *nigromaculata* Mall. p. 442, ENDERLEIN t.c.

Chaetophaenicia gen. n. for *Lucilia silvarum* Meig. p. 211, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Chaetopollenia gen. n. for *Pollenia vespillo* F. p. 211, ENDERLEIN t.c.

Chromocharis gen. n. for *Rutilia atribasis* Walk. p. 432, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Chrysorutilia Towns. (= *Habrota* End.) p. 446, *caeruleata* p. 403, *goeringiana* p. 404, *rufibarbis* p. 405, *lineata* p. 407 W. Australia, *caesia* N. Australia (with var. n. *viridescens*), *angustigena* p. 403 Queensland, *nana* Key Is. p. 404, *luzona* Luzon p. 406, spp. n.; *splendida* varr. n. *evanescens*, *confluens* p. 407; *media* var. n. *scutellata* p. 405 Australia, ENDERLEIN t.c.

Chrysosarcophaga magnifica sp. n. Solomon Is. p. 102, BARANOV Ann. Mag. n. H. (10) 17.

Cochliomyia hominivorax discussed p. 485, TOWNSEND Rev. ent. Rio de J. 6.

Codium gen. n. for *Tachina oblonga* Macq. p. 417, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Cordylobia revision based on male and female terminalia pp. 57-69 figs., PATTON Ann. trop. Med. Parasit. 30.

Discachaeta jacentkovskyi sp. n. Bulgaria p. 98, ENDERLEIN Mitt. naturw. Inst. Sofia 9.

Doleschallius gen. n. type *Rutilia nigrocostalis* Dolesch. p. 441, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Donovanius gen. n. for *Rutilia regalis* Guér. etc. p. 409; *imitator* Australia, *agalmiodes* N. Queensland spp. n. p. 412; *fulgidus* var. n. *nigribasis* W. Australia p. 411, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Eucompsa gen. n. for *Ernestia minor* Macq. p. 400, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.—See *Microrutilia*.

Formosia mirabilis subsp. n. *solomonicola* Solomon Is. p. 101, BARANOV Ann. Mag. n.H. (10) 17.—*F. saturatissima* see *Laccura*; *callipygos*, *glorificans* see *Pancala*.

Formosiomima gen. n. (Rutiliini); *imitatrix* sp. n. Western Australia p. 444, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Grapholestylum latifrons sp. n. Australia p. 442, ENDERLEIN t.c.

Habrota gen. n. for *Rutilia formosa* R.-D. p. 399, ENDERLEIN t.c.—See *Chrysorutilia*.

Hega gen. n. (Rutiliini), *viridicingens* (type) Batjan p. 421, *faceta* North Queensland p. 422 spp. n., ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Helicobia bulgarica sp. n. Bulgaria p. 100, ENDERLEIN Mitt. naturw. Inst. Sofia 9.

Helicobiopsis aurescens redescription p. 845, DE SOUZA LOPES Mus. Univ. São Paulo 21.

Idania gen. n. (Rutiliini), *atrox* (type) Luzon p. 408, *ralumensis* Bismarck Arch. p. 409 spp. n., ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Jacentkovskyia gen. n., *balcanica* sp. n. Bulgaria p. 99 fig., ENDERLEIN Mitt. naturw. Inst. Sofia 9.

Laccura gen. n. for *Formosia saturatissima* Walk. (type); *engeli* sp. n. Banda Is. p. 431, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Lamprometopia pollenia p. 1, *pretoria* p. 3, spp. n. Pretoria, CURRAN Amer. Mus. Nov. no. 836.

Lepidodexia sarcophagina Towns. from *Xylocampta* p. 847, DE SOUZA LOPES Mus. Univ. São Paulo 21.

Liostiria gen. n. (Rutiliini), *ralumensis* sp. n. Bismarck Arch. p. 440, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Lucilia spp. key to third instar larvae p. 288 figs., KNIPLING Iowa St. Coll. J. Sci. 10.—*L. silvarum* see *Chaetophaenicia*.

Menevillea gen. n. for *Clytiomyia pellucens* Macq. p. 416, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Micronitellia gen. n. for *Mycetaulus varius* Mg. p. 211, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Microrutilia Towns. (= *Eucompsa* Enderl.) p. 446, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Mitlogramma cuthbertsoni S. Rhodesia p. 6, *munroi* Pretoria p. 7, spp. n., CURRAN Amer. Mus. Nov. no. 836.

Mycetaulus varius see *Micronitellia*.

Neorutilia subgen. n. see *Rutilia*.

Nephochaetopteryx key p. 83, *flavipalpis* p. 85, *cyaneiventris* p. 86, *affinis* p. 88, spp. n. Brazil figs., DE SOUZA LOPES Inst. Arch. Biol. veg. Rio de J. 3.

Notochaeta indusa sp. n. Solomons p. 61 fig., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Onesia sinensis sp. n. China p. 10, VILLENEUVE Ark. Zool. 27A no. 34.

Pancala gen. n. for *Formosia callipygos* Gerst. (type) etc. p. 422; *eos*, *blattiva* p. 423, *heinrichiana* p. 426 Celebes, *gemmata* Ralum (with var. n. *viridescens* New Pomerania) p. 424, *heinrothi* New Guinea, *bracteata* New Mecklenburg p. 425, spp. n.; *glorificans* var. n. *fulvipes* New Guinea p. 426, ENDERLEIN Veröff. deutsch. kol. Mus. Bremen 1.

Paratricyclea iridata sp. n. Madagascar; *nudiusscula* subsp. n. *moerens* S. Africa p. 8, VILLENEUVE Bull. Mus. H.n. Belg. 12 no. 4.—*P. aurescens* sp. n. Solomon Is. p. 103, BARANOV Ann. Mag. n.H. (10) 17.

Phalacrodiscus whitneyi sp. n. Solomons p. 62, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Phyllogaster mallitosus sp. n. Maryland p. 199, HUCKETT J. N.Y. ent. Soc. 44.

Plionychia gen. n. for *Sphecapata conica* Fall. p. 223, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Pogonagalmia gen. n. for *Rutilia hirticeps* Mall. p. 435, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Pollenia stolida p. 21, *nigrita* p. 22, spp. n. Australia, MALLOCH Proc. Linn. Soc. N.S.W. 61.—*P. vera* sp. n. Bulgaria p. 114 fig., VILLENEUVE in JACENTKOVSKY Mitt. naturw. Inst. Sofia 9.—*P. vespillo* see *Chaetopollenia*; *vagabunda* see *Trichopollenia*.

Prodiaphania see *Senostoma*.

Prosenostoma ruficorne ab. n. *agalmiodes* p. 434; *nigripes* sp. n. p. 435 Australia, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Protofucellia gen. n. p. 281, *synitomorii* sp. n. Japan p. 282 figs., SÉGUY Bull. Soc. ent. Fr. 41.

Psaronia gen. n. (Rutiliini), *bisetosa* sp. n. W. Australia p. 414, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Psaroniella gen. n. for *Rutilia castanipes* Big. p. 417, ENDERLEIN t.c.

Pterella triseriata, *africana* spp. n. S. Africa p. 4, CURRAN Amer. Mus. Nov. no. 836.

Rutilia transversa p. 15, (*Neorutilia* subgen. n.) *simplex* p. 17 spp. n.; *ruficornis* var. n. *cupreiventris* p. 18 Australia figs., MALLOCH Proc. Linn. Soc. N.S.W. 61.—*R. atribasis* see *Chromocharis*; *regalis* see *Donovanius*; *formosa* see *Habrota*; *castanipes* see *Psaroniella*; *albopicta* see *Agalmia*; *hirticeps* see *Pogonagalmia*.

Sarcophaga relationships between Indian and Australian Sarcophaginae and keys, HARDY Proc. Linn. Soc. N.S.W. 61 pp. 89-97.—*S. linearis* sp. n. China p. 8 fig., VILLENEUVE Ark. Zool. 27A no. 34.—*S. dysderci* p. 417, *disessa* p. 418, spp. n. Uganda fig., VILLENEUVE Bull. Ann. Soc. ent. Belg. 76.—*S. Egyptian* spp. pp. 229-247, *rohndorfi* sp. n. Egypt p. 237, key p. 242 figs., SALEM Bull. Soc. ent. Egypte 20.—*S. zethus* sp. n. Solomons p. 60 fig., CURRAN Proc. Calif. Acad. Sci. (4) 22.—*S. azoia* sp. n. Tibesti p. 92 figs., SÉGUY Mém. Acad. Sci. Paris (2) 62.—*S.* list of Hainan spp. pp. 207-

215; *hui* p. 207, *hainanensis* p. 210, spp. n. Hainan figs., Ho Bull. Fan mem. Inst. Biol. 6.

Sarcophila cinerea morphology, biology pp. 367-372 figs., VENKATRAMAN Rec. Ind. Mus. 38.

Sarcotachinella vitoschana sp. n. S.W. Bulgaria p. 69, ENDERLEIN Mitt. naturw. Inst. Sofia 9.

Senostoma Macq. (= *Prodiaphania* Towns.) p. 10, key to Australian spp. p. 11, *victoriae* p. 13, *furcata*, *regina*, *biarmata* p. 14, *cygnus* p. 15, spp. n. Australia figs., MALLOCH Proc. Linn. Soc. N.S.W. 61.

Sphecapata conica see *Plionychia*.

Stilbomyia latigena p. 438, *sauteri* (with var. n. *viridis*) Formosa, *hoeneana* China p. 439, spp. n., ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Stiraulax gen. n. for *Tachina vivipara* F. p. 428, ENDERLEIN Veröff. dtsh. kol. Mus. Bremen 1.

Termitolemus gen. n. p. 646, *marshalli* sp. n. India p. 647 figs., BARANOV Ann. Mag. n.H. (10) 17.

Trichopollenia gen. n. for *Pollenia vagabunda* Meig. p. 211, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Tricyclea ornatipennis sp. n. Belgian Congo p. 9, VILLENEUVE Bull. Mus. H.n. Belg. 12 no. 4.

Wohlfahrtia triquetra sp. n. Tibesti p. 90 fig., SÉGUY Mém. Acad. Sci. Paris (2) 62.

Xanthobrachycoma analis re-description p. 72 figs., DE SOUZA LOPES Arch. Inst. Biol. veg. Rio de J. 3.

Xenopopia erythropyga sp. n. Brazil p. 71 figs., DE SOUZA LOPES Arch. Inst. Biol. veg. Rio de J. 3.

Xylocampta sarcophagina see *Lepidodexia*.

MUSCIDAE (s. str.).

List and keys of the blood-sucking Muscids of Peiping, Ho Bull. Fan mem. Inst. Biol. 6 pp. 185-206, 15 figs.

Corrections, etc., to author's paper on Muscidae, KARL Stettin. ent. Z. 97 pp. 137-140.

Tsetse-flies, their characteristics, life-history and control, ZUMFT Die Tsetse-fliegen 1936 149 pp. 121 figs. 15 tables.

Glossina revision based on male and female terminalia pp. 71-89, 151-168, 305-330, figs., PATTON Ann. trop. Med. Parasit. 30; taxonomic importance of reproductive organs pp. 546-560, figs., ZUMPT Z. Parasitenk. 8.—*G. martini* a subsp. of *palpalis* p. 558; ZUMPT Z. Parasitenk. 8.

Musca revision of Ethiopian spp. based on ♂ genitalia pp. 469-490, *cuthbertsoni* Rhodesia p. 470, *munroi* p. 487 spp. n. Natal figs., PATTON Ann. trop. Med. Parasit. 30.—*M. lasiopa* sp. n. Kenya p. 414, VILLENEUVE Bull. Ann. Soc. ent. Belg. 76.

ANTHOMYIIDAE.

Revision of Coenosine and Limnophorine genera in N. America, HUCKETT J. N.Y. ent. Soc. 44 pp. 187-222, 5 pls.

Puparia of Anthomyiidae, STORK Tijdschr. Ent. 79 pp. 94-167, 35 figs.

Adiplectra gen. n. for *Coenosia sexnotata* Mg. p. 201, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Atherigona reversura sp. n. China p. 11, VILLENEUVE Ark. Zool. 27A no. 34.—*A. arenga* sp. n. Malaya p. 154 fig., MALLOCH J. F.M.S. Mus. 13.—*A. matema* sp. n. Solomons p. 56, fig., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Beckerinella gen. n., *pygmaea* sp. n. Croatia p. 195, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Blepharopoda gen. n. for *Lispa caesia* Meig. p. 195, ENDERLEIN t.c.

Cerodiscia gen. n., *zelleri* sp. n. Sicily p. 201, ENDERLEIN t.c.

Chortophila laricicola morphology, biology pp. 206-220 figs., ZONOVA Rev. Ent. U.R.S.S. 25 1935.

Coenosia discrepans see *Mesodiplectra*; *intermedia* see *Trilasia*; *sexnotata* see *Adiplectra*.

Delia lineola sp. n. China p. 2, COLLIN Ark. Zool. 27A no. 35.

Diatinoza gen. n., *trentina* sp. n. S. Tyrol p. 201, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Fannia parasitica sp. n. Ecuador p. 258, SÉGUY Rev. chil. H.n. 37 1933.

Hebdomostilba gen. n. for *Hoplogaster obscuricula* Rond. p. 200, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Hoplogaster obscuricula see *Hebdomostilba*.

Hylemyia dordeacea sp. n. Morocco p. 3 fig., SÉGUY Bull. Soc. Sci. nat. Maroc 16.

Lispa dissona p. 156, *quaerens* p. 157, sp. n. Anatolia, VILLENEUVE Konowia 15.—*L. caesia* see *Blepharopoda*.

Macrororchis comita sp. n. Alaska p. 214, HUCKETT J. N.Y. ent. Soc. 44.

Melanochelia caesia sp. n. France p. 142, VILLENEUVE Bull. Soc. ent. Fr. 41.

Mesodiplectra gen. n. for *Coenosia discrepans* Stein p. 201, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Mydaea key to Swedish spp. p. 45, *micans* sp. n. Sweden p. 47, RINGDAHL Opusc. ent. Lund 1.

Nudaria see *Psiloplastinx*.

Pegohylemyia jacobaeae, *seneciella* discussed p. 53, COLLIN Ent. Rec. 48.

Pegomyia cameroni sp. n. Malaya p. 156, MALLOCH J. F.M.S. Mus. 13.

Phaonia canariensis sp. n. Canary Is. p. 135, VILLENEUVE Comment. biol. 6 no. 1.—*P. tersa* sp. n. Anatolia p. 156, VILLENEUVE Konowia 15.

Platychiracra gen. n., *siciliana* sp. n. Sicily p. 201, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Psephidocera gen. n. for ? *orbicornis* Stein 1916 p. 201, ENDERLEIN t.c.

Pseudocoenosia nigriventris p. 206, *brevicauda* p. 207, spp. n. U.S.A., HUCKETT J. N.Y. ent. Soc. 44.

Psiloplastinx n. n. for *Nudaria* Karl nec Haworth p. 199, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Scenetes gen. n. (Phaoniinae) p. 9, *cardini* sp. n. Cuba, Porto Rico p. 10, MALLOCH Proc. ent. Soc. Wash. 38.

Trichopticus michitanii sp. n. Japan p. 25 figs., KATO Ins. mats. 11.

Trilasia gen. n. type *Coenosia intermedia* Flin. p. 140, KARL Stettin. ent. Z. 97.

Muscidae Acalyptratae.

Muscidae Acalyptratae (excluding Chloropidae) from Brazil, HENDEL Ann. naturh. Mus. Wien 47 pp. 61–106, 5 figs.

Acalyptratae of Cornwall, THORNLEY Trans. Soc. Br. Ent. 3 pp. 155–171.

BORBORIDAE (SPHAEROCERIDAE).

Borboridae from Midlothian, SMART Scot. Nat. no. 221 p. 134.

Apterina pedestris wings pp. 266–273 figs., GUIBE Bull. Soc. zool. Fr. 61.

Crumomyia glacialis var. n. *rufo-annulata* Kamtchatka p. 12, DUDA Ark. Zool. 28A 1935 no. 7.

Leptocera (*Rachispodina* subgen. n.) *fuscipennis* Halid. p. 173, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Rachispodina subgen. n. see *Leptocera*.

MORMOTOMYIIDAE.

Mormotomyia gen. n. p. 426, *hirsuta* sp. n. Kenya p. 429 figs., AUSTEN Proc. zool. Soc. Lond. 1936.

Mormotomyiidae fam. n. p. 426, AUSTEN t.c.

HETERONEURIDAE (CLUSIIDAE).

Clusiidae of Finland, TUOMIKOSKI Ann. ent. fenn. 2 pp. 182–186, 2 figs.

Czernyola pleuralis sp. n. Solomons p. 54, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Heteromeria fucata sp. n. Brazil p. 89, HENDEL Ann. naturh. Mus. Wien 47.

SCATOMYZIDAE (including

SCOTOPHAGIDAE, CORDYLURIDAE).

Revision of Scopeumatidae, RINGDAHL Ent. Tidskr. 57 pp. 158–179, 6 figs.

Acanthocnema nigripes sp. n. Sweden p. 175 fig., RINGDAHL Ent. Tidskr. 57.

Amaurosoma albipilum sp. n. Sweden p. 177 fig., RINGDAHL t.c.

Chaetosa pilirostris sp. n. Sweden p. 178, RINGDAHL t.c.

Cochliarium lasiostoma see *Rhopochilus*.

Cordylura unilineata see *Megaphthalmoides*.

Megaphthalmoides gen. n. type *Cordylura unilineata* Zett. p. 179, RINGDAHL Ent. Tidskr. 57.

Microprosopa (*Paramicroprosopa* subgen. n. p. 169), *subarctica* sp. n. Sweden pp. 169, 177, RINGDAHL t.c.

Paramicroprosopa subgen. n. see *Microprosopa*.

Rhopochilus gen. n. for *Cochliarium lasiostoma* Beck. p. 136, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Scopeuma vulpinum p. 173, *fascifrons* p. 174 Lapland, *maculipenne*, *parviceps* Sweden p. 175, spp. n. figs., RINGDAHL Ent. Tidskr. 57.

SCIOMYZIDAE (DRYOMYZIDAE, NEOTTIOPHILIDAE, HELCOMYZIDAE).

Antichaeta bisetosa see *Parantichaeta*.

Euthycera guanchica sp. n. Canary Is. p. 97 fig., FREY Comment. biol. 6 no. 1.

Parantichaeta gen. n. for *Antichaeta bisetosa* Hend. p. 145, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

SAPROMYZIDAE (LAUXANIIDAE)

(including CELYPHIDAE).

Desmometopa anuda sp. n. Solomons p. 46, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Homoneura pictipennis sp. n. Brazil p. 86 fig., HENDEL Ann. naturh. Mus. Wien 47.—*H. anuda*, *whitneyi* p. 39, *crockeri*, *sikaiana* p. 40, spp. n. Solomons figs., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Maquilingia malaita p. 33, *matema* p. 34, spp. n. Solomons, CURRAN t.c.

Minettia surda, *ethelia* spp. n. Solomons p. 35 fig., CURRAN t.c.

Sapromyza insularis var. n. *bentejui* p. 99: *linguarrae* p. 100, *columbi*, *teneriffensis* p. 101 spp. n. Canary Is. figs., FREY Comment. biol. 6 no. 1.

Steganopsis solomensis, *ceres* spp. n. Solomons p. 32 fig., CURRAN Proc. Calif. Acad. Sci. (4) 22.

LONCHAEIDAE.

Alasia gen. n. for *Palloptera ambusta* Meig. p. 153, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

DasyLonchaea gen. n. for *Lonchaea crystallophila* Beck. and *nigroviolacea* Frey p. 152 fig., ENDERLEIN t.c.

Hemisira gen. n. for *Palloptera costalis* Loew p. 153, ENDERLEIN t.c.

Lasilonchaea gen. n. for *Lonchaea chorea* F. p. 152 fig., ENDERLEIN t.c.

Lonchaea chorea see *Lasilonchaea*; *crystallophila*, *nigroviolacea* see *DasyLonchaea*.

Palloptera saltuum see *Temnosira*; *costalis* see *Hemisira*; *ambusta* see *Alasia*; *umbellatarum* see *Sira*.

Sira gen. n. for *Palloptera umbellatarum* F. p. 153, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Temnosira gen. n. for *Palloptera saltuum* L. p. 153, ENDERLEIN t.c.

TRYPETIDAE.

Additional notes on British Trypetidae, NIBLETT Ent. Rec. 43 pp. 13-14.

Acanthiophilus benoisti p. 256, *scutellatus* p. 238, spp. n. Ecuador fig., SÉGUY Rev. chil. H.n. 37 1933.

Acrotaenioskola hōnei sp. n. Shanghai p. 57 fig., HERING Konowia 15.

Anastrepha costalimai sp. n. Argentina p. 194 fig., AUTUORI Rev. Ent. Rio de J. 6.

Cecidocharella gen. n. p. 74, *elegans* sp. n. Brazil p. 75 fig., HENDEL Ann. naturh. Mus. Wien 47.

Ceriocera ceratocera rr. p. 207, subsp. n. *microcerus* Germany p. 211 figs., HERING Dtsch. ent. Z. 1935.

Chaetostomella alini sp. n. Manchuria p. 184 fig., HERING Konowia 15.

Cryptodacus scutellatus sp. n. Brazil, p. 73, HENDEL Ann. naturh. Mus. Wien 47.

Euphranta flavorufa sp. n. Manchuria p. 180 fig., HERING Konowia 15.

Ictericia depuncta sp. n. Manchuria p. 184, HERING t.c.

Myiolia angustifascia sp. n. Manchuria p. 181, HERING t.c.

Noëta crepidis sp. n. Magdeburg p. 62 fig., HERING t.c.

Orellia megalopyge sp. n. Manchuria p. 183 fig., HERING t.c.

Orotava gen. n. for *Sphenella caudata* Beck p. 93, FREY Comment. biol. 6 no. 1.

Oxya nasuta sp. n. Podolia p. 60 figs., HERING Konowia 15.

Pardalaspis cuthbertsoni sp. n. S. Rhodesia p. 42, MUNRO Occ. Pap. Rhod. Mus. no. 5.

Paroxyna lhommei France p. 59, *defasciata* p. 185, *medora*, *oxynoides* p. 186 Manchuria, spp. n. figs., HERING Konowia 15.

Platensina malaita sp. n. Solomons p. 29 fig., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Rhabdochaeta crockeri sp. n. Solomons p. 28 fig., CURRAN t.c.

Rhagoletis reducta sp. n. Manchuria p. 182 fig., HERING Konowia 15.

Sphenella caudata see *Orotava*.

Tephritis alini sp. n. p. 188; *cometa* subsp. n. *cingulata* p. 189 Manchuria, HERING t.c.—*T. mundelli* sp. n. Brazil p. 158 figs., DA COSTA LIMA Ann. Acad. bras. Sci. 8.

Themarohystrix exul sp. n. Solomons p. 27 fig., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Trypanea porteri sp. n. Ecuador p. 256, SÉGUY Rev. chil. H.n. 37 1933.—*T. paragoga* Peru, Chile p. 328, *multisetosa* Peru, *nubilata* p. 330, *omphale* p. 331 Chile, spp. n. figs., HERING Rev. Ent. Rio de J. 6.—*T. convergens* sp. n. Manchuria p. 188 fig., HERING Konowia 15.

Vidalia spinulosa sp. n. Silesia p. 56, HERING t.c.

Xyphosia miliaria subsp. n. *orientalis* Manchuria p. 184, HERING t.c.

ORTALIDAE (PLATYSTOMIDAE, PYRGOTIDAE, TANYPEZIDAE).

Classification of Tanypezidae, ENDERLEIN Dtsch. ent. Z. 1936 pp. 39-47.

Systematics and distribution of Pyrgotidae, HENNIG Arb. morph. tax. Ent. Berl. 3 pp. 243-256, 2 figs.

Adapsilia borneensis sp. n. Borneo p. 254, HENNIG Arb. morph. tax. Ent. Berl. 3.

Allogriphoneura robusta sp. n. Brazil p. 86, HENDEL Ann. naturh. Mus. Wien 47.

Aloceuxesta gen. n. for *Euxesta spoliata* Loew p. 78, HENDEL t.c.

Angitula longicornis sp. n. Roon p. 242, ENDERLEIN Arb. morph. tax. Ent. Berl. 3.

Angitulina gen. n. type *polita* Saund. p. 228, ENDERLEIN t.c.

Apyrgota formosana sp. n. Formosa p. 253, HENNIG t.c.

Archiphytalmia gen. n., *prisca* sp. n. New Guinea p. 230, ENDERLEIN t.c.

Campylocera ornatipennis S. Africa p. 254, *mindanensis* Mindanao p. 255, spp. n., HENNIG t.c.

Deutominettia (*Tibiminettia* subgen. n.) p. 84, HENDEL Ann. naturh. Mus. Wien 47.

Eumetopiella fascipennis see *Neoeumetopiella*.

Euprosopia lepida sp. n. Solomons p. 25, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Eusieta scoriacina sp. n. Brazil p. 77, HENDEL Ann. naturh. Mus. Wien 47.

Euxesta spoliata see *Aloceuxesta*.

Hammatopelma gen. n., *nigra* sp. n. New Guinea p. 228, ENDERLEIN Arb. morph. tax. Ent. Berl. 3.

Hemixantha flava sp. n. Brazil p. 476 figs., DE SOUZA LOPES Rev. Ent. Rio de J. 6.—*H. fasciventris* sp. n. Brazil p. 80, HENDEL Ann. naturh. Mus. Wien 47.

Meachina gen. n., *violacea* sp. n. New Guinea p. 241, ENDERLEIN Arb. morph. tax. Ent. Berl. 3.

Naupoda ventralis sp. n. Solomons p. 26, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Neoeumetopiella gen. n. for *Eumetopiella fascipennis* Hend. p. 78, HENDEL Ann. naturh. Mus. Wien 47.

Neopyrgota picea p. 250, *major* p. 251 Costa Rica, *appendiculata*, *falciterebra* p. 252, *unappendix* p. 253 Brazil, spp. n., HENNIG Arb. morph. tax. Ent. Berl. 3.

Neotanypeza flavitibia p. 34, *nigripalpis* p. 36, spp. n. Peru, HENNIG Dtsch. ent. Z. 1936.

Odontomera ruficauda sp. n. Brazil p. 79, HENDEL Ann. naturh. Mus. Wien 47.

Ophryoterpnomyia gen. n. for *Terpnomyia latifrons* Hend. p. 76, HENDEL t.c.

Ozaenina diversa sp. n. Brazil p. 478 figs., DE SOUZA LOPES Rev. Ent. Rio de J. 6.

Parasepsisoma gen. n. for *Sepsisoma geniculatum* Hend. (type), *sepsoides* Schin. p. 80, HENDEL Ann. naturh. Mus. Wien 47.

Polphopeza montana sp. n. Colombia p. 40, ENDERLEIN Dtsch. ent. Z. 1936.

Pseudogriphoneura tristis p. 84, *micans* p. 85, spp. n. Brazil, HENDEL Ann. naturh. Mus. Wien 47.

Scholastes palmyra Palmyra I., *soloemensis* p. 24, *whitneyi* p. 25 Solomons, spp. n., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Scipopeza dimorpha sp. n. Peru p. 37, HENNIG Dtsch. ent. Z. 1936.

Sepsisoma geniculatum, *sepsoides* see *Parasepsisoma*.

Setellia nigripes sp. n. Brazil p. 475 figs., DE SOUZA LOPES Rev. Ent. Rio de J. 6.

Terpnomyia latifrons see *Ophryoterpnomyia*.

Tibiminettia subgen. n. see *Deutero-minettia*.

Travassomyia gen. n., *borgmeieri* sp. n. Brazil p. 248 figs., DE SOUZA LOPES Arch. Inst. Biol. veg. 2 1935.

Tripolphopeza gen. n. type *elegantina* End. p. 41, ENDERLEIN Dtsch. ent. Z. 1936.

Tritanypeza gen. n. key and scope p. 43, *cubito fusca* (type) p. 44, *ochrifemur* Paraguay, *flavibasis* Brazil p. 45, *flavicalx* Colombia, *rufiventris* Bolivia p. 46, spp. n., ENDERLEIN t.c.

Xenochaetina opaca sp. n. Brazil p. 82; *leucostoma* n. n. for *argyrostoma* Schin. nec Wied. p. 83, HENDEL Ann. naturh. Mus. Wien 47.

RHOPALOMERIDAE.

Rhinotora travassosi ♂ p. 106; *diversipennis* sp. n. Brazil p. 107 figs., DE SOUZA LOPES Rev. Ent. Rio de J. 6.

SEPSIDAE (PIOPHILIDAE).

Sepsis mequignoni p. 17, *nephodes* p. 18, spp. n. Azores figs., SÉGUY Ann. Soc. ent. Fr. 105.

MICROPEZIDAE

(NERIIDAE, TYLIDAE).

Revision of Tylidae, II, HENNIG Konowia 15 pp. 129-144, 201-239, 15 figs., 2 maps.

Cardiocephala elegans sp. n. Brazil p. 64 figs., HENDEL Ann. naturh. Mus. Wien 47.

Philosphen subgentilis sp. n. Brazil p. 71, HENDEL t.c.

Rainieria hjaloptera sp. n. Brazil p. 66, HENDEL t.c.

Scipopus ruficeps sp. n. Brazil p. 68, HENDEL t.c.

Systellapha acutivitta sp. n. Brazil p. 67, HENDEL t.c.

Trepidaria mima sp. n. N. America p. 134, fig., HENNIG Konowia 15.

Tylos flavus Peru, *dorsalis* Paraguay p. 204, *reuniensis* Guatemala p. 205, *peruanus* Peru, *breviradialis* Panama p. 208, *nitidus* Arizona p. 212 spp. n.; *marginatus* n. n. for *limbata* End. nec Roeder p. 206, HENNIG t.c.

PSILIDAE.

Lasiopsila gen. n. p. 54, *fasciata* sp. n. Solomons p. 55 figs., CURRAN Proc. Calif. Acad. Sci. (4) 22.

Tetrapsila longipennis sp. n. Azores p. 17, SÉGUY Ann. Soc. ent. Fr. 105.

CHLOROPIDAE (OSCINIDAE).

Chloropidae from Brazil, DUDA Ann. naturh. Mus. Wien 47 pp. 107-113.

Botanobia marginalis, *proxima* see *Oscinella ovalis*; *darlingtoniae* see *Madiza*.

Calamoncosis laminiformis, *aprica* see *Stizambia*.

Chloropisca review of Nearctic spp. pp. 170-177, key p. 170, *appropinqua* Adams (= *pullipes* Coq.) p. 171; *pulla* Adams (= *punctum* Beck., *integra* Beck.) p. 174; *variceps* Lw. (= *marianopolitana* Ouellet) p. 177, SABROSKY Canad. Ent. 68.

Chlorops lithofrons sp. n. Santa Cruz p. 46, CURRAN Proc. Calif. Acad. Sci. (4) 22.—*C. bilineata* see *Diplotoxa messoria*.

Conioscinella angulicornis sp. n. Pernambuco p. 109, DUDA Ann. naturh. Mus. Wien 47.—*C. pumilio* see *Trachysiphonella*.

Cordylosoma valparainum sp. n. S. India p. 343, DUDA Ann. Mag. n.H. (10) 18.

Dasyopa see *Madiza*.

Dicraeus gen. n. for *Dicraeus raptus* Curt. p. 186, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Dicraeus raptus see *Dicraeus*; *styriacus* see *Paroedesiella*.

Diplotoxa messoria Fall. (= *Chlorops bilineata* Adams); *confluens* Lw. (= *glabricollis* Beck. nec Thoms., *inclinata* Beck.) p. 247, SABROSKY Ent. News 47.

Formosina cardami sp. n. S. India p. 345, DUDA Ann. Mag. n.H. (10) 18.

Gampsocera hedini sp. n. China p. 2 fig., ENDERLEIN Ark. Zool. 27B (sep. dated 1933) no. 3.—*G. curvinervis* see *Lordophleps*.

Goniopsita rhodesiae sp. n. S. Rhodesia p. 342, DUDA Ann. Mag. n.H. (10) 18.—*G. fycoperda* see *Lasiambia*.

Hippelates Jamaican spp. pp. 307-321 figs., KUMM Bull. ent. Res. 27.—*H. tenuifacies* p. 48, *matema* p. 49, spp. n. Solomons, CURRAN Proc. Calif. Acad. Sci. (4) 22.—*H. circumdata* Beck. from *Siphonella*; *dissidens* Tuck. from *Oscinis* (= *H. texana* Mall., *Oscinella particeps* Beck. (in part)) p. 245; *particeps* from *Oscinella* (= *subvittata* Mall.) p. 246, SABROSKY Ent. News 47.—*H. longulus* see *Lasiopleura*.

Lasiambia gen. n. for *Goniopsita fycoperda* Bec. etc. p. 188, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi

Lasiopleura longulus Beck. from *Hippelates* p. 246, SABROSKY Ent. News 47.

Liohippelates nigrivertex p. 107, *convexiformis* p. 108, spp. n. Pernambuco, DUDA Ann. naturh. Mus. Wien 47.

Lordophleps gen. n. type *Gampsocera curvinervis* Beck. p. 1, ENDERLEIN Ark. Zool. 27B (sep. dated 1933) no. 3.

Madiza Fall. (= *Dasyopa* Mall.) key to Nearctic spp. p. 709, *cinerea* Lw. (= *trivittata* Fabr.); *darlingtoniae* Jones from *Botanobia* p. 715; *latifrons* Lw. (= *pleuralis* Mall.); *neglecta* Beck. (= *diabolus* Beck., *aequa* Beck., *sulfurihaliterata* Beck.) p. 716; *punctifrons*

Beck. (= *projecta* Mall.); p. 718; *trigramma* Lw. from *Oscinis*, SABROSKY Ann. ent. Soc. Amer. 29.—*M. conicola* see *Oscinella*.

Microneurum corbetti sp. n. Selangor p. 338, DUDA Ann. Mag. n.H. (10) 18.

Monochaetoscinella zernyi sp. n. Para p. 112, DUDA Ann. naturh. Mus. Wien 47.

Oscinella Jamaican spp. pp. 307–315, 321–327, *turneri* p. 325, *saundersi* p. 326, spp. n. Jamaica figs., KUMM Bull. ent. Res. 27.—*O.* key to Nearctic spp. p. 709, *abdominalis* Beck. (= *bifurca* Fabr.) p. 720; *conicola* Greene from *Madiza*; *coendix* Fitch (= *c. var. obscura* Beck.) and *var. n. pullicornis* U.S.A. p. 721; *difficilis* Beck. (= *apparens* Beck.); *dorsata* Lw. (= *spiniger* Fabr.) p. 722; *frit* L. (= *obscura* Coq.) p. 723; *incerta* Beck. (= *opacifrons* Aldr.) p. 724; *nuda* Adams (= *frontalis* Tucker) p. 725; *ovalis* Adams (= *Botanobia marginalis* Mall., *proxima* Mall.) p. 726; *virata* Coq. (= *pectoralis* Coq.) p. 727, SABROSKY Ann. ent. Soc. Amer. 29.—*O. vixen* p. 47, *solomensis* p. 48, spp. n. Solomons, CURRAN Proc. Calif. Acad. Sci. (4) 22.—*O. maculicornis* sp. n. Pernambuco p. 111, DUDA Ann. naturh. Mus. Wien 47.—*O. particeps* (part) see *Hippelates dissidens*; *atriceps* see *Oscinoides*.

Oscinis dissidens see *Hippelates*; *trigramma* see *Madiza*.

Oscinoides Mall. (= *Stenoscinis* Mall.) p. 719; *atriceps* Lw. from *Oscinis* p. 720, SABROSKY Ann. ent. Soc. Amer. 29.

Parahippelates variabilis sp. n. Solomons p. 50, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Paroedesiella gen. n. for *Dicraeus styriacus* Strobl etc. p. 187, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Scoliophthalmus micantipennis sp. n. Tanganyika p. 339 DUDA Ann. Mag. n.H. (10) 18.

Siphonella circumdata see *Hippelates*.

Stenoscinis see *Oscinoides*.

Stizambia gen. n. for *Calamoncosis laminiformis* Beck. and *aprica* Mg. p. 187, ENDERLEIN Tierwelt Mitteleur. 6 ii Teil, 2 Lief., xvi.

Trachysiphonella gen. n. for *Conioscinella pumilio* Zett. p. 187, ENDERLEIN t.c.

DIOPSIDAE.

Diopsis whitei sp. n. India p. 1, CURRAN Amer. Mus. Nov. no. 833.

EPHYDRIDAE.

Atissa orsovana, durrenbergensis see *Atissina*.

Atissina gen. n. for *Atissa orsovana* End. and *durrenbergensis* Lw. p. 169 figs., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Hydrochasma gen. n. p. 101, *zernyi* sp. n. Brazil p. 103 fig., HENDEL Ann. naturh. Mus. Wien 47.

Leptopsilopa pollinosa Kert. (= *Psilopa irregularis* Mall.) p. 53, CRESSON Proc. Calif. Acad. Sci. (4) 22.

Pseudohecamede gen. n., *nasalis* Paraguay p. 104, *facialis* Brazil p. 105, spp. n., HENDEL Ann. naturh. Mus. Wien 47.

Psilopa irregularis see *Leptopsilopa pollinosa*.

Stratiothyrea matema sp. n. Solomons p. 51, CRESSON Proc. Calif. Acad. Sci. (4) 22.

DROSOPHILIDAE.

Acletoxenus quadristriatus sp. n. Queensland p. 347, DUDA Ann. Mag. n.H. (10) 18.

Chymomyza maculipennis sp. n. Brazil p. 97, HENDEL Ann. naturh. Mus. Wien 47.

Cyrtotum nigripalpe sp. n. Brazil p. 90, HENDEL t.c.

Drosophila ochracella, decemseriata p. 98, *umbripennis* p. 99, spp. n. Brazil, HENDEL t.c.—*D. willowsi* p. 42, *mitis*, *anuda* p. 43, *crockeri* p. 44, spp. n. Solomons, CURRAN Proc. Calif. Acad. Sci. (4) 22.—*D.* key to males of *affinis* group; *algonquin* p. 575, *narragansett* Massachusetts, *azteca* Mexico, *seminole* Alabama p. 577, *athabasca* Alaska (with subsp. n. *mahican* New Hampshire), spp. n.; *affinis* subsp. n. *iroquois* Massachusetts p. 576 figs., STURTEVANT & DOBZHANSKY Amer. Nat. 70.—*D. lamellitarsis* sp. n. Malay Penin. p. 350 fig., DUDA Ann. Mag. n.H. (10) 18.

Gitona magnipalpis sp. n. S. Rhodesia p. 348, DUDA t.c.

Leucophenga xanthobasis sp. n. Solomons p. 41, CURRAN Proc. Calif. Acad. Sci. (4) 22.

Nothoasteia gen. n., *platycephala* sp. n. Australia p. 259 figs., MALLOCH Proc. Linn. Soc. N.S. Wales 61.

Paramycodrosophila tephritoptera sp. n. Brazil p. 95, HENDEL Ann. naturh. Mus. Wien 47.

Parclioscena gen. n. for *Periscelis winnertzi* Egg. p. 177, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Periscelis winnertzi see *Parclioscena*.

Scaptomyza chopardi sp. n. Azores p. 20, SÉGUY Ann. Soc. ent. Fr. 105.

Zygothrica pilipes sp. n. p. 93; *aldrichi* var. n. *flavociliata* p. 95 Brazil, HENDEL Ann. naturh. Mus. Wien 47.

GEOMYZIDAE

(TRIXOSCELIDAE, ANTHOMYZIDAE).

Anthomyza sabulosa see *Ptenotaenia*.

Balioptera angustipennis see *Geomyzella*.

Geomyzella gen. n. for *Balioptera angustipennis* Zett. p. 167, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Ptenotaenia gen. n. for *Anthomyza sabulosa* Hal. p. 167 fig., ENDERLEIN t.c.

Trichoscelis gentilis sp. n. Canary Is. p. 103, FREY Comment. biol. 6 no. 1.—*T. proximus* sp. n. Azores p. 19, SÉGUY Ann. Soc. ent. Fr. 105.

Waterhouseia gen. n. p. 260, *cyclops* sp. n. Australia p. 261 figs., MALLOCH Proc. Linn. Soc. N.S. Wales 61.

MILICHIIDAE (OCHTHIPHILIDAE,

CHAMAEMYIIDAE) & TETHINIDAE.

Systematics and geographical distribution in Tethinidae, HENNIG Ent. Rdsch. 54 pp. 136–140, 1 map, 2 figs.

Revision of Palaearctic Chamaemyiidae (Ochthiphilidae), CZERNY in LINDNER Flieg. Pal. Reg. 103 24 pp. 23 figs.

Acrometopia reticulata sp. n. Brazil p. 88, HENDEL Ann. naturh. Mus. Wien 47.

Eccoptomma freyi sp. n. Canary Is. p. 125, HENDEL Comment. biol. 6 no. 1.

Euestelia gen. n. for *Ochthiphila coronata* Loew p. 163, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Leucopsis albobstriata Spain p. 11, *ornatifrons* p. 15, *quinquevittata*, riedeli p. 17, Germany, spp. n. figs., CZERNY in LINDNER Flieg. Pal. Reg. 103.—*L. scutellata* sp. n. Canary Is. p. 102, FREY Comment. biol. 6 no. 1.

Ochthiphila coronata see *Euestelia*.

AGROMYZIDAE (PHYTOMYZIDAE).

Key to Central American Agromyzidae, FROST Ann. Soc. ent. Amer. 29 p. 298.

Agromyzidae of Palaearctic Region (with criticism of Enderlein's so-called new genera pp. 569–570) [end], HENDEL in LINDNER Flieg. Pal. Reg. 59 1936 pp. 513–570 2 pls. 2 figs.

Agromyza kallima p. 299, *barrocoloradensis* p. 300, *centrosemae* p. 301, *iridescent* p. 303, *currani* p. 305, *cassiae* p. 306, *dorsocentralis* p. 307, *tibialis* (also Guatemala, Antigua) p. 312, *crotonis* p. 313, *orbitalis* p. 314, *buskei* p. 315 Panama, *schmidti* Costa Rica p. 302, *oralis*, *curvibrissata* p. 309, *punctohalterata* p. 311, *approximata* p. 316 Guatemala, spp. n., FROST Ann. ent. Soc. Amer. 29.—*A. simplex* see *Triopisopa*; *bicaudata* see *Stomacrypolus*; *flavonotata* see *Metopomyza*; *ambiguus* see *Stomacrypeolus*.

Aulagromyza gen. n. for *Phytagromyza hamata* Hend. p. 180, fig., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Aulomyza gen. n. for *Melanagromyza longilingua* Hend. p. 179, ENDERLEIN t.c.

Dendromyza betulae sp. n. Finland p. 11, morphology, biology pp. 13–25 figs., KANGAS Commun. Inst. for. Fenn. no. 22 1935.

Dizygomyza lunulata, *laticeps* see *Liomyzina*.

Gymnophytomyza gen. n. type *Phytomyza heteroneura* Hend. p. 517, HENDEL in LINDNER Flieg. Pal. Reg. 59.

Hebomyza gen. n. for *Melanagromyza sarothamni* Hend. etc. p. 182, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi; also Mitt. dtsch. ent. Ges. 7 p. 42.

Liomyzina gen. n. for *Dizygomyza lunulata* Hend. and *laticeps* Hend. p. 180 figs., ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi; type *lunulata* Hend. p. 42, ENDERLEIN Mitt. dtsh. ent. Ges. 7.

Liriomyza aequalon, *brunneicornis* p. 74, *centaureana* p. 75, *paradigma* p. 76, spp. n. Germany, HERING Dtsch. ent. Z. 1936.

Melanagromyza sarothamni see *Hexomyza*; *longilingua* see *Aulomyza*; *rostrata* see *Solenomyza*.

Meoneura baluchistani sp. n. Baluchistan p. 337, DUDA Ann. Mag. n.H. (10) 18.

Metopomyza gen. n. for *Agromyza flavonotata* Hal. p. 180, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi; also Mitt. dtsh. ent. Ges. 7 p. 42.

Ophiomyia proboscidea see *Siphonomyza*; *madizina* see *Siridomyza*; *aeneonitens* see *Stiropomyza*; *submaura* see *Stirops*.

Paraphytomyza gen. n. for *Phytomyza xylostei* R.-D. etc. p. 182, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi; also Mitt. dtsh. ent. Ges. 7 p. 42.

Phytagromyza cydoniae Morocco, *dorsalis* Sweden p. 518, *wuorentausi* Kamtschatka p. 520 spp. n., HENDEL in LINDNER Flieg. Pal. Reg. 59.—*P. hamata* see *Aulagromyza*.

Phytomyza biseriata p. 77, *dryas*, *enigma* p. 78, *exilis*, *inulicola* p. 79, *isais* p. 80, spp. n. Germany, HERING Dtsch. ent. Z. 1936.—*P. centralis* sp. n. Costa Rica p. 317, FROST Ann. ent. Soc. Amer. 29.—*P. xylostei* see *Paraphytomyza*; *heteroneura* see *Gymnophytomyza*.

Siphonomyza gen. n. for *Ophiomyia proboscidea* Strobl p. 179, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.

Siridomyza gen. n. for *Ophiomyia madizina* Hend. p. 179, ENDERLEIN t.c.

Solenomyza gen. n. for *Melanagromyza rostrata* Hend. p. 179, ENDERLEIN t.c.

Stiropomyza gen. n. for *Ophiomyia aeneonitens* Strobl p. 179, ENDERLEIN t.c.

Stirops gen. n. for *Ophiomyia submaura* Her. etc. p. 182, ENDERLEIN t.c.; also Mitt. dtsh. ent. Ges. 7 p. 42.

Stomacrypolus gen. n. for *Agromyza bicarudata* Hend. etc. p. 181, ENDERLEIN Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvi.; type *Agromyza ambiguus* Fall. p. 42, ENDERLEIN Mitt. dtsh. ent. Ges. 7.

Triopisopa gen. n. for *Agromyza simplex* Lw. etc. p. 182, ENDERLEIN t.c.; also t.c. p. 42.

Xenomyza gen. n. p. 515, *ilicetensis* sp. n. Mediterranean p. 516, HENDEL in LINDNER Flieg. Pal. Reg. 59; also Eos 11 p. 382.

HIPPOBOSCIDAE.

Hippoboscidae of N.W. Provinces, China, SCHUURMANS STEKHOVEN Ark. Zool. 27A (sep. dated 1934) no. 27, 2 pp.

Check list of Hippoboscidae parasitic on British birds and mammals, THOMPSON Ent. mon. Mag. 72 pp. 91–92.

Check list of Hippoboscidae on Mammalia, Aves and Reptilia in S. Africa, Suppl. 1, BEDFORD Onderstepoort J. vet. Sci. 7 p. 106.

Key to genus of S. American Hippoboscidae and general notes on spp., BEQUAERT Rev. chil. H.n. 37 1933 pp. 160–165.

Hippobosca martinaglia sp. n. Swaziland p. 67 fig., BEDFORD Onderstepoort J. vet. Sci. 7.

STREBLIDAE.

Check list of Streblidae on Mammalia, Aves and Reptilia in S. Africa, Suppl., BEDFORD Onderstepoort J. vet. Sci. 7, pp. 106–107.

Revision of subfam. of Streblidae and genera of subfam. Streblinae, JOBLING Parasitology 28 pp. 355–380, 5 figs.

Lemosia gen. n. p. 243, *setosa* sp. n. Brazil p. 244 figs., PESSÔA & AYROSA GALVÃO Rev. Ent. Rio de J. 6.

Metaselmus pseudopterus redescription p. 370 figs., JOBLING Parasitology 28.

Nycteribosca bequaerti sp. n. Tanganyika p. 374 fig., JOBLING t.c.—*N. scutellaris* sp. n. Fiji p. 177 fig., JOBLING Proc. R. ent. Soc. Lond. (B) 5.

Raymondia intermedia sp. n. Belgian Congo p. 377 fig., JOBLING Parasitology 28.

NYCTERIBIIDAE.

General remarks on the bat-parasites, SCOTT Proc. Linn. Soc. Lond. 1935-36 pp. 119-120.

Check list of Nycteribiidae parasitic on British birds and mammals, THOMPSON Ent. mon. Mag. 72 p. 92.

Basilis eileenae Ceylon p. 481, *carteri* Paraguayan Chaco p. 498, *ferrisi* Costa Rica p. 502 spp. n., list of American spp. p. 497 figs., SCOTT J. Linn. Soc. Lond., Zool. 39.

Listropodia wui re-description p. 275 figs., Hsü Peking n.H. Bull. 10.

Nycteribia placed in official list of generic names p. 29, INTERN. COMMISSION ZOOLOG. NOMENCLATURE Smiths. misc. Coll. 73 no. 8.—*N. phillipsi* ♂ 486; *hindlei* sp. n. China p. 489 figs., SCOTT J. Linn. Soc. Lond., Zool. 39.

Penicillidia soochowensis sp. n. China p. 277 figs., Hsü Peking n.H. Bull. 10.

SIPHONAPTERA.

Check list of Siphonaptera on Mammalia, Aves and Reptilia in S. Africa Suppl. 1, BEDFORD Onderstepoort J. vet. Sci. 7 pp. 107-109.

Notes on varieties of fleas taken at Salé in a year, CORCUFF Bull. Inst. Hyg. Maroc 4 1933 pp. 5-30, 1 pl.

Siphonaptera from Belgian Congo, JORDAN Novit. zool. 39 pp. 294-299, 7 figs.

Fleas from S.-W. Africa and Angola, JORDAN Novit. zool. 40 pp. 82-94, 8 figs. 1 pp.

Classification of Siphonaptera, LAMBEERE Précis de Zool. 5 pp. 16-24, 8 figs.

Revision of Ceratophyllinae, IOFF Z. Parasitenk. 9 pp. 73-124, 73 figs.

Catalogue of Chinese Siphonaptera, LIU Lingnan Sci. J. 15 pp. 279-390, 583-594.

List of Formosan fleas with hosts, OHMORI Oyo-Dobuts. Zasshi 8 pp. 158-164.

Check list of fleas of Br. Columbia, SPENCER Proc. ent. Soc. Br. Columbia no. 32 pp. 11-17.

Review of the literature on the fleas of U.S.S.R., TIFLOV Rev. Microbiol. Epidem. Par. Saratov 15 pp. 131-141.

Fleas of Transbaikalia, TIFLOV & PAVLOV Rev. Microbiol. Epidem. Par. Saratov 15 pp. 79-88, 4 figs.

Keys to genera and species of Siphonaptera of Central Europe, WAGNER Tierwelt Mitteleur. 6 iii Teil, 2 Lief., xvii, 24 pp. 84 figs.

Fleas of moles' nests, WAGNER Konowia 15 pp. 97-101, 1 fig.

Fleas of Br. Columbia, WAGNER Canad. Ent. 68 pp. 193-207, 1 pl.

Acanthopsylla woodwardi Roths. ♂ p. 6; *franklinensis* n. n. for woodwardi ♂ Ectoparasites 1 1923 p. 304 in err., p. 9 fig., ROTHSCHILD Novit. zool. 40.

Anomiopsyllus montanus sp. n. Montana p. 129 figs., COLLINS Ent. News 47.—*A. amphibolus* sp. n. Utah p. 654 fig., WAGNER Z. Parasitenk. 8.

Callopsylla tiflovi sp. n. Transcaspiya p. 346 fig., WAGNER t.c.

Ceratophyllus petrochelidoni sp. n. Br. Columbia p. 655 fig., WAGNER t.c.—*C. infestus* see *Libyastus*.

Ctenocephalides paradoxuri sp. n. Ceylon p. 66 figs., WAGNER Ann. Mag. n.H. (10) 18.—*C. felis* subsp. n. *damarensis* S.W. Africa p. 84, JORDAN Novit. zool. 40.

Ctenophthalmus ansorgei subsp. n. catanganus Belgian Congo; *atomus* ♂ p. 295; *eumeces* ♀ p. 301; *singularis* sp. n. Uganda p. 302 figs., JORDAN op. cit. 39.—*C. ruris* subsp. n. *karamani* Serbia p. 349 figs., WAGNER Z. Parasitenk. 8.—*C. kirschenblatti* p. 145, *tatarica* p. 148, spp. n. Transcaucasia figs., ARGYROPULO Konowia 15.

Dasyopsyllus cteniopus J. & R. further descr. p. 308 figs., JORDAN Novit. zool. 39.

Echidnophaga aranka sp. n. p. 3; *ambulans* subsp. n. *inepta* p. 5 W. Australia figs., ROTHSCHILD op. cit. 40.—*E. cornuta* sp. n. S. Australia p. 332 fig., WAGNER Z. Parasitenk. 8.

Foxella ignotus subsp. n. *utahensis* Utah p. 655, WAGNER t.c.

Glauertia gen. n. (nr. *Leptopsylla*), *scintilla* sp. n. W. Australia p. 9 figs., ROTHSCHILD Novit. zool. 40.

Ischnopsyllus bathyllus p. 14, *earinus* p. 15 spp. n. W. Australia figs., ROTHSCHILD t.c.—*I. isomatus* see *Oxyparius*.

Libyastus gen. n. for *Ceratophyllus infestus* Roths. (type) p. 89; key p. 90; *vates* sp. n. Angola p. 91 figs., JORDAN Novit. zool. 40.

Maxilliopsylla gen. n., *lilloi* sp. n. Tucumán p. 6 figs., SCHREITER & SHANNON Bol. Mus. H.n. Univ. Tucumán, Buenos Aires 1 1927 no. 12.

Megabothris adversus sp. n. Br. Columbia; *lucifer* ♂ p. 656 figs., WAGNER Z. Parasitenk. 8.—*M. rectangularis* new to Britain, descriptions pp. 270–274 figs., ROTHSCHILD Novit. zool. 39.

Megarhroglossus similis, *spenceri*, *pygmaeus* spp. n. Br. Columbia p. 196 figs., WAGNER Canad. Ent. 68.

Neopsylla scapani sp. n. Br. Columbia p. 657 fig., WAGNER Z. Parasitenk. 8.

Neotiphloceras crassispina subspp. n. *hemisus* Bolivia, *chilensis* Chile p. 310 figs., JORDAN Novit. zool. 39.

Nycteridopsylla vancouverensis sp. n. Br. Columbia p. 658 figs., WAGNER Z. Parasitenk. 8.

Oropsylla salantiewi subsp. n. *weisskei* Mongolia p. 338 figs., WAGNER t.c.

Oxyparius gen. n. for *Ischnopsyllus isomatus* Waterst. p. 86 fig., JORDAN Novit. zool. 40.

Paradoxopsyllus transbaikalicus sp. n. Transbaikalia p. 84 fig., TIFLOV & PAVLOV Rev. Microbiol. Epidem. Par. Saratov 15.

Parapsyllus coxalis Roths. further description; *talis* sp. n. Argentina p. 305 figs., JORDAN Novit. zool. 39.

Phalacropsylla allos sp. n. Utah p. 657 fig., WAGNER Z. Parasitenk. 8.

Procaviopsylla spinifex sp. n. Angola p. 88 fig., JORDAN Novit. zool. 40.

Rhopalopsyllus plaumanni sp. n. S. Brazil p. 336 fig., WAGNER Z. Parasitenk. 8.

Stivalius molestus sp. n. Queensland p. 185 fig., JORDAN Proc. Linn. Soc. N.S.W. 61.—*S. richardi* sp. n. Belgian Congo p. 298 fig., JORDAN Novit. zool. 39.

Terapsyllus litis sp. n. Chile p. 307 figs., JORDAN t.c.

Thrassissipenari sp. n. Br. Columbia p. 197 fig., WAGNER Canad. Ent. 68.—*T. howelli* subsp. n. *utahensis* p. 340; *stanfordi* p. 334 Utah, *spenceri* Br. Columbia p. 655 spp. n. figs., WAGNER Z. Parasitenk. 8.

Tunga travassosi ♂ p. 422 figs., DA FONSECA Rev. Ent. Rio de J. 6.

Xenopsylla vexabilis subsp. n. *meseris* Queensland p. 184 fig., JORDAN Proc. Linn. Soc. N.S.W. 61.—*X. robertsi* sp. n. Kenya p. 300 figs., JORDAN Novit. zool. 39.

HEMIPTERA.

Hemiptera hitherto unrecorded from Indiana, DEAY & GOULD Proc. Ind. Acad. Sci. 45 pp. 305–309.

Hemiptera of Christmas I., IZZARD Ann. Mag. n.H. (10) 17 pp. 577–600, 4 figs.

Hemiptera of the central Saale valley, MAERTENS Ent. Anz. 16 pp. 17–20, 57–60, etc.

Hemiptera of Tripolitania and Cyrenaica, MANCINI Ann. Mus. Genova 59 pp. 195–201.

Hemiptera of Capraia Is., MANCINI Mem. Soc. ent. ital. 14 1935 pp. 4–16.

Annotated list of larger Hemiptera of Lincolnshire, ROEBUCK Trans. Lincoln. Nat. Union 1935 pp. 19–35, 1 pl.

Hemiptera on trees and shrubs in Poland, STRAWINSKI Trav. Inst. Rech. Fôr. dom. Warsaw (A) no. 17 216 pp.

Heteroptera.

Check list of Heteroptera on Mammalia, Aves and Reptilia in S. Africa, Suppl. I, BEDFORD Onderstepoort J. vet. Sci. 7 p. 105.

Heteroptera of Azores, BERNARD Ann. Soc. ent. Fr. 105 pp. 7-9.

Catalogue and bibliography of the more important aquatic and semi-aquatic Hemiptera of Chile, DE CARLO Rev. chil. H.n. 39 pp. 105-111.

Heteroptera of the inland dunes of Bellinchen, Mark Brandenburg, ENGEL & HEDICKE Märk. Tierw. 1 pp. 240-245.

List of water bugs of Troki, Poland, GROCHOWSKA Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. 9 1935 pp. 283-286.

Revision of Heteroptera of Central Europe [contd.], GULDE Die Wanzen Mitteleuropas Teil 5 pp. 1-104, 39 figs.

Some aquatic Hemiptera from W. Australia, HALE Trans. Proc. R. Soc. S. Aust. 59 1935 pp. 249-251, 1 fig.

Aquatic and semi-aquatic Hemiptera from Yucatan and Campeche, HUNGERFORD Pub. Carnegie Instn. Wash. 457 pp. 145-150, 2 figs.

Aquatic Heteroptera of Egypt, JACZEWSKI Ann. Mus. Zool. polon. 11 171-211, 2 pls. 5 diagr.

List of Heteroptera of Canary Is., LINDBERG Comment. biol. 6 no. 7 43 pp. 2 pls.

Hemiptera Heteroptera of N. Thuringia, MÜLLER Dtsch. ent. Z. 1936 pp. 13-27.

Aquatic Hemiptera collected by the scientific mission to Omo, POISSON Mém. Mus. H.n. Paris 4 pp. 191-218, 29 figs.

Second list of Heteroptera of Holland, RECLAIRE Ent. Ber. 9 pp. 243-260.

Additions to the Heteropterous fauna of Portuguese forests, DE SEABRA Arq. Secç. Biol. Mus. zool. Univ. Coimbra 2 1935 pp. 159-164.

PLATASPIDAE (COPTOSOMATIDAE).

Brachyplatys translineatus discussion of rr. p. 201, *subsp. n. australensis* p. 203, *siwiensis* p. 204 Siwi fig., HEINZE Dtsch. ent. Z. 1935.

CYDNIDAE (THYREOCORIDAE).

Dallonia gen. n. p. 64, *pangoeoides* sp. n. Tibesti p. 65 fig., DE BERGEVIN Mém. Acad. Sci. Paris (2) 62.

Sehirus mutuus sp. n. Morocco p. 47, key to Palaearctic spp. p. 50 figs., SCHMIDT Dtsch. ent. Z. 1936.

Thyreocoris sierrai sp. n. Chile p. 198 PORTER Rev. chil. H.n. 37 1933.

PENTATOMIDAE, UROSTYLIDAE.

Systematic notes on Pentatomidae of Central Europe, GULDE Ent. Z. 49 pp. 467-470, 6 figs.

Revision of Chinese Tessaratomidae, YANG Bull. Fan mem. Inst. Biol. 6 1935 pp. 103-144, 5 pls. 2 figs.

Acanthosoma potanini p. 10, *kiritshenkoi* p. 11, spp. n. China figs., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Allopodops gen. n. p. 377, *mississippiensis* sp. n. Mississippi p. 378, fig., HARRIS & JOHNSTON Iowa St. Coll. J. Sci. 10.

Ayeshella subgen. n. see *Bagrada*.

Bagrada monograph pp. 22-47 (*Ayeshella* subgen. n. p. 26) *finitima* Eritrea p. 27, *royeri* (with var. n. *picticollis*) p. 30, *singularis* Egypt, *algerica* Algeria p. 31, *monticola* Transcaucasia p. 32, *deserticola* p. 33 (with var. n. *lineata* p. 34) Egypt, *gibbicollis* Anatolia p. 35, *rubra* Bukhara, *aurantiaca* p. 36, *concinna* p. 38 Transcaucasia (with var. n. *biramosa*), *persica* Persia p. 39, *lepida* p. 41, *cicur* p. 42 (with var. n. *scutellaris*) Asia Minor, *confusa* Greece p. 43, *stolata* (with var. n. *quadrinaculata*) Europe p. 44, *turcica* Asia Minor p. 45 spp. n.; *picta* varr. n. *connenctens* Africa, *modesta* India p. 29; *elegans* varr. n. *bolivari*, *scripta* Spain p. 40, HORVÁTH Ann. Mus. hungar. 30.

Brachynema hypocrita var. n. *rungsii* Morocco p. 197, VIDAL Bull. Soc. H.n. Afr. N. 27.

Coenus inermis sp. n. U.S.A. p. 378, HARRIS & JOHNSTON Iowa St. Coll. J. Sci. 10.

Compastes javanicus Java p. 98, *malaccanicus* Malacca, *neoxestimulatus* Bhutan p. 100 spp. n. figs., YANG Bull. Fan mem. Inst. Biol. 6 1935.

Elasmostethus cooleyi status discussed p. 177, VAN DUZEE Pan-Pacific Ent. 11.

Eusthenes variegatus p. 111, *brinae* p. 117 spp. n.; *saevus* var. n. *absolutus* p. 114 China figs., YANG Bull. Fan mem. Inst. Biol. 6 1935.

Eusthenimorpha gen. n., *jungi* sp. n. Hangchow p. 118 figs., YANG t.c.

Mecidea ingramsi sp. n. Arabia p. 96 fig., CHINA Ann. Mag. n.H. (10) 17.

Menaccarus arenicola f. n. *minor* Germany p. 43, STICHEL Mitt. dtsh. ent. Ges. 7.

Oechalia virgula p. 220, *hirtipes* p. 221, spp. n. Hawaii, VAN DUZEE Proc. Hawaii. ent. Soc. 9.

Palomena haemorrhoidalis sp. n. China p. 7, LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Platacantha gen. n. p. 12, *armifer* sp. n. China p. 13 fig., LINDBERG t.c.

Urochela strandi sp. n. Formosa p. 492 fig., ESAKI Festschr. E. Strand 1.

Urostylis hummeli sp. n. China p. 14 figs., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

COREIDAE.

Coreinae, II, of Rijksmuseum Leyden, BLÖTE Zool. Meded. 19 pp. 23-66, 14 figs.

Coreidae on sandal in India, CHATTERJEE Rec. Ind. Mus. (N.S.) 2 pp. 158-172.

Acantholyta distinguenda sp. n. New Guinea p. 50, BLÖTE Zool. Meded. 19.

Agraphopus majorinus sp. n. China p. 20 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Amblypelta gallegonis sp. n. Solomon Is. p. 324 fig., LEVER Ann. Mag. n.H. (10) 17.

Brachylybas dimorphus p. 30, *flexuosus*, *inflexus* p. 31, spp. n. New Guinea fig., BLÖTE Zool. Meded. 19.

Cloesmus boops p. 51, *jacobsoni* p. 52, spp. n. Sumatra figs., BLÖTE t.c.

Colpura a subgen. of *Hygia*, q.v.

Homalocolpura annulata p. 45, *nitida*, *subopaca* p. 48, *vorax* p. 49 Sumatra, *binotata* Timor p. 46, *borneana* Borneo p. 47, spp. n. figs., BLÖTE Zool. Meded. 19.

Homoeocerus Dall. (*Ornytopsis*, *Ornytoides* subgen. n. p. 55), *dallasi* Sylhet, *laterinotatus* Buton p. 56, *marginepunctatus* Sumatra p. 57, *pallascens* Timor p. 58, *pallidulus* Formosa p. 59, *sumbawensis* Sumbawa, *adustus* p. 60, *nota* p. 63 Borneo, *ochraceus*, *rufulus* p. 64, *tangens* p. 65 spp. n.; *javanicus* var. n. *guttatipennis*, *latevitatus* p. 62 Sumatra figs., BLÖTE t.c.

Hygia Uhl., *Colpura* Bergr. a subgenus of p. 35, *simalurensis* Sinabang p. 37, *forsteniana* p. 38, *minahassae* Tondano, *pedestris* Formosa p. 39, *flavitaris* Sumatra p. 40, *montana* Java p. 41, (*Pterocolpura* subgen. n.), *angulicollis* Sumatra p. 42, spp. n. figs., BLÖTE t.c.

Ithamar annectans sp. n. Hawaii p. 222, VAN DUZEE Proc. Hawaii. ent. Soc. 9.

Latimbus angulicollis sp. n. Belgian Congo p. 54, BLÖTE Zool. Meded. 19.

Leptocoris trivittatus ♀ genitalia pp. 45-50 figs., PAYNE Zool. Jb., Anat. 61.

Leptoglossus flavosignatus sp. n. S. America p. 28; *membranaceus* var. n. *sumbawensis* Sumbawa p. 29, BLÖTE Zool. Meded. 19.

Leptoscelis flaviventris sp. n. Peru p. 25, BLÖTE t.c.

Microcolpura armillata further description p. 66 figs., MILLER Proc. R. ent. Soc. Lond. (B) 5.

Molchina obtusidens sp. n. Panama p. 24, BLÖTE Zool. Meded. 19.

Notobitus humeralis sp. n. Borneo p. 51, BLÖTE t.c.

Ornytoides subgen. n. see *Homoeocerus*.

Ornytopsis subgen. n. see *Homoeocerus*.

Pajanja see *Typhlocolpura*.

Phthia decorata var. n. *viridiventris* Peru, Bolivia p. 26, BLÖTE Zool. Meded. 19.

Pterocolpura subgen. n. see *Hygia*.

Sciophyrus annulipes p. 33, *flavoguttatus*, *rugulosus* p. 34, spp. n. New Guinea fig., BLÖTE Zool. Meded. 19.

Stictoplexurus viridescens sp. n. China p. 19 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Typhlocolpura Bredd. (= *Pajanja* Blöte) p. 44, BLÖTE Zool. Meded. 19.—*T. chinai* sp. n. Perak p. 65 figs., MILLER Proc. R. ent. Soc. Lond. (B) 5.

Verlusia rhombea var. n. *fusca* Morocco p. 197, VIDAL Bull. Soc. H.n. Afr. N. 27.

Vittorius sumatranus sp. n. Sumatra p. 43 figs., BLÖTE Zool. Meded. 19.

Xenocolpura gen. n., *elongata* sp. n. Sumatra p. 44 fig., BLÖTE t.c.

ARADIDAE.

Aradus linsleyi p. 493, *serratus* p. 496, *intermedius* p. 498, *furnissi* p. 500, *mexicanus* p. 503, *fuscipennis* p. 504 spp. n. U.S.A.; *concinus* Bergr. (= *depictus* V. Duz.) p. 495 figs., USINGER Ann. ent. Soc. Amer. 29.

Mezira pacifica p. 506, *vanduzeei* p. 507, *carinata* p. 509, *nigripennis* p. 511, spp. n. U.S.A., USINGER t.c.

Pictinus dominicus sp. n. St. Domingo p. 512, USINGER t.c.

BERYTIDAE (NEIDIDAE).

Berytidae on Sandal in India, CHATTERJEE Ind. For. Rec. (N. S.) 2 pp. 172-173.

Metatropis denticollis sp. n. China p. 28, LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

LYGAEIDAE (MYODOCHIDAE).

Aegyptocoris gen. n. p. 164, *myrmecoides* sp. n. Egypt p. 166 figs., CHINA Proc. R. ent. Soc. Lond. (B) 5.

Aphanus chinensis sp. n. China p. 25 LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Cosmopleurus fulvipes var. n. *obscura* Tibesti p. 67, DE BERGEVIN Mém. Acad. Sci. Paris (2) 62.

Dieuches kansuensis sp. n. China p. 26, LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Eremocoris ribauti sp. n. Morocco p. 197 fig., VIDAL Bull. Soc. H.n. Afr. N. 27.

Geocoris in Hawaii pp. 212-215, USINGER Proc. Hawaii. ent. Soc. 9.

Macropes hedini sp. n. China p. 24 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Nysius groenlandicus imago and early stages, 1, 2, 4, 5 described pp. 11-17, LINDBERG Skr. Svalb. Ishavet 65 1935. —N. *andrewsi* p. 580, *dissimilis* p. 581,

spp. n. Christmas I., IZZARD Ann. Mag. n.H. (10) 17. —N. *turneri* sp. n. Tasmania p. 673 fig., EVANS Bull. ent. Res. 27.

Plinthis minutissimus var. n. *meridionalis* Capraia Is. p. 8, MANCINI Mem. Soc. ent. ital. 14 1935.

Pseudocymus gen. n. p. 223, *giffardi* sp. n. Hawaii p. 224, VAN DUZEE Proc. Hawaii. ent. Soc. 9.

Ptochiomera mumfordi n. n. for caeca Van D. nec Dist. p. 174, VAN DUZEE Pan-Pacific Ent. 11.

Spilostethus potanini sp. n. China p. 21 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

TINGIDAE.

The genera and genotypes of Tingitoidea of the W. Hemisphere, DRAKE & POOR Iowa St. Coll. J. Sci. 10 pp. 381-390.

Acanthocheila nexa sp. n. Argentina p. 701 fig., DRAKE Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Acysta ocoteae sp. n. Brazil p. 144, DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935. —A. *brasiliensis* see *Ulotingis*.

Amblystira peltogyne p. 141, *separata* p. 142, spp. n. Brazil, DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Atheas ornatipes sp. n. Brazil p. 143, DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Camptolingis machaerii sp. n. Brazil, Argentina p. 700, DRAKE & HAMBLETON Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Cantacader diffidentis sp. n. India p. 141, DRAKE & POOR Ind. For. Rec. 2.

Catoplatus mamorensis var. n. *biseriatus* Morocco p. 85, fig., LINDBERG Bull. Soc. Sci. nat. Maroc 16.

Compseuta tessellata sp. n. Hainan p. 441, DRAKE & POOR Lingnan Sci. J. 15.

Corycera machaerii p. 142, *alboater* p. 143, spp. n. Brazil, DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Dasytingis gen. n., *rudis* sp. n. India p. 145 fig., DRAKE & POOR Ind. For. Rec. 2.

Derephysia gardneri sp. n. India p. 148, DRAKE & POOR t.c.

Dictyonota teydensis sp. n. Canary Is. p. 29 fig., LINDBERG Comment. biol. 6 no. 7.—*D. mitoris* sp. n. China p. 287, DRAKE & HSIUNG Lingnan Sci. J. 15.

Dicysta lauta sp. n. Brazil p. 152 fig., DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Eteoneus sigillatus sp. n. India p. 144, DRAKE & POOR Ind. For. Rec. 2.

Galeatus maroccanus sp. n. Morocco p. 81, LINDBERG Bull. Soc. Sci. nat. Maroc 16.

Hyalochiton algericus sp. n. Morocco p. 83 fig., LINDBERG t.c.

Jannaeus togularis p. 441, *mirus* p. 442, spp. n. Hainan, DRAKE & POOR Lingnan Sci. J. 15.

Leptobyrsa tersa sp. n. Brazil p. 148, DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Leptopharsa ogloblini sp. n. Argentina p. 701, DRAKE Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.

Liotingis aspidospermae, *affinatus* spp. n. Brazil p. 147 figs., DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Monanthia lupata sp. n. India p. 142, DRAKE & POOR Ind. For. Rec. 2.—*M. parilis* sp. n. Argentina p. 700 fig., DRAKE Trav. Inst. zool. Acad. Sci. U.S.S.R. 3.—*M. cheriani* sp. n. India p. 145, DRAKE J. Bombay Soc. nat. Hist. 39.

Perissonemia assamensis Dist. from *Teleonemia* p. 439; *gressitti* sp. n. Hainan p. 440, DRAKE & POOR Lingnan Sci. J. 15.

Physatocheila chatterjeei p. 142, *dryadis* p. 143, spp. n. India, DRAKE & POOR Ind. For. Rec. 2.—*P. harwoodi* sp. n. England p. 271 figs., CHINA Ent. mon. Mag. 72.

Psilobyrsa gen. n. p. 148, *aechemeae* (type), *vriesiae* spp. n. Brazil p. 149 figs., DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

Stephanitis olyrae p. 150, *faramaeae* p. 151, spp. n. Brazil, figs., DRAKE & HAMBLETON t.c.—*S. oschanini* sp. n. Russian Centr. Asia p. 151, VASILIEV Plant Prot. 7 1935.

Teleonemia assamensis see *Perissonemia*.

Teratochila gen. n., *puerilis* sp. n. India p. 147, DRAKE & POOR Ind. For. Rec. 2.

Trachypeplus malloti sp. n. India p. 144, DRAKE & POOR t.c.—*T. chinensis* sp. n. Hainan p. 440, DRAKE & POOR Lingnan Sci. J. 15.

Ulotingis gen. n. p. 144, type *Acysta brasiliensis* Drake p. 144; *decor*, *nitoris* spp. n. Brazil p. 145 figs., DRAKE & HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.

PHYMATIDAE.

Amblythyreus taiwana sp. n. Formosa p. 401 figs., SONAN Trans. n.H. Soc. Formosa 25 1935.

Cnizocoris shirakii sp. n. Formosa p. 402 figs., SONAN t.c.

REDUVIIDAE.

List and distribution of Triatominae, NEIVA & LENT Rev. Ent. Rio de J. 6 pp. 153-190.

Distribution of Triatominae in Argentina, NIÑO Z. Parasitenk. 8 pp. 606-610, 2 figs., 9 p. 144.

Coranus subapterus copulatory organs p. 39 fig., LARSÉN Opusc. ent. Lund 1.

Isyndus planicollis sp. n. China p. 30 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Polididus armatissimus notes [in Japanese] p. 152 fig., TOSHIOKA Kontyû 10.

Rhaphidosoma dallonii sp. n. Tibesti p. 67 fig., DE BERGEVIN Mém. Acad. Sci. Paris (2) 62.

Sphecanolestes riffensis sp. n. Morocco p. 198, VIDAL Bull. Soc. H.n. Afr. N. 27.

Triatoma rosenbuschi sp. n. Argentina fig., MAZZA Z. Parasitenk. 8.—*T. rosenbuschi*, *platensis* identity, characters pp. 3-17 figs., MAZZA Invest. Enferm. Chagas Buenos Aires pub. no. 29.—*T. platensis* Neiva (= *rosenbuschi* Mazza) p. 174, NEIVA & LENT Rev. Ent. Rio de J. 6.

NABIDAE.

Nabis giffardi sp. n. Hawaii p. 226, VAN DUZEE Proc. Hawaii. ent. Soc. 9.

Prostemma fulvipennis sp. n. China p. 32, LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

ANTHOCORIDAE.

Triphleps piceicollis sp. n. Canary Is. p. 33, LINDBERG Comment. biol. 6 no. 7.

CAPSIDAE (MIRIDAE).

Adelphocoris transversus sp. n. China p. 35 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Calocoris marmoratus sp. n. China p. 36 fig., LINDBERG t.c.

Cylapofulvius listeri sp. n. Christmas I. p. 587, IZZARD Ann. Mag. n.H. (10) 17.

Cyllocoris sordidus sp. n. China p. 40, LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Deraeocoris punctum var. n. berkanensis Morocco p. 199, VIDAL Bull. Soc. H.n. Afr. N. 27.

Engytatus canariensis sp. n. Canary Is. p. 36 fig., LINDBERG Comment. biol. 6 no. 7.

Kiambura gen. n. p. 326, *coffae* sp. n. Kenya p. 328 figs., CHINA Ann. Mag. n.H. (10) 17.

Lygus aldrichi p. 585, *murrayi* p. 586, spp. n. Christmas I., IZZARD Ann. Mag. n.H. (10) 17.—*L. scutellatus* sp. n. China p. 37 fig., LINDBERG Ark. Zool. 27A (sep. dated 1934) no. 28.

Orthotylus nigropilosus sp. n. China p. 41, LINDBERG t.c.

Psallus laureti sp. n. Canary Is. p. 38, LINDBERG Comment. biol. 6 no. 7.

ISOMETOPIIDAE.

Isometopus canariensis sp. n. Canary Is. p. 40 fig., LINDBERG Comment. biol. 6 no. 7.

VELIIDAE.

Microvelia pudoris Grenada I., *sarpta* Brazil spp. n. p. 105, DRAKE & HARRIS Proc. biol. Soc. Wash. 49.

Rhagovelia becki sp. n. Mexico; *varipes* Champ. (= *beameri* Gould) p. 106, DRAKE & HARRIS t.c.—*R.* revision pp. 1–53, characters p. 5, *novacaledonica* N. Caledonia p. 9, *biroi* N. Guinea p. 13,

bipennicillata Sumatra p. 23, *pallida* Tanganyika p. 26, *papuensis* N. Guinea p. 28, *ambonensis* Amboina p. 30, *tibialis* India p. 31, *ceylanica* Ceylon p. 32, *minuta* p. 34, *philippina* p. 36 Philippines, *seychellensis* Seychelles p. 51 spp. n.; *infernalis* var. n. *africana* E. Africa p. 49 figs., LUNDBLAD Ark. Zool. 28A no. 21.—*R. flavicincta* swimming plume and claws pp. 81–84 figs., COKER, MILLSAPS & RICE Bull. Brooklyn ent. Soc. 31.—*R. ravana* see *Tetraripis*.

Tetraripis gen. n. for *Rhagovelia ravana* Kirk. (type) p. 53; *dovery* sp. n. Perak p. 56 figs., LUNDBLAD Ark. Zool. 28A no. 21.

Xiphovelia diffidentis in Brazil, new to W. Hemisphere p. 106, DRAKE & HARRIS Proc. biol. Soc. Wash. 49.

GERRIDAE.

Revision of Gerridae of Indiana, DEAY & GOULD Amer. Midl. Nat. 17 pp. 753–769, 18 figs.

Halobates sewelli sp. n. Gulf of Oman p. 71 figs., IMMS Sci. Repts. John Murray Exp. 1933–34 4.

Halobates parvulus sp. n. Amazon p. 3 fig., DRAKE & HARRIS Ark. Zool. 28B 1935 no. 2.—*H. spiniventris* sp. n. Brazil p. 107, DRAKE & HARRIS Proc. biol. Soc. Wash. 49.

Limnometra gigas in Hainan, apterous form p. 489 fig., HOFFMANN Lingnan Sci. J. 15.

Potamobates peruvianus sp. n. Peru p. 178, HUNGERFORD Bull. Brooklyn ent. Soc. 31.

Rheumatobates key p. 148; *creaseri* sp. n. Yucatan p. 146 figs., HUNGERFORD Pub. Carnegie Inst. Wash. 457.

NAUCORIDAE.

Laccocoris montandoni sp. n. Christmas I. p. 590, IZZARD Ann. Mag. n.H. (10) 17.—*L. bouvieri* sp. n. Sahara p. 274 figs., POISSON Livre jubil. Bouvier 1936.

BELOSTOMATIDAE.

Belostoma grandicollum p. 109, *longirostrum* p. 110, spp. n. Brazil figs., DE CARLO Bol. Mus. nac. Rio de J. 10 1934.—*B. cummingsi* sp. n. Argentina p. 203; *dentatum* Mayr (= *mayri* Berg) p. 204; *ribeiro* De Carlo (= *dufouri* De C.) p. 205 figs., DE CARLO Rev. Soc. ent. argent. 7 1935.

NOTONECTIDAE.

Anisops sardea subsp. n. *madagascariensis* Madagascar p. 209; *hungerfordi* sp. n. S. Ethiopia p. 213 figs., POISSON Mém. Mus. H.n. Paris 4.

Enithares jeanneli Kenya p. 205, *daigrei* Hoggar p. 206 spp. n.; *blandula* Sign. (= *compacta* Gerst.) p. 208 figs., POISSON t.c.

Notonecta in N. Skäne, HÖRBERG Opusc. ent. Lund 1 pp. 41-42.—*N. reuteri*, amplifica new to Japan pp. 40-44 figs., ESAKI Kontyû 10.—*N. handlirshi* ♀ p. 249 figs., HALE Trans. Proc. R. Soc. S. Aust. 59 1935.—*N. arabiensis* ♂ p. 101 fig., HUNGERFORD J. Kans. ent. Soc. 9.

HELOTREPHIDAE.

Neotrephes gen. n. p. 527, *usingeri* sp. n. Brazil p. 532, habitat p. 645, figs., CHINA Ann. Mag. n.H. (10) 17.

CORIXIDAE.

Key to Corixidae of France and allied Palaearctic forms, POISSON Bull. Soc. Sci. Bretagne 13 pp. 55-66, 4 figs.

Arctocorixa bicoloripennis p. 55, *scabricula* p. 56 Canada, *nevadensis* Nevada p. 58, spp. n. figs., WALLEY Canad. Ent. 68.

Corisella tumida ♂ p. 62 figs., WALLEY t.c.

Micronecta borealis sp. n. Sweden p. 23 figs., LUNDBLAD Ent. Tidskr. 57.

Sigara key p. 34, *pearcei* sp. n. Ireland p. 44 figs., WALTON Trans. Soc. Br. Ent. 3.—*S. substriata* redescription p. 34; *marginata* ♂ p. 36; *ussuriensis* sp. n. Ussuri p. 37; list of spp. of subgen. *Anticorixa* p. 40 figs., JACZEWSKI Proc. R. ent. Soc. Lond. (B) 5.

Homoptera.

Cicadinae of Canary Is., LINDBERG Comment. biol. 6 no. 9, 19 pp., 45 figs.

Some new or rare Polish Homoptera, NAST Fragm. Fn. Mus. Zool. polon. 2 pp. 323-326.

Swedish Homoptera, OSSIANNILSSON Opusc. ent. Lund 1 pp. 47-51.

Cicadina of Yemen, Arabia, ZACHVATKIN Wiss. Ber. Moskauer Staats Univ. 4 1935 pp. 106-115.

CICADIDAE.

Cicadidae on sandal in India, CHATTERJEE Ind. For. Rec. 2 pp. 115-124.

Cicadids of Caroline Is., ESAKI Tenthredo 1 pp. 1-8, 2 pls. 2 figs.

Cicada hooshiana sp. n. Japan p. 38, MATSUMURA Ins. mats. 11.

Clidophleps beameri sp. n. California p. 116 figs., DAVIS J. N.Y. ent. Soc. 44.

Euterpnosia chibensis var. n. *gotoi* Japan p. 764 fig., KATO Ent. World 4.

Meimuna iriomoteana sp. n. [locality and descr. in Japanese] p. 841 fig., KATO t.c.

Melampsalta texana sp. n. Texas p. 105 fig., DAVIS J. N.Y. ent. Soc. 44.—*M. microdora* sp. n. N. Zealand p. 230, HUDSON Trans. roy. Soc. N.Z. 66.

Nipponosemia terminalis var. n. *formosana* [locality and descr. in Japanese] p. 840, KATO Ent. World 4.

Okanagana aurora p. 107, *ferrugomaculata* p. 110 spp. n.; *rubrovenosa* var. n. *rubida* p. 113; *hirsuta* var. n. *catalina* p. 114 U.S.A. figs., DAVIS J. N.Y. ent. Soc. 44.

Platypedia balli sp. n. Arizona p. 118 figs., DAVIS t.c.

Platyleura tsuchidai sp. n. Japan p. 759 fig., KATO Ent. World 4.

Purana carolettae sp. n. Caroline Is. p. 3 figs., ESAKI Tenthredo 1.

Tibicen curvispinosa Mexico p. 102, *nigroalbata* Arizona p. 104, spp. n. figs., DAVIS J. N.Y. ent. Soc. 44.—*T. japonicus* var. n. *echigo* Japan p. 762 fig., KATO Ent. World 4.

FULGORIDAE.

Poblicia texana sp. n. Texas p. 105, OMAN J. Kans. ent. Soc. 9.

DICTYOPHARIDAE.

Asiatic Orgeriinae, KUZNETZOV Konowia 15 pp. 65-84, 2 pls.

Bursinia fallax p. 385, *griseola* *discolor* p. 386, *carinata*, *adelpha* p. 387 spp. n. Spain, HORVÁTH Eos 11.—*B. canariensis* sp. n. Canary Is. p. 15 figs., LINDBERG Comment. biol. 6 no. 9.

Mesorgerius gen. n. p. 81, *ryssakovi* Orenburg, *sibiricus* Siberia spp. n. p. 84, KUZNETZOV Konowia 15.

Nymphorgerius rotundus sp. n. Centr. Asia p. 84, KUZNETZOV t.c.

Sphenacratoides lukjanovitshi sp. n. Altai etc. p. 81, KUZNETZOV t.c.

Sphenocratus gussakovskii (with subsp. n. *pallens* Bukhara) sp. n. Samarkand p. 79, KUZNETZOV t.c.

CIXIIDAE.

Catalogue of Cixiidae, METCALF Gen. Cat. Hem. fasc. IV Fulgor. pt. 2 Cixiidae 1936 269 pp.

Betacixius kumejimae genitalia p. 84, MATSUMURA Ins. mats. 10.

Cixius yohenei, *okinawanus* spp. n. Japan p. 83, MATSUMURA t.c.—*C. laticeps* n. n. for *latifrons* Mel. nec Wlk. p. 180; *matsumurai* n. n. for *centralis* Mats. nec Sign. p. 181; *stigmatica* var. *reuteri* n. n. for var. *albipennis* Reut. nec Stål p. 219; *variabilis* n. n. for *varia* F. nec Oliv. p. 220, METCALF Gen. Cat. Hem. Fasc. IV Fulgor. pt. 2 Cixiid.

Gonyphlepsia costalis var. n. *fusca* Australia p. 254, METCALF t.c.

Haitiana gen. n., *nigrita* sp. n. Haiti p. 2 fig., DOZIER Amer. Mus. Nov. no. 845.

Oliarus giffardi n. n. for *montanus* Giff. nec Metc. p. 64; *haupti* n. n. for *brachycephalus* Haupt nec Dist. p. 65; *inaequalis* varr. n. *kohala*, *konana* p. 69; *instabilis* varr. n. *bryani*, *crawi*, *erhorni*, *osborni*, *terryi*, *williamsi* p. 70; *kanakanus* var. n. *punaensis*; *kaohinani* var. n. *perkinsi* p. 71 Hawaii; *lucidus* n. n. for *vitreus* Metc. nec Mel. p. 79; *neomorai* var. n. *oahuana* p. 85; *olympus* var. n. *paliensis* p. 87; *pele* varr. n. *alpha*, *beta* p. 95; *similis* varr. n. *lanaiana*, *mauiana*, *molokaiana* p. 101 Hawaii; *sipoiensis* n. n. for *angusticeps* Muir nec Horv. p. 102; *tarai* varr. n. *hawaiiensis*, *kohalana* p. 105 Hawaii, METCALF Gen. Cat. Hem. Fasc. IV Fulgor. pt. 2 Cixiid.

Ptoleria puncticosta var. n. *beta* Mysol p. 37, METCALF t.c.

DELPHACIDAE.

Eurysa ribauti sp. n. Canary Is. p. 18 fig., LINDBERG Comment. biol. 6 no. 9.

Delphacodes muirianus sp. n. Christmas I. p. 595 fig., IZZARD Ann. Mag. n.H. (10) 17.

Liburnia haupti sp. n. Canary Is. p. 17 figs., LINDBERG Comment. biol. 6 no. 9.

ACHILIDAE.

Catonia antillicola sp. n. Porto Rico p. 92, DOZIER in WOLCOTT J. Agric. Univ. P.R. 20.

ISSIDAE.

Colpoptera carinata sp. n. Porto Rico p. 99, DOZIER in WOLCOTT J. Agric. Univ. P.R. 20.

Dictyonia doeringae sp. n. California p. 157, BALL Proc. biol. Soc. Wash. 49.

Dictyssonina gen. n., *beameri* sp. n. Arizona p. 156, BALL t.c.

Gergithus okinawanus sp. n. Japan p. 82, MATSUMURA Ins. mats. 10.

Sarima yohenei sp. n. Japan p. 82, MATSUMURA t.c.

Tylanira gen. n., *bifurca* sp. n. Arizona p. 155, BALL Proc. biol. Soc. Wash. 49.

ACANALONIIDAE.

Andrewsiella gen. n. p. 593, *oceanica* sp. n. Christmas I. p. 594 figs., IZZARD Ann. Mag. n.H. (10) 17.

CERCOPIDAE.

Aphrophora okinawana sp. n. Japan p. 82, MATSUMURA Ins. mats. 10.—*A. trimaculata* see *Carystoterpa*.

Carystoterpa gen. n. type *Aphrophora trimaculata* White p. 264, LALLEMAND Festschr. E. Strand 1.

Hindola longipennis see *Strandiana*.

Metaenderleinia gen. n., *nervosa* sp. n. Borneo p. 265 fig., LALLEMAND Festschr. E. Strand 1.

Neuroleinia gen. n., *collarti* sp. n. Borneo p. 266, LALLEMAND t.c.

Novophilaenus gen. n. type *Ptyelus calatus* Lall. p. 264, LALLEMAND t.c.

Ptyelus calatus see *Novophilaenus*.

Strandiana gen. n. type *Hindola longipennis* Lall. p. 264, LALLEMAND Festschr. E. Strand 1.

MEMBRACIDAE.

Centrotoscelus handschini sp. n. Flores p. 196 fig., FUNKHOUSER Rev. suisse Zool. 43.

Centrotus okinawanus sp. n. Japan p. 81, MATSUMURA Ins. mats. 10.

Centruchus brevicornis sp. n. Kashmir p. 247 fig., FUNKHOUSER Ann. ent. Soc. Amer. 29.

Cryptaspidia fasciata sp. n. India p. 248 fig., FUNKHOUSER t.c.

Gargara maculata sp. n. N. Andaman p. 249 fig., FUNKHOUSER t.c.—*G. australiensis* N. Australia p. 197, *luteinervis* Celebes p. 198, spp. n. figs., FUNKHOUSER Rev. suisse Zool. 43.

Heliria mexicana re-description p. 685 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Leptocentrus luteinervis sp. n. Bengal p. 245, FUNKHOUSER t.c.—*L. pilosus* sp. n. Flores p. 191 fig., FUNKHOUSER Rev. suisse Zool. 43.

Lycoderes minamen re-description p. 690 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Maurya bicolor sp. n. Bengal p. 246 fig., FUNKHOUSER t.c.

Orthobelus p. 277, *gomez-menori* sp. n. Santo Domingo p. 279 figs., PELÁEZ Bol. Soc. esp. H.n. 36.

Otinotoides dorsatus sp. n. W. Australia p. 192 fig., FUNKHOUSER Rev. suisse Zool. 43.

Palonica deserta sp. n. Mexico p. 686 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Periaman acuticornis sp. n. Malaya p. 187 fig., FUNKHOUSER J. F.M.S. Mus. 13.

Philya lowryi sp. n. Mexico p. 682 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Platybelus macrocerus sp. n. Abyssinia p. 194 figs., PELÁEZ Bol. Soc. esp. H.n. 36.—*P. projectus* sp. n. S. Africa p. 193 fig., FUNKHOUSER Rev. suisse Zool. 43.

Platycotis cornuta sp. n. Mexico p. 683 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Poppea delicata sp. n. Mexico p. 684 figs., PLUMMER t.c.

Sipylus truncaticornis sp. n. Malaya p. 188 fig., FUNKHOUSER J. F.M.S. Mus. 13.

Stictolobus lateralis sp. n. Illinois p. 21 figs., FUNKHOUSER Bull. Brooklyn ent. Soc. 31.

Telamona balli sp. n. Mexico p. 687 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Terentius niger sp. n. W. Australia p. 194 fig., FUNKHOUSER Rev. suisse Zool. 43.

Tricentrus minutus sp. n. Timor p. 195 fig., FUNKHOUSER t.c.

JASSIDAE (CICADELLIDAE).

Bythoscopinae of Australia, EVANS Pap. Proc. roy. Soc. Tasmania 1935 pp. 61–83, 3 pls.

Annotated list of Bythoscopinae of Indiana, LA HUE Proc. Ind. Acad. Sci. 45 pp. 310–314.

Studies on Indian Jassidae, III, PRUTHI Mem. Ind. Mus. 11 pp. 101–131, 2 pls. 26 figs.

Typhlocybidae of France, RIBAUT Faune de France 31 228 pp. 629 figs.

Annotated list of Cicadellids in the collections of the Colorado State College, SWAIN J. Kans. ent. Soc. 9 pp. 49–58.

Agallia avicula Haute Garonne, Morocco p. 31, *uncigera*, *laevis* Pyrenees p. 35, *aspera* Haute Garonne p. 36, spp. n. figs., RIBAUT Bull. Soc. H.n. Toulouse 37 1935.—*A. pararobustus* sp. n. India p. 104 fig., PRUTHI Mem. Ind. Mus. 11.

Agalliopsis food-plants of U.S.A. forms pp. 650–655, *saxosa*, *vellana* p. 649, spp. n. U.S.A., BALL Ann. ent. Soc. Amer. 29.

Alebra albostriella varr. n. *diluta* p. 196, *dufouri* p. 197; *wahlbergi* varr. n. *brunnea*, *pallescens* p. 198 France, RIBAUT Faune de France 31.

Allophleps indicus sp. n. India p. 120 fig., PRUTHI Mem. Ind. Mus. 11.

Allygianus gen. n. type *Thamnotettix gutturosus* Ball p. 59, BALL Bull. Brooklyn ent. Soc. 31.—*A. clathratus* sp. n. California p. 431, BALL J. Wash. Acad. Sci. 26.

Amplicephalus atascasus sp. n. Arizona p. 20, BALL Bull. Brooklyn ent. Soc. 31.

Athysanus capicola see *Mimodrylix*.

Austrogallia gen. n., *torrida* sp. n. S. Australia p. 70 figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Austroagalloides gen. n. p. 70, *karoondae* (type), *rosea*, *grisea* p. 71, *brunnea*, *agalliae* p. 72, *nigra*, *wrightii* p. 73, spp. n. Australia figs., EVANS t.c.

Baileys brachynotus sp. n. India p. 109 fig., PRUTHI Mem. Ind. Mus. 11.

Ballana gen. n. (*Viriosana*, *Laterana*, *subgenn. n.*) type *Thamnotettix vetula* Ball p. 217, DeLONG Ohio J. Sci. 36.

Bobacella turanica sp. n. Turkestan p. 199 figs., HORVÁTH Konowia 15.

Bythoscopus viridipes see *Eurinscopus*.

Calana gen. n. type *Thamnotettix umbricatus* Ball p. 218, DeLONG Ohio J. Sci. 36.

Cestius versicolor further description p. 121 fig., PRUTHI Mem. Ind. Mus. 11.

Chiasmus niger p. 108, *jagdishii* p. 109, spp. n. India figs., PRUTHI t.c.

Chinaella gen. n. p. 76, *argentata* (type) *shephardi*, *cudmorei* spp. n. Australia figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Chloropelix gen. n. p. 3, *canariensis* sp. n. Canary Is. p. 4 figs., LINDBERG Comment. biol. 6 no. 9.

Chlorotettix maculatus sp. n. India p. 118 fig., PRUTHI Mem. Ind. Mus. 11.

Cicadella huachucana p. 19, *sidana* p. 21, *cucurbita* Arizona, *taosa* New Mexico p. 20, spp. n., BALL Proc. biol. Soc. Wash. 49.

Cicadula nausharensis sp. n. India p. 113 fig., PRUTHI Mem. Ind. Mus. 11.—*C. nubila*, *hamata* spp. n. Sweden p. 10 figs., OSSIANNLSSON Opusc. ent. Lund 1.—*C. bipunctella* see *Cicadulina*; *unicolor* see *Circulifer*.

Cicadulina bipunctella Mats. from *Cicadula* (= *zeae* China) p. 111, ZACHVATKIN Wiss. Ber. Moskauer Staats Univ. 4 1935.—*C. storeyi* sp. n. Tanganyika p. 251 figs., CHINA Bull. ent. Res. 27.

Circulifer gen. n. for *haupti* n. n. for *Thamnotettix unicolor* Haupt nec Mel. and others, p. 111, ZACHVATKIN Wiss. Ber. Moskauer Staats Univ. 4 1935.

Colladonus gen. n. type *Thamnotettix collaris* Ball p. 57, BALL Bull. Brooklyn ent. Soc. 31.—*C. tahotus* sp. n. California p. 194, BALL Pan-Pacific Ent. 12.

Conodonon gen. n. type *Thamnotettix flavocapitatus* Van Duz. p. 58, BALL Bull. Brooklyn ent. Soc. 31.

Cyperana gen. n. type *Thamnotettix melanogaster* Prov. p. 218, DeLONG Ohio J. Sci. 36.—*C. smithi* var. n. *polliticarius* p. 193; *wanakena* sp. n. p. 194 U.S.A., BALL Pan-Pacific Ent. 12.

Deltocephalus (*Unerus* subgen. n. p. 219), DeLONG Ohio J. Sci. 36.—*D. mola* p. 126, *gopii* p. 127, *notatus* p. 128, spp. n. India figs., PRUTHI Mem. Ind. Mus. 11.—*D. ferrarii* see *Erythridea*.

Dicraneura contraria p. 210, *palustris* p. 216, spp. n. France figs., RIBAUT Faune de France 31.—*D. mera* California p. 7, *santana* Arizona p. 8, spp. n.; *aegra* n. n. for *mera* Beamer preocc. p. 55, BEAMER Pan-Pacific Ent. 12.

Dicyphonia key p. 66, *plura* p. 68, *plana* p. 69, *minuta* p. 70, spp. n. U.S.A. figs., BEAMER J. Kans. ent. Soc. 9.

Doleranus gen. n. type *Thamnotettix longula* G. & B. p. 58, BALL Bull. Brooklyn ent. Soc. 31.—*D. atascasus* Arizona, *kinonanus* Mexico, spp. n. p. 432, BALL J. Wash. Acad. Sci. 26.

Doratulina macrocephala sp. n. India p. 110 fig., PRUTHI Mem. Ind. Mus. 11.

Dorycephalus omani sp. n. Oregon p. 31, BEAMER J. Kans. ent. Soc. 9.

Elymana gen. n. type *Thamnotettix inornatus* Van Duz. p. 218, DeLONG Ohio J. Sci. 36.—*E.* key to N. American spp. p. 636, *acuma*, *acrita* p. 637, *caduca*, *ritana* p. 638, spp. n. U.S.A. figs., DeLONG Ann. ent. Soc. Amer. 39.—*E. ovatina* sp. n. Arizona p. 195, BALL Pan-Pacific Ent. 12.

Empoasca notes on Egyptian spp. pp. 144–151 figs., PAOLI Bull. Soc. ent. Egypte 20.—*E. unicolor* sp. n. Canary Is. p. 8 figs., LINDBERG Comment. biol. 6 no. 9.—*E. gelbata*, *gleditsia* p. 225, *chelata*, *rubrata* p. 226, *jacinta*, *ziona* p. 227, *apata*, *grossata* p. 228, *confusa*, *carsona* p. 229 U.S.A., *setata* Mexico p. 226, spp. n., DeLONG & DAVIDSON Ohio J. Sci. 36.—*E. decipiens* subsp. n. *minor* Yemen, Arabia p. 112, ZACHVATKIN Wiss. Ber. Moskauer Staats Univ. 4

1935.—*E. digitata* p. 178, *santolinae* p. 191, **spp. n.** France figs., RIBAUT Faune de France 31.—*E. barbistyla* Sudan p. 8, *aequatorialis* Uganda p. 10, *viridigrisea* p. 12, *terrae-reginae* p. 13, *Australia, malayana* Malaya p. 15, **spp. n.**; *bipunctata* p. 16, *libyca* p. 19, *formosana* p. 22 morphology figs., PAOLI Mem. Soc. ent. ital. 15.—*E. peregrina* Peru, *rubra* p. 34, *setigera, longispina* p. 38, *dolonis, trifurcata* p. 39, *curveola, missiona* Argentina, *insularis* Puerto Rico p. 40, *perelegans* p. 35, *phaseola* p. 39 Costa Rica, *ornata* Bolivia p. 38, **spp. n.** figs., OMAN J. Wash. Acad. Sci. 26.

Erythridera **gen. n.** for *Deltoccephalus ferrarii* Put. p. 223 figs., RIBAUT Faune de France 31.

Erythroneura harmsi **sp. n.** Christmas I. p. 600 fig., IZZARD Ann. Mag. n.H. (10) 17.—*E. 8-fasciata* p. 11, *colorata* p. 12, *spartocytisi, tenerifae* p. 13, *rubropunctata* p. 14, *decolor* p. 15, **spp. n.** Canary Is. figs., LINDBERG Comment. biol. 6 no. 9.—*E. cavena, scythia* p. 61, *contrasta, ponderosa* p. 62, *decorata* p. 63, *extrema, stulta* p. 64, *nitida* p. 65, **spp. n.** U.S.A.; *spearca* **n. n.** for *nitida* Johns. & Auten nec Beamer p. 818, JOHNSON & AUTEN Ann. ent. Soc. Amer. 29.—*E. tiliæ* **var. n.** *peruncta*; *ordinaria* (with **varr. n.** *variegata, pandelei*) p. 47, *inconstans* p. 48, *dorycnii* (with **varr. n.** *inops, spoliata* p. 52), *pusilla* p. 74 **spp. n.**; *rorida* **var. n.** *deleta* p. 56; *simplex* **varr. n.** *difficilis, manca* p. 57; *eburnea* **varr. n.** *virgata, cruenta* p. 60; *nivea* **varr. n.** *nycthemera, dorsuaria, tithide* **var. n.** *nudata* p. 61 France figs.; RIBAUT Faune de France 31.

Eupteryx ribauti **var. n.** *umbrata* p. 136; *fulcata* p. 148, *rostrata* (with **var. n.** *levis*) p. 163, *alticola* p. 165 **spp. n.**; *urticae* **var. n.** *deficiens* p. 155; *cyclops* **varr. n.** *trilobata, mendax* p. 157; *zelleri* **var. n.** *decussata* p. 159; *decemnotata* **varr. n.** *litterata, trochlearis* p. 161, *turbatrix*; *collina* **var. n.** *florida* p. 168 France figs., RIBAUT t.c.—*E. laureti* **sp. n.** Canary Is. p. 10, figs., LINDBERG Comment. biol. 6 no. 9.

Eurinscopus dryas (= *pelias* Kirk., *pelamys* Kirk.); *viridipes* Dist. from *Bythoscopus* p. 74; *viridis, pallidus* p. 75, *elegans, citrinus* p. 76, **spp. n.** Australia and Tasmania figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Euscelis plebejus, schenki morphology pp. 335–338 figs., NAST Ann. Mus. zool. polon. 11.

Eutettix tenellus Bak. (= *Thamnotettix rubicundula* Van Duz., *T. indivisus* Haupt) p. 164, OMAN Proc. ent. Soc. Wash. 38.—*E. balli* see *Ollarianus*.

Exitianus kinoanus **sp. n.** U.S.A. p. 71, BALL Bull. Brooklyn ent. Soc. 31.

Flexamia ritana **sp. n.** Arizona; *funabulus* Crumb a good **sp.** p. 257 figs., BEAMER Canad. Ent. 68.

Forcipata **gen. n.** p. 70, *loca, magna* p. 71, *sicula, triquetra* p. 72, *ohioensis, ancantha* p. 73, *acclina, calipera* p. 74, *ortha* p. 75, **spp. n.** U.S.A. figs., DELONG & CALDWELL Ann. ent. Soc. Amer. 29.

Friscananus **gen. n.** type *Thamnotettix intricatus* Ball p. 60, BALL Bull. Brooklyn ent. Soc. 31.

Glordonus **gen. n.** type *Thamnotettix gloriosus* Ball p. 58, BALL t.c.—*G. spatulatus* **sp. n.** California p. 430, BALL J. Wash. Acad. Sci. 26.

Graminella **gen. n.** type *Thamnotettix aureovittatus* Sand. & DeL. p. 218, DELONG Ohio J. Sci. 36.

Graphocephala ignava **sp. n.** Arizona p. 22, BALL Proc. biol. Soc. Wash. 49.

Gurawa intermediatus **sp. n.** India p. 107 fig., PRUTHI Mem. Ind. Mus. 11.

Hebecephalus hilaris, balli p. 252, *firmus, irritus* p. 253, *caecus* **spp. n.** U.S.A.; *scriptanus* ♂ 255 figs., BEAMER Canad. Ent. 68.

Homalodisca elongata **sp. n.** Arizona p. 17, BALL Proc. biol. Soc. Wash. 49.

Idiocerus kirkaldyi, seckeri p. 79, *inconsequens, divisus, lesmurdiensis* p. 80, **spp. n.** Australia figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.—*I. bimaculatus* p. 102, *confuscus* p. 104 [pl. legend *confuscus*], **spp. n.** India figs., PRUTHI Mem. Ind. Mus. 11.

Idiodonus **gen. n.** type *Thamnotettix kennicotti* Uhl. p. 57, BALL Bull. Brooklyn ent. Soc. 31.

Kolla geometrica **var. n.** *plutoniella* Florida p. 22, BALL Proc. biol. Soc. Wash. 49.

Krisna insularis **sp. n.** Porto Rico p. 118, OMAN Pan-Pacific Ent. 12.

Laterana **subgen. n.** see *Ballana*.

Macropsis occidentalis p. 63, *victoricensis*, *federalis*, *filicis* p. 64, *luteus* p. 65, *lincolnensis*, *flindersi* p. 66, *wilsoni* p. 67 Australia, *tasmaniensis* p. 65, *hobartensis* p. 66 Tasmania, spp. n. figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Mimodrylix gen. n. for *Athysanus capicola* Stål p. 108, ZACHVATKIN Wiss. Ber. Moskauer Staats Univ. 4 1935.

Monobazus grandis sp. n. India p. 122 fig., PRUTHI Mem. Ind. Mus. 11.

Neonirvana gen. n. p. 116, *hyalina* sp. n. Costa Rica p. 117 fig., OMAN Pan-Pacific Ent. 12.

Nesotettix gen. n., *freyi* sp. n. Canary Is. p. 6 figs., LINDBERG Comment. biol. 6 no. 9.

Ollarianus gen. n. type *Eutettix balli* Van Duz. p. 59, BALL Bull. Brooklyn ent. Soc. 31.—*O. rubianus* p. 432, *bullatus*, *olus* p. 433, *rudiculus* p. 434, spp. n. Arizona, BALL J. Wash. Acad. Sci. 26.

Oncopsis scopulus, *pullus* p. 67, *melleus*, *translucens* p. 68, *subfuscus*, *tepperi* p. 69, spp. n. Australia figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Ophiola bicolor p. 123, *yatangensis* p. 125, spp. n. India figs., PRUTHI Mem. Ind. Mus. 11.

Osbornellus ignavus sp. n. Arizona p. 18, BALL Bull. Brooklyn ent. Soc. 31.—*O. borealis* sp. n. British Columbia p. 976 fig., DELONG & MOHR Amer. Midl. Nat. 17.

Parabolocratus storði sp. n. Canary Is. p. 4 figs., LINDBERG Comment. biol. 6 no. 9.

Paracoelidia teretis sp. n. Arizona p. 31, BEAMER J. Kans. ent. Soc. 9.

Paralimnus confuscus sp. n. India p. 129 fig., PRUTHI Mem. Ind. Mus. 11.

Paramesus nervosus in Quebec p. 184 figs., OUELLET Nat. canad. 63.

Parasitades gen. n., *baileyi* sp. n. India p. 106 fig., PRUTHI Mem. Ind. Mus. 11.

Pasadenus gen. n. type *Thamnotettix pasadenus* Ball p. 60, BALL Bull. Brooklyn ent. Soc. 31.—*P. limbatus* ♀; *omani* p. 192, *deltus* p. 193, spp. n. Cali-

fornia, BALL Pan-Pacific Ent. 12.—*P. chicanus*, *margaritae* spp. n. California p. 431, BALL J. Wash. Acad. Sci. 26.

Paternus khewrensis sp. n. India p. 111 figs., PRUTHI Mem. Ind. Mus. 11.

Pedioscopus polydorus Kirk. (= *agenor* Kirk.) p. 81, EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Petaloccephala kemp sp. n. India p. 101 fig., PRUTHI Mem. Ind. Mus. 11.

Polyglyptodes viridis sp. n. Mexico p. 688 figs., PLUMMER Ann. ent. Soc. Amer. 29.

Recilia elongatoocellata subsp. n. *jenjouristi* Yemen, Arabia p. 110, ZACHVATKIN Wiss. Ber. Moskauer Staats Univ. 4 1935.

Scaphoideus veterator p. 334, *angustatus* p. 335, *merus* p. 336, *torqus*, *elongatus* p. 337, *cylindratus* p. 338, *chelus*, *transeus* p. 339, *densus* p. 340, spp. n. U.S.A. figs., DELONG & BEERY Ohio J. Sci. 36.—*S. dilatus* p. 966, *camurus* p. 967, *flexus* p. 968, *pullus* p. 969, *auctus*, *baculus* p. 970, *diutius* p. 972, *amplus* p. 973, *scelestus*, *bifurcatus* p. 974, *frisoni* p. 975 Pennsylvania, *crassus* New Jersey p. 966, *curvatus* p. 967, *radix* p. 969, *nigrellus* p. 973 Illinois, *brevidens* Tennessee p. 971, spp. n. figs., DELONG & MOHR Amer. Midl. Nat. 17.

Sunda gen. n., *ribeiroi* sp. n. India p. 112 fig., PRUTHI Mem. Ind. Mus. 11.

Tecanus sonorus sp. n. Arizona p. 19, BALL Bull. Brooklyn ent. Soc. 31.

Thamnotettix brunnescens p. 115, *nigricans* p. 116, *paraveinatus* p. 117, spp. n. India figs., PRUTHI Mem. Ind. Mus. 11.—*T. unicolor* and others see *Circulifer*; *T. rubicundula*, *indivisus* see *Eutettix tenellus*; *umbricatus* see *Calana*; *aureovittatus* see *Graminella*; *inornatus* see *Elymana*; *melanogaster* see *Cyperana*; *vetula* see *Ballana*; *kennicotti* see *Idiodonus*; *collaris* see *Colladonus*; *flavocapitatus* see *Conodonus*; *gloriosus* see *Gloridonus*; *longula* see *Doleranus*; *gutturosus* see *Allygianus*; *intricatus* see *Friscanenus*; *pasadenus* see *Pasadenus*.

Trocnada gigantea, *minuta* spp. n. Australia p. 78 figs., EVANS Pap. Proc. roy. Soc. Tasmania 1935.

Twiningia solitaria sp. n. Arizona p. 18, BALL Bull. Brooklyn ent. Soc. 31.

Typhlocyba inquinata sp. n. p. 88; *rosae* ab. n. manca p. 93; *bifasciata* var. n. *perrieri* p. 122 France figs., RIBAUT Faune de France 31.—*T. dorsti* sp. n. Utah p. 10 fig., OSSIAN-NILSSON Ent. Tidskr. 57.—*T. surda* p. 101, *crassa*, *quadrata* p. 102, *surcula*, *enascora* p. 103, *expanda* p. 104, spp. n. U.S.A. figs., DELONG & JOHNSON Ent. News 47.

Unerus subgen. n. see *Deltocephalus*.

Viriosana subgen. n. see *Ballana*.

Xerophloeia key p. 395, *cephalica*, *magna* p. 396, *elongata* p. 398, *carinata* p. 399 (with var. n. *gigas*), *difformis* p. 400, *elegans* p. 401 spp. n. Argentina; *viridis* synonymy p. 398 figs., OMAN Rev. Ent. Rio de J. 6.

Xestocephalus minutus sp. n. Christ-mas I. p. 598, IZZARD Ann. Mag. n.H. (10) 17.

Zizyphoides indicus further description p. 130 fig., PRUTHI Mem. Ind. Mus. 11.

PSYLLIDAE (CHERMIDAE).

Psyllidae of the Outer Hebrides, HESLOP-HARRISON Ent. mon. Mag. 72 pp. 48-51.

Psyllidae of Scottish Highlands, HESLOP-HARRISON Scot. Nat. no. 220 pp. 120-122.

List of Indian gall-forming Psyllidae, MANI J. Asiat. Soc. (Sci.) 1 pp. 99-108, 1 pl. 1 fig.

Psyllidae of Kyushu, UYE Ent. World 4 pp. 8-14, 849-852, 21 figs.

Aphalara constricta, *osborni* p. 220, *delongi*, *furcata* p. 221, *bifida*, *hebecephala*, *sinuata* p. 222, spp. n. U.S.A. figs., CALDWELL Ohio J. Sci. 36.—*A. hedini* sp. n. China p. 1 figs., ENDERLEIN Ark. Zool. 27B (sep. dated 1933) no. 1.

Pauropsylla key to Indian spp. p. 100, MANI J. Asiat. Soc. (Sci.) 1.

APHIDAE.

Notes on intermountain Aphids, KNOWLTON & SMITH Ent. News 47 pp. 210-213, 1 fig.

Aphids of Great Basin and Rocky Mountain areas of western U.S., KNOWLTON & SMITH Festschr. E. Strand 1 pp. 487-492, 1 pl.

Additions to and notes on New York Aphids, LEONARD J. N.Y. ent. Soc. 44 pp. 177-185.

Aphidae of Morocco, VII, MIMBUR Bull. Soc. Sci. nat. Maroc 15 pp. 251-258, 4 figs.

Additions to plant list of Moroccan Aphids, MIMBUR Bull. Soc. Sci. nat. Maroc 15 pp. 259-260.

Additions and corrections to the "Aphidae of Colorado," PALMER Ann. ent. Soc. Amer. 29 pp. 729-748, 21 figs.

List of Aphidae of China, TSENG & TAO Ent. & Phytopath. 4 pp. 120-176, 3 figs.

Aphids of Voronezh region, VASSIL'VA & MALZEVA Acta Univ. Voronegiensis 8 1935 pp. 67-81.

Acyrtosiphon gossypicola sp. n. Korea p. 148, SHINJI Oyo-Dobuts. Zasshi 8.—*A. photiniae* sp. n. Canton p. 600 fig., TAKAHASHI Lingnan Sci. J. 15.

Amphicercidus maxsoni sp. n. N. Colorado p. 273, fig., PALMER Ann. ent. Soc. Amer. 29.

Anoecia karatanei sp. n. [Japan] p. 103 figs., SASAKI Proc. imp. Acad. Japan 12.

Anomalosiphum pithecolobii wingless viviparous ♀ p. 597 fig., TAKAHASHI Lingnan Sci. J. 15.

Aphis vorabonnevillus sp. n. Utah p. 490 fig., KNOWLTON & SMITH Festschr. E. Strand 1.

Aspidaphis adjuvans subsp. n. *rowei* Utah p. 777 fig., KNOWLTON & SMITH Ann. ent. Soc. Amer. 29.

Astegopteryx key p. 97, *lambersi* p. 98, *leeuweni* p. 99 Sumatra, *swinhoei* p. 100, *sasakii* p. 101 Formosa spp. n. fig., TAKAHASHI Proc. R. ent. Soc. Lond. (B) 5.—*A. pseudostyracophila* sp. n. Japan p. 45 fig., SHINJI Zool. Mag. Tokyo 48.

Bipersona hottesi sp. n. Utah p. 211 fig., KNOWLTON & SMITH Ent. News 47.

Capitophorus acanthovillus p. 108, *chlorophainus* p. 109, *ferageus*, *magnatus* p. 110, *pycnorhysus* p. 111, *xerozoous* p. 112, *bitrichus*, *decampus* p. 230, *infrequens* p. 231, *quadririchus*, *spatulavillus* p. 233, *zoomontanus* p. 234, spp. n. U.S.A. figs., KNOWLTON & SMITH Canad. Ent. 68.

Cavariella hendersoni sp. n. Utah p. 776 fig., KNOWLTON & SMITH Ann. ent. Soc. Amer. 29.

Ceratovacuna hoffmanni sp. n. Canton p. 603, TAKAHASHI Lingnan Sci. J. 15.

Cervaphis quercus new to China p. 654 fig., YAO Ent. & Phytopath. 4.

Chaitophorus clarus p. 154, *shantungensis* p. 157, spp. n. China figs., TSENG & TAO t.c.

Chermes ishiharai sp. n. Japan p. 75 figs., INOUE Ins. mats. 11.

Cinara ezoana sp. n. Japan p. 129, INOUE Ins. mats. 10.—*C. pseudo-schwarzii* sp. n. N. Colorado p. 274 fig., PALMER Ann. ent. Soc. Amer. 29.—*C. cedri* sp. n. Morocco p. 251 figs., MIMÉUR Bull. Soc. Sci. nat. Maroc 15.

Drepanaphis alleghenyensis sp. n. Pennsylvania p. 81, MILLER Canad. Ent. 68.

Dreyfusia nüsslini, piceae examples of separation of spp. pp. 1092-1094, HUBAULT C.R. Soc. Biol. 122.

Epameibaphis utahensis sp. n. Utah p. 91 figs., KNOWLTON & SMITH Proc. ent. Soc. Wash. 38.

Eriosoma elsholtziae sp. n. Japan p. 13 [in Japanese], SHINJI Zool. Mag. 48.

Kakimia collomiae sp. n. N. Colorado p. 276 fig., PALMER Ann. ent. Soc. Amer. 29.

Lachnus cembrae sp. n. Austrian Alps p. 33 figs., SEITNER Zbl. ges. Forstw. 62.

Macrosiphoniella cayratiae sp. n. China p. 142 fig., TSENG & TAO Ent. & Phytopath. 4.

Macrosiphum orchidacearum p. 19, *polystachyae* p. 20, spp. n. Java, FRANSSEN & TIGGELOVEND De vijanden en ziekten Orchid. Java [1935].—*M. breviscriptum* sp. n. N. Colorado p. 277 fig., PALMER Ann. ent. Soc. Amer. 29.—*M. adenocaulonae* p. 65, *scoliopei* p. 68, spp. n. U.S.A. figs., ESSIG Pan-Pacific Ent. 12.

Micraphis takahashii sp. n. China p. 136 fig., TSENG & TAO Ent. & Phytopath. 4.

Micromyzus formosanus Takah. (= *alliumcepa* Essig) p. 72; *alliumcepa* p. 157, *oliveri* p. 160, spp. n. California figs., ESSIG Pan-Pacific Ent. 11.

Myzocallis kuricola var. n. *cantonensis* Canton p. 602, TAKAHASHI Lingnan Sci. J. 15.—*M. subulmifolii* sp. n. Pennsylvania p. 81, MILLER Canad. Ent. 68.

Myzus langei sp. n. California p. 70 figs., ESSIG Pan-Pacific Ent. 12.

Neosymydobius quercihabitus sp. n. Massachusetts p. 82, MILLER Canad. Ent. 68.

Nippocallis kuricola sexual ff. pp. 71-73 [in Japanese] figs., YAGO J. Plant Prot. 23.

Nipponaphis populi Mask. from *Sphaerococcus* p. 15 fig., FERRIS Micro-entomology 1.

Oregma cantonensis sp. n. Canton p. 605 fig., TAKAHASHI Lingnan Sci. J. 15.

Pemphigus napaesus re-description p. 168, TSENG & TAO Ent. & Phytopath. 4.

Sinocharitophorus gen. n. p. 197, *maoi* sp. n. China p. 198 figs., TAKAHASHI Lingnan Sci. J. 15.

Thoracaphis cheni sp. n. China p. 21 fig., TAKAHASHI Peking n.H. Bull. 11.

Tuberolachnus todocolus sp. n. Japan p. 131 figs., INOUE Ins. mats. 10.

ALEURODIDAE.

Aleurocanthus esakii sp. n. Palau Is. p. 111 fig., TAKAHASHI Tenthredo 1.

Aleurodicus griseus p. 143, *antillensis* p. 144, spp. n. Porto Rico, DOZIER in WOLCOTT J. Agric. Univ. P.R. 20.

Aleurolobus chinensis sp. n. China p. 453 figs., TAKAHASHI Lingnan Sci. J. 15.—*A. acanthi* sp. n. Swakopmund, Africa p. 52 fig., TAKAHASHI Arb. morph. taxon. Ent. Berl. 3.

Aleuroplatus bossi sp. n. S.W. Africa p. 87 fig., TAKAHASHI t.c.

Aleurotrachelus dryandrae sp. n. W. Australia p. 83 figs., SOLOMON J. roy. Soc. W. Aust. 21 1935.

Bemisia hancocki Uganda p. 20, *rhodesiaensis* S. Rhodesia p. 22, spp. n. figs., CORBETT Proc. R. ent. Soc. Lond. (B) 5.

Bulgarialeurodes gen. n., *rosae* sp. n. Bulgaria p. 18 fig., CORBETT t.c.

Dialeurodes greenwoodi sp. n. Fiji p. 20 fig., CORBETT t.c.—*D. philippinensis* sp. n. p. 217; *tristylis* var. n. *uichancoi* p. 218; *citri* var. n. *hederae* p. 219 Formosa, TAKAHASHI Philipp. J. Sci. 59.—*D. dissimilis* sexual dimorphism, post-embryonic growth pp. 197–205 figs., ROONWAL Proc. nat. Acad. Sci. India 6.

Mixaleyrodes gen. n., *polystichi* sp. n. Formosa p. 150 fig., TAKAHASHI Kontyû 10.

Pealius rubi sp. n. Formosa p. 219 fig., TAKAHASHI Philipp. J. Sci. 59.

Synaleurodicus gen. n., *hakeae* sp. n. W. Australia p. 79 figs., SOLOMON J. roy. Soc. W. Aust. 21 1935.

Trialeurodes natalensis Natal p. 18, *sesbaniae* Australia spp. n.; *mossopi* further description p. 19 figs., CORBETT Proc. R. ent. Soc. Lond. (B) 5.

Xenaleyrodes gen. n., *artocarpi* sp. n. Palau Is. p. 113 fig., TAKAHASHI Tenthredo 1.

COCCIDAE.

Coccids of Santarém region, DE ALMEIDA Arq. Secç. Biol. Mus. zool. Univ. Coimbra 2 1935 pp. 165–171.

Coccids of Spain, BALACHOWSKY Rev. Path. vég. Ent. agric. 22 1935 pp. 255–269, 1 pl. 2 figs.

Illustrations and discussion of 61 genotypes of Diaspididae, FERRIS Micro-entomology 1 pp. 17–92, 64 figs.

Coccidae of the Caucasus, BORKHSENIUS Trud. Krasnodarsk. sel'.-khov. Inst. 4 pp. 97–138, 3 figs.

Coccids on sandal in India, CHATTERJEE & RAMAKRISHNA AYYAR Ind. For. Rec. 1 pp. 233–242.

Scale-insects of Citrus in several districts of E. Chekiang, CHEN Ent. & Phytopath. 4 pp. 208–228, 5 figs.

Garden and forest Coccids of Azov Black Sea Region, N. Caucasus and Daghestan, GAVALOV Proc. Agric. Inst. Krasnodar 7 1935 40 pp.

Distribution of scale insects in U.S.S.R., KIRITCHENKO Plant Prot. 9 pp. 68–75.

Some Coccids of the Berlin botanical garden, LINDINGER Arb. physiol. angew. Ent. Berl. 3 pp. 153–155.

Synonymy of Coccids [contd.], LINDINGER Ent. Z. 49 p. 444.

Note on careless naming of Coccids, LINDINGER Ent. Z. 50 pp. 285–286.

Some Coccids new to Argentina, LIZER Y TRELLES Physis 12 pp. 113–116.

Coccids of Agaléga I., MAMET Rev. agric. Ile Maurice no. 88 pp. 152–153.

List of Coccidae and their food-plants in S. Africa, MUNRO & FOUCHÉ Bull. Dep. Agric. For. Un. S. Afr. no. 158 104 pp.

Coccids of Portugal, I, NEVES Bull. Soc. portug. Sci. nat. 12 1935 pp. 59–61, 1 pl. 1 fig.

Notes on Coccidae from S. India, RAMAKRISHNA AYYAR J. Bombay Soc. n.H. 39 pp. 146–148.

Coccids of Morocco, III, RUNGS Rev. Path. vég. Ent. agric. 22 1935 pp. 270–282, 1 pl.

Preliminary list of armed scale-insects of Morioka, Japan, SHINJI Kontyû 10 pp. 93–98.

Actenaspis see *Leucaspis*.

Annulococcus gen. n., *ugandaensis* sp. n. N. Uganda p. 209 figs., JAMES Trans. R. ent. Soc. Lond. 85.

Antonina tobai Kuw. (= *Serrolecanium bambusae* Shinji) p. 5, KANDA Insect Wld. 40.

Aonidiella aurantii, *citrina*, *taxus* morphology pp. 249–261 figs., LUPO Boll. Lab. Zool. Portici 29.—*A. perniciosae* morphology p. 233 figs., BONNE-MAISON Rev. Path. vég. Ent. agric. 23.

Apteromidia see *Parlatoria*.

Aspidiotus malençonii sp. n. Morocco p. 50 fig., RUNGS Bull. Soc. ent. Fr. 41.—*A. alma-atensis* Kazakhstan p. 128, *caucasicus* E. Georgia p. 130, *turanicus* p. 131, *armenicus* Armenia, *multiglandulatus* Caucasus p. 132, spp. n. figs., BORKHSENIUS Plant Prot. 6 1935.—*A. vuilleti* morphology pp. 97–100 figs., BALACHOWSKY Bull. Soc. ent. Fr. 41.—*A. ostreaeformis* morphology p. 237 figs., BONNE-MAISON Rev. Path. vég. Ent. Agric. 23.

Aulacaspis phoebicola sp. n. Formosa p. 81 fig., TAKAHASHI Trans. n.H. Soc. Formosa 26.

Carulaspis see *Diaspis*.

Chionaspis Sign. (= *Fundaspis* MacG. p. 24) figs., FERRIS Microentomology 1.—*C. cordiae* sp. n. Mauritius p. 95, MAMET Proc. R. ent. Soc. Lond. (B) 5.—*C. sakaii* sp. n. Japan p. 2 fig., TAKAHASHI Mushi 9.—*C. hempei* sp. n. Brazil p. 167 figs., LEPAGE Arch. Inst. Biol. São Paulo 6 1935.

Chrysomphalus alluaudi p. 93, *castigatus* p. 94, spp. n. Mauritius figs., MAMET Proc. R. ent. Soc. Lond. (B) 5.

Coccus jungi sp. n. China p. 218, CHEN Ent. & Phytopath. 4.—*C. fagi* see *Cryptococcus fagisuga*.

Cockerellaspis see *Diaspis*.

Coelostomidia habits pp. 225–227, *assimile* short description in different localities pp. 227–229, BRITTIN Trans. roy. Soc. N.Z. 66.

Cryptococcus fagisuga n. n. for *Coccus fagi* Bär nec Roemer p. 444, LINDINGER Ent. Z. 49.

Ctenochiton ericae sp. n. France p. 122 figs., BALACHOWSKY Bull. Soc. ent. Fr. 41.

Cupidaspis see *Lineaspis*.

Diaspis Costa (= *Carulaspis* MacG., *Cockerellaspis* MacG. p. 24) figs., FERRIS Microentomology 1.

Dinaspis taiwana sp. n. Formosa p. 427 fig., TAKAHASHI Trans. n.H. Soc. Formosa 26.

Douglasia anchusella sp. n. Sweden p. 51 figs., BENANDER Opusc. ent. Lund 1.

Echinococcus gen. n., *echinatus* sp. n. Moroccan Sahara p. 157 figs., BALACHOWSKY Bull. Soc. ent. Fr. 41.

Eriococcus cistacearum p. 344, *juniperi* p. 353, spp. n. France figs., GOUX Bull. Soc. zool. Fr. 61.

Essigaspis see *Protodiaspis*.

Eulecanium grassei sp. n. France p. 56 figs., BALACHOWSKY Bull. Soc. ent. Fr. 41.

Euleucaspis see *Leucaspis*.

Euparlatoria see *Parlatoria*.

Eurhizococcus gen. n. for *Margarodes brasiliensis* Hemp. (type) and *Termitococcus brevicornis* Silv. p. 39 figs., SILVESTRI Boll. Lab. zool. Portici 30.

Fiorinia pinicola Mask. good sp. p. 2; *minor* Mask. (= *chinensis* Ferr.) p. 4; *nephelii* Mask. (= *hirsuta* Marchal) p. 5 figs., FERRIS Microentomology 1.—*F. vaccini* var. n. *hisakii* Formosa p. 7, TAKAHASHI Mushi 9.

Fundaspis see *Chionaspis*.

Gymnaspis buxi sp. n. China p. 220 fig., TAKAHASHI Peking n.H. Bull. 10.—*G. cinnamomi* sp. n. Formosa p. 82 figs., TAKAHASHI Trans. n.H. Soc. Formosa 26.

Hemiberlesia balachowskyi sp. n. Morocco p. 53 fig., RUNGS Bull. Soc. ent. Fr. 41.—*H. mairei* Balach. (= *Targionia regnieri* Rungs) p. 272, RUNGS Rev. Path. vég. Ent. agric. 22 1935.

Hemichionaspis see *Pinnaspis*.

Howardia Berl. & Leon. (= *Megalodiaspis* Paoli p. 25) figs., FERRIS Microentomology 1.

Jaapia see *Pinnaspis*.

Kermes tropicalis sp. n. Formosa p. 1, TAKAHASHI Mushi 9.

Kuwanaspis MacG. (= *Lepidosaphoides* Lind. p. 25, *Tsukushiaspis* Kuw. p. 26) figs., FERRIS Microentomology 1.

Lecaniodiaspis cremastogastri var. n. *foochowensis* China p. 217, TAKAHASHI Peking n.H. Bull. 10.

Lecanium mauritiense sp. n. Mauritius p. 96, MAMET Proc. R. ent. Soc. Lond. (B) 5.

Lepidaspidis see *Pinnaspis*.

Lepidosaphoides see *Kuwanaspis*.

Leucaspis Targ. (= *Actenaspis* Leon., *Euleucaspis* Lind. p. 24, *Pusillaspis* Lind., *Rhopaloaspis* Del Guer. p. 26) FERRIS Microentomology 1.

Lineaspis MacG. (= *Cupidaspis* MacG. p. 24) figs., FERRIS t.c.

Margarodes vitium synonymy, bibliography pp. 323–335, PORTER Rev. chil. H.n. 39.—*M. brasiliensis* see *Eurhizococcus*.

Megalodiaspis see *Howardia*.

Micrococcus notes on Palaearctic spp. 163, *rungi* Moroccan Sahara p. 160, *dumonti* S. Tunisia p. 164 spp. n. figs., BALACHOWSKY Bull. Soc. ent. Fr. 41.

Mytilella see *Opuntiaspis*.

Obluctaspis see *Protodiaspis*.

Opuntiaspis Ckll. (= *Mytilella* Leon. p. 25) figs., FERRIS Microentomology 1.

Orthezia argrimoniae sp. n. Japan p. 91 [in Japanese] figs., SHINJI Kontyû 10.

Parlatoria Targ. (= *Apterionidia* Berl., *Euparlatoria* Leon. p. 24, *Websteriella* Leon. p. 27) figs., FERRIS Microentomology 1.

Phenacaspis trochodendri sp. n. Formosa p. 4 fig., TAKAHASHI Mushi 9.

Phenacoccus priesneri sp. n. Egypt p. 80 figs., LAING Bull. Soc. ent. Egypte 20.—*P. locustus* p. 204, *trispinosus* p. 206, spp. n. figs., JAMES Trans. R. ent. Soc. Lond. 85.—*P. gavalovi* p. 105, *ussuriensis* p. 108, spp. n. Caucasus figs., BORKHSENIUS Trud. Krasnodarsk. sel'-khoz. Inst. 4.

Pinnaspis Ckll. (= *Hemichionaspis* Ckll., *Jaapia* Lind., *Lepidaspidis* MacG. p. 25) figs., FERRIS Microentomology 1.

Prontaspis see *Unaspis*.

Protodiaspis Ckll. (= *Essigaspis* MacG. p. 24, *Obluctaspis* MacG. p. 26) figs., FERRIS Microentomology 1.

Pseudaonidia tripartita p. 90, *lacinioides* p. 91, spp. n. Mauritius figs., MAMET Proc. R. ent. Soc. Lond. (B) 5.—*P. glandulosa* subsp. n. *occitalis* Morocco p. 273, RUNGS Rev. Path. vég. Ent. agric. 22 1935.

Pseudaulacaspis MacG. (= *Sasakiaspis* Kuw. p. 26) figs., FERRIS Microentomology 1.

Pseudococcus astericola p. 49, *elscholtiae* p. 50, spp. n. Japan figs., SHINJI Kontyû 10.—*P. magnoliae* p. 110, *inamabilis* p. 112, *tibouchinae* p. 113, *sociabilis* p. 114, spp. n. Brazil figs., HAMBLETON Arch. Inst. Biol. São Paulo 6 1935.—*P. cōcotis* re-description, ♂ pp. 25-31 figs., COTTIER Proc. R. ent. Soc. Lond. (B) 5.—*P. longirostralis* Tanganyika p. 207, *masakensis* Uganda p. 208, spp. n. figs., JAMES Trans. R. ent. Soc. Lond. 85.

Pusillaspis see *Leucaspis*.

Rhizococcus graminicola p. 210, *albus* p. 212, spp. n. Kenya figs., JAMES Trans. R. ent. Soc. Lond. 85.

Rhodania flava sp. n. France p. 35 figs., GOUX Bull. Soc. ent. Fr. 41.

Rhopalaspis see *Leucaspis*.

Ripersia parkeri sp. n. France p. 215 figs., BALACHOWSKY Rev. franç. Ent. 3.—*R. littoralis* Kenya p. 213, *themedae* Uganda p. 214, spp. n. figs., JAMES Trans. R. ent. Soc. Lond. 85.

Sasakiaspis see *Pseudaulacaspis*.

Serrolecanium bambusae see *Antonina tobai*.

Sphaerococcus populi see *Nipponaphis* (Aphidae).

Stictococcus aliberti Togo p. 282; *hargreavesi* p. 283, *olivaceus* p. 285 Sierra Leone, spp. n. figs., VAYSSIÈRE Bull. Soc. ent. Fr. 40.

Tachardiella trilobata sp. n. Brazil p. 374 figs., MENDES Rev. Ent. Rio de J. 6.

Targionia regnieri see *Hemiberlesia mairiei*.

Termitococcus redescription p. 33, *carratoi* sp. n. Brazil p. 34 figs., SILVESTRI Boll. Lab. zool. Portici 30.—*T. brevicornis* see *Eurhizococcus*.

Trionymus sanguineus p. 197, *sativus* p. 198, *sporoboli* p. 199, *panici* p. 201, *insularis* p. 202, *sericeus* p. 203 Kenya, *praegrans* Uganda p. 200, spp. n. figs., JAMES Trans. R. ent. Soc. Lond. 85.

Tsukushiaspis sasae sp. n. China p. 218 figs., TAKAHASHI Peking n.H. Bull. 10.—See *Kuwanaspis*.

Unaspis MacG. (= *Prontaspis* MacG. p. 26) figs., FERRIS Microentomology 1.

Websteriella see *Parlatoria*.

THYSANOPTERA.

Knowledge of Californian Thysanoptera previous to 1900, BAILEY Pan-Pacific Ent. 12 pp. 97-103.

A list of Thysanoptera of California, BAILEY Pan-Pacific Ent. 11 pp. 163-169.

Some Thysanoptera new to Argentina, BLANCHARD Physis 12 pp. 103-109, 4 figs.

List of Thysanoptera of Holland, DOEKSEN Zool. Meded. 19 pp. 79-86.

Studies on Neotropical Thysanoptera, I, II, HOOD Rev. Ent. Rio de J. 6 pp. 248-279, 4 figs., 424-460, 5 figs.

Finnish Thysanoptera, HUKKINEN Ann. Ent. Fenn. 1 1935 pp. 84-88; 2 pp. 24-33, 124-140.

Catalogue of Polish Thysanoptera, KÉLER Prace Wydz. Chor. Rośl. państw. Inst. Nauk Gosp. wiejsk. Bydgoszczy. no. 15 pp. 81-149, 5 pls.

Thysanoptera of the Philippines, MOULTON Philipp. J. Agric. 7 pp. 263-273.

Preliminary list of Thysanoptera of Iowa, MOULTON & ANDRE Iowa St. Coll. J. Sci. 10 pp. 223-234, 9 figs.

List of thrips and their food-plants in S.W. Australia, NEWMAN J. roy. Soc. W. Aust. 21 1935 pp. 93-97.

Aeolothrips nobilis f. n. *aterrima* Finland p. 88, HUKKINEN Ann. ent. fenn. 1 1935.—*A. melisi* sp. n. Sardinia p. 35, PRIESNER Redia 22.—*A. vittatus* var. n. *albotarsata* Poland p. 87, KÉLER Prace Wydz. Chor. Rośl. państw. Inst. Nauk Gosp. wiejsk. Bydgoszczy. no. 15.—*A. brevicornis* ♂ (with var. n. *fuscus*); *africanus* sp. n. Cape Province p. 495, MOULTON Ann. Mag. n.H. (10) 17.

Anactinothrips nigricornis Br. Guiana p. 143, *cristatus* Peru p. 147, spp. n. fig., HOOD Proc. R. ent. Soc. Lond. (B) 5.

Anaphothrips corbetti sp. n. Malaya p. 209, PRIESNER t.c.—*A. africanus* sp. n. Cape Province p. 500, MOULTON Ann. Mag. n.H. (10) 17.—*A. maculatus* Finland p. 137 fig., HUKKINEN Ann. ent. fenn. 2.—*A. piercei*, *sacchari* p. 265, *aureus* p. 266, spp. n. Philippines, MOULTON Philipp. J. Agric. 7.—*A. varii* p. 98, *newmani* p. 99, spp. n. W. Australia, MOULTON J. roy. Soc. W. Aust. 21 1935.

Aptinothrips rufus larva p. 120, *stylifer* nymph p. 121, figs., SPEYER Proc. R. ent. Soc. Lond. (A) 11.

Audiothrips monilis sp. n. Cape Province p. 493, MOULTON Ann. Mag. n.H. (10) 17.

Bactrianothrips gen. n. (nr. *Idolothrips*) p. 226, *alluaudi* (type) Madagascar p. 227, *propinquus* Centr. Africa p. 228, spp. n. figs., BAGNALL Rev. franç. Ent. 3.

Bactrothrips aterrimus sp. n. Uganda p. 213, PRIESNER Proc. R. ent. Soc. Lond. (B) 5.

Bdalsidothrips subgen. n. see *Perisothrips*.

Bebelothrips knechteli sp. n. Rumania p. 213 figs., PRIESNER Arb. morph. tax. Ent. Berl. 3.

Bussothrips claratibia sp. n. Manila p. 475, MOULTON Philipp. J. Agric. 6 1935.

Cervothrips gen. n. (nr. *Actinothrips*), *berlandi* sp. n. Congo p. 229, BAGNALL Rev. franç. Ent. 3.

Chirothrips secalis ♀ p. 173, MOULTON Pan-Pacific Ent. 11.—*C. sacchari* p. 181, *fulvus* p. 182, spp. n. Hawaii, MOULTON Proc. Hawaii. ent. Soc. 9.—*C. hamatus* ff. n. *adusta*, *albicornis* p. 62, abb. n. *aptera* p. 89, *aurata*, *testacea*; *manicatus* f. n. *testacea* p. 90 Finland, HUKKINEN Ann. ent. fenn. 1 1935.

Cryptothrips madagascariensis sp. n. Madagascar p. 220, BAGNALL Rev. franç. Ent. 3.

Diceratothrips brevicornis further description p. 187, MOULTON Proc. Hawaii. ent. Soc. 9.

Diopsothrips louisianae sp. n. Louisiana p. 98, HOOD J. N.Y. ent. Soc. 44.

Dolichothrips nigripes sp. n. Ethiopia p. 223, BAGNALL Rev. franç. Ent. 3.

Ecacanthothrips piceae sp. n. Japan p. 154 fig., ISHIDA Ins. mats. 10.

Elaphrothrips zetetis p. 432, *indagator* p. 436, *prospector* p. 440, *peruviensis* p. 443, spp. n. Peru figs., HOOD Rev. Ent. Rio de J. 6.—*E. parvus* sp. n. Sudan p. 102 fig., PRIESNER Bull. Soc. ent. Egypte 20.—*E. gaboniensis* Fr. Congo p. 224, *aethiopiae* Centr. Africa p. 225, spp. n., BAGNALL Rev. franç. Ent. 3.

Ethirothrips madagascariensis sp. n. Madagascar p. 222, BAGNALL t.c.

Euceratothrips gen. n. (*Aeolothripidae*) p. 424, *marginipennis* sp. n. Peru p. 425 figs., HOOD Rev. Ent. Rio de J. 6.

Eurythrips flavacinctus sp. n. Iowa p. 224 figs., MOULTON & ANDRE Iowa St. Coll. J. Sci. 10.—*E. sculpturus* sp. n. Louisiana p. 5 fig., HOOD Psyche 43.

Formicothrips see *Oedaleothrips*.

Frankliniella intonsa var. n. *rufula* Poland p. 104, KÉLER Prace Wydz. Chor. Rośl. państw. Inst. Nauk Gosp. wiejsk. Bydgoszczy. no. 15.—*F. gossypiana* n. n. for *gossypii* Morgan nec Shiraki p. 68, HOOD Proc. biol. Soc. Washington 49.—*F. dampfi* f. n. *nana* Egypt p. 85, PRIESNER Bull. Soc. ent. Egypte 20.—*F. andropogoni* sp. n. Iowa p. 223 fig., MOULTON & ANDRE Iowa St. Coll. J. Sci. 10.—*F. argentinae* sp. n. Argentina p. 255, MOULTON An. Soc. cient. Argent. 120 1935.—*F. insignis*, *citri* p. 170, *yuccae* p. 171, *obscura*, *venusta* p. 172, *conspicua* p. 173, spp. n. California, MOULTON Pan-Pacific Ent. 11.—*F. spinosus* Mexico, *fulvus* p. 61, *andrei*, *grandis* p. 69 U.S.A., *inornatus* Cuba p. 62, spp. n., MOULTON Bull. Brooklyn ent. Soc. 31.

Frankliniethrips aureus sp. n. Cape Province p. 496, MOULTON Ann. Mag. n.H. (10) 17.

Gastrothrips picticornis sp. n. Brazil p. 272, HOOD Rev. Ent. Rio de J. 6.

Gigantothrips micrurus sp. n. Dahomey p. 223, BAGNALL Rev. franç. Ent. 3.

Gynaikothrips sulcifrons sp. n. Panama p. 259, HOOD Rev. Ent. Rio de J. 6.—*G. esakii* sp. n. Marianne Is. p. 118, TAKAHASHI Tenthredo 1.

Halmathrips gen. n. (nr. *Dendrothrips*) p. 248, *citricinctus* sp. n. Trinidad p. 249 fig., HOOD Rev. Ent. Rio de J. 6.

Haplothrips trellesi sp. n. Argentina p. 256, MOULTON An. Soc. cient. Argent. 120 1935.—*H.* new characters for differentiation of spp. p. 61, *jordanicus* p. 64, *palestinensis* p. 67, *atriplicis* p. 70, *rivnayi* p. 72, *rabinovitchi* p. 73, *eothripinus* p. 75 Palestine, *leptadeniae* p. 92, *caespitis* p. 94, *tolerabilis* p. 96, spp. n.; *faureanus* var. n. *sudanensis* p. 94 Sudan, PRIESNER Bull. Soc. ent. Egypte 20.

Helionoethrips lepidus sp. n. Sierra Leone p. 208, PRIESNER Proc. R. ent. Soc. Lond. (B) 5.

Heliothrips pullus sp. n. S. Africa p. 497, MOULTON Ann. Mag. n.H. (10) 17.

Heterothrips xolismae sp. n. Maryland p. 81, HOOD J. N.Y. ent. Soc. 44.—*H. peruvianus* sp. n. Peru p. 429 figs., HOOD Rev. Ent. Rio de J. 6.

Hoplothrips hawaiiensis p. 185, *coprosmae* p. 186, spp. n. Hawaii, MOULTON Proc. Hawaii. ent. Soc. 9.—*H. quercus*, *flavus* spp. n. Iowa p. 225 figs., MOULTON & ANDRE Iowa St. Coll. J. Sci. 10.

Isochaethrips davidsoni sp. n. Idaho p. 64, MOULTON Bull. Brooklyn ent. Soc. 31.

Isoneurothrips rosaceae sp. n. Philippines p. 272, MOULTON Philipp. J. Agric. 7.

Karnyothrips cameroni sp. n. Sudan p. 97, PRIESNER Bull. Soc. ent. Egypte 20.

Lampothrips gen. n. (Thripidae), *maculosus* sp. n. W. Australia p. 97, MOULTON J. roy. Soc. W. Aust. 21 1935.

Limphysothrips aureus sp. n. Cape Province p. 501, MOULTON Ann. Mag. n.H. (10) 17.

Liothrips barronis sp. n. Panama p. 261, HOOD Rev. Ent. Rio de J. 6.—*L. atratus* sp. n. W. Australia p. 100, MOULTON J. roy. Soc. W. Aust. 21 1935.—*L. gymnosporiae* sp. n. Sudan p. 98, PRIESNER Bull. Soc. ent. Egypte 20.

Machatothrips multidens discussed; *spatiatus* Pr. a sp. p. 213, PRIESNER Proc. R. ent. Soc. Lond. (B) 5.

Melanthrips review of non-fossil spp. pp. 29–54, *libycus* p. 34, *sudanensis* p. 35, *arabs* p. 39, *areolatus* p. 41, *bagnalli* p. 43, *matthiolae* p. 45 Egypt, *separandus* p. 38, *tristis* p. 40, *rivnayi* p. 48 Palestine, *knechteli* Rumania p. 40, *anglicus* England p. 47, spp. n., key p. 49 figs., PRIESNER Bull. Soc. ent. Egypte 20.

Metriothrips gen. n. p. 275, *midas* sp. n. Panama p. 276 figs., HOOD Rev. Ent. Rio de J. 6.

Mycterothrips fuscus sp. n. Egypt p. 87, PRIESNER Bull. Soc. ent. Egypte 20.

Neosmerinthothrips debilis sp. n. Panama p. 269 fig., HOOD Rev. Ent. Rio de J. 6.

Oedaleothrips Hood (= *Formicothrips* Priesn.), scope p. 264, *graminis* sp. n. Patos I., W. Indies p. 265 fig., HOOD t.c.

Panceratothrips gen. n. (Cryptothripidae) p. 219, *typicus* sp. n. Madagascar p. 220 fig., BAGNALL Rev. franç. Ent. 3.

Perissothrips (*Bdalsidotherips* subgen. n.) *levis* sp. n. Egypt p. 85, PRIESNER Bull. Soc. ent. Egypte 20.

Phaulothrips fuscus sp. n. W. Australia p. 100, MOULTON J. roy. Soc. W. Aust. 21 1935.

Phlaeothrips sycomori sp. n. Sudan p. 100 figs., PRIESNER Bull. Soc. ent. Egypte 20.

Plesiothrips brunneus sp. n. Panama p. 252; *octarthrus* p. 256, *amblycauda* p. 257 further descriptions; *panicus* Moul. from *Thrips* p. 58, HOOD Rev. Ent. Rio de J. 6.

Pselaphothrips hoodi larva p. 221, BAGNALL Rev. franç. Ent. 3.

Pseudanaphothrips turneri sp. n. Cape Province p. 498, MOULTON Ann. Mag. n.H. (10) 17.

Rhipidothrips aureus sp. n. W. Australia p. 98, MOULTON J. roy. Soc. W. Aust. 21 1935.

Scirtothrips dobroskyi sp. n. Manila p. 264, MOULTON Philipp. J. Agric. 7.—*S. nubicus* sp. n. Egypt p. 84, PRIESNER Bull. Soc. ent. Egypte 20.

Scolothrips brevipilis sp. n. Egypt p. 83, PRIESNER t.c.

Sericopsithrips gen. n. (nr. *Sericothrips*), *palloris* sp. n. New York p. 91, HOOD J. N.Y. ent. Soc. 44.

Sericothrips chrysothamni p. 85, *opuntiae* p. 88, *collaris* p. 91, *ctenogastris* p. 93, *sensillis* p. 95, spp. n. U.S.A. figs., HOOD t.c.

Sorghothrips gen. n. for *Thrips longistylus* Trybom p. 88 figs., PRIESNER Bull. Soc. ent. Egypte 20.

Taeniothrips salicis f. n. *pulchra* p. 31; *tahvanus* sp. n. p. 138 Finland fig., HUKKINEN Ann. ent. fenn. 2.—*T. vacciniophilus* sp. n. New York p. 1 figs., HOOD Psyche 43.—*T. saussureae* sp. n. Kuriles p. 70 fig., ISHIDA Ins. mats. 11.—*T. ugandai* p. 502, *meridiana* p. 503 (with f. n. *tenuis*) Uganda, *pura* p. 505, *quinani* p. 506, *incerta* p. 508 S. Africa, spp. n., MOULTON Ann. Mag. n.H. (10) 17.—*T. trifasciatus* p. 323, *scindapsi* p. 324, *tenerimus* p. 325, *alticola* Sumatra p. 327, *fallax* Java p. 326 (with var. n. *pavidus* Sumatra p.

327) spp. n., PRIESNER Treubia 15.—*T. allia* p. 267, *pulchella* p. 268, spp. n. Philippines, MOULTON Philipp. J. Agric. 7.—*T. carteri* sp. n. Hawaii p. 183, MOULTON Proc. Hawaii. ent. Soc. 9.—*T. falsus* sp. n. Cyprus p. 210, PRIESNER Proc. R. ent. Soc. Lond. (B) 5.

Terthrothrips liberiensis sp. n. Liberia p. 211, PRIESNER t.c.

Thrips leucadophilus sp. n. Sudan p. 91, PRIESNER Bull. Soc. ent. Egypte 20.—*T. victoriensis*, *tusca* p. 270, *armata* p. 271, spp. n. Philippines, MOULTON Philipp. J. Agric. 7.—*T. dianthi* p. 104, *gracilis* p. 105, *anemonensis* p. 107 Canada, *mucidus* p. 105, *gramineae*, *lathyri* p. 106, *frosti* p. 107, *fuscus* p. 108, *taraxaci* spp. n.; *herricki* var. n. *impatiens* p. 109 U.S.A., MOULTON Pan-Pacific Ent. 12.—*T. physapus* f. n. *brunnea* p. 67; *fuscicornis* sp. n. p. 72 Kuriles figs., ISHIDA Ins. mats. 11.—*T. fuscipennis*, major discussed pp. 151–154; *anellicornis* sp. n. Poland p. 116 figs., KÉLER Prace Wydz. Chor. Rośl. państw. Inst. Nauk Gosp. Bydgoszczy. no. 15.—*T. panicus* see *Plesiothrips*; *longistylus* see *Sorghothrips*.

Trichothrips xanthocephalus sp. n. Louisiana p. 97, HOOD J. N.Y. ent. Soc. 44.

Zactinothrips gen. n. (Phlaeothripidae) p. 446, *elegans* sp. n. Peru p. 447 figs., HOOD Rev. Ent. Rio de J. 6.

Zeuglothrips gen. n. (nr. *Actinothrips*) p. 452, *echinus* sp. n. Peru p. 453 figs., HOOD t.c.

Zeugmatothrips badiicornis sp. n. Peru p. 457 figs., HOOD t.c.

ANOPLURA.

Check list of Anoplura on Mammalia, Aves and Reptilia in S. Africa, Suppl. 1, BEDFORD Onderstepoort J. vet. Sci. 7 pp. 101–105.

Nomenclature of Anoplura of man, FAHRENHOLZ Arch. Naturgesch. (N. F.) 5 pp. 663–667.

Systematic notes and keys to Anoplura, FAHRENHOLZ Z. Parasitenk. 9 pp. 50–56.

Bedfordia gen. n. for *Scipio tripedatus* Ferr. p. 55, FAHRENHOLZ Z. Parasitenk. 9.

Inrostrata sub-ord. n. p. 52, FAHRENHOLZ Z. Parasitenk. 9.

Lemurphthirinae subfam. n. p. 54, FAHRENHOLZ t.c.

Linognathus peleus (on *Pelea capreolus*) p. 59, *damaliscus* (on *Damaliscus albifrons*) p. 61, *aepycerus* (on *Aepycerus melampus*) p. 62, spp. n. S. Africa figs., BEDFORD Onderstepoort J. vet. Sci. 7.

Neolineognathidae fam. n. p. 52, FAHRENHOLZ Z. Parasitenk. 9.

Pediculus humanus americanus identity and variation p. 36, EWING Proc. helminth. Soc. Wash. 3.

Phthirus chavesi (on man) sp. n. Peru p. 335 fig., ESCOMEL Crónica Méd. Lima 52 1935.

Polyplax sublaterae (on *Tatera liodon*) sp. n. Uganda p. 63 fig., BEDFORD Onderstepoort J. vet. Sci. 7.

Scipio tripedatus see *Bedfordia*.

Anatoecus monteiro sp. n. (on *Nettium brasiliense*) Brazil p. 107 fig., PESSOA & GUTMARÃES Rev. Biol. Hyg. S. Paulo 6 1935.

Austrokelloggia gen. n. (Ornicholacinae) p. 175, *intermedia* sp. n. (on *Nothocercus n. nigrocapillus*) Bolivia p. 176 figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Bovicola major Piag. (= *Trichodectes painei* Kell. & Nakay.) p. 40; *crassipes* Rud. (= *T. penicillatus* Piag., *pilosus* Piag., *hermsi* Kell. & Nakay.) p. 41; *thompsoni* (on *Nemorhaedus sumatrensis*) Sumatra p. 42, *martinaglia* (on *Onotragus leche*) S. Africa p. 43, *adenota* (on *Adenota kob*) Uganda p. 45 spp. n. figs., BEDFORD Onderstepoort J. vet. Sci. 7.

Brüelia gen. n. (nr. *Nirmus*) *rossitensis* sp. n. (on *Bombycilla garula*) Germany p. 257 fig., KÉLER Arb. morph. tax. Ent. Berl. 3.

Cebidicola gen. n. for *Trichodectes armatus* Neum. p. 52, BEDFORD Onderstepoort J. vet. Sci. 7.

Cuclotocephalus gen. n. (Physconellinae), *extraneus* (type) (on *Nothoprocta branickii*) p. 101, *secundus* (on *N. pentlandi*) p. 102 spp. n. Peru figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Cuclogaster gen. n. (nr. *Lipeurus*), *laticorpus* sp. n. (on *Crypturellus soui soui*) Venezuela p. 67 fig., CARRIKER t.c.

Dahlehornia gen. n. type *Nirmus asymmetricus* Nitz. p. 163 figs., KÉLER Bull. int. Acad. polon. Sci. Cl. Sci. Math. Nat. (B) 1936.

Damalinea hopkinsi (on *Taurotragus oryx*) sp. n. Uganda p. 47 figs., BEDFORD Onderstepoort J. vet. Sci. 7.

Dasyonyx windhuki (on *Procapra windhuki*) S.W. Africa, *nairobiensis* (on *P. mackinderi zelotes*) Kenya, spp. n. p. 38 figs., BEDFORD t.c.

Degeeriella multipunctata (on *Nucifraga caryocatactes*) Kashmir p. 905, *zootherae* (on *Zoothera marginata*) Annam, Himalayas p. 909 (with subspp. n. *daumae* (on *Turdus dauma*) Himalayas, *stresemanni* (on *Z. monticola*) Assam p. 910), *myiophoneae* (on *Myiophoneus temminckii*) Kashmir p. 911, *grandalae* (on *Grandalia coelicolor*) Sikkim, Szechwan p. 913 spp. n.; *biguttata* subsp. n.

MALLOPHAGA.

Host list of Trichodectidae on Proaviidae, BEDFORD Onderstepoort J. J. vet. Sci. 7 pp. 56-58.

Check list of Mallophaga on Mammalia, Aves and Reptiles in S. Africa, Suppl. 1, BEDFORD Onderstepoort J. vet. Sci. 7 pp. 87-101.

Revision of Neotropical Mallophaga of Tinamidae, CARRIKER Proc. Acad. nat. Sci. Philad. 88 pp. 45-218, 32 pls.

Key to Mallophaga, EICHLER Beitr. allg. prakt. Gefiederk. 1 pp. 53-57.

Taxonomy of Trichodectidae, with special reference to New World fauna, EWING J. Parasit. 22 pp. 233-246, 2 figs.

Records of Mallophaga from British birds, THOMPSON Ent. mon. Mag. 72 pp. 224-228.

Mallophaga found on mammals in America, WEBERCK Mem. Inst. Oswaldo Cruz. 31 pp. 391-589, 1 pl. 227 figs.

koslovae (on *Podoces* spp.) E. Turkestan, Kashgaria, Mongolia p. 909; *mandarina* Gigl. probably synonym of *merulensis* Denny p. 913 figs., CLAY Proc. zool. Soc. Lond. 1935.—*D. episcopi* (on *Dissoura episcopa*) sp. n. N. India p. 643 figs., QADRI Z. Parasitenk. 8.

Discocorpus gen. n. (Heptapsogastrinae), *cephalosus* (type) (on *Crypturellus atrocapillus*) Bolivia p. 147, *microgenitalis* (on *C. tataupa*) Brazil p. 149, spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Docophorocotes gen. n. for *Gonicotes sexsetosus* Piag. p. 165 figs., CARRIKER t.c.

Docophorus ocellatus see *Hastaeophorus*.

Esthiopterum plumbeum sp. n. (on *Columba plumbea*) Brazil p. 105 fig., PESSOA & GUIMARÃES Rev. Biol. Hyg. S. Paulo 6 1935.—*E. theristicum* (on *Theristicum caudatus*) p. 311, *constrictiventre* (on *Aestrelata macroptera*) p. 313, spp. n. Brazil figs., PESSOA & GUIMARÃES Ann. Fac. Med. Univ. S. Paulo 11 1935.—*E. tataupa* sp. n. (on *Crypturellus t. tataupa*) Bolivia p. 66 fig., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Eutrichophilus lobatus S. America p. 238, *australis* Paraguay, spp. n. (on *Coendou* spp.) figs., EWING J. Parasit. 22.

Felicola zeylonica (on *Herpestes ritticollis*) Ceylon p. 53, *hopkinsi* (on *Nandinia binotata*) Uganda p. 54, spp. n. figs., BEDFORD Onderstepoort J. vet. Sci. 7.

Geomydoecus texanus sp. n. (on *Geomys personatus fallax*) Texas p. 241, EWING J. Parasit. 22.

Gonicotacanthus gen. n. (Philopteridae) p. 225, *mattogrossensis* sp. n. (on *Columbigallina minuta*) Brazil p. 226 figs., GUIMARÃES Rev. Mus. paul. 20.

Gonicotes clypeiceps see *Heterogonoides*; *sexsetosus* see *Docophorocotes*; *rotundatus* see *Tinamicola*.

Gonides parvulus see *Heptarthrogaster*; *sexpunctatus* see *Rhyncothura*.

Gyropus ewingi sp. n. (on *Otenomys opimus*) Bolivia p. 436, WERNECK Mem. Inst. Oswaldo Cruz 31.

Halipeurus gen. n. (type *Lipeurus angusticeps* Piag.) p. 40, scope p. 41, THOMPSON Ann. Mag. n.H. (10) 18.

Hastaeophorus gen. n. for *Docophorus ocellatus* Scop. p. 261; *alpinus* morphology p. 262 figs., KÉLER Arb. morph. tax. Ent. Berl. 3.

Heptagoniodes gen. n. (Ornicholacinae) p. 166, *mirabilis* sp. n. (on *Tinamus tao*) Venezuela p. 167 figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Heptapsogaster gen. n. (Heptapsogastrinae) p. 115, *mandibularis* (on *Crypturellus tataupa*) p. 116, *petersi* (on *C. t. tataupa*) p. 122 Brazil, *temporalis* (on *C. u. undulatus*) p. 118 (with subsp. n. *femininus* (on *C. cinereus cinerascens*), *chiiiriri* (on *C. atrocapillus*)), *platycephalus* (on *C. soui inconspicuus*) p. 120 Bolivia (with subsp. n. *soui* (on *C. s. soui*) Venezuela p. 122), *tesselatus* (on *Nothoprocta curvirostris*) p. 124 (with subsp. n. *truncatus* (on *N. branickii*) p. 125) Peru, spp. n. figs., CARRIKER t.c.

Heptapsogastridae fam. n., subfam. n. Heptapsogastrinae p. 76, Ornicholacinae, Physconellinae, Strongylocotinae p. 77, CARRIKER t.c.

Heptapsogastrinae see Heptapsogastridae.

Heptapsus gen. n. (Heptapsogastrinae) p. 153, *nothocerae* (type) (on *Nothocercus bonaparti*) Venezuela p. 154, *tergalis* (on *N. n. nigrocapillus*) Peru p. 155, spp. n. figs., CARRIKER t.c.

Heptarthrogaster gen. n. type *Goniodes parvulus* Tasch. p. 134, *grandis* sp. n. (on *Tinamus s. serratus*) Bolivia p. 136 figs., CARRIKER t.c.

Heterogoniodes gen. n. type *Gonicotes clypeiceps* Giebel p. 144, *heterurus* sp. n. (on *Crypturellus b. berlepschi*) Colombia p. 146 figs., CARRIKER t.c.

Hypocryptus gen. n. type *Strongylocotes coniceps* Tasch. p. 178; c. subsp. n. *heterurus* (on *Crypturellus cinereus cinerascens*) p. 179, *inconspicuus* (on *C. soui inconspicuus*), *undulatus* (on *C. u. undulatus*) p. 180, *obsoletus* (on *C. obsoletus punensis*) p. 181 Bolivia, *nigriceps* (on *C. soui nigriceps*) Peru p. 180; *genitalis* sp. n. (on *C. t. tataupa*) Brazil p. 181 figs., CARRIKER t.c.

Kelloggia latithorax sp. n. (on *Crypturellus atrocapillus*) Bolivia p. 174 fig., CARRIKER t.c.

Lamprocorpus gen. n. (Heptapsogastriinae), *hirsutus* (type) (on *Nothoprocta branickii*) p. 150, *spinosus* (on *N. pentlandi*) p. 152 spp. n. Peru figs., CARRIKER t.c.

Lipeurus rhynchoti sp. n. (on *Rhynchotus r. rufescens*) Bolivia p. 63 figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.—*L. tinami* see *Pseudolipeurus*; *angusticeps* and others see *Halipeurus*; *nigrolimbatus* and others see *Perineus*; *pelagicus* see *Synnautes*.

Loricicola gen. n. for *Trichodectes mjobergi* Stobbe p. 51, BEDFORD Onderstepoort J. vet. Sci. 7.

Meganinus gen. n. (Physconellinae) p. 97, *emarginatus* (type) (on *Crypturellus obsoletus punensis*) Bolivia p. 98 (with subsp. n. *sordidus* (on *C. b. berlepschi*) Colombia p. 99), *quadri thorax* (on *Tinamus major robustus*) Costa Rica p. 100 spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Megaepostus gen. n. (Heptapsogastriinae) p. 141, *asymmetricus* sp. n. (on *Crypturellus u. undulatus*) p. 142, (with subsp. n. *parvigenitalis* (on *C. atrocapillus*) p. 143) Bolivia figs., CARRIKER t.c.

Menacanthus exilis Nitzsch from *Menopon*, ♀ p. 50 figs., KÉLER Arb. morph. tax. Ent. Berl. 3.

Menopon exile see *Menacanthus*.

Naubates garbei sp. n. Brazil p. 109 figs., PESSOA & GUIMARÃES Rev. Biol. Hyg. S. Paulo 6 1935.

Nirmocotes gen. n. (Strongylocotinae) p. 78, *orbicularis* (type) (on *Crypturellus tataupa*) p. 79, *glabrous* (on *C. telaupa*) p. 82 Brazil, *nirmoides* (on *C. obsoletus punensis*) Peru p. 80, *cordiceps* (on *Tinamus major*) Br. Guiana p. 83, spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Nirmus asymmetricus see *Dahlemhornia*.

Nothocotus gen. n. (Physconellinae) p. 103, *parvithorax* (type) (on *Nothocercus bonaparti*) Venezuela p. 104, *subsimilis* (on *N. nigrocapillus cadwaderi*) Peru p. 105, spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Ornitholacinae see Heptapsogastriidae.

Ornitholax robustus subsp. n. *taoi* (on *Tinamus tao tao*) Venezuela p. 171 figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Pectenosoma verrucosa subsp. n. *parva* (on *Crypturellus tataupa*) p. 164, *angusta* (on *C. atrocapillus*) p. 165 Bolivia figs., CARRIKER t.c.

Perineus gen. n. (type *Lipeurus nigrolimbatus* Gieb.) p. 41, scope p. 42, THOMPSON Ann. Mag. n.H. (10) 18.

Philopterus stegmanni sp. n. (on *Podoces proskii*) E. Persia p. 905 figs., CLAY Proc. zool. Soc. Lond. 1935.—*P. gonothorax* see *Saemundssonina*.

Physconella kelloggi subsp. n. *subsimilis* (on *Crypturellus soui inconspicuus*) p. 95: *nothocercae* (on *Nothocercus n. nigrocapillus*) p. 97, *hamatus* (on *C. obsoletus punensis*) (with subsp. n. *genitalis* on *C. atrocapillus*) spp. n. p. 96 Bolivia figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Physconellinae see Heptapsogastriidae.

Procavicola angolensis (on *Dendrohyrax bocagei*) p. 34, *jordani* (on *D. angolensis*) p. 35, spp. n. Angola figs., BEDFORD Onderstepoort J. vet. Sci. 7.

Pseudocolpocephalum gen. n. (nr. *Colpocephalum*) p. 640, *uchidi* (on *Dissoura episopa*) sp. n. N. India p. 641 figs., QADRI Z. Parasitenk. 8.

Pseudolipeurus gen. n. type *Lipeurus tinami* Carr. p. 68, *taoi* (on *Tinamus tao tao*) Venezuela p. 70, *genitalis* (on *Crypturellus u. undulatus*), *subsimilis* (on *C. soui inconspicuus*) p. 71, *grandis* (on *Nothocercus n. nigrocapillus*) p. 73 Bolivia, spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Pseudomenopon poliocephalus (on *Porphyrio poliocephalus*) sp. n. N. India p. 638 figs., QADRI Z. Parasitenk. 8.

Pseudophilopterus gen. n. (nr. *Philopterus*) *hirsutus* sp. n. (on *Crypturellus undulatus yapura*) Peru p. 73; *h.* subsp. n. *obsoletus* (on *C. obsoletus punensis*) Bolivia p. 75 figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Pterocotes aberrans subsp. n. *taoi* (on *Tinamus tao kleei*) Peru p. 158 figs., CARRIKER t.c.

Rallicola bresslaui sp. n. (on *Aramus scolopaceus*) Brazil p. 169 figs., PESSOA & GUIMARÃES Ann. Fac. Med. Univ. S. Paulo 11 1935.

Rhopaloceras laticeps subsp. n. abbreviatus (on *Nothocercus nigrocapillus cadwaladeri*) Peru p. 109; *genitalis* (on *Tinamus serratus ruficeps*) Colombia 110 (with subsp. n. *simplex* (on *T. major castaneiceps*) Costa Rica p. 111), *brevi-temporalis* (on *Crypturellus obsoletus punensis*) Bolivia p. 112, *rudimentarius* (on *C. soui nigriceps*) Peru p. 113, spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Rhynchothura gen. n. type *Goniodes sexpunctatus* Piag. p. 127, *crenulata* (on *Rhynchotus rufescens maculicollis*) p. 128, *lunulata* (on *R. r. m.*) p. 130 Bolivia, *minuta* (on *Nothura maculosa nigroguttata*) Uruguay p. 131, spp. n. figs., CARRIKER t.c.

Saemundssonina gen. n. for *Philopterus gonothorax* Giebel and related spp. p. 97 figs., TIMMERMAN Zool. Anz. 114.

Strongylocotes complanatus subspp. n. *interruptus* (on *Crypturellus atrocapillus*) Bolivia p. 85, *variegatus* (on *C. variegatus salvini*) Peru p. 86; *abdominalis* (on *C. cinereus cinerascens*) p. 87, *sub-spinosus* (on *Nothocercus n. nigrocapillus*), *angulocapitis* (on *Tinamus s. serratus*) p. 89, *subconiceps* (on *C. soui inconspicuus*) p. 90, spp. n. Bolivia figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.—*S. limai* sp. n. (on *Crypturellus* spp.) Brazil p. 48 fig., GUIMARÃES Folia Clin. Biol. S. Paulo 8.—*S. coniceps* see *Hypocryptus*.

Strongylocotinae see Heptapsostridae.

Synnartes gen. n. for *Lipeurus pelagicus* Denny p. 43, THOMPSON Ann. Mag. n.H. (10) 18.

Tinamicola gen. n. type *Goniocotes rotundatus* Rudow p. 158, *latithorax* sp. n. (on *Rhynchotus r. rufescens*) Bolivia p. 159 figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Trichodectes ugandensis (on *Poecilogale doggetti*) sp. n. Uganda p. 49 figs., BEDFORD Onderstepoort J. vet. Sci. 7.—*T. wolffhügeli* (on *Conepatus chinga*) Chile p. 513, *dorcelaphi* (on *Dorcelaphus besoarticus*) p. 565, *albimarginatus* (on *Mazama americanus*) p. 570 Brazil, spp. n. figs., WERNECK Mem. Inst. Oswaldo Cruz 31.—*T. painei* see *Bovicola major*; *penicillatus*, *pilosus*, *hermsi* see *Bovicola crassipes*; *mjobergi* see *Loricicola*; *armatus* see *Cebidicola*.

Trichodopeostus gen. n. (Heptapsostrinae) p. 137, *spinosus* (type) (on *Nothocercus n. nigrocapillus*) Bolivia p. 138, *incertus* (on *N. nigrocapillus cadwaladeri*) Peru p. 139, spp. n. figs., CARRIKER Proc. Acad. nat. Sci. Philad. 88.

Vernonia gen. n. type *Lipeurus macgregori* Kell. p. 221, GUIMARÃES Rev. Mus. paul. 20.

PSOCOPTERA.

Psocoptera of Madagascar, BADONNEL Bull. Acad. malgache (N. S.) 18 pp. 97–120, 4 pls.

Psocoptera of France, VII, BADONNEL Bull. Soc. ent. Fr. 41 pp. 24–29, 6 figs.

Psocoptera of Côte d'Or, BADONNEL Bull. sci. Bourgogne 5 pp. 75–78.

Yorkshire Psocoptera, BROWN Naturalist 1936 pp. 135–139.

Copeognatha of Switzerland, HOLZAPFEL Rev. suisse Zool. 43 pp. 335–357.

Taxonomy of Psocoptera, PEARMAN Proc. R. ent. Soc. Lond. (B) 5 pp. 58–62.

Amphipsocus pallidus sp. n. Mombasa p. 363 fig., NAVÁS Rev. Zool. Bot. afr. 28.—*A. erythrostigma* p. 111, *limbatus*, *similis* p. 112, spp. n. Madagascar figs., BADONNEL Bull. Acad. malgache (N. S.) 18.

Archipsocus biguttatus sp. n. Ceylon p. 1 figs., PEARMAN Spolia zeyl. 20.

Caecilius European spp. with ochraceous wings pp. 171–189 figs., BADONNEL Rev. franç. Ent. 3.—*C. despaxi* sp. n. France p. 25, BADONNEL Bull. Soc. ent. Fr. 41.—*C. signatipennis* Endln. ♂; *seyrigi* p. 106, *brunneoflavus* p. 107, *sinuolasciatus* p. 108, *longistylus* p. 109, *hemipsocoides* p. 110, spp. n. Madagascar figs., BADONNEL Bull. Acad. malgache (N. S.) 18.—*C. kansuensis* sp. n. China p. 2 fig., ENDERLEIN Ark. Zool. 27A (sep. dated 1934) no. 16.

Diplacanthoda bouvieri Endln. further descr. p. 104, BADONNEL Bull. Acad. malgache (N. S.) 18.

Ectopsocus bicaudatus sp. n. Madagascar p. 118 figs., BADONNEL t.c.—*E. briggsi* MacL. (= *californicus* Banks) p. 155, BADONNEL Mém. Mus. H.n. Paris 4.

Euclismia alluaudi sp. n. Madagascar p. 100 figs., BADONNEL Bull. Acad. malgache (N. S.) 18.

Harpezoneura madagascariensis p. 114, *distincta* p. 116, spp. n. Madagascar figs., BADONNEL t.c.

Kolbea hummeli sp. n. China p. 4 fig., ENDERLEIN Ark. Zool. 27A (sep. dated 1934) no. 16.

Loënsia burgeoni sp. n. Belgian Congo p. 362, NAVÁS Rev. Zool. Bot. afr. 28.

Makeella seyrigi p. 101, *zachardiae* p. 102, spp. n. Madagascar figs., BADONNEL Bull. Acad. malgache (N. S.) 18.

Marcenendius illustris sp. n. Catalonia p. 11 figs., NAVÁS Arx. Inst. Cienc. 8 (1920) 23.

Neopsocopsis gen. n. for *Neopsocus pyrenaicus* Badon. p. 420 figs., BADONNEL Bull. Soc. zool. Fr. 60.

Neopsocus pyrenaicus see *Neopsocopsis*.

Nepiomorpha gen. n. (nr. *Reuterella*), *crucifera* sp. n. Ceylon p. 4 figs., PEARMAN Spolia zeyl. 20.

Peripsocus hedinianus sp. n. China p. 5 figs., ENDERLEIN Ark. Zool. 27A (sep. dated 1934) no. 16.—*P. coccophagus* sp. n. Madagascar p. 117 figs., BADONNEL Bull. Acad. malgache (N. S.) 18.

Prionoglaris stygia Enderl. (= *Scoliopsyllopsis latreillei* End.) p. 396; mouth-parts of nymph and adult compared p. 398 figs., BALL Mém. Mus. H.n. Belg. (2) 3.

Pseudopsocus meridionalis sp. n. Pyrenees p. 27 figs., BADONNEL Bull. Soc. ent. Fr. 41.

Psocus lapidarius sp. n. Algeria p. 97 figs., BADONNEL Rev. franç. Ent. 3.—*P. incurius* sp. n. Mombasa p. 361 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Scoliopsyllopsis latreillei see *Prionoglaris stygia*.

Stenopsocus bicoloriceps sp. n. China p. 2 figs., ENDERLEIN Ark. Zool. 27A (sep. dated 1934) no. 16.

Xenopsocus affinis sp. n. Madagascar p. 113 fig., BADONNEL Bull. Acad. malgache (N. S.) 18.

ISOPTERA.

Distribution of termites, EMERSON Science 83 pp. 410–411.

List of termites of Tanganyika, HARRIS Bull. ent. Res. 27 pp. 361–368, 3 figs.

Termites of S.E. Polynesia, LIGHT & ZIMMERMANN Occ. Pap. Bishop Mus. 12 no. 12, 12 pp. 1 pl.

Termites of Mauritius, MOUTIA Bull. Dep. Agric. Mauritius, Sci. Ser., no. 21 30 pp. 3 pls. 18 photos.

Termites collected in Fezzan, SCORTECCI Natura, Milan 27 pp. 1–12, 5 figs.

Our enemy the termite, SNYDER Comstock Pub. Co. 1935 xii + 196 pp. 1 pl. 56 figs.

Allodotermes morogorensis sp. n. Tanganyika p. 364 figs., HARRIS Bull. ent. Res. 27.

Basidentitermes amicus sp. n. Tanganyika p. 367 fig., HARRIS t.c.

Kaloterms rapae sp. n. Polynesia p. 5 fig., LIGHT & ZIMMERMANN Occ. Pap. Bishop Mus. 12 no. 12.

Leucotermes perfidus sp. n. St. Helena p. 203 figs., SILVESTRI Bull. Soc. ent. Fr. 41.

EMBIOPTERA.

Studies in Australian Embioptera, I, II, DAVIS Proc. Linn. Soc. N.S. Wales 61 pp. 229–253, 43 figs., 254–258, 7, figs.

Metoligotoma gen. n., *reducta* (type) (with subsp. n. *reducta*, p. 248, *ingens* p. 250) p. 248, *pentanesiana* p. 254, *extorris* p. 256, spp. n. Australia figs., DAVIS t.c.

Notoligotoma gen. n. for *Oligotoma hardyi* Fried. p. 244; *nitens* sp. n. Australia p. 246 figs., DAVIS t.c.

Oligotoma gurneyi subsp. n. *hilli*, *centralis* p. 237, *spinulosa* p. 239, *subclavata* p. 240; *tillyardi* sp. n. p. 241 Australia figs., DAVIS t.c.—*O.* notes on Indian spp. pp. 89–95; *asymmetrica* sp. n. Salsette I., Bombay p. 92 figs., MENON & GEORGE J. Univ. Bombay 4 no. 5.—*O. hardyi* see *Notoligotoma*.

PLECOPTERA.

Notes on some French Plecoptera, DESPAX Bull. Soc. H.n. Toulouse 68 1935 pp. 202–204.

British Plecoptera in 1935, KIMMINS J. Soc. Br. Ent. 1 pp. 148–149.

Evolution and variation in wings in Plecoptera, WILLEY Trans. roy. Soc. Can. (3) 30 sect. 5 pp. 115–137, 18 figs.

Plecoptera of China, WU Peking n.H. Bull. 11 pp. 49–82, 163–189, 47 figs.

Acroneuria cuestae p. 260, *salvelini* p. 261, *fumosa*, *okanagan* p. 262, spp. n. Canada, figs., RICKER Canad. Ent. 67.

Allocaupnia torontonensis sp. n. Canada p. 258 figs., RICKER t.c.

Alloperla concolor, *onkos* spp. n. Canada p. 256 figs., RICKER t.c.

Allonuria n. n. for *Nuria* Nav. nec Valenc. (Pisces) p. 622, CLAASSEN Ann. ent. Soc. Amer. 29.

Banksiana n. n. for *Banksiella* Klap. nec Muir (Hem.) p. 622, CLAASSEN t.c.

Banksiella see *Banksiana*.

Capnia confusa n. n. for *nivalis* Neave nec Ueno p. 623, CLAASSEN Ann. ent. Soc. Amer. 29.

Capniella see *Neocapniella*.

Chloroperla Newm. type *tripunctata* Scop. (= *lutea* Latr.) p. 122, *C. auct.* a synonym of *Isoperla* p. 123, list of British spp. p. 124 figs., KIMMINS J. Soc. Br. Ent. 1.—*C. bengtssonii* n. n. for *borealis* Bengt. nec Banks; *petita* n. n. for *brevis* Nav. nec Banks p. 623, CLAASSEN Ann. ent. Soc. Amer. 29.—*C. lepinyei* sp. n. Morocco p. 91 fig., NAVÁS Bol. Soc. ent. Esp. 18.—*C. Pictet* (= *Isoperla* Banks) revision pp. 337–398, *grammatica* subsp. n. subarmata England p. 254, *oxylepis* Vosges p. 359, *triangularis* Hérault p. 360; *acicularis* Cantal p. 369, *ambigua* p. 374, *moselyi* p. 376, *pilosa* p. 384 Pyrenees spp. n. figs., DESPAX Bull. Soc. H.n. Toulouse 69.

Euryplax see *Neoeuryplax*.

Filchneria furcifera sp. n. China p. 3 fig., NAVÁS Ark. Zool. 27A (sep. dated 1934) no. 15.

Fulla see *Neofulla*.

Gripopteryx bullocki p. 231, *venulata* p. 232, spp. n. Chile figs., NAVÁS Rev. chil. H.n. 37 1933.

Hedinia gen. n. (Perlodidae) p. 1, *implexa* sp. n. China p. 2 fig., NAVÁS Ark. Zool. 27A (sep. dated 1934) no. 15.

Hydroperla parallela sp. n. Oregon p. 261 fig., FRISON Ann. ent. Soc. Amer. 29.

Isoperla Banks (= *Chloroperla* auct.) type *bilineata* Say p. 123, KIMMINS J. Soc. Br. Ent. 1.—See *Chloroperla*.

Kamimuria pronotalis p. 7, *radialis*, *ramosa* spp. n. China p. 8 fig., NAVÁS Ark. Zool. 27A (sep. dated 1934) no. 15.

Klapalekia n. n. for *Microplagia* Klap. nec Towns. (Dipt.) p. 622, CLAASSEN Ann. ent. Soc. Amer. 29.

Leuctra okomotoa n. n. for *abdominalis* Okom. nec Steph. p. 623, CLAASSEN t.c.

Microplagia see *Klapalekia*.

Nemoura martynovia n. n. for *pallida* Martyn. nec Steph.; *matsumura* n. n. for *humeralis* Mats. nec Pict.; *erratica* n. n. for *risi* Desp. nec Jac. & Bianki; *misnoma* n. n. for *japonica* Mats. nec Needh.; *wui* n. n. for *sinuata* Wu nec Ris; *pallidura* n. n. for *pallida* Banks nec Steph. p. 623, CLAASSEN Ann. ent. Soc. Amer. 29.—*N. dimicki* p. 256,

obscura p. 258, *perplexa* p. 259, *lobata* p. 260, **spp. n.** Oregon figs., FRISON Ann. ent. Soc. Amer. **29**.—*N. striolata* **sp. n.** Catalonia p. 14 figs., NAVÁS Arx. Inst. Cienc. **8** (1920) 1923.

Neocapniella **n. n.** for *Capniella* Klap. nec Sahlb. p. 622, CLAASSEN Ann. ent. Soc. Amer. **29**.

Neoeuryplax **n. n.** for *Euryplax* Klap. nec Stimpson (Crust.) p. 622, CLAASSEN t.c.

Neofulla **n. n.** for *Fulla* Nav. nec Daniells. p. 622, CLAASSEN t.c.

Neoperla arambourgana **sp. n.** Kenya p. 124 figs., NAVÁS Mém. Mus. H.n. Paris **4**.

Nuria see *Allonuria*.

Paragnetina infumata **sp. n.** China p. 10 fig., NAVÁS Ark. Zool. **27A** (sep. dated 1934) no. 15.

Perla burmeisteriana **n. n.** for *abdominalis* Burm. nec Guér.; *misnoma* **n. n.** for *obscura* Needhm. & Cl. nec Zett. p. 622; *errata* **n. n.** for *venosa* N. & C. nec Pictet; *navasa* **n. n.** for *costalis* Nav. nec Pict.; *orientalis* **n. n.** for *stictica* Nav. nec Blanch.; *tinctata* **n. n.** for *tincta* N. & C. nec Nav. p. 623, CLAASSEN Ann. ent. Soc. Amer. **29**.—*P. theryana* **sp. n.** Barbary p. 90 fig., NAVÁS Bol. Soc. ent. Esp. **18**.

Perlodes margarita **sp. n.** U.S.A. p. 26, ALEXANDER Bull. Brooklyn ent. Soc. **31**.—*P. fonti* further descr. p. 12 figs., NAVÁS Arx. Inst. Cienc. **8** (1920) 1923.—*P. simplicior* p. 4, *brevipennis* p. 5, *debilior* p. 6, **spp. n.** China figs., NAVÁS Ark. Zool. **27A** (sep. dated 1934) no. 15.

Perlomyia solitaria p. 261, *sobrina* p. 262, **spp. n.** Oregon figs., FRISON Ann. ent. Soc. Amer. **29**.

Phasganophora hummelina **sp. n.** China p. 10 fig., NAVÁS Ark. Zool. **27A** (sep. dated 1934) no. 15.

EPHEMEROPTERA (PLECTOPTERA).

Some Ephemeroptera from Moscow, CHERNOVA Trav. Inst. zool. Acad. Sci. U.R.S.S. **3** pp. 89–95.

The mayflies of China, Hsu Peking n.H. Bull. **11** pp. 129–148, 11 figs.

British Ephemeroptera in 1935, KIMMINS J. Soc. Br. Ent. **1** pp. 147–148.

Ephemeroptera of N.-E. Poland, MACKIEWCZ-GUTOWSKA Trav. Soc. Sci. Wilno, Cl. Sci. math. nat. **9** 1935 pp. 287–306.

The biology of mayflies, with a systematic account of North American species, NEEDHAM, TRAVER & HSU New York, Ithaca, Comstock Pub. Co. 1935 xiv + 759 pp., 40 pls., 168 figs.

Monograph of mayflies of Tasmania, TILLYARD Pap. Proc. roy. Soc. Tasmania 1935 pp. 23–59, 1 pl. 33 figs.

List of Chinese Ephemeroptera, ULMER. Peking n.H. Bull. **10** pp. 212–215.

Adenophlebia infuscata **sp. n.** Belgian Congo p. 365 figs., NAVÁS Rev. Zool. Bot. afr. **28**.

Ameletus oregonensis, *vernalis* nymphs p. 208; *connectus* p. 209, *suffusus* p. 210 **spp. n.** Br. Columbia figs., McDUNNOUGH Canad. Ent. **68**.

Ametropus albrighti **sp. n.** U.S.A. p. 431, TRAVER in NEEDHAM, TRAVER & HSU Biol. Mayflies 1935.

Anagenesia paradoxa **sp. n.** Amur p. 157 figs., BULDOVSKII Bull. Far East. Br. Acad. Sci. U.S.S.R. no. **14** 1935; Bull. Acad. Sci. U.R.S.S. 1935 1935.—*A. yangi* **sp. n.** China p. 319 fig., Hsu Peking n.H. Bull. **10**.

Aneporus hummeli **sp. n.** China p. 4, ULMER Ark. Zool. **27A** no. 36.

Atalophlebia discolor ♂ p. 233 **37** 1933; *valdiviae* **sp. n.** Chile p. 138 **39** fig., NAVÁS Rev. chil. H.n.—*A.* key to Tasmanian spp. p. 30, *superba* p. 33, *hudsoni* p. 38, *albiterminata* p. 39, *ida* p. 42, *brunnea* p. 43, *fuscata* p. 44, *delicatula* p. 47, **spp. n.** Tasmania figs., TILLYARD Pap. Proc. roy. Soc. Tasmania 1935.

Baëtis aeneus **sp. n.** Madagascar p. 107 fig., NAVÁS Rev. Acad. Cienc. Zaragoza **19**.—*B. chinensis* p. 208, *pekingensis* p. 209, **spp. n.** China figs., ULMER Peking n.H. Bull. **10**.—*B. kulindrophthalmus*, *carpatica* compared p. 12, BOGOESCU Bul. Soc. Nat. Roman.,

Bucharest 7 1935.—*B. foemina* sp. n. Baffin I. p. 33 figs., McDUNNOUGH Canad. Ent. 68.—*B. adonis* p. 680, *devinctus* p. 684, *endymion* p. 686, *ephippiatus*, *erebus* p. 687, *piscatoris* p. 697, spp. n. U.S.A., TRAYER in NEEDHAM, TRAVER & HSU Biol. Mayflies 1935.—*B. frater* sp. n. Tasmania p. 50 figs., TILLYARD Pap. Proc. roy. Soc. Tasmania 1935.—*B. angolinus* sp. n. Chile p. 233 fig., NAVÁS Rev. chil. H.n. 37 1933.

Brachycercus flavus sp. n. U.S.A. p. 640, TRAVER in NEEDHAM, TRAVER & HSU Biol. Mayflies 1935.

Caenis delicata sp. n. U.S.A. p. 647, TRAVER t.c.—*C. aethiopica* sp. n. Ethiopia p. 70, NAVÁS Bol. Soc. ent. Esp. 18.—*C. scotti* sp. n. Tasmania p. 56 figs., TILLYARD Pap. Proc. roy. Soc. Tasmania 1935.

Callibaetis hebes sp. n. California p. 120 fig., UPHOLT Pan-Pacific Ent. 12.—*C. carolus* sp. n. U.S.A. p. 663; *doddsi* n. n. for *vitreus* DODDS nec NAVÁS p. 664, TRAVER in NEEDHAM, TRAVER & HSU Biol. Mayflies 1935.

Campsurus incertus sp. n. U.S.A. p. 286, TRAVER t.c.

Centroptilum asperatum p. 708, *elsa* p. 713, *rivulare* p. 716, *venosum* p. 718, spp. n. U.S.A., TRAVER t.c.

Chankgenesia gen. n. (Palingeniidae) p. 152, *natans* sp. n. Lake Khana, Vladivostok p. 153 figs., BULDOVSKIĖ Bull. Far East. Br. Acad. Sci. U.S.S.R. no. 14 (July) 1935; Bull. Acad. Sci. U.R.S.S. 1935 1935 p. 831 (Dec.) [emended to *Chankgenesia*].

Cinygma hirasana p. 214, *kurobensis* p. 215, *adusta*, *vernalis* p. 217, *dorsalis* p. 218, spp. n. Japan figs., IMANISHI Annot. zool. jap. 15 1935.

Cloeon protextum notes, Belgium pp. 420–424, LESTAGE Bull. Ann. Soc. ent. Belg. 76.—*C. tasmaniae* sp. n. Tasmania p. 53 fig., TILLYARD Pap. Proc. roy. Soc. Tasmania 1935.—*C. carneum* p. 366, *stigmale* p. 367, *rimosum* p. 368, spp. n. Belgian Congo figs., NAVÁS Rev. Zool. Bot. afr. 28.—*C. irretitum* sp. n. Madagascar p. 106 fig., NAVÁS Rev. Acad. Cienc. Zaragoza 19.—*C. schoenemundi* sp. n. Sweden p. 4 figs BENGTTSON Opusc. ent. Lund 1.—*C. erromangense* sp. n. N. Hebrides p. 80 figs., KIMMINS Ann. Mag. n.H.(10) 18.

Ecdyonurus characters p. 539, *kibunensis* p. 540, *tigris* p. 541, spp. n. Japan figs., IMANISHI Annot. zool. Jap. 15.—*E. venosus* prothorax p. 234 figs., Ide Canad. Ent. 68.—*E. diversus* sp. n. Barcelona p. 16 figs., NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.—*E. aethereus* sp. n. Kenya p. 126 fig., NAVÁS Mém. Mus. H.n. Paris 4.—*E. herklotsi* sp. n. Hong Kong p. 233 figs., HSU Hong Kong Nat. 7.—*E. pallescens* p. 121, *radialis* p. 122, *hyalinus* p. 123, spp. n. China figs., NAVÁS Notes Ent. chin., Mus. Heude 3.

Ephemera pilosa sp. n. China p. 117 fig., NAVÁS t.c.—*E. media* sp. n. China p. 204 fig., ULMER Peking n.H. Bull. 10.—*E. triplex* sp. n. U.S.A. p. 253, TRAVER in NEEDHAM, TRAVER & HSU Biol. Mayflies 1935.

Ephemerella sinensis sp. n. China p. 325 figs., HSU Peking n.H. Bull. 10.—*E. sven-hedini* sp. n. China p. 2 figs., ULMER Ark. Zool. 27A no. 36.

Eurylophella gen. n. (Ephemerellidae) p. 20, *karelica* sp. n. Finland p. 21 figs., TIENSUU Ann. ent. fenn. 1 1935.

Heptagenia sulphurea f. n. *denervosa* Finland p. 13, TIENSUU t.c.—*H. ngi* sp. n. Hong Kong p. 235 figs., HSU Hong Kong Nat. 7.—*H. limbata* p. 119, *costata* p. 120, spp. n. China figs., NAVÁS Notes Ent. chin., Mus. Heude 3.—*H. kihada* re-description p. 220 figs., IMANISHI Annot. zool. jap. 15 1935; nymph p. 538, IMANISHI t.c.—*H. dolosa* p. 344, *rodocki* p. 357, *rosea* p. 358, *rubroventris* p. 359, *thetis* p. 362, *townesi* p. 363, spp. n. U.S.A., TRAVER in NEEDHAM, TRAVER & HSU Biol. Mayflies 1935.

Hexagenia pallens sp. n. Kansas p. 271, TRAVER t.c.

Iron confusus p. 398, *fraudator* p. 402, *lagunitas* p. 405, *proprius* p. 408, *sanctagabriel* p. 410, *tenuis*, *youngi* p. 412, spp. n. U.S.A., TRAVER t.c.—*I. dominans* p. 123, *famulans* p. 124, spp. n. China figs., NAVÁS Notes Ent. chin., Mus. Heude 3.—*I. minor* sp. n. China p. 323 figs., HSU Peking n.H. Bull. 10.

Isonychia kiangsinsensis sp. n. China p. 323 fig., HSU t.c.

Leptophlebia duplex p. 118, *simplex* p. 119, spp. n. China figs., NAVÁS Notes Ent. chin., Mus. Heude 3.—*L. wui* sp. n. China p. 206 fig., ULMER Peking n.H. Bull. 10.

Melanameletus gen. n. (Siphonuridae) p. 15, *brunnescens* sp. n. Finland p. 16, TIENSUU Ann. ent. fenn. 1 1935.

Metamonius hollermayeri p. 139, *needhami* p. 140, spp. n. Chile fig., NAVÁS Rev. chil. H.n. 39.

Neurocaenis gen. n. (Caenidae) p. 365, *fuscata* sp. n. Belgian Congo p. 366 fig., NAVÁS Rev. Zool. Bot. afr. 28.

Oligoneuriella grandaeva sp. n. Kenya p. 125 fig., NAVÁS Mém. Mus. H.n. Paris 4.

Polymitarcys ladogensis sp. n. Finland p. 8 figs., TIENSUU Ann. ent. fenn. 1 1935.—*P. nanchangi* sp. n. China p. 143, Hsu Peking n.H. Bull. 11.

Potamanthellus chinensis sp. n. China p. 321 fig., Hsu Peking n.H. Bull. 10.

Potamanthodes nanchangi sp. n. China p. 323 fig., Hsu t.c.

Potamanthus distinctus p. 280, *neglectus* p. 282 spp. n. U.S.A., TRAVER in NEEDHAM, TRAVER & Hsu Biol. Mayflies 1935.

Pseudiron meridionalis sp. n. U.S.A. p. 437, TRAVER t.c.

Pseudocloeon etowah sp. n. U.S.A. p. 726, TRAVER t.c.

Rhithrogena amica sp. n. U.S.A. p. 373, TRAVER t.c.—*R. semicolorata*, *semitincta* ♂ genitalia differences p. 279 figs., KIMMINS Entomologist 69.—*R. magawana* p. 544, *tateyamana* p. 545, *minazuki* p. 546, *satsuki* p. 547, spp. n. Japan figs., IMANISHI Annot. zool. jap. 15.

Stenonema birdi p. 306, *candidum* p. 308, *conjunctum* p. 309, *gildersleevei* p. 315, *majus* p. 320, *ohioense* p. 322, *proximum* p. 325, *scitulum* p. 330, spp. n. U.S.A., TRAVER in NEEDHAM, TRAVER & Hsu Biol. Mayflies 1935.

Tricorythodes fallax p. 634, *fictus* p. 635, *minutus* p. 636, *texanus* p. 638, spp. n. U.S.A., TRAVER t.c.

ODONATA

(PARANEUROPTERA).

Key to American genn. of Anisopterous dragonfly nymphs with a labium in form of a mask, BYERS Ent. News 47 p. 60-64.

Records of Florida dragonflies, II, BYERS Florida Ent. 19 pp. 40-42.

Odonata of Italy, CASTELLANI Boll. Soc. ent. ital. 68 pp. 34-40.

Key to genera (p. 511), list of spp. (p. 523) of Disparoneura-complex, COWLEY Ann. Mag. n.H. (10) 17.

Notes on British Odonata in 1934 and 1935, COWLEY Entomologist 69 pp. 149-153.

Keys to Odonata of Auvergne, EUSÉBIO Bull. Soc. H.n. Auvergne 10 1926 pp. 29-48, 2 pls. 1 graph.

Dragonflies of Darjeeling district, FRASER J. Darjeeling n.H. Soc. 10 pp. 92-100, 18 figs.

Odonata from Bhutan, FRASER J. Darjeeling n.H. Soc. 10 pp. 183-184.

Odonata collected in Japan, FRASER Trans. R. ent. Soc. Lond. 85 pp. 141-156, 6 figs.

Odonata of India, III, FRASER Fn. Brit. Ind., Odon. 3 xi and 461 pp., 1 map 2 pls. 125 figs.

List of Odonata of Sunda Is., LIEFTINCK Rev. suisse Zool. 43 pp. 99-160, 19 figs.

Studies on African Odonata with synonymy, LONGFIELD Trans. R. ent. Soc. Lond. 85 pp. 467-498, 10 figs.

List of Odonata of N. Hebrides, KIMMINS Ann. Mag. n.H. (10) 18 pp. 68-69.

Odonata of the Oxford Univ. Sarawak Expedition, KIMMINS J. F.M.S. Mus. 13 pp. 65-108, 17 figs.

Nymphs of N. American Libellulines, NEEDHAM & FISHER Trans. Amer. ent. Soc. 62 pp. 107-116, 2 pls.

Odonata of Fezzan, Libya, NIELSEN Atti Soc. ital. Sci. nat. 74 1935 pp. 372-382, 7 figs.

Odonata collected in Uganda, NIELSEN Ann. Mus. Genova 59 pp. 187-194.

Odonata of Italian E. Africa, NIELSEN Boll. Soc. ent. ital. 68 pp. 123-131, 1 fig.

Notes on dragonflies, 1935, PINNIGER London Nat. 1935 pp. 71-72.

Habits of some Odonata from Marga-Marga, PIRION Rev. chil. H.n. 37 1933 pp. 78-82, 1 fig.

Annotated list of Odonata of Ludwikowo, Poland, URBĄSKI Bull. Soc. Amis Sci. Poznań (B) 6 1934 pp. 27-31.

Odonata of Canary Is., VALLE Comment. biol. 6 1935 no. 5, 7 pp.

Odonata of Hawaii, WILLIAMS Proc. Hawaii. ent. Soc. 9 pp. 273-348 figs.

Odonata from Yucatan, WILLIAMSON Pub. Carnegie Instn. Wash. 457 pp. 139-143.

Aeschna Centr. European spp. pp. 53-73, morphology pp. 53-60, key p. 60 figs., SCHMIDT Dtsch. ent. Z. 1936.—*A. rileyi* Calv. (= *subpupillata* McL.) p. 480, LONGFIELD Trans. R. ent. Soc. Lond. 85.—*A. frontalis* sp. n. China p. 41, NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Africogomphus gen. n. for *Gomphus zebra* Martin p. 143, FRASER Proc. R. ent. Soc. Lond. (B) 5.

Agriocnemis luteola sp. n. China p. 46; *trilineatum* ♂ p. 47 fig., NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Anisogomphus pieli ♀ p. 39, NAVÁS t.c.

Argia charalana ♀ p. 33; *variata* 34, *medinensis* p. 35, *espalensis* p. 36, spp. n. Colombia figs., NAVÁS Bol. Soc. ent. Esp. 17 1935.

Austrolestes cheesmanae sp. n. Banks I. p. 69 figs., KIMMINS Ann. Mag. n.H. (10) 18.

Bayadera kali sp. n. Assam p. 477 figs., COWLEY t.c.

Bornargiolestes gen. n. (Megapodagruidae) p. 86, *nigra* sp. n. Borneo p. 87 fig., KIMMINS J. F.M.S. Mus. 13.

Brachymesia gravis nymph p. 35, BYERS Ent. News 47.

Bursigomphus see *Crenigomphus*.

Calocypha petiolata Selys synonymy p. 64, LAIDLAW J. F.M.S. Mus. 13.

Celebophlebia gen. n. (Libellulidae) p. 399, *dactylogastra* sp. n. Celebes p. 401 figs., LIEFTINCK Treubia 15.

Celebothemis (= *Parathemis* Fras.) *delecollei* Ris (= *metallica* Fras.) p. 403, LIEFTINCK t.c.

Cercion lindeni var. n. *nigriceps* Spain p. 10, NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.

Chlorocnemis pauli sp. n. Uganda p. 470 figs., LONGFIELD Trans. R. ent. Soc. Lond. 85.—*C. cyanura* see *Iso-mecocnemis*.

Chlorocypha tenuis sp. n. Uganda p. 468 figs., LONGFIELD Trans. R. ent. Soc. Lond. 85.

Chlorogomphus infuscatus var. n. *holophaea* China p. 42, NAVÁS Notes Ent. chinoise, Mus. Heude 3.—*C. fraseri* sp. n. India p. 103 fig., St. QUENTIN Konowia 15.—*C. mortonii* sp. n. Sikkim p. 22 fig., FRASER Proc. R. ent. Soc. Lond. (B) 5.

Coeliccia cyaneothorax sp. n. Borneo p. 89 fig., KIMMINS J. F.M.S. Mus. 13.

Coenagrion trilineatum ♂ p. 47, NAVÁS Notes Ent. chinoise, Mus. Heude 3.

Crenigomphus (= *Bursigomphus* Martin) *hartmanni* Först. (= *pardus* Martin) p. 142; (= *Dentigomphus* Martin) *renei* sp. n. Lake Tchad p. 138 fig., FRASER Proc. R. ent. Soc. Lond. (B) 5.

Davidius fujiana sp. n. Japan p. 150 fig., FRASER Trans. R. ent. Soc. Lond. 85.

Dentigomphus characters p. 137, FRASER Proc. R. ent. Soc. Lond. (B) 5.—See *Crenigomphus*.

Drepanosticta dultensis p. 98, *forcicula* p. 100, *dentifera* p. 101, spp. n. Borneo figs., KIMMINS J. F.M.S. Mus. 13.—*D. mylitta* p. 160, *lymetta* p. 161, *megametia* p. 163, spp. n. Philippines figs., COWLEY Trans. R. ent. Soc. Lond. 85.

Echinopterogomphus see *Lestinogomphus*.

Enallagma ambiguum sp. n. China p. 47, NAVÁS Notes Ent. chinoise, Mus. Heude 3.—*E. pseudelongatum* sp. n. Uganda p. 475 figs., LONGFIELD Trans. R. ent. Soc. Lond. 85.

Epigomphus notes p. 134, *crepidus* sp. n. Mexico p. 126 figs., KENNEDY Ann. ent. Soc. Amer. 29.

Epiphlebia superstes ♂ abdominal sternites pp. 130-136 figs., SCHMIDT Zool. Anz. 116.—*E. laidlawi* pl. of locality in Darjeeling district where larva was found p. 82, INGLIS J. Darjeeling n.H. Soc. 11.

Euphaea laidlawi sp. n. Malaya p. 77 fig., KIMMINS J. F.M.S. Mus. 13.

Gomphoides williamsoni sp. n. U.S.A. p. 9 figs., GLOYD Occ. Pap. Mus. Zool. Michigan no. 326.

Gomphus rogersi sp. n. U.S.A. p. 1 figs., GLOYD t.c.—*G. septimus* ♀ p. 37; *trinus*, junior spp. n. China p. 38 figs., NAVÁS Notes Ent. chinoise, Mus. Heude 3.—*G.* larval morphology pp. 270–281 figs., SCHMIDT Senckenbergiana 18.—*G. fujiacus* p. 147, *chichibui* p. 148, spp. n. Japan figs., FRASER Trans. R. ent. Soc. Lond. 85.—*G. pilosus* see *Onychogomphus*; *zebra* see *Africogomphus*.

Gynacantha Ramb. status discussed p. 74, KIMMINS Ann. Mag. n.H. (10) 18.

Idionyx laidlawi sp. n. Malaya; *dohrni* ♀ p. 701, FRASER J. Bombay n.H. Soc. 38.

Isomecognemismis gen. n. for *Chlorocnemismis cyanura* Först. p. 514 figs., COWLEY Ann. Mag. n.H. (10) 17.

Leptogomphus coomansi sp. n. Borneo p. 267 figs., LAIDLAW Treubia 15.

Lestes ochraceus in Fr. Sudan p. 261, LESTAGE Bull. Soc. Sci. nat. Maroc 15.

Lestinogomphus (= *Echinopterogomphus*) p. 142, FRASER Proc. R. Soc. ent. Lond. (B) 5.

Leucorhinia key to larvae of European spp. p. 389, SCHMIDT Arch. Naturgesch. (N. F.) 5.

Macromia reginae Le Roi (= *halei* Fras.) p. 484, LONGFIELD Trans. R. ent. Soc. Lond. 85.—*M. cantonensis* sp. n. Canton p. 457, TINKHAM Lingnan Sci. J. 15.

Mesagrion leucorhinum ♀ p. 37, NAVÁS Bol. Soc. ent. Esp. 17 1935.

Mesocnemismis singularis Karsch (= *pruinosa* Fras.) p. 471, LONGFIELD Trans. R. ent. Soc. Lond. 85.

Mnais pيلي sp. n. China p. 42, NAVÁS Notes Ent. chinoise, Mus. Heude 3.—*M. earnshawi* subsp. n. *thoracicus* p. 102; *semiopaca* sp. n. p. 103 China figs., MAY Senckenbergiana 17 1935.

Neogomphus molestus, *bidens* appendages fig. p. 80, PIRION Rev. chil. H.n. 37 1933.

Nesobasis malekulana sp. n. N. Hebrides p. 72 figs., KIMMINS Ann. Mag. n.H. (10) 18.

Nilogomphus see *Notogomphus*.

Notogomphus Selys (= *Podogomphus* Karsch) p. 477, LONGFIELD Trans. R. ent. Soc. Lond. 85.—*N.* (= *Nilogomphus* Fraser) *dorsalis* Sel. (= *carpenteri* Fras.) p. 143, FRASER Proc. R. ent. Soc. Lond. (B) 5.

Notoneura emphylla Flores p. 118, *diadesma* Soemba p. 120, spp. n. figs., LIERTINCK Rev. suisse Zool. 43.

Oligoclada revision pp. 1–42; *monosticha* Peru p. 20, *stenoptera* p. 22, *xanthopleura* p. 27, *crocogaster* p. 29 Brazil, *heliophila* p. 32, *umbricola* p. 38 Colombia, spp. n. figs., BORROR Misc. Pub. Mus. Zool. Univ. Mich. no. 22 1931.

Onychogomphus supinus Selys (= *angela* Martin) p. 141; *pilosus* Mart. from *Gomphus* p. 142, FRASER Proc. R. ent. Soc. Lond. (B) 5.

Orthetrum borneense sp. n. Borneo p. 70 fig., KIMMINS J. F.M.S. Mus. 13.—*O. stemmale* subsp. n. *kalai* S. Rhodesia p. 487, LONGFIELD Trans. R. ent. Soc. Lond. 85.

Oxygomphus Lacr. characters p. 140, type *agilis* Martin p. 141 fig., FRASER Proc. R. Soc. ent. Lond. (B) 5.

Paragomphus moka sp. n. Fernando Po p. 478 figs., LONGFIELD Trans. R. ent. Soc. Lond. 85.

Parathemis see *Celebothemis*.

Periaeschna mira sp. n. China p. 40, NAVÁS Notes Ent. Chinoise, Mus. Heude 3.

Philoganga robusta sp. n. China p. 43, NAVÁS t.c.

Phyllogomphus aethiops Selys (= *helenae* Lacroix) p. 479, LONGFIELD Trans. R. ent. Soc. Lond. 85.

Platycnemismis latipes var. n. *brachygastra* Catalonia p. 9, NAVÁS Arx. Inst. Cienc. 8 (1920) 1923.

Podogomphus see *Notogomphus*.

Protorthemis intermedia wings p. 700 fig., FRASER J. Bombay n.H. Soc. 38.

Protosticta fraseri sp. n. Assam p. 67 figs., KENNEDY Proc. R. ent. Soc. Lond. (B) 5.

Pseudagrion revision of African spp. pp. 1-68 figs., RIS & SCHMIDT Abh. senckenb. naturf. Ges. **433**.—*P. gigas* p. 33, *basicornu* p. 62 Guinea, *risi* Kamerun p. 34, *mortoni* Palestine p. 55, *glaucoideum* p. 66, *pseuderythromma* p. 67 Congo, spp. n. figs., RIS t.c.—*P. schmidtianum* Timor p. 122, *calosomum* Soemba spp. n.; *nigrofasciatum* Lieft. (= *infracavum* Schmidt) p. 124; keys pp. 126, 128; *pilidorsum* subsp. n. obscurum Nias p. 131, *declaratum* Lombok p. 132, *deflexum* Timor p. 134 figs., LIEFTINCK Rev. suisse Zool. **43**.—*P. australasiae* discussed, synonymy pp. 167-170 figs., LIEFTINCK Konowia **15**.

Pseudictinus Martin, *tigris* Martin nom. nud. p. 139, FRASER Proc. R. ent. Soc. Lond. (B) **5**.

Rhinocypha pagenstecheri subsp. n. *timorana* Timor p. 111 fig., LIEFTINCK Rev. suisse Zool. **43**.—*R. pelops* sp. n. Perak p. 60; *turconii* further description p. 61 figs., LAIDLAW J. F.M.S. Mus. **13**.—*R. spinifer* ♀ p. 82; *cognata* sp. n. Borneo p. 84 figs., KIMMINS t.c.

Rhinoneura caerulea sp. n. Borneo p. 79 fig., KIMMINS t.c.

Rhyothemis phyllis subsp. n. *aequalis* N. Hebrides p. 78 figs., KIMMINS Ann. Mag. n.H. (10) **18**.

Risicnemis incisa p. 91, *reflexa* p. 92, spp. n. Borneo figs., KIMMINS J. F.M.S. Mus. **13**.

Stylurus townesi sp. n. S. Carolina p. 5 figs., GLOYD Occ. Pap. Mus. Zool. Michigan no. **326**.

Taolestes rubripes sp. n. China p. 44, NAVAS Notes Ent. chinoise, Mus. Heude **3**.

Teinobasis laidlawi sp. n. Borneo, Sarawak p. 95 figs., KIMMINS J. F.M.S. Mus. **13**.

Telebasis flammeola p. 804, *carota* p. 807, *livida* p. 811, spp. n. Ecuador figs., KENNEDY Ann. ent. Soc. Amer. **29**.

Tetrathemis corduliformis sp. n. Uganda p. 484 figs., LONGFIELD Trans. R. ent. Soc. Lond. **85**.

Triacanthagyna Selys status discussed p. 74, KIMMINS Ann. Mag. n.H. (10) **18**.

Trithemis risi sp. n. E. Africa p. 490; *donaldsoni* subsp. n. *nigra* Principe I. p. 492 figs., LONGFIELD Trans. R. ent. Soc. Lond. **85**.—*T. scorteccii* sp. n. Libya p. 375 fig., NIELSEN Atti Soc. ital. Sci. nat. **74** 1935.—*T. kirbyi* var. n. *dallonia* Tibesti p. 72 fig., NAVAS Mém. Acad. Sci. Paris (2) **62**.

Zygonyx iris subsp. n. *osiris* Burma p. 400, FRASER Fn. Brit. India, Odon. **3**.

DERMAPTERA.

Dermaptera of U.R.S.S., BEI-BIENKO Faune U.R.S.S. no. **5** viii + 239 pp. 67 figs.

Dermaptera of Rhodes I. and Scarpanto, MENOZZI Boll. Lab. zool. Portic **30** pp. 24-31, 4 figs.

Dermaptera collected in Africa, REHN Proc. Acad. nat. Sci. Philad. **88** pp. 507-526, 9 figs.

Dermaptera of U.S.S.R., SEMENOV-TIEN-SHANSKIĬ Bull. Acad. Sci. U.R.S.S. **1935** 1935 pp. 824-830.

Diplatys burri sp. n. Belgian Congo p. 127 figs., HINCKS Proc. R. ent. Soc. Lond. (B) **5**.

Euborellia vanderbilti sp. n. Belgian Congo p. 510 figs., REHN Proc. Acad. nat. Sci. Philad. **88**.

Forficula sagitta sp. n. Transcaspia pp. 135, 228 figs., SEMENOV-TIAN-SHANSKIĬ in BEI-BIENKO Faune U.R.S.S. no. **5**.—*F. fedtschenkoi* see *Oreasiobia*.

Hemimerus revision pp. 457-508, key p. 473, *vicinus* Nigeria p. 481, *vosseleri* Tanganyika p. 483, *essor* Kenya p. 487, *deceptus* Transvaal p. 489, *advextus* Angola p. 501 spp. n.; *talpoides* Wlk. (= *chevalieri* Chop.) p. 493 figs., REHN Proc. Acad. nat. Sci. Philad. **87**.

Oreasiobia gen. n. type *Forficula fedtschenkoi* Sauss. pp. 158, 228 figs., SEMENOV-TIAN-SHANSKIĬ in BEI-BIENKO Faune U.R.S.S. no. **5**.

Skendyle nitens sp. n. Java p. 542 fig., GÜNTHER Rev. suisse Zool. 41 1934.

Thalperus sanga sp. n. Fr. Equatorial Africa p. 422 figs., REHN Proc. Acad. nat. Sci. Philad. 88.

ORTHOPTERA.

Orthoptera of Ifni, N.E. Africa, BOLIVAR Eos 11 pp. 395-426, 5 pls. 16 figs.

British grasshoppers and their allies, BURR London, Philip Allan 1936 xvi + 162 pp. 6 pls. 40 maps 56 figs.

Orthoptera of Mozambique, CHOPARD Mem. Mus. zool. Univ. Coimbra (1) no. 85 1935 32 pp. 18 figs.

Orthoptera of Tibesti, CHOPARD Mém. Acad. Sci. Paris (2) 62 pp. 70-72.

Tridactylidae and Gryllidae of Ceylon, CHOPARD Spolia zeyl. 20 pp. 9-87, 22 figs.

Orthoptera of N. Dakota, HEBARD Tech. Bull. N. Dakota Agric. exp. Sta. no. 284 66 pp.

Notes on N. American Orthoptera of the Arctic-Alpine zone, HEBARD Ent. News 47 pp. 13-15.

Bio-ecological and systematic notes on Orthoptera of Aegean Is., JANNONE Boll. Lab. Zool. Portici 29 pp. 47-248, 1 pl. 48 figs.

Some Orthoptera from Palestine, JANNONE Mem. Soc. ent. ital. 15 pp. 78-92, 5 figs.

Orthoptera of Tadzhikistan, MIRAM Trud. Tadzhik Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935 pp. 221-235, 11 figs.

On the Orthopterous fauna of Lettland, I, PRINCEIS Folia zool. hydrobiol. 9 pp. 90-92.

Orthoptera of Fezzan, Libya, SALFI Atti Soc. ital. Sci. nat. 74 1935 pp. 383-388.

Orthoptera of the Black Sea coast, SHECHELKANOVITZEV Acta Univ. Voroneg. 8 1935 no. 3 pp. 59-66.

Notes on Orthoptera from Hupeh and Kiangsi, TINKHAM Lingnan Sci. J. 15 pp. 201-218, 1 pl.

Studies in Arabian Orthoptera, I, UVAROV J. Linn. Soc. London, Zool. 39 pp. 531-554, 2 pls. 3 figs.

Orthoptera collected in Cyprus, WERNER Zool. Anz. 14 pp. 14-19.

List of Orthoptera collected from the Dodekanese, WERNER S.B. Akad. Wiss. Wien 145 Abt. i pp. 9-16.

Orthoptera of the Canaries, WILLEMSE Natuurh. Maandbl. 25 pp. 40-42, 56 etc. 1 pl.

BLATTIDAE.

Aphlebia larrinuai see *Arbiblatta*; *algerica*, *cazurroi* see *Dziriblatta*.

Arbiblatta gen. n. type *Aphlebia larrinuai* Bol. p. 62, CHOPARD Bull. Soc. H.n. Afr. N. 27.

Dicellonotus insularis see *Panesthia*.

Dziriblatta gen. n. for *Aphlebia algerica* Bol. (type) p. 62, *A. cazurroi*, *Hololampra kroumiriensis* Adel. p. 64 figs., CHOPARD Bull. Soc. H.n. Afr. N. 27.

Heterogamodes zavattarii sp. n. Lybia p. 121 figs., SALFI Boll. Soc. ent. ital. 67 1935.—*H. chopardi*, *marmorata* spp. n. Arabia p. 532, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Hololampra key to Algerian spp. p. 56, *brevipennis* p. 59, *integra*, *bicolor* p. 60, spp. n. Algiers figs., CHOPARD Bull. Soc. H.n. Afr. N. 27.—*H. kroumiriensis* see *Dziriblatta*.

Mopsella gen. n., *toxopei* sp. n. Buru p. 394 figs., HANITSCH Treubia 7 Suppl.

Panesthia insularis Kby. from *Dicellonotus* p. 399 fig., HANITSCH t.c.

Parascalida gen. n., *fusca* sp. n. Buru p. 393 figs., HANITSCH t.c.

Parasymphloe biguttata sp. n. Buru p. 392 figs., HANITSCH t.c.

Rhabdoblatta pertruncata n. n. for *truncata* Brunn. 1898 nec 1865 pp. 390, 396; *castanea* sp. n. Buru p. 396, HANITSCH t.c.

Temnopteryx chevalieri sp. n. Cape Verde Is. p. 91 fig., CHOPARD Rev. franç. Ent. 3.

MANTIDAE.

Ameles gracilis redescription p. 56, WILLEMSE Natuurh. Maandbl. 25.—*A. cypria* sp. n. Cyprus p. 507 fig., UVAROV Ann. Mag. n.H. (10) 18.—*A. moralesi* sp. n. N.W. Africa p. 423 fig., BOLIVÁR Eos 11.

Atlatia gen. n. *philbyi* sp. n. Arabia p. 533 fig., UVAROV J. Linn. Soc. Lond., Zool. 39.

PHASMIDAE.

Phasmidae of Centr. Borneo, GÜNTHER Ark. Zool. 28A no. 9 1935 29 pp. 9 figs.

Phasmidae of Celebes, GÜNTHER Mitt. zool. Mus. Berl. 21 pp. 1-29, 2 pls.

Phasmidae from Dutch New Guinea, GÜNTHER Nova Guinea 17 Zool. pp. 323-344, 17 figs.

Apora exotica B.v.W. (= *Pericentrus nudipes* Redt., *Cnipsus laevis* R.) p. 8; *laetior* further description p. 9, fig., GÜNTHER Ark. Zool. 28A no. 9, 1935.

Aruanoidea pallida see *Necrosia affinis*.

Bacteria tuberculata sp. n. Brazil pp. 98, 99 fig., DE TOLEDO PIZA Rev. Ent. Rio de J. 6.

Bacillus cyprius sp. n. Cyprus p. 505 fig., UVAROV Ann. Mag. n.H. (10) 18.

Canuleius grandis p. 280, *vetus* p. 281, *corallinus*, *bispinosus* p. 282, *fischeri* p. 283, *brevipes* p. 284, spp. n. Brazil; 20-*spinosus* ♀ p. 285 figs., DE TOLEDO PIZA Rev. Ent. Rio de J. 6.

Carausius heinrichi sp. n. Celebes p. 6 figs., GÜNTHER Mitt. zool. Mus. Berl. 21.

Ceroys scaber p. 286, *multispinosus*, *auritus* p. 287, *brunneri* p. 288, spp. n. Brazil figs., DE TOLEDO PIZA Rev. Ent. Rio de J. 6.

Cnipsus laevis see *Apora exotica*.

Dagys gen. n., *balia* sp. n. Celebes p. 3 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Dares ulula Westw. (= *otys* Westw., *validispinus* Stål, *breitensteini* Redt., *verrucosus* R., *calamita* R., *corticinus* R.) p. 3, GÜNTHER Ark. Zool. 28A no. 9 1935.

Elicius gen. n. p. 16, *microbasileus* sp. n. Celebes p. 17 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Eubias gen. n. p. 21, *athlius* sp. n. Celebes p. 22, fig., GÜNTHER t.c.

Menexenus epidicus sp. n. Celebes p. 5; *horridus* Br.v.W. (= *polyacanthus* Dohrn) p. 6 fig., GÜNTHER t.c.

Miroceroys gen. n., *redtenbacheri* (type) p. 290, *heymonsi* p. 291, spp. n. Brazil, DE TOLEDO PIZA Rev. Ent. Rio de J. 6.

Moritasgus gen. n. p. 19, *stresemanni* sp. n. Celebes p. 20 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Mortites gen. n., *enarges* sp. n. Celebes p. 13 fig., GÜNTHER t.c.

Mylothrus gen. n., *oligarches* sp. n. Celebes p. 18 fig., GÜNTHER t.c.

Nearchus maximus subsp. n. *mjöbergi* p. 10 Borneo, GÜNTHER Ark. Zool. 28A no. 9 1935.

Necrosia affinis Gray (= *Aruanoidea pallida* Redt.); *punctata* Gray (= *bistriolata* Redt.) p. 13; *monticola* p. 17, *potameis* p. 19, *chloë* p. 20, spp. n. Borneo figs., GÜNTHER t.c.—*N. tenella* sp. n. Celebes p. 24 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Necrosiodes tibangensis sp. n. Borneo p. 21 fig., GÜNTHER Ark. Zool. 28A no. 9 1935.

Neopromachus celebensis sp. n. Celebes p. 14 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.—*N. extraordinarius* p. 326, *laetus* p. 331, spp. n. New Guinea figs., GÜNTHER Nova Guinea 17 Zool.

Nescicroa rivalis p. 25, *puella* p. 26 ♂♂ figs., GÜNTHER Ark. Zool. 28A no. 9 1935.—*N. heinrichi* p. 25, *rammei* p. 26, spp. n. Celebes figs., GÜNTHER Mitt. zool. Mus. Berl. 21.

Orthonecrosia mjöbergi sp. n. Borneo p. 23 fig., GÜNTHER Ark. Zool. 28A no. 9 1935.

Otraleus gen. n. *hypsimelathrus* sp. n. Celebes p. 28 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Paranecrosia bisignata further description p. 27, GÜNTHER Ark. Zool. 28A no. 9 1935.

Pericentropsis gen. n., *aculeata* sp. n. New Guinea p. 336 fig., GÜNTHER Nova Guinea 17 Zool.

Pericentrus nudipes see *Apora exotica*.

Periphetes parastatidon sp. n. Celebes p. 11 figs., GÜNTHER Mitt. zool. Mus. Berl. 21.

Phalces longiscaphus biology pp. 80–86 figs., LE FEUVRE Cape Nat. 1.

Presbistus sjostedti sp. n. Borneo p. 5 figs., GÜNTHER Ark. Zool. 28A no. 9 1935.

Prisomera obsolefactum sp. n. Celebes p. 4 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.

Prosentoria longelaminata B.v.W. (= *arrogans* B.v.W.) p. 7, GÜNTHER Ark. Zool. 28A no. 9 1935.

Sipylloidea hariola sp. n. Celebes p. 23 fig., GÜNTHER Mitt. zool. Mus. Berl. 21.—*S. pseudosipylus* subsp. n. *laevis* p. 341; *robusta* sp. n. p. 343 New Guinea figs., GÜNTHER Nova Guinea 17 Zool.

Timema podura sp. n. California p. 268 figs., STROHECKER Ent. News 47.

Trapezaspis echinata sp. n. New Guinea p. 335 fig., GÜNTHER Nova Guinea 17 Zool.

GRYLLIDAE.

Notes on crickets in the Orient, BODENHEIMER Livre jubil. Bouvier 1936 pp. 143–147.

Gryllids of China, CHOPARD Notes Ent. chinoise, Mus. Heude 3 pp. 1–14, 1 pl.

Amusurgus specularis sp. n. Ceylon p. 52 fig., CHOPARD Spolia zeyl. 20.

Anaxipha henryi sp. n. Ceylon p. 57. CHOPARD t.c.—*A. beccarii* sp. n. Br. Guiana p. 6 figs., SALFI Ann. Mus. zool. Univ. Napoli (N.S.) 6 1935 no. 17.

Apentacentrus aurantiacus sp. n. Mozambique p. 27, CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.

Arachnomimus annulicornis sp. n. Ceylon p. 67 fig., CHOPARD Spolia zeyl. 20.

Coiblemmus gen. n. for *Homaloblemmus compactus* Chop. p. 30, CHOPARD t.c.

Conoblemmus acutifrons sp. n. Turkestan p. 42 fig., CHOPARD Opusc. ent. Lund 1.

Cryptoptilum henryi see *Derectaotus*.

Cycloptilum lesnei sp. n. Mozambique p. 26 fig., CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.

Derectaotus gen. n. p. 61 for *Ornebius ceylonicus* Chop., *Cryptoptilum henryi* Chop. *palpatum* sp. n. Ceylon p. 62, CHOPARD Spolia Zeyl. 20.

Euscyrtus laminifer p. 83, *perforatus* p. 84 spp. n. Ceylon, CHOPARD t.c.

Goniogryllus gen. n., *punctatus* sp. n. China p. 7 fig., CHOPARD Notes Ent. chinoise, Mus. Heude 3.

Gryllomimus gen. n. for *Gryllus chopardi* Ebner p. 541, further description p. 542 fig., CHOPARD Ann. Mag. n.H. (10) 17.

Gryllotalpa formosana var. n. *microphthalma* China p. 3, CHOPARD Notes Ent. chinoise, Mus. Heude 3.

Gryllus chopardi p. 150, *depressiceps* p. 151, spp. n. Sudan, EBNER Anz. Akad. Wiss. Wien 72 1935.—*G. chopardi* see *Gryllomimus*.

Gryllulus flavus p. 24, *brevicauda* p. 26, spp. n. Ceylon figs., CHOPARD Spolia Zeyl. 20.

Hemilandrevia lamellipennis sp. n. Ceylon p. 38 fig., CHOPARD Spolia zeyl. 20.

Heterotrypus elegans sp. n. Ceylon p. 72 fig., CHOPARD t.c.

Homaloblemmus compactus see *Coiblemmus*.

Homoeogryllus parvus sp. n. Sudan p. 544, CHOPARD Ann. Mag. n.H. (10) 17.

Landrevia angustifrons sp. n. Ceylon p. 36 fig., CHOPARD Spolia zeyl. 20.

Madasumma albonotata p. 76, *valida* p. 78 spp. n. Ceylon; *varipennis* Wlk. (= *incerta* Chop.), p. 79 fig., CHOPARD t.c.

Meristoblemmus gen. n., *lobifrons* sp. n. India p. 234 fig., JONES & CHOPARD Ann. Mag. n.H. (10) 18.

Metioche lesnei sp. n. Zambesi p. 22, CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.

Metiochodes trilineatus sp. n. Ceylon p. 50 fig., CHOPARD Spolia zeyl. 20.

Microgryllus nemobioides sp. n. Sudan p. 540, CHOPARD Ann. Mag. n.H. (10) 17.

Mnesibulus pallipes sp. n. Ceylon p. 81 fig., CHOPARD Spolia zeyl. 20.

Oecanthus pellucens subsp. n. californensis Aegean Is. p. 131 fig., JANNONE Boll. Lab. Zool. Portici 29.—*O. henryi* sp. n. Ceylon p. 65, CHOPARD Spolia zeyl. 20.

Ornebius varipennis sp. n. Ceylon p. 60, CHOPARD t.c.—*O. ceylonicus* see *Derecatotus*.

Phaeophilacris bimaculata sp. n. E. Africa p. 30, CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.

Scapsipedoides gen. n., *macrocephalus* (type), *apterus* spp. n. Ceylon p. 32 fig., CHOPARD Spolia zeyl. 20.

Scapsipedus lesnei sp. n. Mozambique p. 16 fig., CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.

Scottia ceylonica sp. n. Ceylon p. 45 fig., CHOPARD Spolia zeyl. 20.

Seychellesia ceylonica sp. n. Ceylon p. 69 fig., CHOPARD t.c.

Tridactylus nigripennis, curtus p. 14, *quadrifasciatus* p. 15, spp. n. Ceylon figs., CHOPARD t.c.—*T. guyanensis* sp. n. Br. Guiana p. 4 figs., SALFET Ann. Mus. zool. Univ. Napoli (N.S.) 6 1935 no. 17.

Trigonidomorpha lineatifrons sp. n. Zambesi p. 23 fig., CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.—*T. fuscifrons* sp. n. Ceylon p. 54 fig., CHOPARD Spolia zeyl. 20.

TETTIGONIIDAE (including GRYLLACRIDAE).

Gryllacridae of Zool. Institut Halle a. S., KARNY Z. Naturw. 88 1927 pp. 1-14, 1 pl.

Genera of Tympanophorinae, ZEUNER Trans. R. ent. Soc. Lond. 85 pp. 299-301.

Subfamilies of Tettigoniidae, ZEUNER Proc. R. ent. Soc. Lond. (B) 5 pp. 103-109.

Ammobaenetes gen. n. for *Daihinia phrixocnemoides* Caud. p. 34, HUBBELL Univ. Florida Pub., Biol. Sci. Ser. 2.

Arethaea revision of N. American spp. pp. 231-256, *gracilipes* subsp. n. *cerciata* p. 241; *constricta* subsp. n. *comanche* p. 244; *mescalero* p. 247, *ambulator* p. 253 spp. n. U.S.A. figs., HEBARD Trans. Amer. ent. Soc. 62.

Bradyopisthius see *Spalacomimus*.

Bucephalopectera jannonei sp. n. Aegean Is. p. 135, RAMME Boll. Lab. Zool. Portici 29.

Ceuthophilus brevipes external morphology, phylogenetic position pp. 281-314 figs., GURNEY J. N.Y. ent. Soc. 44.—*C.* revision 551 pp., key p. 39, *yavapai* p. 80, *pima* p. 86, *mormonius* p. 88, *chiricahuae* p. 91, *hualapai* p. 94, *baboquivariae* p. 97, *mescalero* p. 99, *papago* p. 102, *pinalensis* p. 104, *wasatchensis* p. 105, *abditus* p. 193, *ozarkensis* p. 213, *osagensis* p. 217, *wichitaensis* p. 220, *kansensis* p. 231, *mississippi* p. 233, *tinkhami* p. 239, *unguiculatus* p. 241, *gertschi* p. 250, *apache* p. 251, *conicaudus* p. 260, *isletae* p. 284, *rehni* p. 293, *nitens* p. 347, *umbrosus* p. 351, *carolinus* p. 371, *rogersi* p. 381, *armatipes* p. 396, (*Geotettix* subgen. n. p. 496), *thomasi* p. 419, *polingi* p. 445, *umbratilis* p. 447, *cunicularis* p. 449, *caudelli* p. 451, *perplexus* p. 453, *vicinus* p. 454, *inyo*, *hebardii* p. 457, *hesperus* p. 479 (with *r.* n. *transitans* p. 482, *clunicornis*), *fossor* p. 484, *fissicaudus* p. 488, *wheeleri* p. 498 spp. n.; *ensifer* *r.* n. *saxicola* p. 113; *gracilipes* *r.* n. *apalachicola* p. 157 U.S.A.; life-history, habits etc. pp. 501-518 figs., HUBBELL Univ. Florida Pub., Biol. Sci. Ser. 2.—*C. neomexicanus* see *Styracoscetes*.

Daihinia phrixocnemoides see *Ammobaenetes*.

Daihiniella gen. n. for *Phrixocnemis bellicosus* Scudder p. 34, HUBBELL Univ. Florida Pub., Biol. Sci. Ser. 2.

Decticus loudoni notes p. 166; *apurtianus* sp. n. Italy p. 170 figs., CAPRA Boll. Soc. ent. ital. 68.

Diestrammena vandermeermohri sp. n. Sumatra p. 1, WILLEMSE Misc. zool. sumatr. 100.

Drymadusa inornata sp. n. Cyprus p. 510, UVAROV Ann. Mag. n.H. (10) 18.

Euanerota n. n. for *Phanerota* p. 12, KARNY Z. Naturw. 88 1927.

Eugaster fernandezi sp. n. N.W. Africa p. 419, BOLIVAR Eos 11.

Eumetriopectera gen. n., *pavlovskiyi* sp. n. Tadzhikistan p. 223 figs., MIRAM Trud. Tadzhik. Sect. Acad. Sci. S.S.R. 5 (Zool. & Parasit.) 1935.

Eurycorypha lesnei sp. n. Zambesi p. 7 fig., CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.—*E. arabica* sp. n. p. 534 (with subspp. n. *media* p. 535, *reducta*, *darlingi* p. 536) Arabia figs., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Geotettix subgen. n. see *Ceuthophilus*.

Gryllacris inarmata Brazil p. 11, *roseiceps* Colombia p. 13, spp. n. figs., ANDER Opusc. ent. Lund 1.

Homorocoryphus eurostratus sp. n. Palestine p. 80 figs., JANNONE Mem. Soc. ent. ital. 15.

Isophya mavromoustakisi sp. n. Cyprus p. 508 fig., UVAROV Ann. Mag. n.H. (10) 18.

Leiomeles gen. n. p. 14, *denticauda* (type) p. 15, *brunneifrons* p. 16, spp. n. Chile figs., ANDER Opusc. ent. Lund 1.

Metrioptera chopardi sp. n. Aegean Is. p. 136 figs., JANNONE Boll. Lab. Zool. Portici 29.

Mortoniellus chopardi sp. n. Fed. Malay States p. 295 fig., ZEUNER Trans. R. ent. Soc. Lond. 85.

Nippancistroger sinensis sp. n. S. China p. 408, TINKHAM Lingnan Sci. J. 15.

Orophila p. 72, *nubigena* p. 73 further descriptions, WILLEMSE Natuurh. Maandbl. 25.

Oxyecous gen. n., *lesnei* sp. n. Mozambique p. 4 figs., CHOPARD Mem. Mus. zool. Univ. Coimbra (I) no. 85 1935.

Pantolepta multivenosa sp. n. Zambesi p. 2 fig., CHOPARD t.c.

Paracycloptera larvae pp. 191–194 figs., EBNER Rev. Ent. Rio de J. 6.

Phaneracra gen. n., *bartletti* sp. n. St. Helena p. 561 fig., UVAROV Ann. Mag. n.H. (10) 18.

Phanerota see *Euanerota*.

Phrixocnemis bellicosus see *Daihinilla*.

Poecilimon chostae sp. n. W. Caucasus p. 65, SHCHELKANOVITSEV Acta Univ. Voroneg. 8 1935 no. 3.

Pterolepis minuscula, *theyana* ♂♂ p. 421 figs., BOLIVÁR Eos 11.

Rhacocleis uvarovi p. 134, *silvestrii* p. 135, spp. n. Aegean Is., RAMME Boll. Lab. Zool. Portici 29.

Spalacomimus Karsch (= *Bradyopisthius* Karsch) characters p. 105, *paradoxurus* p. 106, *talpa* p. 110, *inermis* p. 111 figs., PAOLI Ann. Mus. Genova 58.

Styracosceles gen. n. type *Ceuthophilus neomexicanus*, scope p. 33, HUBBELL Univ. Florida Pub., Biol. Sci. Ser. 2.

Tettigonia paolii p. 162, *silana* p. 164, spp. n. Italy, key to Italian spp. p. 165 figs., CAPRA Boll. Soc. ent. ital. 68.

Tylopsis coi sp. n. Aegean Is. p. 147 fig., JANNONE Boll. Lab. Zool. Portici 29.

Tympanophora re-description, *pellucida* description p. 288; *uvarovi* sp. n. E. Australia p. 290 figs., ZEUNER Trans. R. ent. Soc. Lond. 85.

Xiphidopsis hastaticercus sp. n. China p. 410 figs., TINKHAM Lingnan Sci. J. 15.

ACRIDIDAE.

Monograph of the Australian Acridiidea [contd.], Sjöstedt K. Svenska VetenskAkad. Handl. (3) 15 1935 no. 2 191 pl. 2 pls.

Glandular pouches in Cyrtacanthacrinae of possible taxonomic value, SLIFER & KING J. N. York ent. Soc. 44 pp. 345–348.

Acanthacris ruficornis subsp. n. *yemenita* Arabia p. 547, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Acinipe exarata sp. n. N.W. Africa p. 401 fig., BOLIVÁR Eos 11.

Acrida curta sp. n. Yemen p. 536, UVAROV J. Linn. Soc. Lond. (Zool.) 39.—*A. turrita* subsp. n. *uvarovi* N.W. Africa p. 408, BOLIVÁR Eos 11.

Acrophymus rhodesianus sp. n. S. Rhodesia p. 159 fig., MILLER Proc. R. ent. Soc. Lond. (B) 5.

Adramita gen. n. for *Anacridium arabicum* Uvar. p. 547, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Althaeменes borneensis sp. n. Borneo p. 197 figs., WILLEMSE Ent. Ber. 9.

Amismizia pupa ♂ p. 409 fig., BOLIVÁR Eos 11.

Anacridium arabicum see *Adramita*.

Anamesacris ifniensis sp. n. N.W. Africa p. 410 figs., BOLIVÁR Eos 11.

Apalacris gracilis p. 372, *incompleta* p. 373, spp. n. Celebes, WILLEMSE Livre Jubil. Bouvier 1936.

Apotropis soror sp. n. New South Wales p. 133, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Appalachia gen. n. p. 9, *hebardii* sp. n. U.S.A. p. 10 figs., REHN Trans. Amer. ent. Soc. 62.

Aptenopedes revision p. 190, key p. 193, *aptera* subsp. n. *simplex* p. 196, *borealis* p. 198, *saturiba* p. 201, *coquinae* p. 203; *hubbelli* p. 205, *nigropicta* p. 208, *robusta* p. 209 spp. n.; *sphenarioides* subsp. n. *appalachee* p. 212 U.S.A. figs., HEBARD t.c.

Arminda brunneri further description p. 72, WILLEMSE Natuurh. Maandbl. 25.

Asemoplus sierranus sp. n. California p. 188 figs., HEBARD Trans. Amer. ent. Soc. 62.

Asmara punctata sp. n. Arabia p. 550 fig., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Austracris guttulosa subsp. n. *robusta* p. 164, *varienotum* p. 165 N.W. Australia, *sulcata* N. Queensland p. 166, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Bermius cylindricus sp. n. Queensland p. 73, SJÖSTEDT t.c.

Bodenheimerella arabica sp. n. Arabia p. 540 fig., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Bryodema zaisanicum B.-Bienko (= *fallax* B. B.) p. 301, BEI-BIENKO Ann. Mag. n.H. (10) 18.

Calliptamus mus sp. n. p. 414 (with var. n. *abbreviata* p. 415) N.W. Africa BOLIVÁR Eos 11.

Callitala parvicornis further descr. p. 24 figs., SJÖSTEDT K. Svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Ceracris kiansu morphology, habits pp. 191-198 [in Chinese] figs., SOONG Ent. & Phytopath. 4.

Chirotopica gen. n. p. 169, *histrio* sp. n. W. Australia p. 170, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Chorthippus cyprius sp. n. Cyprus p. 512 fig., UVAROV Ann. Mag. n.H. (10) 18.—*C. dessyi* sp. n. Aegean Is. p. 160 figs., JANNONE Boll. Lab. Zool.

Portici 29.—*C. songoricus* Chinese Dzhungaria p. 296, *karatavicus* Kazakhstan p. 298, spp. n., BEI-BIENKO Ann. Mag. n.H. (10) 18.—*C. longicornis* var. n. *montana* Poland p. 288, GROCHOWSKA Trav. Soc. Sci. Lett. Wilno, Cl. Sci. math. nat. 9 1935.

Chortoicetes tonnoiri p. 35, *jucunda* p. 36, *finitima* p. 38, *exigua*, *concolor* p. 39, *vittata* p. 40 spp. n.; *jungi* f. n. *monticola* p. 37 New South Wales figs., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Chromacris of Argentina pp. 116-124 figs., LIEBERMANN Rev. chil. H.n. 39.

Cirphula flavotibialis sp. n. Australia p. 123, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Conophyma jakovlevi sp. n. E. Ferg-hana p. 302 fig., BEI-BIENKO Ann. Mag. n.H. (10) 18.

Coptacra celebensis sp. n. Celebes p. 11 fig., WILLEMSE Natuurh. Maandbl. 25.

Corystoderes gen. n., *escalerai* sp. n. N.W. Africa p. 412 figs., BOLIVÁR Eos 11.

Craneopsis unicolor sp. n. N. Borneo p. 198, WILLEMSE Ent. Ber. 9.

Curpilladia flavocarinata further description p. 109 figs., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Cyclopternacris omanica sp. n. Arabia p. 550, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Cymochtha deserticola see *Xerophlaeoba*.

Dendrotettix hesperus sp. n. Oregon p. 187 figs., HEBARD Trans. Amer. ent. Soc. 62.

Diedronotus, notes on Argentina spp. p. 36, *warovi* sp. n. Argentina p. 38, LIEBERMANN Rev. Soc. ent. Argent. 7 1935.

Epallia rosea Australia p. 127, *rufa*, *flavipennis* Queensland p. 128, spp. n., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Eremippus veltistshevi sp. n. Tadzhikistan p. 228 figs., MIRAM Trud. Tadzshik. Sect. Acad. Sci. S.S.R. 5 (Zool. and Parasit.) 1935.—*E. solerii* sp. n. Aegean Is. p. 167 figs., JANNONE Boll. Lab. Zool. Portici 29.

Eumacrotona picta Sjöst. not syn. of *australis* Wlk. p. 143, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Euophistes almadensis sp. n. N. Queensland p. 91, SJÖSTEDT t.c.

Eupropacris rammei sp. n. S. Rhodesia p. 161, MILLER Proc. R. ent. Soc. Lond. (B) 5.

Exobothrus gen. n., *histrion* sp. n. Australia p. 27, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Gastrimargus volkensi subsp. n. arabicus Arabia p. 542, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Gomphomastax bolivari sp. n. Kashmir p. 18 fig., UVAROV Opusc. ent. Lund 1.—*G. robusta* sp. n. Kazakstan p. 305, BEI-BIENKO Ann. Mag. n.H. (10) 18.

Goniaea micronotum Northern Territory p. 98, *rostrata* W. Australia p. 99, spp. n. figs., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Goniaeoides bicolor p. 106, *fasciata* p. 107, spp. n. Northern Territory, SJÖSTEDT t.c.

Hyalorrhapis arabica sp. n. Arabia p. 543, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Kapaoria flava sp. n. New Guinea p. 10 fig., WILLEMSE Natuurh. Maandbl. 25.

Lucretilis genitalia p. 201, *maculata* sp. n. Borneo p. 202 fig., WILLEMSE Ent. Ber. 9.

Maclystria evittata see *Perlocchia*.

Melanoplus the *indigenus* group of N. American spp. p. 168, key p. 170, subspp. n. *missoulæ* p. 175, *digitifer* p. 178; *payettei* sp. n. p. 180; *foedus* subsp. n. *iselyi* p. 182 U.S.A. figs., HEBARD Trans. Amer. ent. Soc. 62.—*M. viridifemoratus* Caud. (= *viridi femoratus* Tsai) p. 211, TINKHAM Lingnan Sci. J. 15.

Mesopsis alienus sp. n. Arabia p. 541, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Miramella splendida p. 395, *shirakii* p. 398, spp. n. Formosa figs., TINKHAM Trans. n.H. Soc. Formosa 26.—*M. lofaoshana* from *Podisma*, q.v.

Mongolotettix key p. 207, TINKHAM Lingnan Sci. J. 15.

Moraba longirostis p. 22, *curvicercus* p. 23 further descriptions figs., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Nitakacris gen. n. p. 389, *goganzanensis* sp. n. (type) Formosa p. 392; *rosaceanum* Shir. from *Podisma* p. 391 figs., TINKHAM Trans. n.H. Soc. Formosa 26.

Nocarodes bulgaricus sp. n. Bulgaria p. 254 figs., EBNER & DRENOVSKI Mitt. bulg. ent. Ges. Sofia 9.

Nomadacris septemfasciata subsp. n. insularis Cape Verde Is. p. 95, CHOPARD Rev. franç. Ent. 3.

Notopleura ifniensis sp. n. N.W. Africa p. 406 figs., BOLIVAR Eos 11.

Notostaurus popovi sp. n. Tadjikistan p. 230 fig., MIRAM Trud. Tadzhih Sect. Acad. Sci. S.S.R. 5 (Zool. and Parasit.) 1935.

Oedaleus obtusangulus sp. n. Arabia p. 542 figs., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Oedipoda fuscocincta subspp. pp. 130–131, subsp. *coerulea* Sauss. (= var. *iberica* Bol., *portugalis*) p. 130; *germanica* subspp. pp. 131–132, subsp. *germanica* (= *miniata* subsp. *intermedia* Ramme) p. 131; subsp. n. *pyrenaica*, ab. n. *cyaneascens* Pyrenees p. 132, UVAROV Ann. Mag. n.H. (10) 18.—*O. miniata* var. n. *diversipicta* Aegean Is. p. 177 figs., JANNONE Boll. Lab. Zool. Portici 29.

Omocestus burri sp. n. Spain p. 378, UVAROV Ann. Mag. n.H. (10) 18.

Oxyrrhypes meyeri sp. n. Celebes p. 371 fig., WILLEMSE Livre jubil. Bouvier 1936.

Paracinema revision pp. 379–400, *tricolor* synonymy, key to subspp. p. 380, subspp. n. *madecassa* Madagascar p. 391, *montana* Abyssinia p. 390, *sudanensis* Sudan p. 389 figs., KEY Trans. R. ent. Soc. Lond. 85.

Parasphena yemenita sp. n. Arabia p. 546, UVAROV J. Linn. Soc. Lond. (Zool.) 39

Peakesia soror further descr. p. 115; *almadenensis* sp. n. N. Queensland p. 118 fig., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Peitharchicus re-description p. 199, *flavolineata* sp. n. Borneo p. 200, WILLEMSE Ent. Ber. 9.

Penichrotes strigilifer sp. n. S. Rhodesia p. 153 fig., MILLER Proc. R. ent. Soc. Lond. (B) 5.

Perakia re-description p. 12, borneensis p. 15, siebersia, bettotania spp. n. Borneo p. 16, key p. 16 figs., WILLEMSE Natuurh. Maandbl. 25.

Perelytrana gen. n., rana sp. n. New South Wales p. 146 figs., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Perloccia gen. n. for *Maclystria evitata* Sjöst. (type), simplex sp. n. Queensland, p. 150, SJÖSTEDT t.c.

Pezotettix lagoi p. 199, silvestrii p. 201, spp. n. Aegean Is. figs., JANNONE Boll. Lab. Zool. Portici 29.

Phaulacridium pullum, bicolor spp. n. New South Wales p. 132 fig., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Platypterna obsoleta sp. n. Arabia p. 537 fig., UVAROV J. Linn. Soc. Lond. (Zool.) 39.—*P. turanica* p. 292, mistshenkoi p. 294, spp. n. Turkmenia figs., BEI-BIENKO Ann. Mag. n.H. (10) 18.

Podisma frigida var. n. kamtschatkae Kamtschatka p. 16, SJÖSTEDT Ark. Zool. 28A 1935 no. 7.—*P. glacialis* var. n. amplicerca Virginia p. 147 fig., CAUDELL & ALLARD Proc. ent. Soc. Wash. 38.—*P. lofaoshana* sp. n. S. China p. 405, transferred to *Miramella* p. 649 figs., TINKHAM Lingnan Sci. J. 15.—*P. rosaceanum* see *Niitakacris*.

Praxibulus laminatus ♀ New South Wales p. 76, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Prionolopha daguerrei sp. n. Argentina p. 35, LIEBERMANN Rev. Soc. ent. Argent. 7 1935.

Pseudocranae type *loriae* Bol. not jucunda Br. p. 204, WILLEMSE Ent. Ber. 9.

Pseudothericles porcellus sp. n. S. Rhodesia p. 154 fig., MILLER Proc. R. ent. Soc. Lond. (B) 5.

Pycnodietya gracilis sp. n. Arabia p. 543 fig., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Pyrgomorpha agarena var. n. ifniensis N.W. Africa p. 418, BOLIVÁR Eos 11.

Pyrgomorphella rotundata sp. n. Arabia p. 545 fig., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Repratella gen. n., variegata sp. n. N. Queensland p. 135, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Ribullata gen. n., mirabilis sp. n. Queensland p. 78, SJÖSTEDT t.c.

Spathosternum sinense Uv. a race of *prasiniferum* Wlk. p. 47, characters p. 48 figs., TINKHAM Lingnan Sci. J. 15.

Sphingonotus insularis sp. n. Cyprus p. 513 fig., UVAROV Ann. Mag. n.H. (10) 18.—*S. rubescens* subsp. n. burri Cape Verde Is. p. 94, CHOPARD Rev. franç. Ent. 3.—*S. crivellarii* sp. n. Aegean Is. p. 190 figs., JANNONE Boll. Lab. Zool. Portici 29.

Sphodromerus rathjensi sp. n. Arabia p. 548, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Stenohippus arabicus sp. n. Arabia p. 540, UVAROV t.c.

Thericles asellus sp. n. S. Rhodesia p. 154 fig., MILLER Proc. R. ent. Soc. Lond. (B) 5.

Thisoecetrus rantae sp. n. Arabia p. 549, UVAROV J. Linn. Soc. Lond. (Zool.), 39.—*T. brevipes* sp. n. N.W. Africa p. 416 fig., BOLIVÁR Eos 11.

Utubius gen. n., zahrae sp. n. Arabia p. 544 figs., UVAROV J. Linn. Soc. Lond. (Zool.) 39.

Valanga soror p. 159, rubrispinarum p. 160, spp. n. Queensland, SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Wernerella pachecoi var. n. dimidiata N.W. Africa p. 404, BOLIVÁR Eos 11.

Xanterriaria concolor further description p. 109 figs., SJÖSTEDT K. svenska VetenskAkad. Handl. (3) 15 1935 no. 2.

Xerophlaeoba gen. n. for *Cymochtha deserticola* Krauss p. 538, UVAROV J. Linn. Soc. Lond. (Zool.) 39.

TETRIGIDAE.

List of Acrydiinae from Dutch New Guinea, GÜNTHER Nova Guinea 17 Zool. pp. 344–352, 21 figs.

Criolettia superfluous p. 344, tenuis p. 345, spp. n. New Guinea figs., GÜNTHER Nova Guinea 17 Zool.

Eugavalidium formosanum sp. n.
Formosa p. 207, TINKHAM Trans. n.H.
Soc. Formosa 26.

Euloxilobus gen. n. *hilli* sp. n. N.
Queensland p. 7, SJÖSTEDT K. svenska
VetenskAkad. Handl. (3) 15 1935 no. 2.

Hancockia kwangtungensis sp. n.
China p. 402, TINKHAM Lingnan Sci. J.
15.

Hedotettix alienus sp. n. Arabia p.
553, fig., UVAROV J. Linn. Soc. Lond.
(Zool.) 39.

Mazarredia reducta sp. n. New Guinea
p. 348 figs., GÜNTHER Nova Guinea 17
Zool.

Palaisioscaria gen. n. for *Saussurella*
calosoma Gthr. p. 351, GÜNTHER t.c.

Paratettix gentilis, difficilis spp. n. New
Guinea p. 350 figs., GÜNTHER Nova
Guinea 17 Zool.—*P. ocellatus* sp. n.
Arabia p. 552, UVAROV J. Linn. Soc.
Lond. (Zool.) 39.—*P. longipennis* p. 11,
albolimbatus p. 12, *histrion* p. 13, *pro-*
ductus p. 14, *latifastigi*, *gibbus* p. 15,
mediocris, curvinotum p. 12, *crassus* p.
14, *biplagiatus* p. 13, spp. n. Australia,
SJÖSTEDT K. svenska VetenskAkad.
Handl. (3) 15 1935 no. 2.

Saussurella calosoma see *Palaisios-*
caria.

Systolederus affinis sp. n. New Guinea
p. 347 figs., GÜNTHER Nova Guinea 17
Zool.

Thoradonta nodulosa Stål (= *spiculoba*
Hanc.) p. 75, GÜNTHER Tijdschr. Ent.
79.

COLLEMBOLA.

British Tullbergiinae, II, BAGNALL
Ent. mon. Mag. 72 pp. 34-40, 8 figs.

Collembola from W. Spitsbergen,
BROWN Ent. mon. Mag. 72 pp. 62-65.

Some Collembola from Lapland,
BROWN Ann. Mag. n.H. (10) 17 pp.
610-617.

Collembola from Grimsey I., N. Ice-
land, DAVIES Ent. mon. Mag. 72
pp. 86-89.

Collembola collected in India, DENIS
Mem. Conn. Acad. Arts Sci. 10 pp.
261-282, 60 figs.

Collembola of Mozambique, DENIS
Mem. Mus. zool. Univ. Coimbra (I) no.
83 1935 6 pp., 7 figs.

Collembola of basin of N. Donets
Riv., KEL'SHTEIN Trav. Soc. Nat.
Charkow 52 1929 pp. 243-248.

Collembola of Charkow region,
KEL'SHTEIN Trav. Soc. Nat. Charkow
53 1930 pp. 76-78.

Collembola of Spitzbergen, LINNANI-
EMI Ann. Ent. Fenn. 1 1935 pp. 137-
141.

List of Collembola of N.-E. Greenland,
LINNANIEMI Skr. Svalb. Ishavet 65
1935 pp. 19-25, 1 map.

Collembola of N. Zealand, WOMERS-
LEY Trans. roy. Soc. N.Z. 66 pp. 316-
328, 2 figs.

Achorutes cirratus Schött a var. of
hirtellus Börn. p. 209; *h.* var. n.
schötti Australia p. 210, WOMERSLEY
Trans. Proc. R. Soc. S. Aust. 59 1935.—
A. sinister sp. n. France p. 353, DENIS
Bull. Soc. H.n. Toulouse 67 1935.

Arrhopalites aurantiaca sp. n. S.
Australia p. 218 fig., WOMERSLEY
Trans. Proc. R. Soc. S. Aust. 59 1935.

Astephanus denisi sp. n. Australia p.
215 fig., WOMERSLEY t.c.

Brachystomella granulata sp. n.
Australia p. 207 figs., WOMERSLEY
t.c.

Chaetoceras Handsch. discussed, *pritch-*
ardi sp. n. N. Zealand p. 324 figs.,
WOMERSLEY Trans. roy. Soc. N.Z.
66.

Cyphoderus jugoslavicus sp. n. Jugo-
slavia p. 271 figs., DENIS Ann. Soc. ent.
Fr. 105.

Dinaphorura diversispina Australia,
novae-zealandae N. Zealand, spp. n. p.
213 figs., WOMERSLEY Trans. Proc. R.
Soc. S. Aust. 59 1935.

Entomobrya pazaristei sp. n. Mace-
donia p. 265 figs., DENIS Ann. Soc. ent.
Fr. 105.—*E. hutchinsoni* sp. n. Ind.
Tibet p. 282 figs., DENIS Mem. Conn.
Acad. Arts Sci. 10.

Folsomia sensibilis sp. n.; *diploph-*
thalma var. n. *tetraphthalma* Czecho-
slovakia p. 3, KSENNEMAN Acta Soc. Sci.
nat. morav. 9 1934 no. 8.

Friesea excelsa sp. n. Tibet p. 261 figs., DENIS Mem. Conn. Acad. Arts Sci. 10.

Heteromurus gradgensis sp. n. Macedonia p. 263, DENIS Ann. Soc. ent. Fr. 105.

Hypanurida flavescens sp. n. Czechoslovakia p. 3, KSENEMAN Acta Soc. Sci. nat. morav. 9 1934 no. 8.

Isotoma decemoculata sp. n. S. Australia p. 216 fig., WOMERSLEY Trans. Proc. R. Soc. S. Aust. 59 1935.

Katianna pescotti sp. n. Queensland p. 218 fig., WOMERSLEY t.c.

Lepidocyrtinus queenslandiae sp. n. Queensland p. 216 fig., WOMERSLEY t.c.—*L. unifasciatus* sp. n. India p. 269 figs., DENIS Mem. Conn. Acad. Arts Sci. 10.

Lepidocyrtus serbicus p. 268, *joupani* p. 269, spp. n. Macedonia figs., DENIS Ann. Soc. ent. Fr. 105.

Megalothorax remyi sp. n. Jugoslavia p. 274 figs., DENIS t.c.

Mesira brunnea sp. n. Queensland p. 217 fig., WOMERSLEY Trans. Proc. R. Soc. S. Aust. 59 1935.

Metaphorura gen. n. (Tullberginae), *borneri* sp. n. Scotland p. 36 figs., BAGNALL Ent. mon. Mag. 72.

Neonaphorura anglicanus sp. n. England p. 38, BAGNALL t.c.

Neotullbergia laingi sp. n. Scotland p. 35 fig., BAGNALL t.c.

Odontella trispina sp. n. S. Australia p. 208 figs., WOMERSLEY Trans. Proc. R. Soc. S. Aust. 59 1935.

Oncopodura reyersdorfensis sp. n. Silesia p. 132 figs., STACH Mitt. Höhlen- u. Karstf., Berlin 1936.

Onychiurus subambulans p. 32, *hussoni* p. 34, *ortus* p. 36, *antheuili* p. 82, spp. n. France; key p. 38 figs., DENIS Bull. sci. Bourgogne 5.—*O. bertrandi* sp. n. Mt. Blanc p. 142, DENIS Rev. franç. Ent. 3.

Paranura australasiae sp. n. Australia p. 208 figs., WOMERSLEY Trans. Proc. R. Soc. S. Aust. 59 1935.

Parasira subornata sp. n. Kashmir p. 267 figs., DENIS Mem. Conn. Acad. Arts Sci. 10.

Paratullbergia macdougalli sp. n. Scotland p. 37 figs., BAGNALL Ent. mon. Mag. 72.

Polyacanthella parva sp. n. N. Zealand p. 317, WOMERSLEY Trans. roy. Soc. N.Z. 66.

Proisotoma brisbanensis sp. n. Queensland p. 215 fig., WOMERSLEY Trans. Proc. R. Soc. S. Aust. 59 1935.—*P. ladaki* sp. n. Kashmir p. 262 figs., DENIS Mem. Conn. Acad. Arts Sci. 10.

Pseudochorutes pacificus, *novae-zealandiae* spp. n. N. Zealand p. 318 figs., WOMERSLEY Trans. roy. Soc. N.Z. 66.

Pseudanurophorus list and key to spp. pp. 5-8; *binoculatus* sp. n. Switzerland p. 1 figs., KSENEMAN Acta Soc. Sci. nat. morav. 9 1934 no. 8.

Pseudosinella kemneri sp. n. Sweden p. 27 figs., AGRELL Opusc. ent. Lund. 1.

Salina dubiosa sp. n. S. India p. 275 fig., DENIS Mem. Conn. Acad. Arts Sci. 10.

Sira brahamides Kashmir p. 265, *nilgiri* Nilgiri Hills p. 266 spp. n. figs., DENIS t.c.

Sminthurides pauliani sp. n. France p. 127, DENIS Bull. Soc. ent. Fr. 41.

Stenaphorura absoloni sp. n. Scotland p. 40, BAGNALL Ent. mon. Mag. 72.

Tullbergia gambiense sp. n. S. Australia p. 211 figs., WOMERSLEY Trans. Proc. R. Soc. S. Aust. 59 1935.

Xenylla lesnei sp. n. Mozambique p. 1 figs., DENIS Mem. Mus. zool. Univ. Coimbra (1) no. 86 1935.

THYSANURA.

Thysanura of Charkow region, KEL'SHTEIN Trav. Soc. Nat. Charkow 53 1930 pp. 75-76.

Thysanura collected in India, SILVESTRI Mem. Conn. Acad. Arts Sci. 10 pp. 253-259, 36 figs.

Entotrophi of Warmbad Villach, Kärnten, STRONHAL Festschr. E. Strand 1 pp. 519-529.

Anajapyx vesiculosus var. n. guineensis Fr. Guinea p. 72 figs., SILVESTRI Boll. Lab. Zool. Portici 30.

Campodea frigillis p. 6, *oregonensis* p. 7, *montanensis* p. 8, *utavensis*, *centralis* p. 9, spp. n. U.S.A. figs., HILTON J. Ent. Zool. 23.—*C. augens* sp. n. Kärnten p. 529 figs., SILVESTRI Festschr. E. Strand 1.

Indjapyx harrisoni S. India p. 253, *petrunkevitchi* Kashmir p. 255, spp. n. figs., SILVESTRI Mem. Conn. Acad. Arts Sci. 10.

Japyx taxonomy of Bulgarian spp. pp. 14–26 fig., KOSAROFF Zool. Anz. 113.

Machilanus hutchinsoni sp. n. India p. 259 figs., SILVESTRI Mem. Conn. Acad. Arts Sci. 10.

Metamachilis gen. n. (Machilidae) p. 111, *pieli* sp. n. China p. 113 fig., SILVESTRI Notes Ent. chin., Mus. Heude 3.

Pedetontus savioi p. 103, *bianchii* p. 105 (with var. n. *centralis* p. 107), *fukiensis* p. 109, spp. n. China figs., SILVESTRI t.c.

Projapyx congruens Fr. Guinea, Kamerun p. 47, *brasiliensis* Brazil p. 49, spp. n. figs., SILVESTRI Boll. Lab. zool. Portici 30.

Symphylurinus peregrinus p. 56, *simplex* p. 58 Argentina, *occidentalis* Gambia, Nigeria p. 59, *discretus* p. 61, *travassosi* p. 64, *paratus* p. 68 Brazil, *tristanii* Costa Rica p. 66, *perceptus* Gambia p. 70, spp. n. figs., SILVESTRI t.c.

Tachycampa gen. n. (Campodeidae), *lepineyi* sp. n. Morocco p. 86 figs., SILVESTRI Bull. Soc. Sci. nat. Maroc 16.

PROTURA.

Synonymy and synopsis of Protura, EWING Proc. biol. Soc. Wash. 49 pp. 159–166.

Taxonomy of Protura, IONESCU C.R. Acad. Sci. Roumanie 1 reprint 5 pp.

Acerentulus sexspinus sp. n. S. Australia p. 65 figs., WOMERSLEY Ent. mon. Mag. 72.—A. auct. see *Proturentomon*.

Meroentomon see *Proturentomon*.

Paraentomon see *Proturentomon*.

Protentomon see *Proturentomon*.

Proturentomon Silv. (= *Acerentulus* auct., *Protentomon* Ewing, *Meroentomon* Womersl., *Paraentomon* Wom.), *minimum* Berl. (= *Paraentomon clevedonense* Wom.) p. 212, BAGNALL Ann. Mag. n.H. (10) 17.

ZORAPTERA.

Menonia gen. n., *cochinensis* sp. n. S. India p. 86 figs., GEORGE J. Univ. Bombay 4 no. 5.

FOSSILS.

Paleozoologic insects of the Sarre basin, WATERLOT Ann. Soc. géol. Nord 59 1934 pp. 205–208.

Tracing the dawn of life further backwards, TILLYARD Cawthron Lecture 1935 1936 37 pp. 7 pls. 10 figs. 5 tables.

A new upper triassic fossil insect bed in Queensland, TILLYARD Nature 138 pp. 719–720, 1 fig.

Fossil insects of Sunchal (or Margas Verdes) formation; N. Argentina, COCKERELL Amer. Mus. Novit. no. 886 9 pp. 19 figs.

Fossil insect remains in Brazil, LÖFGREN Bol. Serv. geol. min. Brasil 80 p. 28.

Insect fauna of Saar-Carbons, GUTHÖRL Senckenbergiana 18 pp. 82–112, 4 pls., 18 figs.

Fossil tertiary insects of Auvergne, PITON Ins. foss. cinér. randann. d'Auvergne 1933 4 pp. 1 pl.

Fossil insects of Miopliocene, Varennes, PITON Rev. Auvergne 50 no. 2 pp. 17–20.

Fossil insects of Miopliocene in Auvergne, PITON & THÉOBALD Rev. Sci. nat. Auvergne 1 1935 pp. 65-104, 5 pls.

Fossil insects of Oligocenelimestone of Ronzon, Le Puy, MANÉVAL Ann. Soc. linn. Lyon (n.s.) 79 pp. 23-37, 5 figs.

Coleoptera.

Pleistocene Coleoptera of Łęki Dolne, PILZNO, MAKÓLSKI & SMREČZYŃSKI C.R. Acad. Cracovie 1936 no. 6 p. 9.

Apteropoda grossa sp. n. Miopliocene, France p. 77 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Callidium primordiale sp. n. Miopliocene, France p. 78 fig., PITON t.c.

Carabites (Carabidae) *harringtoni* sp. n. N. Argentina p. 4 fig., COCKERELL Amer. Mus. Nov. no. 886.

Carabus foveolatus sp. n. Miopliocene, France p. 66 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Cassida dufouri sp. n. Auvergne p. 18 fig., PITON Rev. Sci. Bourbonn. 1936.

Ceutorhynchus chambonensis sp. n. Miopliocene, France p. 81 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Chrysomela rudeli sp. n. Oligocene, Gaube, p. 81, PITON Bull. mens. Soc. inn. Lyon (N.S.) 5.

Coniatus scudderi sp. n. Miopliocene, France p. 82 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Cryptophagus minimus sp. n. Miopliocene, France p. 75 fig., PITON t.c.

Curculionites angustior, *sunchalicus latiusculus* p. 6, *eustictus*, *microstictus*, *epistictus* p. 8, *megastictus*, *parastictus*, *magdalinus* p. 9, spp. n. N. Argentina figs., COCKERELL & WAGNER Amer. Mus. Nov. no. 886.

Damarsilia martyi sp. n. Miopliocene, France p. 66 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Donacia antiqua sp. n. Miopliocene, France p. 77 fig., PITON t.c.—*D. splendida*, *tenuipunctata* spp. n. Miopliocene, France p. 76 figs., THÉOBALD t.c.

Hister pitoni sp. n. Miopliocene, France p. 74 fig., THÉOBALD t.c.

Lachnopus robustus sp. n. Miopliocene p. 78 fig., THÉOBALD t.c.

Larinus pici sp. n. Miopliocene, France p. 80 fig., PITON t.c.

Lebia (Carabidae) *harrelli* sp. n. N. Argentina p. 4, COCKERELL Amer. Mus. Nov. no. 886.—*L. minuscula* sp. n. amber, Lac Chambon p. 21, PITON Rev. sci. Bourbonn. 1936.

Melasoma micropunctata sp. n. Miopliocene, France p. 77 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Melolonthites laterosinuatus sp. n. Miopliocene, France p. 78 fig., PITON t.c.

Mimema see *Mimemala*.

Mimemala n. n. for *Mimema* Handl. nec Woll. p. 169, STRAND Folia zool. hydrobiol. 9.

Mylabris punctatissima sp. n. Miopliocene, France p. 67 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Nebria fossilis sp. n. Miopliocene, France p. 74 fig., PITON t.c.

Otiorynchites (Curculionidae) *crassus* sp. n. N. Argentina p. 6 fig., COCKERELL & WAGNER Amer. Mus. Nov. no. 886.—*O. heribaudi* sp. n. Oligocene, Puy de Mur p. 79, PITON Bull. Mens. Soc. linn. Lyon (N.S.) 5.

Pachylobius (Curculionidae) *yungi* sp. n. Oligocene, Gaube p. 81, PITON t.c.

Peltis minuscula sp. n. Miopliocene, France p. 90 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Phyllobius incertus sp. n. Miopliocene, France p. 79 fig., THÉOBALD t.c.

Phytonomus incertus sp. n. Miopliocene, France p. 81 fig., THÉOBALD t.c.

Podabrus santaritensis sp. n. N. Argentina p. 5 fig., COCKERELL Amer. Mus. Nov. no. 886.

Rhinocyllus marmoreus sp. n. Miopliocene, France p. 79 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Sphenophorus elegans sp. n. Miopliocene, France p. 67 fig., THÉOBALD t.c.

Tanymecus (Curculionidae) *gautieri* sp. n. Oligocene, Gaube p. 81, PITON Bull. mens. Soc. linn. Lyon (N.S.) 5.

Trichodes (Cleridae) *stebingeri* sp. n. N. Argentina p. 5 fig., COCKERELL Amer. Mus. Nov. no. 886.

Troglops punctatissima sp. n. Miopliocene, France p. 75 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Hymenoptera.

Phylogeny of social bees, STATZ Wiss. Mitt. Ver. Natur.-u. Heimatk. Köln 1 1931 pp. 39-60, 11 figs.

Camponotus obesus sp. n. Miopliocene, France, p. 68 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Formica cantalica p. 68, *auxillacensis* p. 91 spp. n. Miopliocene, France figs., PITON t.c.—*F. pitoni* p. 82, *maculipennis* p. 91 spp. n. Miopliocene, France figs., THÉOBALD t.c.

Lasius crispus p. 68, *chambonensis* p. 82, spp. n. Miopliocene, France figs., THÉOBALD t.c.

Synapis (Apidae) *kaschkei* sp. n. Rott in Siebengebirge p. 50 figs., STATZ Wiss. Mitt. Ver. Natur.-u. Heimatk. Köln 1 1931.

Lepidoptera.

Amber Lepidoptera, REBEL Iris 49 pp. 162-186, 1 pl.

Errors in fossil investigations on glacial and xerothermic Lepidoptera, SCHULTZ Arb. phys. angew. Ent. Berl. 3 pp. 259-262.

Micropteryx proavittella sp. n. amber p. 185 fig., REBEL Iris 49.

Prophalonia gen. n., *gigas* (type) p. 167, *acutitarsella* p. 168, spp. n. amber figs., REBEL Iris 49.

Zygaena miocaenica sp. n. Miocene, Suabia p. 556 figs., REISS Ent. Rdsch. 53.

TINEIDAE.

Adelites serraticornella p. 183, *purpurascens* p. 184, spp. n. amber figs., REBEL Iris 49.

Argyresthites balticella sp. n. amber p. 174 fig., REBEL Iris 49.

Borkhausenites incertella p. 178, *angustipennella* p. 179, *vulneratella* p. 180, *implicatella*, *vicinella* p. 181, *ingentella*, *crassella* p. 182, spp. n. amber figs., REBEL Iris 49.

Depressarites gen. n. (Oecophoridae) *levipalpella* (type) p. 176, *blastuliferella* p. 177, spp. n. amber figs., REBEL Iris 49.

Epinomeuta gen. n. (Hyponomeutidae) *truncatipennella* (type) p. 172, *inversella* p. 173, *acutipennella*, *minorella* p. 174, spp. n. amber figs., REBEL Iris 49.

Lepidopterites gen. n. (no sp.) amber, Lake Chambon p. 17, PITON Rev. Bourbonn. 1936.

Scythropites gen. n. (Hyponomeutidae) *balticella* sp. n. amber p. 169 fig., REBEL Iris 49.

Trichoptera.

Phryganea elegans sp. n. Lac Chambon p. 20, PITON Rev. Sci. Bourbonn. 1936.

Rhyacophilites gen. n., *hydropsychiformis* sp. n. Miopliocene, France p. 176 fig., PITON Ann. Soc. linn. Lyon (N.S.) 78 1935.

Neuroptera.

Revision of Nearctic Raphidiodea, CARPENTER Proc. Amer. Acad. Arts Sci. 71 pp. 89-157, 2 pls. 13 figs.

Chronological list of Tertiary Raphidiodea of North America, CARPENTER Proc. Amer. Acad. Arts Sci. 71 p. 143.

Raphidia creedei sp. n. Miocene, Colorado p. 151 figs., CARPENTER t.c.

Mecoptera.

Bittacopanorpa gen. n. (Neorthophebiidae), *javorskii* sp. n. Kusnetz basin p. 688 figs., ZALESKY Bull. Soc. géol. Fr. (5) 5.

Diptera.

Fossil and living Nemestrinidae compared, BEQUAERT & CARPENTER J. Paleont. 10 pp. 395-409, 11 figs.

Pleistocene Chironomid tufa from Crémien (Isère), EDWARDS Proc. Geol. Ass. London 47 pp. 197-198, 1 pl.

Fossil Psychodid pupae from Upper Miocene fresh-water chalk, Germany, SEEMANN Jh. Ver. vaterl. Naturk. Württemb. 91 1935 pp. 19-21, 2 figs.

Bibio aymardi sp. n. (= *Dichaneurum infoosum* Aym. 1855 + *D. primaevum* Aym. 1855 nomina nuda) Oligocene limestone, France p. 34 figs., MANEVAL Ann. Soc. linn. Lyon (N.S.) 79.—*B. joursacensis* sp. n. Miopliocene, France p. 69 fig., THÉOBALD Rev. Sci. nat. Auvergne 1 1935.

Chironomus pliogenicus sp. n. Miopliocene, France p. 86 fig., PITON t.c.

Chrysotus stanciui sp. n. Amber, Rumania p. 211 figs., PARENT Rev. franç. Ent. 3.

Culicites arvernensis sp. n. Auvergne p. 17 fig., PITON Rev. sci. Bourbonn. 1936.

Dichaneurum infossum, *primaevum* see Bibio.

Dicranoptycha lignitica sp. n. coal, Siebengebirge p. 99 fig., STATZ Wiss. Mitt. Ver. Nat.-u. Heimatk. Köln 1 1934.

Elephantomyia weigandi sp. n. coal, Siebengebirge p. 97 figs., STATZ t.c.

Limnobia horioni, *antiqua* spp. n. coal, Siebengebirge p. 98 figs., STATZ t.c.

Limnophila veterana, *robusta* p. 102, *pterotrichia* p. 103 spp. n. coal, Siebengebirge figs., STATZ t.c.

Limnophilus antiquus fig. p. 18, PITON Rev. Sci. Bourbonn. 1936.

Mycetophila plumiliformis sp. n. Miopliocene, France p. 84 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Plecia vergnei sp. n. Miopliocene, France p. 86 fig., PITON t.c.

Simulium oligogenicum sp. n. Baltic amber p. 353 fig., RUBTZOV C.R. Acad. Sci. U.R.S.S. (N.S.) 2.

Tipula maclurei var. n. *chervini* Miopliocene, Auvergne p. 38, PITON Bull. Soc. H.n. Auvergne 22 1934.—*T. maxima* sp. n. coal, Siebengebirge p. 95 figs., STATZ Wiss. Mitt. Ver. Nat.-u. Heimatk. Köln 1 1934.

Trichocera miocaenica sp. n. coal, Siebengebirge p. 100 fig., STATZ t.c.

Ula rottensis sp. n. coal, Siebengebirge p. 100 fig., STATZ t.c.

Hemiptera.

Acanthosoma joursacensis sp. n. Auvergne, Tertiary pp. 3, 4 fig., PITON Ins. foss. cinér. randann. Auvergne 1933.

Aphrophora maculata sp. n. Menat, Eocene p. 94 fig., PITON Misc. ent. 37.

Cicadellites theobaldi sp. n. Miopliocene, France p. 90 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Coreites dubius sp. n. Miopliocene, France p. 88 fig., PITON t.c.

Cydropsis scutellaris var. n. *minima* Auvergne, Tertiary pp. 3, 4 fig., PITON Ins. foss. cinér. randann. Auvergne 1933.—*C. gangeardi* sp. n. Oligocene, Puy de Mur p. 79, PITON Bull. mens. Soc. linn. Lyon (N.S.) 5.

Lygaeus arvernus sp. n. Auvergne, Tertiary pp. 3, 4 fig., PITON Ins. foss. cinér. randann. Auvergne 1933.

Meunieria gen. n. (Cicadid), *haupti* sp. n. Menat, Eocene p. 93 figs., PITON Misc. ent. 37.

Naucoris crassus sp. n. Miopliocene, France p. 90 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Nezara subtropicalis sp. n. Auvergne, Tertiary pp. 3, 4 fig., PITON Ins. foss. cinér. randann. Auvergne 1933.

Pachymerus grassei sp. n. Miopliocene, France p. 89 fig., PITON Rev. Sci. nat. Auvergne 1 1935.

Pentatoma magna sp. n. Miopliocene, France p. 87 fig., PITON t.c.—*P. chambonensis* sp. n. Auvergne, Tertiary pp. 3, 4 fig., PITON Ins. foss. cinér. randann. Auvergne 1933.

Plecoptera.

Megaleuctra neavei sp. n. Prussia middle Tertiary amber p. 259, RICKER Canad. Ent. 67.

Dermaptera.

Mesoforicula gen. n. p. 107, *sinkianensis* sp. n. Jurassic, Sinkiang p. 108 fig., PING Chinese J. Zool. 1 1935.

Orthoptera and Protorthoptera.

Fossil Orthoptera of amber and copal, CHOPARD Ann. Soc. ent. Fr. 105 pp. 375–386, 13 figs.

Fossil Tympanophorinae, ZEUNER Trans. R. ent. Soc. Lond. 85 pp. 287–302, 2 pls.

Amusurgus africanus sp. n. E. Africa, Pleistocene p. 383 fig., CHOPARD Ann. Soc. ent. Fr. 105.

Eomortoniellus gen. n., *handlirschi* sp. n. Lower Oligocene amber, E. Prussia p. 291 figs., ZEUNER Trans. R. ent. Soc. Lond. 85.

Gryllites vocalis sp. n. N. Argentina p. 9 fig., COCKERELL Amer. Mus. Nov. no. 886.

Heterotrypus septentrionalis sp. n. Germany, Oligocene p. 380 fig., CHOPARD Ann. Soc. ent. Fr. 105.

Lipotactes discussed p. 296, *martynovi* sp. n. Lower Oligocene amber, E. Prussia p. 297 fig., ZEUNER Trans. R. ent. Soc. Lond. 85.

Madasumma europensis sp. n. Germany, Oligocene p. 381 fig., CHOPARD Ann. Soc. ent. Fr. 105.

Menatacridrum gen. n., *cocenicum* [*ecenicum* on pl.] sp. n. Tertiary, Auvergne p. 78 fig., PITON Misc. Ent. 37.

Ottweileria gen. n., *schmidti* sp. n. Saar-carbons p. 103 figs., GUTHÖRL *Senckenbergiana* 18.

Ottweileridae fam. n. p. 103, GUTHÖRL t.c.

Prorhaphidophora gen. n. p. 163, *zeuneri* p. 164, *antiqua* (type) p. 166, spp. n. Prussia, Oligocene figs., CHOPARD Livre jubil. Bouvier 1936.—*P. tachycinoides* sp. n. Germany, Oligocene p. 376 fig., CHOPARD Ann. Soc. ent. Fr. 105.

Rhichnogrillus zeuneri sp. n. E. Africa, Pleistocene p. 385 fig., CHOPARD t.c.

Stenogryllodes gen. n., *brevipalpis* sp. n. Germany, Oligocene p. 382 fig., CHOPARD t.c.

Trichogryllus gen. n. *macrocerus* sp. n. Germany, Oligocene p. 378 fig., CHOPARD t.c.

Zeunera gen. n., *madeleineae* sp. n. Tertiary, Auvergne p. 77 figs., PITON Misc. Ent. 37.

Thysanoptera.

Permothripidae fam. n. p. 333, MARTYNOV C.R. Acad. Sci. U.R.S.S. (N.S.) 3 1935.

Thysanoptera of potash of Upper Rhine, PRIESNER & QUIÉVREUX Bull. Soc. géol. Fr. (5) 5 pp. 471–477, 2 pls.

Aeolothrips extinctus sp. n. potash, Upper Rhine p. 473 figs., PRIESNER & QUIÉVREUX Bull. Soc. géol. Fr. (5) 5.

Frankliniella oligocaenica sp. n. potash, Upper Rhine p. 474 figs., PRIESNER & QUIÉVREUX t.c.

Permothrips gen. n. (Permothripidae), *longipennis* sp. n. Permian, Kungur District p. 334 figs., MARTYNOV C.R. Acad. Sci. U.R.S.S. (N.S.) 3 1935.

Ephemeroptera.

Ephemeropsis tingi sp. n. Jurassic, Sinkiang p. 109 fig., PING Chinese J. Zool. 1 1935.

Mesonetopsis gen. n. p. 112, *zeni* sp. n. Jurassic, Sinkiang p. 113 fig., PING t.c.

Sinoephemera gen. n., *kingi* sp. n. Jurassic, Sinkiang p. 111 fig., PING t.c.

Odonata.

Lestes grandis sp. n. Tertiary of Rott in Siebengebirge p. 11 figs., STATZ Wiss. Mitt. Ver. Natur.- u. Heimatk. Köln 1 1930.

Megasemum gen. n. (Libellulidae) (= *Megasemum* Aym. 1855 nom. nud.), *ronzonense* sp. n. (= *ronzonense* Aym. 1855 nom. nud.) oligocene limestone, France p. 23 figs., MANEVAL Ann. Soc. linn. Lyon (n.s.) 79.

Isoptera.

Nests of Isoptera in Upper Pleistocene in Stanley pool, Belgian Congo, COLETTE Bull. Soc. belge Géol. 45 pp. 309–348, 22 figs.

Calotermes rottensis p. 12, *sophiae* p. 13 spp. n. Tertiary of Rott in Siebengebirge Mts. figs., STATZ Wiss. Mitt. Ver. Natur.- u. Heimatk. Köln 1 1930.

Protoperlaria.

Lemmatophoropsis gen. n. (Lemmatophoridae), *sibirica* sp. n. Kusnetsk basin, p. 691 figs., ZALESKY Bull. Soc. géol. Fr. (5) 5.

ERRATA.

- Vol. lii, 1915, p. 225, 1st col., *Limnophilus congener* is not a new species.
- Vol. lxiv, 1927, p. 162, 2nd col., last line, for "53" read "33"
- Vol. lxv, 1928, p. 328, 1st col., for "*Ceralolophana*" read "*Ceratolophana*"
- Vol. lxvi, 1929, p. 71, no. 1506, for "Lindiger" read "Lindinger"
- Vol. lxvi, 1929, p. 392, 1st col., line 35, for "9" read "8"
- Vol. lxvii, 1930, p. 13, no. 155 and p. 413, 2nd col., 13 lines from end, for "Allg. Zool." read "Syst."
- Vol. lxix, 1932, p. 228, 1st col., 7 lines from end for "*Paracorssidius*" read "*Paracrossidius*"
- Vol. lxix, 1932, p. 228, 2nd col., line 1, for "HEYROVSKY" read "BALTHASAR"
- Vol. lxx, 1933, p. 341, 2nd col., 20 lines from end and p. 342, 1st col., 15 lines from end, for "BANKS" read "CARPENTER"
- Vol. lxxi, 1934, p. 31, no. 510, for "1935" read "1934"
- Vol. lxxi, 1934, p. 234, 2nd col., line 20, after "1896" insert "p. 75"
- Vol. lxxi, 1934, p. 450, 2nd col., 4 lines from end, for "KEMNER" read "HOLMGREN"
- Vol. lxxii, 1935, p. 60, no. 1141a, 2nd col., for "Heft" read "Hfte."
- Vol. lxxii, 1935, p. 219, 1st col., transfer lines 5 and 6 from end (*arabicus*—spp. n. to *Philonthus*).
- Vol. lxxii, 1935, p. 333, 1st col., 8 lines from end, for "Int. ent. Z." read "Ent. Z."
- Vol. lxxii, 1935, p. 341, 1st col., line 9, for "*lomydellus*" read "*molydellus*"
- Vol. lxxii, 1935, p. 347, 1st col., 9 lines from end, for "584" read "588"
- Vol. lxxii, 1935, p. 390, 1st col., 2 lines from end, for "YALLOCH" read "MALLOCH" and after "Zool." insert "87."
- Vol. lxxii, 1935, p. 439, 1st col., transfer *Limnophilus* to Trichoptera and after "*Rhyacophilites*" insert "gen. n." and transfer to Trichoptera.
- Vol. lxxii, 1935, p. 439, 2nd col., line 26 and p. 440, 2nd col., last line, for "64" read "164"

I.—TITLES.

1.—**Ärnäck-Christie-Linde, A.** A notable case of relation in *Perophora*. Ark. Zool. Stockholm **28** B 9 1936 pp. 1-6 3 figs.

2.—**Berrill, N. J.** Studies in Tunicate development. Part V. The evolution and classification of Ascidians. Philos. Trans. London (B) **226** 1936 pp. 43-70 40 figs.

Berrill, N. J. *vide* Cohen, A.

3.—**Berrill, N. J. and Cohen, A.** Regeneration in *Clavelina lepadiformis* J. Exp. Biol. Cambridge **13** (3) 1936 pp. 352-362 5 figs.

4.—**Bradway, W.** The experimental alteration of the rate of metamorphosis in the Tunicate, *Clavelina huntsmani* (Van Name). J. exp. Zool. Philadelphia **72** 1936 pp. 213-224 5 figs.

5.—**Brien, P.** La régénération chez les Clavelinidae: leurs rapports avec les Diazonidae. C.R. Congr. Sci. Bruxelles **1930** pp. 825-831 3 figs.

6.—**Choolacheeb, L.** Note on a "sea-squirt" attached to mollusk stakes in the Gulf of Siam. J. Siam Soc. **10** (2) 1936 pp. 170-171.

7.—**Cohen, A. and Berrill, N. J.** The development of isolated blastomeres of the Ascidian egg. J. exp. Zool. Philadelphia **74** 1936 pp. 91-117 4 figs.

Cohen, A. *vide* Berrill, N. J.

8.—**Das, S. M.** On the bionomics and distribution of *Herdmania pallida* Lahille (*Rhabdocynthis pallida* Herdman). Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 307.

9.—**Das, S. M.** On the spicules found in the test and mantle of *Herdmania pallida*. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 308.

10.—**Das, S. M.** On the external characters of *Herdmania pallida*. Proc.

Indian Sci. Congr. Calcutta **22** 1935 p. 308.

11.—**Das, S. M.** On the presence of nerve-cells, nerve-fibres, and receptor-cells in the test of *Herdmania pallida*. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 308.

12.—**Das, S. M.** On the mantle and the atrial cavity of *Herdmania pallida*, with a note on the rôle of the muscles in producing movements in the animal. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 308.

13.—**Das, S. M.** On the neural gland, nerve-ganglion, and dorsal tubercle of *Herdmania pallida*. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 309.

14.—**Das, S. M.** On the anatomy and histology of the alimentary canal of *Herdmania pallida*. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 309.

15.—**Das, S. M.** On the anatomy and histology of the reproductive system of *Herdmania pallida*. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 310.

16.—**Das, S. M.** On the blood-vascular system of *Herdmania pallida* with an account of the histology of the blood. Proc. Indian Sci. Congr. Calcutta **22** 1935 p. 310.

17.—**Das, S. M.** *Herdmania*, a Monascidian of the Indian Seas. India Zool. Mem. on Indian Animal types No. 5. Lucknow **1936**. (See Nature **137** p. 999.)

18.—**Das, S. M.** *Herdmania* (The Monascidian of the Indian Seas). Pp. x + 104 Lucknow **1936** [N.V.]

19.—**Das, S. M.** On the structure and function of the Ascidian test. J. Morph. Philadelphia **59** 1936 pp. 539-601 9 figs.

20.—**Forrest, J. E.** The Natural History of Barra, Outer Hebrides. Proc. phys. Soc. Edinb. **22** 5 1936 pp. 295-296.

21.—Garstang, W. *Spolia Bermudiana*. Proc. Linn. Soc. London 1935-36 (2) 1936 p. 99.

22.—Garstang, W. On a new Appendicularian, *Bathochordaeus* sp., from Bermuda, with a revision of the genus. Proc. Linn. Soc. London 1935-36 (3) 1936 pp. 131-132.

23.—Garstang, W. and Georgeson, E. The Arctic Plankton collected by the Nautilus Expedition, 1931.—III. Report on the Appendicularians. J. Linn. Soc. London 39 1936 pp. 411-412.

24.—George, W. C. The rôle of blood cells in excretion in Ascidians. Biol. Bull. Woods Hole 71 1936 pp. 249-254 1 fig.

Georgeson, E. *vide* Garstang, W.

25.—Grave, C. Metamorphosis of Ascidian larvae. Pap. Tortugas Lab. Carn. Instn. 29 1936 pp. 209-292 2 pls. 1 fig.

26.—Grave, C. and Nicoll, P. A. Further studies of Ascidian metamorphosis. Yearb. Carnegie Inst. Washington 34 1935 pp. 82-84.

27.—Greco, B. La fauna permiana del Sosio. Palaeontogr. ital. Siena 35 1935 [Tunicates pp. 141-147 pls. and figs.].

28.—Gustafson, G. The distribution of *Phoronis mülleri* De Selys Longchamps on the Swedish West Coast. Ark. Zool. Stockholm 28 B no. 1 1935 pp. 1-6.

29.—Huus, J. Ascidiologische Notizen. II. Über den Fund von *Styela atlantica* (Van Name) an der norwegischen Westküste, mit Bemerkungen über die amphatlantische Verbreitung einiger Ascidien. Bergens Mus. Aarb. 1936 5 pp. 1-18 8 figs.

30.—Ihle, J. E. W. and Ihle-Landenberg, M. E. *Cyclosalpa virgula* (Vogt) und *Cyclosalpa komaii* n. sp. Pubbl. Staz. zool. Napoli 15 1936 pp. 274-283 3 figs.

31.—Kapelin, F. F. The anatomy of the Enteropneust *Saccoglossus inkacen-*

sis sp. n. Ann. Natal Mus. P'mburg. 8 (1) 1936 pp. 47-94 25 figs.

32.—Knaben, N. Über Entwicklung und Funktion der Testazellen bei *Corella parallelogramma* Müll. Bergens Mus. Aarb. 1936 (1) pp. 1-33 1 pl. 16 figs.

33.—Konopacki, M. Le rôle de l'épithélium folliculaire et des cellules du test pendant l'oogenèse des Ascidies (*Clavelina lepadiformis* Müll.). C.R. Soc. Biol. Paris 122 (16) 1936 pp. 139-142.

34.—Koo, S. Y. Measurements on velar tentacles of the Amoy Amphioxus. Nat. Sci. Bull. Univ. Amoy 1 1935 pp. 175-178 1 text-fig.

35.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. 2 vols. Jena 1936 [Tunicates pp. 1010-1032 figs.].

Nicoll, P. A. *vide* Grave, C.

36.—Ohuye, T. On the coelomic corpuscles in the body fluid of some invertebrates. III. The histology of the blood of some Japanese Ascidians. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 191-222 12 figs.

37.—Pesson, P. Note de faunistique Armoricaine. (3^e Note.) Bull. Soc. sci. Bretagne 13 (1-2) 1936 [Tunicates p. 84].

38.—Plough, H. H. Intergeneric graft hybrids of *Ecteinascidia* and *Perophora* (Ascidians). Anat. Rec. Philadelphia 67 Suppl. 1 1936 p. 79.

39.—Pourbaix, N. Formation des cavités péribranchiales chez les Polyclinidae. C.R. Congr. Sci. Bruxelles 1930 pp. 832-837 2 figs.

40.—Ravitch-Stcherbo, J. De l'origine bactérienne du pigment rouge de l'*Amphioxus lanceolatum*, cause de sa mort et destruction. Trav. Sta. biol. Sébastopol 5 1936 pp. 287-296 2 figs. [Résumé p. 296.]

41.—Reverberi, G. Analisi de primi momenti dello sviluppo in nova ibride di Ascidie. Pubbl. Staz. Zool. Napoli 15 1936 pp. 175-193 17 figs.

42.—Sato, T. Vorläufige Mitteilung über *Atubaria heterolopha* gen. nov. sp. nov., einen in freiem Zustand aufgefundenen Pterobranchier aus dem Stillen Ozean. Zool. Anz. Leipzig **115** 1936 pp. 97–106 5 figs.

43.—Selys Longchamps, M. de. Un aspect de la torsion de la queue chez les Urochordes. Mém. Mus. Hist. nat. Tuniciers. C.R. Congr. Sci. Bruxelles 1930 pp. 838–840.

44.—Selys Longchamps, M. de. À propos de la torsion de la queue chez les Urochordes. Mém. Mus. Hist. nat. Belg. (2) **3** 1936 pp. 401–405.

45.—Stolte, H. A. Die Herkunft des Zellmaterials bei regenerativen Vorgängen der wirbellosen Tiere. Biol. Rev. Cambridge **11** (1) 1930 [Tunicates pp. 40–42 1 fig.].

46.—Tyler, A. On the energetics of differentiation. III. and IV. Comparison of the temperature coefficients for cleavage and later stages in the development of the eggs of some marine animals. Biol. Bull. Woods Hole **71** 1936 [Tunicates pp. 64–67, 94–95].

47.—van der Horst, C. J. *Planctosphaera* and *Tornaria*. Quart. J. micr. Sci. London **78** (4) 1936 pp. 605–613 3 figs.

48.—Weel, P. B. van. Vital- und Supravitalfärbung verschiedener Organe und Organsysteme von *Amphioxus lanceolatus*. Arch. neerl. Zool. **2** 1936 pp. 160–177 5 figs.

II.—SUBJECT INDEX.

TECHNIQUE.

WEEL, 48.

EVOLUTION.

BERRILL, 2; SELYS LONGCHAMPS, 44.

CLASSIFICATION.

BERRILL, 2.

STRUCTURE.

DAS, 9–19; KAPELIN, 31; KOO, 34; OHUYE, 36; REVERBERI, 41.

PHYSIOLOGY.

DAS, 12, 19; GEORGE, 24; KNABEN 32; TYLER, 46.

DEVELOPMENT.

BERRILL, 2; BRADWAY, 4; COHEN & BERRILL, 7; GRAVE, 25; GRAVE & NICOLL, 26; KNABEN, 32; KONOPACKI, 33; KORSCHULT, 35; POURBAIX, 39 REVERBERI, 41.

ETHOLOGY.

Regeneration, BERRILL & COHEN, 3; BRIEN, 5; STOLTE, 45; hybridization PLOUGH, 38; disease, RAVITCH-STCHERBO, 40.

DISTRIBUTION.

MARINE.

British Isles, FORREST, 20; France, PESSON, 37; Sweden, GUSTAFSON, 28; North Atlantic, HUUS, 29; Arctic, GARSTANG & GEORGESON, 23; Bermuda, GARSTANG, 21, 22; Lourenço Marques, KAPELIN, 31; Indian Ocean, DAS, 8; G. of Siam, CHOOACHEEB, 6; Japan, ÄRNBACK-CHRISTIE-LINDE 1; IHLE & IHLE-LANDENBERG, 30 SATO, 42.

DISTRIBUTION.

FOSSIL.

Permian, GRECO, 27.

III.—SYSTEMATIC INDEX.

TUNICATA.

Bathochordaeus, GARSTANG 22.

Cyclosalpa komaii sp. n. Japan, IHLE & IHLE-LANDENBERG Pubb. Staz. zool. Napoli **15** p. 274 figs. 1–3.

Herdmania pallida structure, etc.,
DAS 9-19.

†*Permosoma tuberculatum* sp. n. Per-
mian Sicily, GRECO Palaeontogr. ital.
Siena 35 1935 p. 146 pl. xii figs. 8-9 pl.
xiii fig. 1.

Perophora orientalis sp. n. Japan,
ÄRNBÄCK-CHRISTIE-LINDE Ark. Zool.
Stockholm 23 B9 p. 1 figs. 1-3.

Styela atlantica distribution, HUUS
29.

HEMICHORDATA

Saccoglossus inhacensis sp. n. Lourenço
Marques, KAPELIN Ann. Natal Mus.
P'mburg 3 1936 p. 47 figs. 1-25.

CEPHALOCHORDATA.

(Vacant.)

PTEROBRANCHIA.

Atubaria gen. n., *heterolopha* sp. n.
Japan, SATO Zool. Anz. Leipzig 115 p.
105 figs. 1-5.

PHORONIDEA.

(Vacant.)

INCERTAE SEDIS.

Planctosphaera VAN DER HORST 47.

XIII. PISCES

BY

E. TREWAVAS, D.Sc.

CONTENTS

| | PAGE |
|------------------------------|------|
| I. TITLES | 2 |
| II. SUBJECT INDEX | 52 |
| III. SYSTEMATIC INDEX | 63 |

I.—TITLES.

1. **Abramowitz, A. A.** Physiology of the melanophore system in the Catfish, *Ameiurus*. Biol. Bull. Woods Hole **71** 1936 pp. 259–281 1 pl.
- 2.—**Abramowitz, A. A.** Action of Crustacean eye-stalk extract on melanophores of hypophysectomized fishes, amphibians and reptiles. Proc. Soc. Exp. Biol. N.Y. **34** 1936 pp. 714–718.
- 3.—**Abramowitz, A. A.** The double innervation of caudal melanophores in *Fundulus*. Proc. Nat. Acad. Sci. Washington **22** 1936 pp. 233–238 6 text-figs.
- 4.—**Abramowitz, A. A.** The non-identity of the neurohumors for the melanophores and the xanthophores of *Fundulus*. Amer. Nat. **70** 729 1936 pp. 372–378.
- 5.—**Acrivo, C.** Über die Neubildung von Kiemenlamellen bei Ganoiden und Teleostiern. Zool. Anz. Leipzig **114** 1936 pp. 101–105 2 text-figs.
- 6.—**Ahl, E.** Ueber eine kleine Sammlung von Süßwasserfischen aus dem Gebiet des Amazonas. Mit. zool. Mus. Berlin **21** 1936 pp. 264–269.
- 7.—**Ahl, E.** Beschreibung dreier neuer Fische der Familie Cichlidae aus Südamerika. SitzBer. Ges. naturf. Fr. Berlin 1936 pp. 138–142.
- 8.—**Ahl, E.** Beschreibung eines neuen Zahnkarpfens aus Westafrika. SitzBer. Ges. naturf. Fr. Berlin 1936 pp. 402–403.
- 9.—**Ahl, E.** Beschreibung neuer Fische der Familie Characidae aus Südamerika. Zool. Anz. Leipzig **114** 1936 pp. 19–26.
- 10.—**Ahl, E.** Beschreibung eines neuen Fisches der Familie Atherinidae aus Celebes. Zool. Anz. Leipzig **114** 1936 pp. 175–177.
- 11.—**Ahl, E.** Beschreibung dreier neuen Welse aus Brasilien. Zool. Anz. Leipzig **116** 1936 pp. 109–111.
- Ahl, E. vide Arnold, J. P.**
- 12.—**Aida, T.** Sex reversal in *Aplocheilichthys latipes* and a new explanation of sex differentiation. Genetics Menasha **21** 1936 pp. 136–153.
- 13.—**Aitken, W. W.** A comparative study of the effects of certain hypnotics on *Lepisosteus osseus* and *Ictalurus punctatus* at different temperatures. Copeia Ann Arbor 1936 pp. 121–122.
- 14.—**Aiyar, R. G.** Mortality of fish of the Madras Coast in June 1935. Curr. Sci. Bangalore **4** 1936 pp. 483–489.
- 15.—**Akita, Y. K.** Studies on the physiology of the swimbladder. I. The secretion of gas in the swimbladder. II. The mechanism of gas secretion. Zool. Mag. Tokyo **48** 1936 pp. 158–162 2 text-figs.
- 16.—**Akita, Y. K.** Studies on the physiology of the swimbladder. III. The absorption of gas in the swimbladder. Zool. Mag. Tokyo **48** 1936 pp. 288–289.
- 17.—**Allis, E. P.** Comparison of the lateral-sensory lines, the snout and the cranial roofing bones of the Stegocephali with those in fishes. J. Anat. London **70** 1936 pp. 293–316, 4 text-figs.
- 18.—**Alm, G.** Die Fischzucht in den grösseren Seen. Verh. int. Vereinig. Limnol. Beograd **7** 2 1935 pp. 357–360.
- 19.—**Alvarado, A. de and Menéndez Puget, L.** Pizarras bituminosas.—Datos obtenidos en el sondeo numero 1 de Puertollans. Bol. Inst. geol. min. España. Madrid **52** 1931 pp. 253–291.
- 20.—**Ameghino, F.** Notes sur les poissons du Patagonien. (Notas sobre los peces de Patagónico.) Obras completas y correspondencia científica de Florentino Ameghino **17** 1934 pp. 383–421 2 text-figs. La Plata.
- 21.—**Amemiya, I.** On the local variation of the Japanese Sardine, *Sardinella melanosticta*, especially on the variation of the number of vertebrae. Abstract [of Suisan Gakkwai Hô **6** No. 1 1934 pp. 1–12, *non vidi*] Japan J. Zool. **6** 1936 p. (79).

22.—Andersson, K. A. The Herring groups in the Skagerak, the Kattegat and the Baltic. Rapp. Cons. Explor. Mer Copenh. 100 Pt. 2 1936 p. 11.

23.—André, M. E. Sur l'alimentation naturelle de la Truite. Bull. Soc. Centr. Aquiculture Paris 43 1936 pp. 67-71.

24.—Anon. Raies géantes en rade de Djibouti. Terre et la Vie Paris 6 1936 pp. 238-240 4 text-figs.

25.—Aquar. Berlin 1936.

26.—Aquarium, Philadelphia. 4-5 1936.

27.—Arambourg, C. Note préliminaire sur les Vertébrés fossiles des phosphates du Maroc. Bull. Soc. géol. Fr. (5) 5 1935 pp. 413-439 pls. xix & xx 2 text-figs.

28.—Arambourg, C. Nouvelles observations sur les faunes et la stratigraphie des phosphates du Maroc. C.R. Séances Soc. Géol. Fr. Paris 1936 pp. 211-212.

29.—Arambourg, C. and Schneegans, D. Les poissons fossiles du bassin sédimentaire du Gabon. C.R. Séances Soc. géol. Fr. 1935 pp. 170-171.

30.—Arambourg, C. and Schneegans, D. Poissons fossiles du bassin sédimentaire du Gabon. Ann. Paléont. Paris 24 4 1936 pp. 137-160 (1-24) 3 pls. 8 text-figs.

31.—Arné, P. Sur deux causes de mortalité peu communes constatées, en 1935, à l'aquarium du Musée de la mer à Biarritz. Bull. Soc. Centr. Aqu. Paris 43 1936 pp. 49-51.

32.—Arnold, J. P. and Ahl, E. Fremländische Süßwasserfische 592 pp. 7 pls. numerous text-figs. Braunschweig 1936.

Asada, T. *vide* Kudo, T.

Astad, A. *vide* Schmidt-Nielsen, S.

33.—Aschaur, G. Eines über *Polycentrus schomburgkii* u. dessen Zucht. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 221-223 1 text-fig.

34.—Athanassopoulos, G. [Sur la présence du thon dans la mer Méditerranée Orientale.] Prakt. Akad. Athens 3 1928 pp. 534-538. [Greek; French summary p. 536.]

35.—Athanassopoulos, G. [La présence des parasites devorants dans les

viviers grecs.] Prakt. Akad. Athens 1 1929 pp. 25-26. [Greek; French summary p. 26.]

36.—Athanassopoulos, G. [Régime alimentaire de quelques poissons de la baie du Phalères]. Prakt. Akad. Athens 4 1929 pp. 42-49. [Greek; French summary p. 48.]

37.—Athanassopoulos, G. Particularités de la distribution de l'ichthyofaune des eaux douces en Grèce. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 117-121.

38.—Athanassopoulos, G. Effets d'abaissement du niveau par dessèchement sur la production piscicole, d'un lac macédonien. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 321-325.

39.—Athanassopoulos, G. La *Muraena unicolor* dans la Méditerranée. Bull. Inst. océanogr. Monaco 691 1936 pp. 1-2.

40.—Athanassopoulos, G. Sur la montée des civelles dans la Méditerranée orientale. Bull. Inst. océanogr. Monaco 692 1936 pp. 1-3.

41.—Athanassopoulos, G. Sur un centre de concentration et de reproduction des poissons de mer dans les eaux helléniques. Bull. Inst. océanogr. Monaco 693 1936 pp. 1-5.

42.—Athanassopoulos, G. Sur un fait curieux de la montée d'anguille. Bull. Inst. océanogr. Monaco 697 1936 pp. 1-7.

43.—Athanassopoulos, G. Sur la montée des civelles. C.R. Acad. Sci. Paris 202 1936 pp. 1204-1206.

44.—Atoka, K. The innervation of the cranial nerves of the Catfish: *Parasilurus asotus* L. Sci. Rep. Tôhoku Univ. (4) 11 1936 pp. 91-113 9 text-figs.

45.—Auer, M. Die Entwicklung der Seitenlinie bei der Regenbogenforelle (*Trutta iridea*). Arch. Entw. Mech. Org. Berlin 135 1936 pp. 253-268 15 text-figs.

46.—Aust, S. Die Epidermis von *Anguilla vulgaris* F. während seiner Entwicklung. Zool. Jahrb. Jena (Anat.) 62 1936 pp. 1-44 20 text-figs.

47.—Avon Biological Research Rep. Southampton 1934-5 1936 126 pp.

48.—Bader, R. Entwicklung und Funktion des Labyrinths von *Macropodus opercularis* L. Zool. Anz. Leipzig 115 1936 pp. 261–268 5 text-figs.

49.—Bader, R. Die Atmung der Labyrinthfische. Bl. Aqu. Terr. 47 1936 pp. 196–198.

50.—Bailey, B. E. The nutritive value of marine products. VII. The vitamin A and D potency of the oils from British Columbia canned salmon. J. biol. Board Canada 2 1936 pp. 431–437.

51.—Bailey, R. J. The osteology and relationships of the Phallostethid fishes. J. Morph. Philadelphia 59 1936 pp. 453–478 pls. i–iv 1 text-fig.

52.—Balé, H. Observations sur un Turbot anormal: *Scophthalmus (Rhombus) maximus* L. (Poisson Téléostéen Pleuronectidé). Bull. Soc. sci. Bretagne 11 1935 pp. 168–176 6 text-figs.

Balkashina, E. J. vide Kirpichnikov, V. S.

53.—Barigozzi, C. La gametogenesi e la sessualità di *Cyprinus carpio* var. *specularis*. Bol. Soc. ital. Biol. sper. 11 1936 pp. 291–292.

54.—Barnes, B. O., Kanter, A. E. and Klawans, A. H. Bitterling ovipositor lengthening produced by adrenal extracts. Science N.Y. 84 1936 p. 310.

55.—Barrington, E. J. W. Proteolytic digestion and the problem of the pancreas in the Ammocoete larva of *Lampetra planeri*. Proc. Roy. Soc. London (B) 121 1936 pp. 221–232 pl. vi 2 text-figs.

56.—Battle, H. I., Huntsman, A. G., Jeffers, A. M., Jeffers, G. W., Johnson, W. H. and McNairn, N. A. Fatness, digestion and food of Passamaquoddy young Herring. J. biol. Board Canada 2 1936 pp. 401–429 6 text-figs.

57.—Baudin, L. Régénération du sang des poissons consécutive à la saignée. C.R. Soc. Biol. Paris 121 1936 pp. 330–332.

58.—Baudin, L. Modifications du sang du poisson *Perca fluviatilis*, consécutives à la pêche en profondeur. C.R. Soc. Biol. Paris 121 1936 pp. 437–439.

59.—Baudin, L. Cycles de variations de la composition du sang des poissons. C.R. Soc. Biol. Paris 121 1936 pp. 501–502.

60.—Bayer, B. Poznámky k rodu *Palaeoxyris* Bgt. (Bemerkungen zur Gattung *Palaeoxyris* Bgt.). Příroda Brunn 27 1934 pp. 265–266 (*non vidi*).

61.—Bayliss, L. E., Lythgoe, R. J. and Tansley, K. Some new forms of visual purple found in sea fishes, with a note on the visual cells of origin. Proc. roy. Soc. London (B) 120 pp. 95–113 pls. iv & v 3 text-figs.

62.—Bayraçki, J. K. Die Schuppenentwicklung bei Süßwasserfischer und ihre örtlichen Verschiedenheiten. Int. Rev. Hydrobiol. Leipzig 33 1936 pp. 73–155 1 pl. 11 text-figs. 53 graphs.

Beaufort, L. F. de vide Weber, M.

63.—Beauvallet, M. and Veil, C. Action de quelques sympatholytiques sur la cellule pigmentaire de l'écaille détachée du poisson. C.R. Soc. Biol. Paris 123 1936 pp. 785–787.

64.—Beebe, W. The egg-life of a deep-sea Eel. Bull. New York zool. Soc. 39 1936 pp. 60–66 24 figs.

65.—Beebe, W. On the world's greatest fishing-ground. Bull. New York Zool. Soc. 39 1936 pp. 232–242 11 figs.

66.—Beebe, W. Food of the Bermuda and West Indian Tunas of the genera *Parathunnus* and *Neothunnus*. Zoologica New York 21 1936 pp. 195–205 pls. i–iii.

67.—Beebe, W. and Tee-Van, J. Systematic notes on Bermudian and West Indian Tunas of the genera *Parathunnus* and *Neothunnus*. Zoologica New York 21 1936 pp. 177–194 pls. i–vii.

68.—Beebe, W. and Crane, J. Deep-sea fishes of the Bermuda oceanographic expeditions. No. 3. Family Serrivomeridae. Zoologica New York 20 1936 pp. 53–102.

69.—Behre, E. H. The behavior of the melanophores of Goldfishes. Proc. Louisiana Acad. Sci. 2 1 1935 pp. 177–182.

- 70.—Bell, F. H. and Kask, J. L. *Lampris regius* (Bonnaterre), the Opah or Moonfish from the North Pacific. *Copeia Ann Arbor* 1936 pp. 54–56 1 text-fig.
- 71.—Bellamy, A. W. Interspecific hybrids in *Platylocichthys*: one species ZZ-WZ; the other XY-XX. *Proc. Nat. Acad. Sci. Washington* 22 1936 pp. 531–536.
- Benetato, G. *vide* Michail, D.
- 72.—Bennington, N. L. Germ cell origin and spermatogenesis in the Siamese Fighting Fish, *Betta splendens*. *J. Morph. Philadelphia* 60 1936 pp. 103–125 6 pls.
- 73.—Beregov, R. *Smerdis macrurus*, Agassiz de l'Oligocène de la Bulgarie du Sud-ouest. *Geol. Balkanica Sofia* 2 1936 pp. 96–100 pl. i.
- 74.—Berg, L. S. Lake Issyk-kul fisheries. Results Lake Issyk-Kul Exped. 1 1930 pp. 1–48 10 text-figs. 1 map.
- 75.—Berg, L. S. Matériaux pour servir à la biologie du saumon du Nord (*Salmo salar*). Aperçu des travaux exécutés par l'institut des pêches lacustres et fluviales en 1930–1934. *Bull. Inst. Freshwater Fish. Leningrad* 20 1935 pp. 3–113 30 text-figs. [Russian.]
- 76.—Berg, L. S. [The division of the Palaearctic into zoogeographical regions on the basis of the distribution of freshwater fishes.] *Trud. Ist. Vsesoyuzn. Geogr. Syezda* 3 (1936 ?) 8 pp. 1 chart. [Russian, with French legend of chart.]
- 77.—Berg, L. S. Fishes of the Atrek basin. *Acad. Sci. U.S.S.R. Trud. Sov. Izuch. Proevvod. Ser. Turkmensk.* 6 (1936 ?) pp. 241–253 7 text-figs.
- 78.—Berg, L. S. *Teleopterina* n. g., a highly organized Acanthopterygian from the Carboniferous of North America. *C.R. Acad. Sci. U.R.S.S. Leningrad* 4 (13) 1936 pp. 345–347 1 text-fig.
- 79.—Berg, L. S. Ueber die Gattung *Palaeoniscinotus* Rohon (*Palaeoniscoidei*) aus dem Jura von Siberien. *Trav. Inst. Paléozool. Acad. U.S.S.R.* 5 1936 pp. 35–42 2 pls. 1 text-fig.
- 80.—Berg, L. S. The Suborder Esocoidae (Pisces). *Izvest. biol. N.-Issled. Inst. Permsk. Univ. Perm.* (Bull. Inst. Rech. biol. Perm) 10 1936. pp. 385–391.
- 81.—Berg, L. S. On some periodicities in propagation and distribution of fishes. *Acad. Sci. U.S.S.R. V.I. Vernadskommu k pyatidesyatiletiyu hauch. y pedagog. deyatel.* 1936 pp. 1163–1168. [Russian; English summary p. 1168.]
- 82.—Berg, L. S. Note on *Coregonus* (*Prosopium*) *cylindraceus* (Pallas). *Copeia Ann Arbor* 1936 pp. 57–58.
- 83.—Berg, L. S. On a fossil Flying Fish from Canada. *Copeia Ann Arbor* 1936 p. 166.
- Berrill, N. J. *vide* Cohen, A.
- 84.—Bertin, L. Sur une série de Leptocéphales appartenant au genre *Saccopharynx* Mitchill. *C.R. Acad. Sci. Paris* 203 1936 pp. 1540–1542.
- 85.—Bertin, L. Contribution à l'étude des larves de poissons Apodes. (Les types de Strömman à l'Institut zoologique de l'Université d'Uppsala.) *Bull. Inst. océanogr. Monaco* 694 1936 pp. 1–16 13 text-figs.
- 86.—Bertin, L. Nouvelle contribution à l'étude des larves de poissons Apodes. (Les types de Kaup et de Regan au British Museum.) *Bull. Inst. océanogr. Monaco* 706 1936 pp. 1–14 6 text-figs.
- 87.—Bertin, L. Un type primitif de nageoire caudale chez les poissons du genre *Cyema* Günther. *Bull. Soc. zool. Fr.* 61 1936 pp. 440–446 5 text-figs.
- 88.—Bertin, L. Un nouveau genre de poissons apodes caractérisé par l'absence de machoire supérieure. *Bull. Soc. zool. Fr.* 61 1936 pp. 533–540 4 text-figs.
- 89.—Bertolini, F. Ricerche sui Selaci mangiatori di plancton. *Bol. Soc. ital. Biol. spec.* 9 1934 pp. 1269–1271 1 pl.
- 90.—Bevelander, G. A comparative study of the branchial epithelium in fishes, with special reference to extra-renal excretion. *J. Morph. Philadelphia* 57 1935 pp. 335–348 1 pl. 6 text-figs.
- 91.—Bevelander, G. Branchial glands in fishes. *J. Morph. Philadelphia* 59 1936 pp. 215–222 1 pl.

92.—Bhatti, H. K. The integument and dermal skeleton of Siluroidea. Abs. Diss. Univ. Cambridge 1935-36 1936 pp. 32-34.

93.—Bialaszewicz, K. and Kupfer, C. De la composition minérale des muscles des animaux marins. Arch. int. Physiol. 42 1936 pp. 398-404.

94.—Biborski, J. O naczyniach segmentalnych i pletw nieparzystych gładzicy.—Über die Segmentalgefäße und die Gefäße der unpaaren Flossen der Scholle (*Pleuronectes platessa*). Bull. int. Acad. Cracovie (B II) 1935 pp. 279-291 pl. xii 2 text-figs.

95.—Binet, L. et Morin, G. Contribution à l'étude de l'hyperthermie et de l'asphyxie (recherches sur les poissons). Biol. méd. Paris 26 1936 pp. 329-361 6 text-figs.

96.—Birrer, A. and Schweizer, W. Der Edelfisch das Vierwaldstätter Sees, *Coregonus Wartmanni nobilis* Fatio. Ein Beitrag zur Kenntnis der Coregonen in den Schweizer Seen. Arch. Hydrobiol. Stuttgart 29 1936 pp. 617-663 pls. xi-xiii 4 text-figs.

97.—Birrer, A. and Schweizer, W. Der Weissfisch des Vierwaldstättersees. (*Coregonus exiguus albellus*, Fatio.) Ein Beitrag zur Kenntnis der Coregonen in den Schweizerseen. Mitt. naturf. Ges. Luzern 12 1935 pp. 1-88 5 pls. 8 text-figs.

98.—Blake, I. H. Studies on the comparative histology of the digestive tube of certain teleost fishes. III. A bottom-feeding fish, the Sea Robin (*Prionotus carolinus*). J. Morph. Philadelphia 60 1936 pp. 77-102 7 text-figs.

99.—Blanckenberg, K. Segelfisch-Fang im Golfstrom. Natur. u. Volk. 66 1936 pp. 428-430 1 text-fig.

100.—Blegvad, H. Transplantations of Plaice from the North Sea to the Belt Sea 1928-1933. The scientific survey. Rep. Danish biol. Sta. 39 1935 pp. 9-84 43 text-figs.

101.—Bogachev, V. V. New data on the Transcaucasian Miocene. Trud. Azerbaid nach-issled. neft. Inst. V.V. Kuibysheff, Baku 31 1936 pp. 5-32 pls. i & ii. [Russian; English summary p. 31.]

102.—Boino-Rodzewicz, M. Das Gefäßsystem der Acipenseridae. Mitteilung I. Die Gefäße des Kiemen-

und Kiefergerüsts. Bull. Inst. sci. Lesshaft Leningrad 19 2 1936 pp. 149-174 5 text-figs. [Russian; German summary p. 167.]

Bokowa, E. vide Karpewitsch, A.

103.—Bolin, R. L. Two new Cottid fishes from the western Pacific, with a revision of the genus *Stlengis* Jordan & Starks. Proc. U.S. Nat. Mus. 83 1936 pp. 325-334 pl. xxxiv text-figs. 26 & 27.

104.—Bolin, R. L. New Cottid fishes from Japan and Bering Sea. Proc. U.S. Nat. Mus. 84 1936 pp. 25-38 text-figs. 5-8.

105.—Bolin, R. L. A revision of the genus *Icelinus* Jordan. Copeia Ann Arbor Mich. 1936 pp. 151-159.

106.—Bolin, R. L. The systematic position of *Indostomus paradoxus* Prashad & Mukerji, a fresh water fish from Burma. J. Wash. Acad. Sci. 26 1936 pp. 420-423.

107.—Borcea, I. Les Clupéides de la région littorale roumaine de la Mer Noire et des eaux intérieures. Ann. sci. Univ. Jassy 22 1936 pp. 306-344.

108.—Borei, H. Über die Zusammensetzung der Körperflüssigkeiten von *Myxine glutinosa* L. Ark. Zool. Stockholm 28 B 3 1935 pp. 1-5.

109.—Boring, A. M. and Han-Hsin, W. The reversal of symmetry in two Chinese Dogfish. Peking nat. Hist. Bull. 11 1 1936 pp. 17-20 1 pl.

110.—Borodin, N. A. On a collection of freshwater fishes from Lake Nyasa, Tanganyika and Viktoria in Central Afrika. Zool. Jahrb. Jena (Syst.) 68 pp. 1-34 pl. i.

111.—Bowen, R. E. Sensory hairs of the Dogfish ear. Biol. Bull. Woods Hole 71 1936 pp. 429-432.

112.—Bowman, A. and Rae, B. B. Lemon Soles (*Pleuronectes microcephalus*). Marking experiments in Scottish waters during the period 1919-1931. Sci. Invest. Fish. Scotl. 1935 No. 1 1936 42 pp. 6 charts 1 graph.

113.—Boyer, J. Nouveau dispositif pour photographier les poissons. Nature Paris 2977 1936 pp. 442-443 5 text-figs.

114.—Branson, C. C. Palaeontology and stratigraphy of the Phosphoria formation. Univ. Missouri Studies 5 2 1930 99 pp. 16 pls.

115.—Branson, C. C. Carboniferous stratigraphy of Wyoming (Abstract). Proc. Geol. Soc. Amer. 1935 1936 pp. 391-392.

116.—Breder, C. M. Heterosomata to Pediculati from Panama to Lower California. Bull. Bingham Oceanogr. Coll. New Haven 2 Art. 3 pp. 1-56 text-figs. 1-19.

117.—Breder, C. M., Jr. The reproductive habits of the North American Sunfishes (family Centrarchidae). Zoologica New York 21 (part 1) pp. 1-48 6 text-figs. 7 pls.

118.—Breder, C. M. "All modern conveniences." A note on the nest architecture of the Four-spined Stickleback. Bull. New York zool. Soc. 39 1936 pp. 72-76 6 figs.

119.—Breder, C. M. Long-lived fishes in the Aquarium. Bull. New York zool. Soc. 39 1936 pp. 116-117.

120.—Breder, C. M. and Harris, J. E. Effect of light on orientation and stability of young Plectognath fish. Pap. Tortugas Lab. Carn. Instn. 29 1936 pp. 23-36 3 text-figs.

121.—Breder, C. M. and Nigrelli, R. F. Winter movements of the landlocked Alewife, *Pomolobus pseudoharengus* (Wilson). Zoologica New York 21 1936 pp. 165-175 6 text-figs.

Breder, C. M. *vide* Nichols, J. T.

122.—Breider, H. Genmanifestation und genotypisches Milieu. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 112-118.

123.—Breider, H. Weiteres über die Geschlechtsbestimmung und Geschlechtsdifferenzierung bei *Limia vittata* Poy. Zool. Anz. Leipzig 114 1936 pp. 113-119 3 text-figs.

124.—Breider, H. Eine Erbanalyse von Artmerkmalen geographisch vikariierender Arten der Gattung *Limia*. Z. indukt. Abstamm.-u. Vererb. Lehre 71 1936 pp. 441-499 35 text-figs.

125.—Breider, H. Eine Allelenserie von Genen verschiedener Arten. Z. indukt. Abstamm. u. Vererb. Lehre 72 1936 pp. 80-87 8 text-figs.

Brocklesby, H. N. *vide* Denstedt, O. F.

126.—Broek, A. J. P. van den. Das Nierensystem der Vertebraten, eine

theoretische Betrachtung. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 467-509 16 text-figs.

127.—Brotzen, F. Beiträge zur Vertebratenfauna des westpödlischen Silurs und Devons. I. *Protaspis arnelli* n. sp. und *Brachipteraspis* n. gen. *latissima* Zych. Ark. Zool. Stockholm 28A 22 1936 pp. 1-52 10 pls. 17 text-figs.

128.—Brough, J. On the evolution of bony fishes during the Triassic period. Biol. Rev. Cambridge 11 pp. 385-405 12 text-figs.

129.—Brown, F. A. Light intensity and melanophore response in the minnow, *Erimyza buccata* Cope. Biol. Bull. Woods Hole 70 1936 pp. 8-15 2 text-figs.

Bruner, J. *vide* Fontès, G.

130.—Bruun, A. F. Sur la distribution de quelques poissons océaniques d'après les expéditions danoises. Bull. Inst. océanogr. Monaco 700 1936 pp. 1-16 6 text-figs.

131.—Bruun, A. F. Nordatlantens *Synaphobranchus*-Arter, Biologi og Udbredelse sammenlignet med Aals og Havaals. Forh. skand. naturf. Møte 19 1936 pp. 480-482.

132.—Bruun, A. F. Exocoetidae, Macrorhamphosidae in Faune Ichthyologique de l'Atlantique Nord, Copenhague no. 16 1936.

133.—Bruun, A. F. En tvekønnet Regnbeuørred. Ferskvandsfiskeribl. Kjøbenh. 34 1936 pp. 221-223 2 text-figs.

134.—Bryant, W. L. A study of the oldest known vertebrates, *Astraspis* and *Eryptychius*. Proc. Amer. Phil. Soc. Philad. 76 4 1936 pp. 409-427 13 pls.

135.—Bryant, W. L. and Johnson, J. H. Upper Devonian fish from Colorado. J. Paleont. Menasha Wis. 10 1936 pp. 656-659 5 text-figs.

136.—Bückmann, A. Scholle (*Pleuronectes platessa*). Die relative Stärke der einzelnen Jahrgänge in verschiedenen Meeresteilen. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 3 No. 7 1936 15 pp.

137.—Buddenbrock, W. v. What physiological problems are of interest to the marine biologist in his studies of the most important species of fish. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 1 1936 pp. 3-14.

138.—Buddenbrock, W. v., Henschel, J. and Friedrich, H. Untersuchungen über das Blut und die Atmung der einheimischen Plattfische. I. Mitteilung. Die morphologische Beschaffenheit des Blutes der Nordsee-, Beltsee- und Ostseescholle. Wiss. Meeresuntersuch. Abt. Kiel (N.F.) 22 1936 pp. 1-20.

139.—Budker, P. Sur une ostéoclasie déterminant la chute des écailles placoides, ou dents cutanées des Squales. C.R. Acad. Sci. Paris 202 1936 pp. 505-507.

140.—Budker, P. Sur la destruction et la chute des dents mandibulaires des Squales. C.R. Acad. Sci. Paris 203 1936 pp. 386-387.

141.—Budker, P. Compte-rendu sommaire d'une mission au large des cotes de Mauritanie (Cap Blanc). Bull. Mus. Hist. nat. Paris (2) 8 1936 pp. 237-239.

Budker, P. *vide* Petit.

142.—Buen, F. de. Fauna Ictiológica. Catalogo de los peces ibéricos: de la planicie continental, aguas dulces, pelágicos y de los abismos proximos. Tercera parte. Notas Res. Inst. Esp. Oceanogr. Madrid (2) 94 1936 pp. 151-173.

143.—Buen, F. de. Un nuevo "Gobiidae" de Marruecos Mediterráneo. Bol. Soc. esp. Hist. nat. 36 1936 pp. 237-243 2 text-figs.

144.—Bulawa, M. Les lymphatiques dans la peau des Téléostéens. C.R. Acad. Cracovie 1936 9 pp. 5-6.

145.—Bull, H. O. Studies on conditioned responses in fishes. Part VI. The formation of a conditioned motor response in *Blennius pholis* L. to a change in direction of current flow. Rep. Dove Mar. Lab. Cullercoats (3) 3 1935 pp. 37-48.

146.—Bull, H. O. Studies on conditioned responses in fishes. Part VII. Temperature perception in Teleosts. J. Mar. biol. Ass. Plymouth N.S. 21 1936 pp. 1-27.

147.—Büren, G. v. Der Gerzensee. Eine limnologische Studie. Mitt.

naturf. Ges. Bern. 1935 1936 pp. 29-94 2 pls. 3 text-figs. (Pisces p. 88.)

148.—Cabanes, C. L'élevage aquatiques. Nature Paris 1936 2976 pp. 395-401 12 text-figs.

149.—Cadenat, J. Les Serranidés de la côte occidentale d'Afrique (du Cap Sparte au Cap Vert). Rev. Trav. Pêches marit. Paris 8 1935 pp. 377-422 30 text-figs.

150.—Cadenat, J. Sur les stades jeunes de quelques poissons de chalut de la côte de Mauritanie. Rev. Trav. Pêches marit. Paris 9 1936 pp. 293-322 23 text-figs.

151.—Cahn, A. R. Observations on the breeding of the Lawyer, *Lota maculosa*. Copeia Ann Arbor 1936 pp. 163-165.

152.—Calderwood, W. L. Passage of smolts through turbines.—Experiments at a power house. Salmon and Trout Mag. London 81 1935 pp. 303-318 1 pl. 2 text-figs.

153.—Calderwood, W. L. Natural and artificial methods of salmon production. With a short review of Canadian results. Salmon and Trout Mag. London 84 1936 pp. 219-223.

154.—Calzoni, M. Ricerche sulla placenta del *Carcharias glaucus*. Pubbl. Staz. zool. Napoli 15 1936 pp. 169-174 3 text-figs.

155.—Campo, R. M. del. Vertebrados de Octopan. An. Inst. Biol. Mexico 7 1936 pp. 271-286 7 text-figs.

156.—Carere Comes, O. Ricerche istofisiologiche sull' ipofisi dei Selaci con particolare riguardo alle modificazione gravidiche. Pubbl. Staz. zool. Napoli 15 1936 pp. 339-354 8 text-figs.

157.—Carr, A. F. A new species of *Cyprinodon* from Lake Eustis, Florida. Copeia Ann Arbor 1936 pp. 160-163 1 text-fig.

158.—Carter, N. M. The nutritive value of marine products. VIII. Proximate analysis of canned British Columbia Sockeye and Pink Salmon. J. Biol. Board Canada 2 1936 pp. 439-455.

159.—Cascia, P. la. Sul *Cetorhinus maximus* Gunn. (*Selache maxima*) nel Mediterraneo.—Catture nel mare di Palermo. Bull. Ist. zool. Univ. Palermo 2 1935 pp. 137-176 pls. i-iii.

160.—Castle, W. E. A simplified explanation of Bellamy's experiments concerning sex determination in tropical fishes. *Proc. Nat. Acad. Sci. Washington* 22 1936 pp. 679-687.

161.—Cayeux, L. Les coprolithes des phosphates nord-africains. *C.R. Acad. Sci. Paris* 203 1936 pp. 217-219.

162.—Chabakov, A. Synopsis of the ichthyofauna of the Permian deposits of Russia. *Mém. Soc. russe Mineral* 56 1927 pp. 199-213.

163A.—Chabakov, A. and Zonov, N. Sharks from the Jurassic of the Moscow Basin. *Trans. Centr. Geol. Prosp. Inst. Leningrad & Moscow* 34 1935 pp. 1-16 4 pls. [Russian; English summary p. 11.]

163.—Chabakov, A. W. On some regularities in the species-formation among the Middle and Upper Cretaceous Teleostean fishes. *Mém. Soc. russe Mineral* 56 1927 pp. 214-224. [Russian; English summary p. 222.]

164.—Chabanaud, P. Le neurocrane osseux des Téléostéens dyssymétriques après la métamorphose. *Ann. Inst. océanogr. Paris N.S.* 16 1936 pp. 223-297 112 text-figs.

165.—Chabanaud, P. Situation particulière de l'organe nasal nadiral des Téléostéens dyssymétriques de la famille des Achiridae. *C.R. Acad. Sci. Paris* 202 1936 pp. 586-588 1 text-fig.

166.—Chabanaud, P. La fenêtre interbranchiale des Téléostéens dyssymétriques. *C.R. Acad. Sci. Paris* 202 1936 pp. 2104-2016 2 text-figs.

167.—Chabanaud, P. Sur divers soléides apparentés au genre *Zebrias*. *Bull. Soc. zool. Fr.* 61 1936 pp. 382-404 pl. vi 16 text-figs.

168.—Chabanaud, P. Les poissons de mer exotiques aux Halles Centrales de Paris. Remarques sur diverses espèces, notamment *Solea senegalensis* Kaup et *Hilsa reevesi* H.B. *Bull. Mus. Hist. nat. Paris* (2) 8 pp. 61-64.

169.—Chaine, J. Recherches sur les otolithes des poissons. Étude descriptive et comparative de la sagitta des Téléostéens. (Suite.) *Act. Soc. linn. Bordeaux* 87 1935 pp. 5-242 pls. i-xviii.

170.—Chaldinowa, N. A. Study on the spawning, eggs and larvae of

Eleginus (Gadus) navaga Pall. *Zool. J. Moscow* 15 1936 pp. 321-339 8 text-figs.

171.—Charnley, F. Calculations in the investigation of oils and fats with special reference to fish oils. Part II. *J. biol. Board Canada* 2 1936 pp. 285-297.

172.—Checchia-Rispoli, G. Di un nuovo genere di "Pristidae" del Cretaceo superiore della Tripolitania. *Mem. Cl. Sci. fis. mat. e nat. R. Acc. d'Italia Roma* 4 1933 pp. 1-7 1 pl.

Chen, C. H. *vide* Tchou, S.

173.—Chen, T. P. The Red-tail fish, *Tanichthys albonubes* Lin. *Lingnan Sci. Journ. Canton* 15 1936 pp. 431-437 4 text-figs.

174.—Chen, T. Y. and Tang, D. S. Some economic aspects of the food fishes of Amoy. *Nat. Sci. Bull. Univ. Amoy* 1 1935 pp. 113-137.

175.—Chevey, P. Capture d'un Requin-Baleine, *Rhineodon typus* A. Smith, en Cochinchine. *Notes Inst. Océan. Indochine Cauda Annam* 28 1936 31 pp. 9 pls.

176.—Chevey, P. Le lac-cratère de Kouang-Tchéou-Wan (Chine du Sud). Description de deux poissons nouveaux.* *Bull. Soc. zool. France* 60 1936 pp. 427-433 3 text-figs.

177.—Chevey, P. Sur la présence du genre *Anguilla* en Indochine Française. *Bull. Mus. Hist. nat. Paris* (2) 8 1936 pp. 65-68.

178.—Chevey, P. Sur la présence d'une seconde espèce d'Anguille en Indo-Chine française et sur les lois de la circulation des eaux dans le Mer de Chine méridionale. *Bull. Mus. Hist. nat. Paris* (2) 8 1936 pp. 130-131.

Chevey, P. *vide* Pellegrin, J.

179.—Chiang, T.-H. A study on the seasonal cycle in the genital glands of Gold-fish. *Sci. Rep. Univ. Chekiang* 2 1 1936 pp. 83-90, 12 text-figs.

180.—Chiang, T.-H. Sex differentiation in the Goldfish. *Sci. Rep. Univ. Chekiang* 2 1 1936 pp. 91-97 19 figs.

* For "de deux poissons nouveaux" read "d'un poisson nouveau." — Author's corrigendum.

181.—Chiang, T.-H. A report of spermatogenetic waves in Goldfish. *Sci. Univ. Chekiang* 2 1 1936 pp. 111-112 4 figs.

182.—Chichkoff, G. Sur la faune ichthyologique de la Kamtchia. *Ann. Univ. Sofia* 30 1934 pp. 131-184 pl. 1. [Bulgarian; French summary p. 183.]

183.—Chichkoff, G. [Description d'un Barbeau nouveau—*Barbus barbus bergi* n. subsp.] *Ann. Univ. Sofia* 31 1935 pp. 305-314 pl. i. [Bulgarian; French summary p. 311.]

184.—Chichkoff, C. [Sur un Barbeau peu connu.] *Ann. Univ. Sofia* 31 1935 pp. 315-330 pl. ii. [Bulgarian; French summary p. 326.]

185.—Chope, R. P. Devonshire fish names. *Rep. Devons. Ass. Adv. Sci.* 67 1935 pp. 421-433.

186.—Chute, W. H. Notes on color differences in living specimens of two Indo-Pacific Pomacentrid fishes, *Dascyllus trimaculatus* and *Dascyllus albisella*. *Copeia Ann Arbor* 1936 p. 60.

Chvaliova, M. A. *vide* Sokolov, N. P.

187.—Ciaranfi, E. Sulla esistenza di fermenti deidrogenanti gli acidi grassi nel fegato di *Serranus cabrilla*. *Pubb. Staz. zool. Napoli* 15 1936 pp. 317-321.

188.—Cieglewicz, W. Wzrost storni (*Pleuronectes flesus*) poławianej w Zatoce Gdańskiej i w Zachodnim Bałtyku. The growth of Flounder (*Pleuronectes flesus*) caught in the Bay of Danzig and in the Western Baltic. *Arch. Hdyrobiol. Ichthyol. Suwałki* 9 1-2 1935 pp. 108-121 2 text-figs. [Polish; English summary p. 120.]

189.—Clark, F. N. Variations in the number of vertebrae of the Sardine, *Sardinops caerulea* (Girard). *Copeia Ann Arbor* 1936 pp. 147-150 2 text-figs.

190.—Clark, F. N. Interseasonal and intraseasonal changes in size of the California Sardine (*Sardinops caerulea*). *Calif. Fish Game Fish Bull.* 47 1936 28 pp. 11 text-figs.

191.—Clark, H. W. New and noteworthy fishes. No. 29 of The Templeton Crocker expedition of the California Academy of Sciences, 1932. *Proc. Calif. Acad. Sci.* (4) 21 1936 pp. 383-396.

192.—Clark, R. S. Age composition of Haddock in European waters. *Rapp.*

Cons. Explor. Mer. Copenh. 101 Pt. 3 No. 2 1936 7 pp.

193.—Clarke, G. L. Light penetration in the western North Atlantic and its application to biological problems. *Rapp. Cons. Explor. Mer. Copenh.* 101 Pt. 2 No. 3 1936 14 pp. 6 text-figs.

194.—Clarke, G. L. On the depth at which fish can see. *Ecology Brooklyn* 17 1936 pp. 452-456.

195.—Clarke, W. J. Marine records and notes from Scarborough. *Naturalist London* 1935 pp. 229-230.

196.—Clarke, W. J. Marine fish: (in) The Yorkshire Naturalists' Union's seventy-fourth annual report. *Naturalist London* 1936 p. 38.

197.—Clausen, R. G. Oxygen consumption in fresh water fishes. *Ecology Brooklyn* 17 1936 pp. 216-226 3 text-figs.

Cleve, R. van *vide* Thompson, W. F.

198.—Coates, C. W. Four eyes see better than two. *Bull. New York zool. Soc.* 39 1936 pp. 114-116 3 figs.

199.—Coates, C. W. and Cox, R. T. Preliminary note on the nature of the electrical discharges of the Electric Eel, *Electrophorus electricus* (Linnaeus). *Zoologica New York* 21 pp. 125-128 text-figs. 1.

Coates, C. W. *vide* Kleiner, J. T.

Coates, C. W. *vide* Smith, G. M.

200.—Cockerell, T. D. A. The fauna of the Sunchal (or Margas Verdes) formation, Northern Argentina. *Amer. Mus. Nov. N.Y.* 886 1936 9 pp. 19 text-figs.

201.—Cohen, A. and Berrill, N. J. Cell division and differentiation in the growth of specialized vertebrate tissues. *J. Morph. Philadelphia* 60 1936 pp. 243-259 7 text-figs.

202.—Collier, A. The mechanism of internal fertilization in *Gambusia*. *Copeia Ann Arbor* 1936 pp. 45-53 16 text-figs.

203.—Cooper, C. F. A mid-Devonian fish fauna. *Proc. Linn. Soc. London* 1935-6 148 1936 pp. 56-57.

204.—Cooper, C. L. Actinopterygian jaws from the Mississippian Black Shales of the Mississippi valley. *J. Paleont. Menasha Wis.* 10 1936 pp. 92-94 pl. xii.

205.—Cooper, G. P. Age and growth of the Golden Shiner (*Netemigonus crysoleucas auratus*) and its suitability for propagation. Pap. Mich. Acad. Sci. 21 pp. 587-597 text-figs. 27-29.

Cooper, G. P. *vide* Hubbs, C. L.

Conrad, M. *vide* Gregory, W. K.

206.—Cordier, R. Les organes sensoriels cutanés du Protoptère. Bull. Acad. Belg. Cl. Sci. (5) 22 4 1936 pp. 474-483 6 text-figs.

207.—Corradini, P. Sulla consistenza di alcune differenze biometriche delle specie *Mullus barbatus* e *Mullus surmuletus*. Boll. Zool. Torino 6 1935 pp. 333-344 2 text-figs.

208.—Covey, F. M. Fish food studies of a number of Northeastern Wisconsin lakes. Trans. Wisc. Acad. Sci. Arts Lett. 29 1935 pp. 131-172 11 text-figs.

Cowan, D. *vide* Storrow, B.

Cox, R. T. *vide* Coates, C. W.

209.—Crane, J. Notes on the biology and ecology of Giant Tuna, *Thunnus thynnus* Linnaeus, observed at Portland, Maine. Zoologica New York 21 1936 pp. 207-212 pl. i text-fig. 1.

Crane, J. *vide* Beebe, W.

210.—Crookshank, H. Geology of the northern slopes of the Satpuras between the Morand and the Sher Rivers. Mem. geol. Surv. India 66 1936 (Fishes pp. 288-9).

Crowell, M. *vide* McCay, C. M.

211.—D'Abreu, E. A. On the diet of the fish, *Rita rita*. J. Bombay Nat. Hist. Soc. 39 1936 p. 189.

212.—Dahl, K. Salmon marking in Norway. The lessons of 1935. Salmon and Trout Mag. London 85 1936 pp. 324-329 4 text-figs.

213.—Dahl, K. and Sømme, S. Experiments in Salmon marking in Norway 1935. Skr. norske Vidensk.-Akad. Oslo 1935 no. 12 1936 pp. 1-27 8 text-figs.

214.—Dahlgren, E. H. Further developments in the tagging of the Pacific Herring, *Clupea pallasii*. J. Conseil Copenhagen 11 1936 pp. 229-247 7 text-figs.

215.—Dakin, W. J. Science and sea fisheries with special reference to Australia. R. M. Johnston Memorial lecture. Pap. Roy. Soc. Tasm. 1934 1935 pp. 1-39 2 pls. 3 text-figs.

216.—Dalinkevičius, J. A. On the fossil fishes of the Lithuanian Chalk. I. Selachii. Vyt. Didž. Univ. Mat.-gamtos Fak. Darbai Kowno (Kaunas) 9 1935 pp. 1-63 5 pls. text-figs.

217.—Daniel, R. J. The study of fish. (Abstract.) Proc. L'pool. biol. Soc. 49 1936 pp. 1-7.

218.—Danilchenko, P. G. On the ecology of the spawning migrations of Salmon. C.R. Acad. Sci. Moscou 1936 2 pp. 81-84.

219.—Danilchenko, P. G. Matériaux pour servir à la biologie du saumon du fleuve de Mezène (mer Blanche) dans sons cours moyen. Bull. Inst. Fresh-water Fish. Leningrad 20 1935 pp. 312-323 1 chart. [Russian.]

220.—David, L. Contribution à l'étude de la faune ichthyologique du lac Tanganyka. Rev. zool. bot. afr. Bruxelles 28 1936 pp. 149-160 5 text-figs.

221.—David, L. *Uegitglanis*, Silure aveugle de la Somalie italienne. Chaînon entre Bagrides et Clariides. Rev. zool. bot. afr. Bruxelles 28 1936 pp. 369-388 8 text-figs.

222.—David, L. Deux espèces de *Synodontis* du Moyen-Congo. Rev. zool. bot. afr. Bruxelles 28 1936 pp. 417-418.

223.—David, L. Die von Dr. Fritz Haas auf der Schomburgk-Afrika-Expedition 1931/32 gesammelten Süßwasser - Fische. Senckenbergiana Frankfurt 18 1936 pp. 72-74 1 text-fig.

224.—Davies, A. M. Tertiary Faunas I. London 1935 406 pp. 565 text-figs. (Pisces pp. 360-364 figs. 551-556.)

225.—Davis, A. G. The London Clay at Sheppey and the location of its fossils. Proc. Geol. Ass. London 47 1936 pp. 328-345.

226.—Davis, F. M. A contribution to the "race question." Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 1936 pp. 12-13.

227. — Dechaseaux, C. *Lepidotus hourcqui*: nouvelle espèce du Lias de Madagascar. Bull. Soc. géol. Fr. (5) 5 1936 pp. 527-532 2 text-figs.

De Lacy, A. C. *vide* Schultz, L. P.

228. — Delépine, G. La faune (in) Recherches paléontologiques sur quelques gisements carbonifères de la Sarthe. Bull. Soc. géol. Fr. (5) 5 1935 pp. 81-84.

229. — Dementiev, P. [Sur la position zoogéographique du lac Issyk-Kul (Thian-Chan Central).] Bull. Soc. Nat. Moscou. Sect. Biol. N.S. 44 1935 pp. 441-443. [Russian; French summary p. 443.]

230. — Denny, M. The occurrence of cupulae on lateral-line organs. Science N.Y. N.S. 83 1936 pp. 302-303.

231. — Denstedt, O. F. and Brocklesby, H. N. Fish oils. VI. The structure and properties of Pilchard oil films. J. biol. Board Canada 2 1936 pp. 13-40 9 text-figs.

Dentinho, S. *vide* Frade, F.

232. — Deraniyagala, P. E. P. Two xiphiiform fishes from Ceylon. Spolia zeylan. Colombo (B) 19 1936 pp. 211-218 pls. xxiii & xxiv 2 text-figs.

233. — Deraniyagala, P. E. P. Two new fishes from Ceylon. Spolia zeylan. Colombo (B) 19 1936 pp. 219-224 3 text-figs.

234. — Desbrosses, P. Présence à l'entrée occidentale de la Manche de *Callanthias ruber* (Rafinesque 1810), poisson des eaux ibéro-madériennes et méditerranéennes. Bull. Soc. zool. Fr. 61 1936 pp. 215-219 1 text-fig.

235. — Desbrosses, P. Présence à l'entrée occidentale de la Manche de *Callanthias ruber* (Rafinesque 1810). Deuxième note. Bull. Soc. zool. Fr. 61 1936 pp. 406-407.

236. — Desbrosses, P. Contribution à la connaissance de la biologie du Rouget-Barbet en Atlantique-Nord (III) *Mullus barbatus* (Rond) *surmuletus* (Fage) Mode septentrional (Fage). Rev. Trav. Pêches marit. Paris 8 1935 pp. 351-376 14 text-figs.

237. — Desbrosses, P. Contribution à la connaissance de la biologie du Rouget-Barbet en Atlantique-Nord (IV). *Mullus barbatus* (Rond.) *sur-*

muletus (Fage). Mode septentrional Fage. Rev. Trav. Pêches marit. Paris 9 1936 pp. 339-399 19 text-figs.

Detwiler, R. A. *vide* Miller, R. A.

238. — Devold, F. The susceptibility of Plaice eggs to shock. K. norske vidensk. Selsk. Trondheim 8 pp. 71-74 2 text-figs.

239. — Dewberry, E. B. The Common Herring (*Clupea harengus* Linn.). Naturalist London 1936 pp. 97-104 and 121-129 4 text-figs.

240. — Dildine, G. C. Studies in teleostean reproduction. I. Embryonic hermaphroditism in *Lebistes reticulatus*. J. Morph. Philadelphia 60 1936 pp. 261-277 2 pls.

241. — Dildine, G. C. The effect of light and temperature on the gonads of *Lebistes*. (Abstract.) Anat. Rec. Philad. 67 Suppl. 1 1936 p. 61.

242. — Doan, K. H. *Opsopoeodus emiliae* from Lake St. Clair. Copeia Ann Arbor 1936 p. 59.

243. — Domantay, J. S. The culture of the Siamese Fighting Fish, *Betta splendens*. Philipp. J. Sci. Manila 58 1935 pp. 521-528.

244. — Drjagin, P. A. Hybrids between the species of *Coregonus* from the river Kolyma. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 443-455. [Russian; English summary p. 454.]

245. — Dulzetto, F. Sullo sviluppo dell'apparato sessuale femminile di *Gambusia holbrooki* (Grd.). Arch. zool. Torino 23 1936 pp. 493-516 16 text-figs.

246. — Duncker, G. Die Fische der Nordmark. Lfg. 1 & 2 96 pp. 2 pls. Kiel & Leipzig 1936.

247. — Duncker, G. Svaerdfisk (*Xiphias gladius* L.) i de danske Farvande. Flora og Fauna Kjøbenh. 42 1936 pp. 92-94 1 text-fig.

248. — Dybowski, B. O rybach stodo wodnych i morskich Wschodniej Syberyi. [Freshwater and marine fisheries of Eastern Siberia.] Arch. Tow. nauk. Lwow (3) 2 18 1923 pp. 1-39. [Polish.]

249. — Dymond, J. R. Some freshwater fishes of British Columbia. Rep. Comm. Fisheries Br. Columbia 1935 pp. L60-L73.

250.—Ebina, K. On the growth of *Erynnis cardinalis* (Lacépède). J. Imp. Fish. Inst. Tokyo **31** 1936 pp. 69–78 12 text-figs.

251.—Edmunds, F. H. and Oakley, K. P. The Central England district. Brit. Reg. Geol. Geol. Surv. Mus. London 1936. [Fishes pp. 24–30.]

252.—Ehrenbaum, E. Naturgeschichte und wirtschaftliche Bedeutung der Seefische Nordeuropas. Lübbert & Ehrenbaum. Handb. Seefisch. Nordeuropas **2** 337 pp. 26 pls. 276 text-figs. Stuttgart 1936.

253.—Elam, J. The value of hatchery trout for stocking rivers.—Hatchery trout dropping downstream. Salmon and Trout Mag. London **83** 1936 pp. 142–144.

254.—Elizarova, S. S. The influence of the active reaction of hydrogen ions and of salinity on the eggs of *Engraulis encrasicolus* L. C.R. Acad. Sci. Moscou N.S. **1936** 2 pp. 255–260.

255.—Ellisor, L. O. A toxicological investigation of nicotine on the Goldfish and the Cockroach. Iowa St. Coll. J. Sci. **11** 1 1936 pp. 51–53.

256.—Elster, H.-J. Die künstliche Erbrütung bei grossen Seen, vorläufige Ergebnisse und Anregungen. Verh. int. Vereinig. Limnol. Beograd **7** 2 1935 pp. 361–370.

257.—Emelianow, S. W. Die morphologie der Tetrapodenrippen. Zool. Jahrb. Jena Anat. **62** 1936 pp. 173–274 49 text-figs.

258.—Erasmus, G. d'. Sur alcuni avanzi di Vertebrati terziari della Sirtica. Missione sci. R. Acc. d'Italia a Cufra (1931) Roma **3** 1934 pp. 257–279 pls. xxiii & xxiv 30 text-figs.

259.—Erasmus, G. d'. Sopra alcuni avanzi di vertebrati fossili della Patagonia raccolti dal dott. E. Feruglio. Atti R. Acc. Sci. fis. mat. Napoli (2) **20** 8 1934 26 pp. 1 pl.

260.—Erdmann, W. Die deutsche grosse Heringsfischerei in den Jahren 1931–1934. Ber. deutsch. wiss. Kom. Meeresforsch. Berlin (N.F.) **8** 1936 pp. 1–23 16 charts.

261.—Erdmann, W. Die deutsche grosse Heringsfischerei im Jahre 1935. Ber. deutsch. wiss. Kom. Meeresforsch. Berlin (N.F.) **8** 1936 pp. 25–26 1 text-fig. 9 charts.

262.—Esther, H. Die Geschlechtsumkehr von *Xiphophorus helleri* Heckel. Bl. Aqu. Terr. Stuttgart **47** pp. 122–125 1 text-fig.

263.—Evans, G. The relation between vitamins and the growth and survival of goldfishes in homotypically-conditioned water. J. exp. Zool. Philadelphia **74** 1936 pp. 449–476 4 text-figs.

264.—Evans, H. M. Hearing in fishes. J. Ipswich nat. Hist. Soc. **1** 1935 pp. 217–230 4 text-figs.

265.—Eyken, B. van der. Gebiss- und Zahnentwicklung bei der Irisforelle (*Salmo irideus*). III. Oberkiefer. Proc. K. Akad. Wet Amsterdam **39** 1936 pp. 271–278 2 text-figs.

266.—Eyken, B. van der. Gebiss- und Zahnentwicklung bei der Irisforelle (*Salmo irideus*). IV. Zwischenkiefer und Pfugscharbein. Proc. K. Akad. Wet. Amsterdam **39** 1936 pp. 541–548 3 text-figs.

267.—Eyken, B. van der. Gebiss- und Zahnentwicklung bei der Irisforelle (*Salmo irideus*). V. Gaumen und Schlundkopf. Proc. K. Akad. Amsterdam **39** 1936 pp. 683–692 1 text-fig.

268.—Eyken, B. van der. Gebiss- und Zahnentwicklung bei der Irisforelle (*Salmo irideus*). VI (Schluss). Zahnentwicklung. Proc. K. Akad. Wet. Amsterdam **39** 1936 pp. 773–779 8 figs.

269.—Facciola, L. I due sessi nelle specie nostrane dei Murenoidi e le loro glandole generative. Atti Soc. ital. Milano **74** 1935 pp. 394–418 pls. x & xi.

270.—Fach, M. Zur Entstehung der Fischenschuppe. Z. Anat. Entw. Gesch. **105** 1935 pp. 288–304 19 text-figs.

271.—Fahrenholz, C. Die sensiblen Einrichtungen der Neunaugenhaut Z. mikr. anat. Forsch. Leipzig **40** 1936 pp. 323–380 21 text-figs.

272.—Faitelson, M. I. On the structure and development of the paired fins and their girdles in the Teleostei. Bull. Inst. sci. Lesshaft. Leningrad **19** 2 1936 pp. 175–202 18 text-figs. [Russian; English summary p. 194.]

Fang, P. W. vide Pellegrin, J.

273.—Faouzi, H. Successful stocking of Lake Qaroun with Mulletts (*Mugil cephalus* Linn. and *M. capito* Cuv.) from the Mediterranean. *Int. Rev. Hydrobiol. Leipzig* 33 1936 pp. 434-439 1 map.

274.—Farran, G. P. On the mesh of Herring drift-nets in relation to the condition factor of the fish. *J. Conseil Copenhagen* 11 1936 pp. 43-52 4 text-figs.

275.—Fasten, N. Effects of chlorinated city water and lack of food on Comet Goldfish. *Amer. Nat.* 70 1936 pp. 95-96.

276.—Faune Ichthyologique de l'Atlantique nord. *Copenhagen* 16 [1936].

277.—Fessard, A. La décharge des poissons électriques est-elle un phénomène exceptionnel? *Bull. Soc. philom. Paris* 115 1932 pp. 58-69 2 text-figs.

278.—Fey, H. N. Studies on the respiratory physiology of the Catfish, *Parasilurus asotus* L. I. The diurnal variations of the rate of oxygen consumption. II. The rate of oxygen consumption in relation to the oxygen tension and hydrogen ion concentration of the medium. *Biol. Bull. Normal Coll. Shiang Chyn Univ. Canton* 3 1936 28 pp. 4 text-figs.

279.—Findenegg, I. Beiträge zur Kenntnis des Ossiacher Sees. *Carinthia II* 123-124 1934 pp. 61-78 1 pl. 6 text-figs.

280.—Firth, F. E. *Gephyroberyx darwini* (Johnson), a Berycoid fish new to the North American fauna. *Copeia Ann Arbor* 1936 p. 126 1 text-fig.

Firth, F. E. *vide* Gudger, E. W.

Firth, F. E. *vide* Nichols, J. T.

Fischer, E. *vide* Graupner, H.

Flood, A. *vide* Schmidt-Nielsen, S.

281.—Florentin, P. Sur la vascularisation des noyaux végétatifs du diencéphale chez les Téléostéens. *C.R. Soc. Biol. Paris* 122 1936 pp. 1090-1092.

282.—Foerster, R. E. An investigation of the life history and propagation of the Sockeye Salmon (*Oncorhynchus nerka*) at Cultus Lake, British Columbia. No. 5. The life history cycle of the 1926 year class with artificial propagation involving the liberation of free-swimming fry. *J. biol. Board Canada* 2 1936 pp. 311-333 2 text-figs.

283.—Foerster, R. E. Artificial spawning methods for Sockeye Salmon. *Bull. biol. Board Canada* 50 1936 13 pp. 2 text-figs.

284.—Follett, W. I. The unbarred phase of the Californian Surf-fish. *Amphistichus argenteus*. *Copeia Ann Arbor* 1936 pp. 117-118 1 text-fig.

285.—Fontaine, M. Sur la maturation complète des organes genitaux de l'anguille mâle et l'émission spontanée de ses produits sexuels. *C.R. Acad. Sci. Paris* 202 1936 pp. 1312-1314 1 text-fig.

286.—Fontès, G., Bruner, J. et Lindenberg, A. Mécanisme de variations du coefficient *k* de Nieloux chez *Gobio fluviatilis* normal, hydraté et déshydraté. *C.R. Soc. Biol. Paris* 121 1936 pp. 1458-1461.

287.—Fontès, G., Bruner, J. and Lindenberg, A. Variations du poids de *Carassius auratus* et de *Gobio fluviatilis* dans l'eau du robinet pure et salée à 9 gr. par litre. *C.R. Soc. Biol. Paris* 122 1936 pp. 319-322.

288.—Fontès, G., A. Lindenberg et J. Bruner. Hydratation de *Carassius auratus* dans l'eau Hépar et dans l'eau Grand Source de Vittel. Sa déshydratation dans l'eau Pavillon de Contrexéville. *C.R. Soc. Biol. Paris* 122 1936 pp. 323-324.

289.—Fontès, G., Lindenberg, A. et Gross, R. Erreurs du dosage de l'alcool éthylique chez *Carassius auratus*. *C.R. Soc. Biol. Paris* 121 1936 pp. 1461-1465.

290.—Forbes, A. Propulsive power used by Flying Fish. *Science N.Y. N.S.* 83 1936 pp. 261-262.

291.—Fowler, H. W. A synopsis of the fishes of China. Part V *concluded*. The Cods, Opahs, Flounders, Soles, John Dories, Berycoids, Pipe Fishes, Silversides, Mulletts, Barracudas and Thread Fishes. *Hong Kong Nat.* 6 1935 pp. 276-284 text-figs. 58-60.

292.—Fowler, H. W. A synopsis of the fishes of China. VI.—The mackerels and related fishes. *Hong Kong Nat.* 7 1 1936 pp. 61-80 11 text-figs.

293.—Fowler, H. W. A synopsis of the fishes of China. Part VI *concluded*. The Mackerels and related fishes. *Hong Kong Nat.* 7 1936 pp. 186-202 text-figs. 12-17.

294.—Fowler, H. W. Zoological results of the third De Schauensee Siamese expedition. Part VII.—Fishes obtained in 1935. Proc. Acad. Nat. Sci. Philad. **87** (1935) 1936 pp. 509–513 7 text-figs.

295.—Fowler, H. W. Fresh-water fishes obtained in Guatemala by Mr. Rodolphe Meyer de Schauensee in 1935. Proc. Acad. Nat. Sci. Philad. **87** (1935) 1936 pp. 515–531 45 text-figs.

296.—Fowler, H. W. Zoological results of the George Vanderbilt African expedition of 1934. Part III.—The fresh water fishes. Proc. Acad. nat. Sci. Philad. **88** 1936 pp. 243–335 152 text-figs.

297.—Fowler, H. W. The marine fishes of West Africa, based on the collection of the American Museum Congo Expedition, 1909–1915. Parts I and II. Bull. Amer. Mus. Nat. Hist. **70** 1936 pp. 1–1493 567 text-figs.

298.—Fox, D. L. Further studies of the Carotenoids of two Pacific marine fishes, *Fundulus parvipinnis* and *Hypsypops rubicunda*, and of a marine Annelid, *Thoracophelia* sp. Proc. Nat. Acad. Sci. Washington **22** 1936 pp. 50–54.

Fox, D. L. vide Young, R. T.

299.—Frade, F. Notas sobre o *Regalictus glesne* (Ascanius) das costas de Portugal. Bull. Soc. portug. Sci. nat. **12** 1935 pp. 29–32.

300.—Frade, F. and Dentinho, S. Marcação de Atuns na costa do Algarve. Contribuição portuguesa para o estudo dos movimentos migratórios do Aruma (*Thunnus thynnus* L.). Bull. Soc. portug. Sci. nat. **12** 1935 pp. 63–69 pl. vii.

301.—Francis, E. T. B. and Horton, F. M. Some reactions of the Ammo-coete. J. exp. Biol. London **13** 4 1936 pp. 410–415 1 text-fig.

302.—Franz, G. Über die reflektorische Regulierung des Gasgehaltes in der Schwimmblase der Fische. Verh. Deutsch. zool. Ges. Leipzig **38** 1936 pp. 290–291.

303.—Franz, V. Struktur und Mechanismus der Melanophoren im Farbenkleid der Teleostier. Z. Zellf. mikr. Anat. Berlin **23** 1936 pp. 150–197 35 text-figs.

304.—Franz, V. Nachtrag zu vorstehender Arbeit. Z. Zellf. mikr. Anat. Berlin **23** 1936 pp. 198–200 2 text-figs.

Fraser, J. H. vide Henderson, G. T. D.

305.—Fraser-Brunner, A. The occurrence of the Snipe-eel, *Nemichthys scolopaceus* on the Irish Atlantic Slope. Irish Nat. Journ. Belfast **6** 1936 pp. 16–18 1 text-fig.

306.—Freidenfelt, T. Über die systematische Bedeutung der Zähnnchen zweiter Ordnung an den Kiemenreusenzähnen der Coregonen. Zool. Anz. Leipzig **115** 1936 pp. 325–329.

307.—Freidenfelt, T. Hornsimpa från Fryken. Medd. Värml. Naturh. För. Karlstad **9** p. 7.

308.—Friedrich, H. Untersuchungen über das Blut und die Atmung der einheimischen Plattfische. II. Mitteilung. Die Blutgase von *Pleuronectes flesus* und *Pleuronectes platessa*. Wiss. Meeresuntersuch. Abt. Kiel (N.F.) **22** 1936 pp. 42–52 8 text-figs.

Friedrich, H. vide Buddenbrock, W. v.

309.—Frisch, J. von. Über den Gehörsinn der Fische. Biol. Rev. Cambridge **11** pp. 210–246 17 text-figs.

310.—Fritsch, R. H. Vergleichend physiologische Beobachtungen der Blutgerinnung bei Kaltblütern. Zool. Jahrb. Jena (Allg. Zool.) **57** 1936 pp. 129–156 6 text-figs.

311.—Froriep, E. Zur Frage der Sertoli'schen Zellen. Anat. Anz. Jena **82** 1936 pp. 1–20 5 text-figs.

312.—Fu, T. S. Study of the fishes of Sin-Yang. Bull. Fan Memorial Inst. Biol. Peiping **6** 1935 pp. 178–181 1 text-fig. [Abstract in Absts. Pap. Sci. Conf. Nanning 1935 pp. 66–67.]

313.—Fuhrmann, O. Le brochet, sa nourriture et sa croissance. Bull. Soc. neuchâtel. Sci. nat. **59** 1934 pp. 203–204.

314.—Furnestin, J. Quelques observations sur les Harengs du Fladen Ground. Rapp. Cons. Explor. Mer. Copenh. **100** Pt. 2 pp. 13–15 3 text-figs.

315.—Furnestin, J. Observations diverses sur les concentrations de Harengs du "Fladen" (Mer du Nord). Rev. Trav. Pêches marit. Paris **9** 1936 pp. 47–55 5 text-figs.

316. — Gaetani, D. de. Uova, sviluppo embrionale e stadi post-embrionali negli Sparidi. 3. *Pagellus acarne* C.V. Mem. Com. talassogr. ital. 220 1935 pp. 1-20 1 pl.

Gaige, H. T. *vide* Peckham, H. H.

317. — Gall, J. Le. Note préliminaire sur la biologie de la Sardine marocaine. Bull. Soc. Sci. nat. Maroc. 15 1935 pp. 229-231 pl. iv 1 text-fig.

318. — Gall, J. Le. Le Tassergal ou Blue Fish (*Pomatomus saltatrix* Lacépède = *Temnodon saltator* Linné). Résumé des connaissances acquises sur la biologie et l'utilisation de ce poisson. Bull. Soc. Sci. nat. Maroc. 15 1935 pp. 232-233 1 text-fig.

318A. — Gall, J. Le. Le Tassergal ou Blue Fish. (*Pomatomus saltatrix* Lacépède = *Temnodon saltator* Linné.) Résumé des connaissances acquises sur la biologie de ce poisson. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 3 No. 4 1936 3 pp. 1 fig.

319. — Gall, J. le. The present state of our knowledge concerning the origin and distribution of Herring population in Western European waters. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 1936 pp. 15-18.

320. — Gall, J. Le. Sur l'abondance relative des "classes annuelles" dans les différentes concentrations de Harengs de l'Atlantique nord-est. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 3 No. 3 1936 11 pp.

321. — Gall, J. Le. Statistiques biologiques et considerations sur les populations de Harengs de la Manche orientale et du sud de la Mer du Nord. Rev. Trav. Pêches marit. Paris 9 1936 pp. 37-46 2 text-figs.

322. — Garrault, H. Développement des fibres d'élastoïdine (actinotrichia) chez les Salmonides. Arch. Anat. micr. Paris 32 pp. 105-137 18 text-fig.

323. — Gąsowska, M. Der Giebel—eine ostasiatische Silberkarausche (*Carassius auratus gibelio* Bloch). Neue Unterscheidungsmerkmale. Z. Fischerei u. d. Hilfswiss. 34 1936 pp. 719-725 text-figs. 1-5.

324. — Gérard, P. Sur l'homologie entre les appareils sensoriels du système latéral et ceux du système vestibulaire,

chez les Téléostomes. Bull. Acad. Belg. Cl. Sci. (5) 22 1936 pp. 447-455 7 text-figs.

325. — Gérard, P. Sur l'existence de vestiges oculaires chez *Caecobarbus geertsi*. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 549-552 5 text-figs.

326. — Gerrish, C. S. The value of hatchery trout for stocking rivers. Salmon and Trout Mag. London 84 1936 pp. 245-254 1 pl. 2 text-figs.

327. — Gerrish, C. S. Hatchery stock and the trout streams. Are farm fish short lived? Salmon and Trout Mag. London 81 1935 pp. 331-344 2 pls. 2 text-figs.

328. — Gerrish, C. S. Scales from Avon Trout and Grayling. Avon Biol. Res. Rep. Southampton 1934-35 1936 pp. 81-95.

329. — Geyer, E. Die ersten Fischfunde aus dem Quartär Sachsens. Mitteil. a.d. Osterlande Altenburg (Thür) 41 (N.F. 22) 1934 pp. 23-26.

330. — Geyer, F. Eine Plotze (*Leuciscus rutilus* L.) ohne Bauchflossen aus dem Heidensee in Ostholstein. Arch. Hydrobiol. Stuttgart 30 1936 pp. 497-501 5 text-figs.

331. — Giacomini, E. I corpi ultimobranchiali dei Teleostei e dei Ganoidi. A proposito di un recente lavoro "sopra una glandula incretorica finora sconosciuta nei Teleostei." Boll. Soc. ital. Biol. sper. 11 1936 pp. 1012-1014.

332. — Gillaspy, C. C. Structural features of the brain of *Lepidosteus*. Proc. Iowa Acad. Sci. 42 [1935] pp. 199-202 2 text-figs.

333. — Gillaspy, C. C. The myelencephalic gland of *Lepidosteus* (osseus and platostomus) and its relationship to the semicircular canals. Proc. Iowa Acad. Sci. 42 [1935] pp. 203-206 3 figs.

334. — Gillet, S. and Théobald, N. Les sables marins de l'Oligocène du Haut-Rhin. Bull. Serv. Carte géol. Alsace-Lorraine 3 1936 pp. 37-76 pl. iii.

335. — Gilson, G. Further observations on spent Herring with remarks on fluctuations and oscillation. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 3 1906 pp. 22-25 2 text-figs.

336.—Giltay, L. Note sur quelques poissons marins du Congo Belge. Bull. Mus. Hist. nat. Belg. 11 36 1935 15 pp. 3 text-figs.

337.—Giltay, L. Notes ichthyologiques. XI.—Revision du genre *Hemipsilichthys* (Loricariidae). Bull. Mus. Hist. nat. Belg. 12 No. 14 1936 7 pp.

338.—Giltay, L. Remarques sur quelques caractères adaptatifs chez les Loricariidae (Poissons Téléostéens). Mem. Mus. Hist. nat. Belg. (2) 3 1936 p. 497.

339.—Ginsburg, I. Description of a new flatfish, with notes on related species. J. Wash. Acad. Sci. 26 1936 pp. 128-133 1 text-figs.

340.—Gnuschke, H. Untersuchungen über den Stoffwechsel während des Aufbaues der Fischgonade. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 7-62.

341.—Godsil, H. C. Tuna tagging. J. Conseil Copenhague 11 1936 pp. 94-97 2 text-figs.

342.—Goodrich, H. B. Studies on color patterns of Tortugas fish. Yearb. Carnegie Inst. Washington 34 1935 pp. 81-82.

343.—Gordon, M. The production of spontaneous melanotic neoplasms with a single type of melanophore in hybrid fishes. (Abstract.) Amer. Nat. 70 726 1936 pp. 50-51.

344.—Gordon, M. The production of spontaneous melanotic neoplasms at birth in hybrid fishes. (Abstract.) Amer. Nat. 70 726 1936 p. 51.

Gould, R. G. *vide* Graffin, A. L.

345.—Graffin, A. L. Renal function in marine teleosts. III.—The excretion of urea. Biol. Bull. Woods Hole 70 1936 pp. 228-235.

346.—Graffin, A. L. Renal function in marine teleosts. IV.—The excretion of inorganic phosphate in the Sculpin. Biol. Bull. Woods Hole 71 1936 pp. 360-374 3 text-figs.

347.—Graffin, A. L. and Gould, R. G. Renal function in marine teleosts. II. The nitrogenous constituents of the urine of Sculpin and Flounder, with particular reference to trimethylamine oxide. Biol. Bull. Woods Hole 70 1936 pp. 16-27.

348.—Graham, M. Modern theory of exploiting a fishery, and application to North Sea trawling. J. Conseil Copenhague 10 1935 pp. 263-274.

349.—Graham, M. Investigations of the Herring of Passamaquoddy and adjacent regions. J. Biol. Board Canada Toronto 2 1936 pp. 95-140 text-figs. 1-16.

350.—Graham-Smith, W. The tail of fishes. Proc. Zool. Soc. London 1936 pp. 595-608 47 text-figs.

351.—Graupner, H. and Fischer, E. Die Entwicklung und Degeneration der Melanophoren von *Atherina mocho*. Z. Zellf. mikr. Anat. Berlin 22 1935 pp. 434-444 5 text-figs.

352.—Gray, J. Studies in animal locomotion. IV.—The neuromuscular mechanism of swimming in the Eel. V. Resistance reflexes in the Eel. J. Exp. Biol. Edinburgh 13 1936 pp. 170-191 4 pls. 8 text-figs.

353.—Gray, J. and Sand, A. The locomotory rhythm of the Dogfish (*Scyllium canicula*). J. Exp. Biol. Edinburgh 13 1936 pp. 200-209 3 text-figs.

354.—Gray, J. and Sand, A. Spinal reflexes of the Dogfish, *Scyllium canicula*. J. exp. biol. Cambridge 13 1936 pp. 210-218 2 pls. 3 text-figs.

355.—Gregorio, A. de. Monografia dei fossili liassici di Monte San Giuliano. Ann. Géol. Paléont. Palermo 53 1930 56 pp. 14 pls. (Fishes p. 13.)

356.—Gregory, W. K. Reduplication in evolution. Quart. Rev. Biol. Baltimore 10 1935 pp. 272-290 12 text-figs.

357.—Gregory, W. K. The transformation of organic designs: a review of the origin and deployment of the earlier vertebrates. Biol. Rev. Cambridge 11 1936 pp. 311-344 10 text-figs.

358.—Gregory, W. K. and Conrad, M. Pictorial phylogenies of deep sea Isospondyli and Iniomi. Copeia Ann Arbor Mich. 1936 no. 1 pp. 21-36 4 text-figs.

359.—Gregory, W. K. and Conrad, M. The evolution of the Pediculate fishes. Amer. Nat. N.Y. 70 1936 pp. 193-208 5 text-figs.

360.—Gridelli, E. Le Trote della Venezia Giulia (Nota preventiva). Note Ist. Biol. mar. Rovigno **16** 1935 pp. 1-10.

361.—Grieb, A. W. and Stepanowa, W. S. Ergänzende Untersuchungen an den Sjaberskie Seen des Rayons von Luga und einige Angaben über den Charakter ihrer Ichthyofauna. Trav. Soc. Nat. Leningrad (Sect. Zool.) **63** 1934 pp. 324-342 4 text-figs. [Russian; German summary p. 341.]

362.—Grieb, A. W. Einige Besonderheiten in der postembryonalen Entwicklung des Schlammbeissers (*Misgurnus fossilis* L. fam. Cobitidae, Cyprinoidea). Trav. Soc. Nat. (Sect. Zool.) Leningrad **65** 1936 pp. 229-238 6 text-figs. [Russian; German Summary p. 237.]

363.—Griffin, L. T. Revision of the Eels of New Zealand. Trans. Roy. Soc. N.Z. **66** 1936 pp. 12-26 pls. v, vi text-figs. 1-6.

Gross, R. *vide* Fontès, G.

364.—Gross, W. Beiträge zur Osteologie baltischer und rheinisches Devon-Crossopterygier. Palaeont. Z. Berlin **18** 1936 pp. 129-145 pls. vii-viii 10 text-figs.

365.—Gross, W. Neue Crossopterygier aus dem baltischen Oberdevon. Zbl. Min. Geol. Paläont. Stuttgart **1026** pp. 69-78 9 text-figs.

366.—Grove, A. J. and Newell, G. E. A mechanical investigation into the effectual action of the caudal fin of some aquatic chordates. Ann. Mag. Nat. Hist. (10) **17** 1936 pp. 280-290 4 text-figs.

367.—Gruvel, A. Contribution à l'étude de la bionomie générale et de l'exploitation de la faune du Canal de Suez. Mem. Inst. Égypt. **29** 1936 pp. 1-255. (Fishes pp. 147-176, text-figs. 20-52.)

368.—Gudger, E. W. The earliest published figures (1613-1758) of the Oblong or Truncate-tailed Ocean Sunfish, *Ranzania truncata*. Nature London **137** 1936 pp. 947-948.

369.—Gudger, E. W. Beginnings of fish teratology, 1555-1642. Belon, Rondelet, Gesner and Aldrovandi, the fathers of ichthyology, the first to figure abnormal fishes. Scientific Monthly N.Y. **43** 1936 pp. 252-261 8 text-figs.

370.—Gudger, E. W. A Whale Shark off Bimini, Bahamas. Science N.Y. **84** 1936 p. 227.

371.—Gudger, E. W. The Whale Shark off Havana. Scientific Monthly N.Y. **42** 1936 pp. 84-85 1 fig.

372.—Gudger, E. W. Rhineodon at New York's front door. Nat. Hist. N.Y. **37** 1936 pp. 159-169 7 figs.

373.—Gudger, E. W. A reversed almost wholly ambicolorate Summer Flounder, *Paralichthys dentatus*. Amer. Mus. Nov. N.Y. **896** 1936 pp. 1-5 3 text-figs.

374.—Gudger, E. W. Ambicoloration partial and complete, in the Southern Flounder, *Paralichthys lethostigma*. Amer. Mus. Nov. N.Y. **897** 1936 pp. 1-7 6 text-figs.

375.—Gudger, E. W. and Firth, F. E. Three partially ambicolorate four-spotted Flounders, *Paralichthys oblongus*, two each with a hooked dorsal fin and a partially rotated eye. Amer. Mus. Nov. N.Y. **885** 1936 pp. 1-9 6 text-figs.

Gudger, E. W. *vide* Storey, M.

376.—Gunnell, F. H. Conodonts from the Fort Scott Limestone of Missouri. J. Paleont. Tulsa Ok. **5** 1931 pp. 244-252 pl. xxix.

377.—Gunter, G. Studies of the destruction of marine fish by shrimp trawlers in Louisiana. Louisiana Conservation Review New Orleans **5** no. 4 pp. 18-24, 45-46 4 text-figs.

378.—Gustafson, G. On the biology of *Myxine glutinosa* L. Ark. Zool. Stockholm **28** A no. 2 1935 pp. 1-8.

Gustafson, G. *vide* Lönnberg, E.

Guy, J. H. *vide* Torgeson, R. A.

379.—Habernoll, A. Natur und Bedeutung der tierbedingten Unfälle in Deutschland. SitzBer. Ges. naturf. Fr. Berlin **1935** 1936 pp. 403-441. [Fishes p. 437.]

380.—Hafen, G. Zur Psychologie der Dressurversuche. Z. vergl. Physiol. **22** 1935 pp. 192-220 5 text-figs.

381.—Hagen, F. v. Die wichtigsten Endokrinen des Flusssals. Thyroidea, Thymus und Hypophyse im Lebenszyklus des Flusssals (*Anguilla vulgaris*); nebst einigen Untersuchungen über das chromophile und chromophobe Kolloid

der Thyreoidea. Zool. Jahrb. Jena (Anat.) **61** 1936 pp. 467-538 pls. xii-xvi 37 text-figs.

382.—Hayman, N. Laxfångstens växlingar och älvarnas vattenstånd. Forh. skand. natuf. Møte **19** 1936 pp. 486-487.

383.—Hale, H. M. The egg-case of a Cat Shark, *Scyliorhinus vincenti* (Zietz). Rec. S. Aust. Mus. Adelaide **5** 1935 pp. 367-368 1 text-fig.

Haneda, Y. *vide* Yasaki, Y.

Han-Hsin, W. *vide* Boring, A. M.

384.—Hardenberg, J. D. F. On a collection of fishes from the estuary and the lower and middle course of the River Kapuas (W. Borneo). Treubia Buitenzorg **15** 1936 pp. 225-254.

385.—Hardenberg, J. D. F. Some new or rare fishes of the Indo-Australian Archipelago. V. Treubia Buitenzorg **15** 1936 pp. 367-378.

386.—Hardy, A. C. The ecological relations between the herring and the plankton investigated with the plankton indicator. Part I. The object, plan and methods of the investigation. J. Mar. Biol. Ass. Plymouth **21** no. 1 1936 pp. 147-177 10 text-figs.

387.—Harega, N. Notă asupra conținutului stomacal al unor pești marini și limnici din regiunea Jibreni și Volcicoc. Bull. Mus. nat. Kichineff **6** 1935 pp. 38-41.

388.—Harle, T. G. A. and Kemp, C. Artificial propagation of Brown Trout: Hatchery mortality. Part I. Salmon and Trout Mag. London **84** 1936 pp. 268-282 5 text-figs.

389.—Harris, J. E. Swimming movements of fishes: anatomy and physiology of the pectoral fin. Yearb. Carnegie Inst. Washington **34** 1935 pp. 84-85.

390.—Harris, J. E. The role of the fins in the equilibrium of the swimming fish. I. Wind-tunnel tests on a model of *Mustelus canis* (Mitchill). J. Exp. Biol. Edinburgh **13** 1936 pp. 476-493 text-figs. 1-8.

Harris, J. E. *vide* Breder, C. M.

391.—Harrison, A. C. Black Bass in the Cape Province. Second report on the progress of American Large-mouth

Black Bass (*Micropterus salmoides* Lacépède). Dep. Comm. Ind. Fish. S. Africa Inv. Rep. **7** 1936 119 pp. 3 pls.

391A.—Hass, G. Variationsstatische Untersuchungen an Proben von *Gobius microps* Kroyer aus der Kieler Bucht und der Schlei. Schr. naturw. Ver. Schl.-Holst. **21** 3 1936 pp. 419-426.

392.—Hase, A. Ueber ein hypertrophisches Flossenregenerat beim Goldfisch (*Carassius auratus* L.). Sitzber. Ges. naturf. Fr. Berlin **1935** 1936 pp. 283-289 2 text-figs.

393.—Houghton, S. H. Report of the commission on the distribution of the Karroo (Gondwana) system. Rep. 16th Inst. Geol. Congress U.S.A. 1933 **2** 1936 pp. 1115-1146. [Fishes p. 1139.]

394.—Houghton, S. H. On some Karroo fishes from East Africa. Quart. J. Geol. Soc. London **92** 1936 pp. 58-61 pl. vi.

395.—Hayes, J. Z. and Ross, D. M. A quantitative study of the total fat content of developing Salmon eggs. Proc. roy. Soc. London (B) **121** 823 1936 pp. 358-375 6 text-figs.

396.—Hegener, K. Kleine Beobachtungen an *Symphysodon discus*. Bl. Aqu. Terr. Stuttgart **47** 1936 pp. 241-243 1 text-fig.

397.—Heintz, A. Hirtveldyrenes avstamning. Naturen Bergen **1933** pp. 257-266, 289-298, 10 text-figs.

398.—Heintz, A. Holonema-Reste aus dem Devon Spitzbergens. Medd. Svalbard og Ishavet Oslo **31** 1935 pp. 1-8 1 pl.

399.—Helfer, H. Giftwirkungen auf Fische; ihre Ermittlung durch Versuche und die Bewertung der Ergebnisse. Kleinen Mitt. Mitglieder Vereins Wasser-, Boden- und Lufthygiene Berlin **12** 1936 pp. 32-62.

400.—Henderson, G. T. D. The ecological relations between the herring and the plankton investigated with the plankton indicator. Part III. The zooplankton-herring correlations in the Scottish fisheries. J. Mar. Biol. Ass. Plymouth N.S. **21** no. 1 1936 pp. 243-276 7 text-figs.

401.—Henderson, G. T. D., Lucas, C. E. and Fraser, J. H. The ecological relations between the herring and the plankton investigated with the plankton indicator. Part IV. The relation between catches of herring and phytoplankton collected by the plankton indicator. *J. Mar. Biol. Ass. Plymouth N.S.* **21** no. 1 1936 pp. 277–291 4 text-figs.

Henderson, G. T. D. *vide* Lucas, C. E.

402.—Henschel, J. Wasserhaushalt und Osmoregulation von Scholle und Flunder. *Wiss. Meeresuntersuch. Abt. Kiel (N.F.)* **22** 1936 pp. 89–121 15 text-figs.

Henschel, J. *vide* Buddenbrock, W. v.

403.—Hernández-Pacheco, F. Los materiales bituminosos de la Serranía de Ronda (Málaga). *Bol. Soc. esp. Hist. nat.* **36** 1936 pp. 245–275 pls. xxx–xxxvi. [*Pisces* pp. 271–272 pls. xxxv, xxxvi.]

404.—Herre, A. W. C. T. *Phaenopogon* a synonym of *Cirrhitigaleus*. *Copeia Ann Arbor* 1936 p. 59.

405.—Herre, A. W. C. T. Some habits of *Amphiprion* in relation to Sea Anemones. *Copeia Ann Arbor* 1936 pp. 167–168.

406.—Herre, A. W. C. T. Notes on fishes in the zoological museum of Stanford University. IV. A new Catostomid from Mexico and a new Callionymid from Celebes and the Philippines. *Proc. Biol. Soc. Washington* **49** 1936 pp. 11–13.

407.—Herre, A. W. A new Cyprinid genus and species and a new Characin from Portuguese East Africa. *Proc. Biol. Soc. Washington* **49** 1936 pp. 99–102.

408.—Herre, A. W. C. T. Fishes in the zoological museum of Stanford University. III. New genera and species of Gobies and Blennies and a new *Myxus*, from the Pelew Islands and Celebes. *Philipp. J. Sci. Manila* **59** 1936 pp. 275–286 1 pl.

409.—Herre, A. W. C. T. Notes on fishes in the zoological museum of Stanford University. V. New or rare Philippine fishes from the Herre 1933 Philippine Expedition. *Philipp. J. Sci. Manila* **59** 1936 pp. 357–373 2 pls.

410.—Herre, A. W. C. T. Notes on fishes in the Zoological Museum of

Stanford University. VI. New and rare Hong Kong Fishes obtained in 1934. *Hong Kong Nat.* **6** 1935 pp. 285–293 1 text-fig.

411.—Herre, A. W. C. T. Two new Gobies from Hong Kong. *Hong Kong Nat.* **7** 1936 pp. 184–185.

412.—Herre, A. W. Fishes of the Crane Pacific expedition. *Field Mus. Pub. Chicago* **21** no. 353 1936 pp. 1–472 50 text-figs.

413.—Herre, A. W. C. T. Eleven new fishes from the Malay Peninsula. *Bull. Raffles Mus. Singapore* **12** 1936 pp. 5–16 11 pls.

414.—Herre, A. W. C. T. Report on a collection of fresh-water fishes from Hainan. *Lingnan Sci. Journ. Canton* **15** 1936 pp. 627–631.

415.—Herre, A. W. and Lin, S. Y. Fishes of the Tsien Tang River system. *Bull. Chekiang Prov. Fish. Exp. Sta. Tanghai* **2** no. 7 1936 pp. 1–37 8 text-figs.

416.—Hesse, C. J. A new species of the genus *Priscacara* from the Eocene of Washington. *J. Geol. Chicago* **44** 1936 pp. 745–750 1 pl.

417.—Hickling, C. F. Fluctuations in year-classes of Hake (*Merluccius merluccius*, Linn). *Rapp. Cons. Explor. Mer. Copenh.* **101** Pt. 3 No. 8 1936 3 pp.

418.—Hickling, C. F. and Rutenberg, E. The ovary as an indicator of the spawning period in fishes. *J. Mar. Biol. Ass. Plymouth N.S.* **21** 1 1936 pp. 311–317 1 text-fig.

419.—Hile, R. Summary of investigations on the morphometry of the Cisco, *Leucichthys arctedi* (Le Sueur), in the lakes of the Northeastern Highlands, Wisconsin. *Pap. Mich. Acad. Sci.* **21** pp. 619–634 pl. lxii.

420.—Hill, B. H. On the origin of thymocytes in *Salmo fario*. (Abstract.) *Anat. Rec. Philadelphia* **64** (Suppl. 3) 1936 p. 21.

421.—Hills, E. S. On certain endocranial structures in *Coccosteus*. *Geol. Mag. London* **73** 1936 pp. 213–226 pl. iii 6 text-figs.

422.—Hills, E. S. Records and descriptions of some Australian Devonian fishes. *Proc. roy. Soc. Vict.* **48** 1936 pp. 161–171 pl. xii 5 text-figs.

- 423.—Hilzheimer, M. Ein *Saurichthys* Ag. aus dem Röt von Rüdersdorf. Brandenburgia Nauen **39** 1930 pp. 18–20.
- 424.—Hiyama, Y. [On the development of fused teeth of *Oplegnathus fasciatus* Temminck and Schlegel.] Dobuts. Zasshi Tokyo **46** 1934 pp. 304–312 9 text-figs. [Japanese.]
- 425.—Hiyama, Y. [A preliminary note on fishes of Hemirhamphidae of Japan.] Dobuts. Zasshi Tokyo **46** 1934 pp. 401–410 9 text-figs. [Japanese.]
- 426.—Hiyama, Y. [On *Tridentiger bifasciatus* etc.] Dobuts. Zasshi Tokyo **45** 1933 pp. 373–377 6 text-figs. [Japanese.]
- 427.—Hiyama, Y. [Notes on the spawning habits of Japanese small Goby, *Tridentiger bifasciatus* Steindachner.] Proc. sci. Fish. Ass. Tokyo **7** 1936 pp. 66–69 2 text-figs. [Japanese.]
- 428.—Ho, H. J. The growth of the Goldfish (*Carassius auratus*). China J. Shanghai **24** 1936 pp. 101–105 2 pls. 2 text-figs.
- 429.—Hoch, R. Labyrinthfische. Bl. Aqu. Terr. Stuttgart **47** 1936 pp. 52–54.
- 430.—Hodgson, W. C. The present state of our knowledge concerning the origin and distribution of Herring populations in Western European waters.—The Southern Bight. Rapp. Cons. Explor. Mer. Copenh. **100** Pt. 2 1936 pp. 19–20.
- 431.—Hoerr, N. L. Cytological studies by the Altmann-Gersch freezing-drying method. III. The preexistence of neurofibrillae and their disposition in the nerve fibre. Anat. Rec. Philadelphia **66** 1936 pp. 81–90 4 text-figs.
- 432.—Hogben, L. The pigmentary effector system. VII. The chromatic function in Elasmobranch fishes. Proc. roy. Soc. London (B) **120** pp. 142–158.
- 433.—Hollister, G. A fish which grows by shrinking. Bull. New York zool. Soc. **39** 1936 pp. 104–109 5 figs.
- 434.—Hollister, G. Caudal skeleton of Bermuda shallow water fishes. I. Order Isospondyli: Elopidae, Megalopidae, Albulidae, Clupeidae, Dussumeriidae, Engraulidae. Zoologica New York **21** 1936 pp. 257–290 53 text-figs.
- 435.—Holly, M. Pisces, 4. Ganoidei. Das Tierreich Leipzig Lfg. **67** 1936 pp. 1–65 56 text-figs.
- 436.—Holly, M. Die Lungenfische (Dipnoi). Bl. Aqu. Terr. Stuttgart **47** 1936 pp. 218–220, 246–250, 9 text-figs.
- 437.—Holly, M. Die Ammodytesarten der Küste des Königreiches Belgien. Bull. Mus. Hist. nat. Belg. **12** no. 5 1937 pp. 1–19.
- 438.—Holly, M. Die Syngnathiden der belgischen Küstengewässer. Bull. Mus. Hist. nat. Belg. **12** no. 7 1936 pp. 1–3.
- 439.—Holly, M., Meinken, H. and Rachow, A. Die Aquarienfische Stuttgart Lfg. 5–8 [1935] 9–14 [1936] illustr.
- 441.—Holmgren, N. An interpretation of the exceptional relation between the orbit and the forebrain division of the cranial cavity in Chimaera. Psychiatr. neurol. Bladen Amsterdam **1934** pp. 623–624.
- 442.—Holmgren, N. and Stensiö, E. Kraniaum und Visceralskelett der Akranier, Cyclostomen und Fische. Bolk. Handb. Vergl. Anat. Wirbeltiere **4** Wien 1936 pp. 233–500 text-figs. 203–373.
- 443.—Hoover, E. E. The spawning activities of the Fresh Water Smelt, with special reference to the sex ratio. Copeia Ann Arbor **1936** pp. 85–91 4 text-figs.
- 444.—Hora, S. L. Physiology, bio-nomics, and evolution of the air-breathing fishes of India. Trans. Nat. Inst. Sci. India **1** 1 1935 pp. 1–16 pl. i.
- 445.—Hora, S. L. Report on fishes. Part I: Cobitidae. Mem. Conn. Acad. Arts Sci. **10** 1936 pp. 299–321 pl. xii 9 text-figs.
- 446.—Hora, S. L. Notes on fishes in the Indian Museum. XXVI. On a small collection of fish from Chitaldrug district, Mysore. Rec. Ind. Mus. Calcutta **38** 1936 pp. 1–7.
- 447.—Hora, S. L. On a further collection of fish from the Naga Hills. Rec. Ind. Mus. Calcutta **38** 1936 pp. 317–331 9 text-figs.
- 448.—Hora, S. L. Siluroid fishes of India, Burma and Ceylon: II. Fishes of the genus *Akysis* Bleeker. III. Fishes of the genus *Olyra* McClelland.

IV. On the use of the generic name *Wallago* Bleeker. V. Fishes of the genus *Heteropneustes* Müller. Rec. Ind. Mus. Calcutta **38** 1936 pp. 199-209 4 text-figs.

449.—Hora, S. L. Siluroid fishes of India, Burma and Ceylon. VI. Fishes of the genus *Clarias* Gronovius. VII. Fishes of the genus *Silurus* Linnaeus. VIII. Fishes of the genus *Callichrous* Hamilton. Rec. Ind. Mus. Calcutta **38** 1936 pp. 347-361 6 text-figs.

450.—Hora, S. L. and Misra, K. S. Sexual dimorphism in the carp, *Labeo dero* (Hamilton). Rec. Ind. Mus. Calcutta **38** 1936 pp. 341-342 2 text-figs.

451.—Hora, S. L. and Mukerji, D. D. Notes on the fishes in the Indian Museum. XXVII. On two collections of fish from Maungmagan, Tavoy District, Lower Burma. Rec. Ind. Mus. Calcutta **38** 1936 pp. 15-39 pls. i & ii 6 text-figs.

452.—Hora, S. L. and Mukerji, D. D. Fish of the eastern Doons, United Provinces. Rec. Ind. Mus. Calcutta **38** 1936 pp. 133-146 5 text-figs.

453.—Hora, S. L. and Mukerji, D. D. European species of fish from the Tavoy Coast, Burma. Nature London **137** 1936 p. 152.

Hora, S. L. *vide* Prashad, B.

454.—Hornyold, A. G. Usages médicaux de l'Anguille d'après le Dr. Georg Handsch von Limus 1529-1579. Verh. schweiz. naturf. Ges. **116** 1935 pp. 394-395.

455.—Hornyold, A. G. Observations sur la Civelles d'Aguinaga en 1932-33. Bull. Soc. Hist. nat. Toulouse **67** 1935 pp. 40-50.

456.—Hornyold, A. G. Observations sur la petite Anguille jaune des étangs de Gruissan et de Thau. Bull. Soc. Hist. nat. Toulouse **67** 1935 pp. 237-246.

457.—Hornyold, A. G. Difference de taille et de poids entre la Civelles de la Méditerranée et celle de l'Atlantique en Janvier et Février 1934. Verh. int. Vereinig. Limnol. Beograd **7** 1935 pp. 645-652 2 text-figs.

458.—Hornyold, A. G. La Civelles d'Arcachon et d'Aguinaga, des 22 et 23 Février 1935. Bull. Sta. biol. Arcachon **32** 1935 pp. 173-181.

459.—Hornyold, A. G. Observations sur le sexe, l'âge et la croissance de la petite anguille du Canal du Rhône à Gallician (Gard). Bull. Soc. zool. Fr. **60** 1936 pp. 473-481.

460.—Hornyold, A. G. Les otolithes de six grandes Anguilles du lac de Trasimène. Bull. Soc. zool. Fr. **61** 1936 pp. 248-252 pls. ii, iii.

461.—Hornyold, A. G. Observations sur la montée de la Civelles dans l'Orto. Bull. Soc. Océanogr. Paris **87** 1936 pp. 1505-1506.

462.—Hornyold, A. G. La taille maximum de la Civelles du Golfe de Gascogne. Bull. Soc. Océanogr. Paris **91** 1936 pp. 1569-1571.

463.—Hornyold, A. G. La Civelles d'Aguinaga de 1935 à 1936. Bull. Soc. Océanogr. Paris **92** 1936 pp. 1597-1599.

464.—Hornyold, A. G. Le sexe, l'âge et la croissance de la petite Anguille de l'étang de Seamandre, dit des Iscles (Gard). Bull. Soc. Centr. Aqu. Paris **43** 1936 pp. 35-40.

465.—Hornyold, A. G. Civelles pigmentées de la Loire de mars et mai 1935. Bull. Soc. Centr. Aqu. Paris **43** 1936 pp. 108-114.

466.—Hornyold, A. G. Observations sur le nombre de zones des écailles de quelques anguilles. Bull. Soc. Centr. Aqu. Paris **43** 1936 pp. 115-118.

467.—Hornyold, A. G. The otoliths of eight small Silver Eels from the Valli (Lagunes) of Comacchio. J. R. micr. Soc. London (3) **56** 2 1936 pp. 154-157 2 pls.

468.—Hornyold, A. G. Vingt années de recherches sur l'anguille (1916-1936). Lugano 1936 23 pp. 1 pl.

469.—Hornyold, A. G. Une grande Anguille de Ponte-Tresa (Tessin). Bull. Suisse Pêche Piscicult. **37** 1936 pp. ? [non *vidi*].

Horton, F. M. *vide* Francis, E. T. B.

470.—Hosch, L. Untersuchungen über Grosshirnfunktionen der Elritze (*Phoxinus phoxinus*) und des Gründlings (*Gobio flaviatilis*). Zool. Jahrb. Jena (Allg. Zool.) **57** 1936 pp. 57-98 7 text-figs.

471.—Hossfeld, O. Seepferdchen im Meeresaquarium des Aquarienliebhabers. Bl. Aqu. Terr. Stuttgart **47** 1936 pp. 10-13 1 text-fig.

- 472.—Howes, N. H. A study of the histology of the pituitary gland of the Skate. *Quart. J. micr. Sci.* London N.S. 78 pp. 637-651 pls. xxxiii & xxxiv 5 text-figs.
- 473.—Hubbs, C. L. An older name for the Black-nosed Dace. *Copeia Ann Arbor* 1936 pp. 124-125.
- 474.—Hubbs, C. L. *Austroperca*, a new name to replace *Torrentaria*, for a genus of Mexican fishes. *Occ. Pap. Mus. Zool. Univ. Mich.* 341 1936 3 pp.
- 475.—Hubbs, C. L. Fishes of the Yucatan Peninsula. *Pub. Carnegie Instn. Washington* 457 1936 pp. 157-287 1 text-fig. 15 pls.
- 476.—Hubbs, C. L. and Cooper, G. P. Minnows of Michigan. *Bull. Cranbrook Inst. Sci.* 8 1936 95 pp. 10 pls.
- 477.—Hubbs, C. L. and Innes, W. T. The first known Blind Fish of the family Characidae: a new genus from Mexico. *Occ. Pap. Mus. Zool. Univ. Mich.* 342 1936 pp. 1-7 1 pl.
- 478.—Hubbs, C. L. and Trautman, M. B. The need for investigating fish conditions in winter. *Trans. Amer. Fisheries Soc. Washington* 65 1935 pp. 51-56.
- Hubbs, C. L. *vide* Peckham, H. H.
- Hubbs, C. L. *vide* Rivero, L. H.
- Hubbs, C. L. *vide* Trautman, M. B.
- 479.—Huntsman, A. G. Return of Salmon from the sea. *Bull. biol. Board Canada* 51 1936 20 pp. 10 text-figs.
- Huntsman, A. G. *vide* Battle, H. J.
- 480.—Hutchinson, G. E. Alkali deficiency and fish mortality. *Science N.Y.* 84 1936 p. 18.
- 481.—Hutton, J. A. Results of scale reading, 1935. *Salmon Trout Mag.* London 82 1936 pp. 68-94 4 graphs.
- 482.—Ikeda, K. [On the Sticklebacks of the Kurile Islands.] *Bull. biogeogr. Soc. Tokyo* 5 1935 pp. 213-232 4 text-figs. [Japanese.]
- 483.—Ikeda, H. Notes on the sexual characters of *Triborodon hakonensis* (Günther). *Dobuts. Zasshi Tokyo* 48 1936 pp. 53-54 1 pl.
- 484.—Ikeda, H. Statistical observation on the species of genus *Triborodon* in Aomori-ken and notes on their distribution. *Dobuts. Zasshi Tokyo* 48 1936 pp. 354-368 14 text-figs. [Japanese; English summary p. 354.]
- 485.—Ikeda, H. On the sexual dimorphism and the taxonomical status of some Japanese Loaches. *Dobuts. Zasshi Tokyo* 48 1936 pp. 983-994 13 text-figs.
- 486.—Ikeda, H. [On a deformed specimen of *Tribolodon* sp. collected at Lake Akan, Hokkaido.] *Botany & Zool. Tokyo* 4 1936 pp. 1549-1552 6 text-figs. [Japanese and (some) English.]
- Innes, W. T. *vide* Hubbs, C. L.
- 487.—Inukai, T. Experiments on release of young Salmon from the hatchery directly into sea water. *Zool. Mag. Tokyo* 48 1936 pp. 907-910 1 text-fig. [Japanese; English summary p. 907.]
- 488.—Ishida, J. Ciliated intestinal epithelium in Teleost. *Annot. zool. jap.* 15 1935 pp. 158-160 2 text-figs.
- 489.—Ishida, J. The stomach of *Mugil cephalus* and its digestive enzymes. *Annot. zool. jap.* 15 1935 pp. 182-189 1 text-fig.
- 490.—Ishida, J. Influence of change in food on liver-glycogen in a Labroid fish, *Thalassoma umbrostigma*. *Annot. zool. jap.* 15 1935 pp. 203-212.
- 491.—Ishida, J. Distribution of the digestive enzymes in the digestive system of stomachless fishes. *Annot. zool. jap.* 15 1936 pp. 263-284 7 text-figs.
- 492.—Ivanova-Berg, M. M. Spring migration and spawning of the Neva Lamprey. *Bull. Acad. Sci. U.R.S.S. (Ser. Biol.)* 1936 pp. 599-604. [Engl. summ. p. 604.]
- 493.—Jablonskaja, E. A. Zur Kenntnis der Fischproduktivität der gewässer. *Mitteilung V.* Die Ausnutzung der natürlichen Futterarten seitens der Spiegelkarpfen und die Wertung des Futterreichtums der Wasserbecken von diesem Standpunkt aus. *Arb. limnolog. Sta. Kossino.* 20 1935 pp. 99-127. [German summ. p. 122 etc.]
- 494.—Jacobs, W. Der spanische Reuterfisch. *Natur. u. Volk.* 66 1936 pp. 399-402 4 text-figs.
- Jaeckel, S. *vide* Neubaur, R.

495.—Järvi, T. H. and Menzies, W. J. M. The interpretation of the zones on scales of Salmon, Sea Trout and Brown Trout. Rapp. Cons. Explor. Mer. Copenh. **97** 1936 63 pp. 88 figs.

Jeffers, A. M. *vide* Battle, H. I.

Jenkins, T. N. *vide* Warden, C. J.

496.—Jespersen, P. Investigations on the stocks of Halibut in the North Atlantic. Rapp. Cons. Explor. Mer. Copenh. **99** 1936 No. 2 27 pp. 13 text-figs.

497.—Jespersen, P. Fluctuations in year-classes of Halibut. Rapp. Cons. Explor. Mer. Copenh. **101** Pt. 3 No. 6 1936 3 pp.

498.—Johansen, B. G. Bemerkung über die Neunaugen Ostasiens. Animadv. syst. Mus. Zool. Inst. Biol. Univ. Tomskensis **2** 1935 4 pp. [Russian; German summary p. 4.]

499.—John, C. C. Freshwater fish and fisheries of Travancore. J. Bombay Nat. Hist. Soc. **38** 1936 pp. 702–733 5 text-figs.

500.—Johnsen, S. On the variation of fishes in relation to environment. (Preliminary account.) Bergens Mus. Aarb **1936** no. 4 pp. 1–26 5 text-figs.

Johnson, J. H. *vide* Bryant, W. L.

Johnson, W. H. *vide* Battle, H. I.

501.—Jong, J. C. M. de. Beiträge zur Kenntnis des Baues und der Entwicklung der Schwimmblase einiger Physoclisten. Amsterdam **xvi** + 92 pp. 10 pls. photos. 1–4c. 1936.

502.—Jordan, K. Dr. Karl Jordan's expedition to South-west Africa and Angola. Narrative. Novit. zool. Tring **40** 1936 pp. 17–62 figs. 20–32.

503.—Jung, J. Erfahrungen über die Behandlung der Ichthyophtiriasis mit Chinin. Bl. Aqu. Terr. Stuttgart **47** 1936 pp. 223–225 250–253.

504.—Jürgens, W. Polypteriden im Aquarium. Bl. Aqu. Terr. Stuttgart **47** pp. 26–29 1 text-fig.

505.—Kamada, T. Membrane potential of the egg of *Oryzias latipes*. Dobuts. Zasshi Tokyo **48** 1936 pp. 152–153.

506.—Kamohara, T. On the Zeomorphi of Japan. Botany & Zool. Tokyo **4** 1936 pp. 357–362 5 text-figs. [Japanese.]

506A.—Kamohara, T. Supplementary note on the fishes of the Zeomorphi of Japan. Botany & Zool. Tokyo **4** 1936 pp. 1035–1036 1 text-fig. [Japanese.]

507.—Kamohara, T. On the fishes of the family Balistidae of Prov. Tosa Japan. Botany & Zool. Tokyo **4** 1936 pp. 1739–1745 5 text-figs. [Japanese and English.]

508.—Kamohara, T. A review of the Peristedioid fishes found in the waters of Japan. Annot. zool. jap. **15** 1936 pp. 436–442 pls. xxix, xxx.

509.—Kamohara, T. Two new deep-sea fishes from Japan. Annot. zool. jap. **15** 1936 pp. 446–448 2 text-figs.

510.—Kamohara, T. Supplementary note on the fishes collected in the vicinity of Kôchi (VIII). Dobuts. Zasshi Tokyo **48** 1936 pp. 17–22 5 text-figs.

511.—Kamohara, T. Supplementary note on the fishes collected in the vicinity of Kôchi-shi (IX). Dobuts. Zasshi Tokyo **48** 1936 pp. 306–311 3 text-figs. [Japanese; English summary p. 306.]

512.—Kamohara, T. On a new fish of the Triglidae from Kochi, Japan. Dobuts. Zasshi Tokyo **48** 1936 pp. 481–483 1 text-fig. [Japanese; English summary.]

513.—Kamohara, T. Supplementary note on the fishes collected in the vicinity of Kochi-shi (X). Dobuts. Zasshi Tokyo **48** 1936 pp. 929–935 4 text-figs. [Japanese; English summary p. 929.]

514.—Kamohara, T. On two new species of fishes found in Japan. Dobuts. Zasshi Tokyo **48** 1936 pp. 1006–1008 2 text-figs.

Kanter, A. E. *vide* Barnes, B. O.

515.—Karaman, S. Die Fauna der unterirdischen Gewässer Jugoslaviens. Verh. int. Vereinig. Limnol. Beograd **7** 1935 pp. 46–73.

516.—Karpewitsch, A. und Bokowa, E. Verdauungstemplos bei Seefischen. Zool. J. Moscow **15** 1936 pp. 143–168 14 text-figs. [Russian.]

517.—Karsinkin, G. S. Zur Kenntnis der Fischproduktivität der Gewässer. Mitteilung IV. Durchgangsdauer und Ausnutzbarkeit der Nahrung von der Brut von *Esox lucius* L. Arb. limnolog. Sta. Kossino 20 1935 pp. 81-97. [German summary p. 93.]

518.—Karsinkin, G. S. Zur Erkenntnis der Fischproduktivität der gewässer. Mitteilung III. Zur Physiologie der Fischernährung als eines der Momente in der Erforschung der Produktivität der Binnengewässer. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 398-410.

519.—Kask, J. L. The experimental marking of Halibut. Science N.Y. 83 1936 pp. 435-436.

Kask, J. L. *vide* Bell, F. H.

520.—Kato, K. On the intestinal epithelium of *Nomius gronovii*. Annot. zool. jap. 15 1935 pp. 190-193 2 text-figs.

521.—Kato, K. On the copulation of *Callionymus valenciennesi*. Dobuts. Zasshi Tokyo 48 1936 pp. 5-6.

Keith-Roach, E. *vide* Luke, H.

522.—Keller, G. Fischreste aus dem Oberkarbon des Ruhrgebiets. Glückauf. Essen 1934 40 pp. 913-917 8 text-figs.

Kelley, K. L. *vide* Torgeson, R. A.

Kemp, C. *vide* Harle, T. G. A.

523.—Kennedy, W. A. *Pomoxis angularis* in Ontario. Copeia Ann Arbor 1936 p. 121.

524.—Kerff, G. Die Photographie von Aquarienfischen. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 77-81 6 text-figs.

Khabakov = Chabakov, *q.v.*

525.—Kieselbach, G. A ráják és a cápák húsa. Termeszett. Közl. Budapest 65 1933 pp. 228-232 2 text-figs.

526.—Kimura, S. The fresh-water fishes of the Tsung-Ming Island, China. Abstract [of Bull. Shanghai Sci. Inst. 5 1935 pp. 1-29 *non vidi*]. J. Shanghai Sci. Inst. (3) 3 1935 pp. 99-120 1 text-fig.

527.—Kinoshita, Y. On the conversion of sex in *Sparus longispinis* (Temminck & Schlegel) (Teletosei). J. Sci. Hiroshima Univ. Zool. 4 1936 pp. 69-79 3 pls. 3 text-figs.

528.—Kinoshita, Y. On the accidental hermaphroditism and sex-reversal in *Halichoeres poecilopterus*.

Botany & Zool. Tokyo 4 1936 pp. 1027-1030 5 text-figs. [Japanese, with some English.]

529.—Kinoshita, Y. On the nuptial coloration of *Chloea sarchynnus* Jordan & Snyder which is found only in the female. Dobuts. Zasshi Tokyo 48 1936 pp. 257-259 1 text-fig.

530.—Kirillov, F. N. The Sand-eel of Novaya Zemlya (*Ammodytes marinus* Raitt). C.R. Acad. Sci. Leningrad N.S. 1936 4 pp. 233-235.

531.—Kirpichnikov, V. S. and Balkashina, E. I. [Materials on genetics and selection of the Carp. II. 1. The fundamental series of genes of the scales and the problem of pleiotropism of genes of the carp. 2. Hybrids of the cultivated and the wild carp.] Biol. J. Moscou 5 1936 pp. 327-376 13 figs. [Russian; English summary p. 374.]

532.—Kisch, B. Zur Kenntnis des Augapfelgelenkes der Knorpelfische. Wiss. Mitt. Ver. Natur. u. Heimath. Köhn a Rh. 1 1930 pp. 20-22 1 text-fig.

Klawans, A. H. *vide* Barnes, B. O.

533.—Kleiner, J. S., Weisman, A. J., Mishkind, D. I. and Coates, C. W. The female Bitterling as a biologic test animal for male hormone. Zoologica New York 21 1936 pp. 241-250 1 pl. 1 text-fig.

534.—Kobayasi, H. Observations on the scales of Japanese Cobitid fishes. Botany & Zool. Tokyo 4 1936 pp. 855-862. [Japanese; English summary p. 861.]

535.—Koch, W. und Scheuring, L. Die Wirkung von Hypophysenvorderlappenhormon auf den Laichakt von Fischen. Zool. Anz. Leipzig 116 1936 pp. 62-64.

536.—Ko-ching, Y. Sur la contraction protoplasmique du vitellus chez le Poisson Core (*Carassius auratus* L.). Absts. Pap. Sci. Conf. Nanning 1935 pp. 78-80.

537.—Kongiel, R. W sprawie wieku "siwaka" w okolicach Pulaw. Contribution à l'étude du "siwak" dans les environs de Pulawy (plateau de Lublin). Trav. Soc. Sci. Wilno 9 1935 pp. 171-227 8 pls. (4-11). [Polish; French summary p. 217. Pisces p. 215.]

538.—Konopacka, B. Studja histochemiczne nad rozwojem ryb. 1. Wytwarzanie się zółtka u kielbia (*Gobio fluviatilis*) i karpia (*Cyprinus carpio*).—Recherches histochimiques sur le développement des Poissons. I. La vitellogénèse chez le Goujon (*Gobio fluviatilis*) et le Carpe (*Cyprinus carpio*). Bull. int. Acad. Cracovie B II 1935 pp. 163–182 pl. vi.

539.—Korringa, P. Visscherij en vischfauna van de Noordzeekanaalboezem. I. Visscherij. Levende Natuur Amsterdam 41 1936 pp. 84–90, 91–123 5 text-figs.

540.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. 2 vols. Jena 1936 1314 pp. 1310 text-figs. (Vertebrata pp. 1167 ff.)

541.—Koshow, M. Materialien über die Hydrobiologie des Kleinen Meeres auf dem Baikalsee und über die Migration der *Coregonus migratorius* (Georgi). Bull. Inst. Sci. Biol. Géogr. Irkutsk. 7 1–2 1936 pp. 93–126. [German summ. p. 125.]

542.—Kosswig, C. Nicht homologe Heterochromosomen bei nächstverwandten Arten (Kreuzung von *Platyopocilus maculatus* und *Pl. xiphidium*). Biol. Zbl. Leipzig 56 1936 pp. 199–207.

543.—Kosswig, C. Homogametische ZZ- und WW-Weibchen entstehen nach Artkreuzung mit dem im weiblichen Geschlecht heterogametischen *Platyopocilus maculatus*. Biol. Zbl. Leipzig 56 1936 pp. 409–414.

544.—Kosswig, C. Kleinere Mitteilungen über Art- und Gattungsbastarde von Zahnkarpfen. Zool. Anz. Leipzig 114 1936 pp. 195–206 12 text-figs.

545.—Kostomarov, B. Oliv paprsků ultrařalových na vzrůst a látkovou výměnu ryb. Bull. Ec. sup. Agron. Brunn. (C) 18 1930 pp. 1–28 16 text-figs.

546.—Kotthaus, A. Die Schollenbevölkerung der Deutschen Bucht im Jahre 1935. J. Conseil Copenhagen 11 1936 pp. 27–32 1 text-fig.

547.—Koumans, F. P. Notes on Gobiod fishes. 7. On the Indo-Australian species of *Oxyeleotris* Bleeker. Zool. Meded. Leiden 19 1936 pp. 128–134.

548.—Koumans, F. P. A case of increase of the number of scales during growth in fishes. Temminckia Leiden 1 1936 pp. 267–276 3 text-figs.

549.—Koutchina, E. S. L'âge et le rythme de croissance du Saumon des rivières Voronia et Tëriberka (côte de Mourman). Bull. Inst. Freshwater Fish. Leningrad 20 1935 pp. 202–221 3 pls. [French and Russian.]

550.—Koutchina, E. S. Biologie et industrie du saumon de la rivière Soyana (affluent du Kouloï, mer Blanche). Bull. Inst. Freshwater Fish. Leningrad 20 1935 pp. 264–293 pls. v–vi 4 text-figs. [Russian; French summary p. 292.]

551.—Krawarik, F. Über eine bisher unbekannte Drüse ohne Ausführungsgang bei den heimischen Knochenfischen. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 555–608 18 text-figs.

552.—Krawarik, F. and Süß, K. Nerven und Nervenendigungen in der Schleimhaut des Karpfenrüssels. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 379–393 11 text-figs.

553.—Krejci-Graf, K. Fährte des Schlamm-Springers (*Periophthalmus*). Nat. u. Volk. 66 1936 p. 548 1 text-fig.

554.—Krochin, E. M. and Krogus, F. V. The lake form of *Oncorhynchus nerka* from Lake Kronotsk, Kamchatka. C.R. Acad. Sci. Moscow N.S. 1936 4 pp. 89–92.

Krogus, F. V. vide Krochin, E. M.

555.—Kubo, I. Feeding velocity of the Eel, *Anguilla japonica* T. & S., in relation to water temperature and other environmental conditions. Bull. Jap. Soc. Sci. Fisheries 4 1936 pp. 335–338 3 text-figs.

556.—Kudô, T. and Asada, T. Ueber den Dimorphismus des in Japan einheimischen Neunauges. Zool. Mag. Tokyo 48 1936 pp. 521–533 2 text-figs.

557.—Kümel, F. Fossile Perlen im niederösterreichischen Jungtertiär. Verh. geol. Bundesanst. Wien 1935 pp. 110–112.

558.—Kulmatycki, W. J. Das vergleichen des Wachstumstempas von *Hucho hucho* L. in den Gewässern

Jugoslaviens und Polens. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 308-312.

Kupfer, C. *vide* Bielaszewicz, K.

Kuragake, T. *vide* Oya, T.

559.—Lake, C. T. The life-history of the Fan-tailed Darter, *Catnotus flabellaris flabellaris* (Rafinesque). Amer. Midl. Nat. Notre Dame 17 1936 pp. 816-830 3 text-figs.

LaMonte, F. R. *vide* Nichols, J. T.

560.—Lange, F. Morphologisch-physiologische Untersuchungen an der Hypophyse von Fischen. Allat. Közlem. Budapest 33 1936 pp. 65-83 pls. i & ii. [Hungarian; German summary p. 81.]

561.—Langlois, T. H. A study of the Small-mouth Bass, *Micropterus dolomieu* (Lacepède) in rearing ponds in Ohio. Ohio State Univ. Bull. 6 1936 pp. 190-225 6 text-figs.

562.—Langlois, T. H. Survival value of aggregational behavior of Bass under adverse conditions. Ecology Brooklyn 17 1936 pp. 177-178.

563.—Langlois, T. H. Length-weight relationships of Bullheads. Copeia Ann Arbor 1936 p. 120.

564.—Largaiolli, V. Ittiologia del lago di Ténno. Studi trentini Trento 16 2-3 1935 p. 148.

565.—Lea, E. and Went, A. E. Plastic copies of microscopical reliefs, especially of fish-scales. Hvalrôd. Skr. Oslo 13 1936 pp. 1-19 6 pls.

566.—Legendre, R. Raie bouclée anormale trouvée à Concarneau. Bull. Soc. zool. Fr. 61 1936 pp. 314-315 pl. v.

567.—Le Mare, D. W. Reflex and rhythmical movements in the Dogfish. J. exp. Biol. London 13 1936 pp. 429-442 9 text-figs.

568.—Leriche, M. Sur l'importance des Squales fossiles dans l'établissement des synchronismes de formations à grandes distances, et sur la repartition stratigraphique et géographique de quelques espèces tertiaires. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 739-774 10 maps.

569.—Leriche, M. Sur les restes de poissons du niveau à nodules phosphatés qui occupe la base de l'Oligocène dans le

nord-est des Pays-Bas. Verh. geol.-Mijnb. Genoot. Ned. Kolon (Geol.) 11 1936 pp. 293-299.

570.—Lieber, A. Der Jahreszyklus der Schilddrüse von *Misgurnus fossilis* L. und seine experimentelle Beeinflussbarkeit. Z. wiss. zool. Leipzig 148 1936 pp. 364-400 10 text-figs.

571.—Liebermann, J. Ichthyological fauna of the zone of the River Plate contaminated by the discharge of the main drain of the city of Buenos Aires. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 421-422.

572.—Lin, S. Y. Fisheries of Tsien Tang Kiang. Bull. Chekiang Prov. Fish. Exp. Sta. 2 3 pp. 1-33 1936 15 text-figs.

573.—Lin, S. Y. Notes on Hair Tails and Eels of China. Bull. Chekiang Prov. Fish. Exp. Sta. 2 5 1936 pp. 1-16 5 text-figs.

Lin, S. Y. *vide* Herre, A. W.

574.—Lin, M. C. and Wu, Y. C. A survey of the fishery industries of Ningpo. Bull. Chekiang Prov. Fish. Exp. Sta. 2 2 1936 28 pp. 2 pls. [Chinese; English summary p. 27.]

575.—Lindberg, G. J. Description of a new species *Bothragonus occidentalis* (Agonidae Pisces) from Japan Sea. [Russian; summary in English.] Bull. Acad. Leningrad 1935 pp. 1223-1227 text-figs. 1 & 2.

576.—Lindberg, G. U. L'état moderne de la pêche sur le lac Issyk-koul. Acad. Sci. U.S.S.R. Trud. Kirghiz. Exped. (3) 2 1935 pp. 147-183 10 text-figs. [Russian.]

577.—Lindberg, G. U. Arbeiten der ichthyologischen Abteilung der Expedition nach Kirgisien, entsandt von der Akademie der Wissenschaften im Jahre 1933. Acad. Sci. U.S.S.R. Trud. Kirghiz Exped. (3) 1 1936 pp. 7-48 2 charts 14 text-figs. [Russian; German summary p. 45.]

578.—Lindberg, G. U. Materials for the fish fauna of the Maritime Province of the Soviet Far-East. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 393-407 10 text-figs. [Russian; English summary p. 407.]

579.—Lindberg, G. U. and Ochramkin, D. J. Über die Plattfische der Japansee *Liopsetta obscura* (Herzenstein) und *Limanda schrencki* (Schmidt). C.R. Acad. Sci. U.R.S.S. Leningrad 4 (13) 1936 pp. 205–208 4 text-figs.

Lindenberg, A. *vide* Fontès, G.

580.—Lityński, A. Jeziora suwalskie i ryby je zamieszkujące w Świecie danych dokumentu z XVI wieku. [Die Suwalki-Seen und ihre Fischfauna nach den Angaben eines Dokumentes aus dem XVI Jahrhundert.] Arch. Hydrobiol. Ichthyol. Suwalki 9 1–2 1935 pp. 122–138. [Polish; German summary p. 137.]

581.—Loeb, L. B. The "flight" of flying fish. Science N.Y. N.S. 83 1936 pp. 260–261.

582.—Longley, W. H. Osteological notes and descriptions of new species of fishes. Yearb. Carnegie Instn. Washington 34 1935 pp. 86–89.

583.—Longley, W. H. Preparation of a monograph of Tortugas fishes. Carnegie Instn. Washington 34 1935 pp. 283, 284.

584.—Lönnberg, E. On the occurrence of carotenoid pigments in the eyes of certain animals. Ark. Zool. Stockholm 28A 4 1935 pp. 1–14.

585.—Lönnberg, E. On the occurrence of carotenoid pigments in various organs of fishes. Ark. Zool. Stockholm 28A 15 1936 pp. 1–7 3 text-figs.

586.—Lönnberg, E. and Gustafson, G. Till kännedomen om blågyltans (*Labrus ossifagus* L.) levnadshistoria. Fauna och Flora Uppsala 1936 pp. 145–155 text-figs. 1, 2.

587.—Lönnberg, E. and Gustafson, G. Contributions to the life-history of the Striped Wrasse, *Labrus ossifagus* Lin. Ark. Zool. Stockholm 29A no. 7 pp. 1–16 text-figs. 1–7.

588.—Lovern, J. A. Fat metabolism in fishes. VIII. Changes in the fat of ripening Salmon eggs. Bio-Chem. J. Cambridge 30 1936 pp. 20–24.

589.—Löwenstein, O. and Sand, A. The activity of the horizontal semicircular canal of the Dogfish, *Scyllium canicula*. J. exp. Biol. London 13 1936 pp. 416–428 6 text-figs.

590.—Lucas, C. E. On the diurnal variation of size-groups of trawl-caught

Herring. J. Conseil Copenhagen 11 1936 pp. 53–59 1 text-fig.

591.—Lucas, C. E. The ecological relations between the herring and the plankton investigated with the plankton indicator. Part II. Zooplankton-herring correlations in the English fisheries. J. Mar. Biol. Ass. Plymouth N.S. 21 1 1936 pp. 178–242 24 text-figs.

592.—Lucas, C. E. and Henderson, G. T. D. On the association of jellyfish and other organisms with catches of herring. J. Mar. Biol. Ass. Plymouth N.S. 21 1 1936 pp. 293–304.

Lucas, C. E. *vide* Henderson, G. T. D.

593.—Luke, H. and Keith-Roach, E. (Editors). The Handbook of Palestine and Trans-Jordan. London 1934. 549 pp. [Fishes pp. 422–425.]

594.—Lukjanova, V. S. The physical characteristics of the mimicry of fish. C.R. Acad. Sci. Leningrad N.S. 1936 3 pp. 57–60 3 text-figs.

595.—Lundbeck, J. Biologisch-statistische Untersuchungen über die deutsche Hochseefischerei. I. Die Zusammensetzung der Anlandungen. Ber. deutsch. wiss. Kom. Meeresforsch. Berlin (N.F.) 8 1936 pp. 37–129 6 figs. numerous tables.

596.—Luther, W. Potenzprüfungen an isolierten Teilstücken der Forellenskeimscheibe. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 73–82 1 text-fig.

597.—Luther, W. Potenzprüfungen an isolierten Teilstücken der Forellenskeimscheibe. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 359–383 8 text-figs.

598.—Luther, W. Austausch von präsumptiver Epidermis und Medullarplatte beim Forellenskeim. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 384–388 3 text-figs.

599.—Luzzatti, E. L'assorbimento nelle appendici piloriche dei Teleostei. Esperimenti su *Eupomotis gibbosus* (L.) e *Salmo irideus* Gibb. Boll. Zool. Torino 7 1936 pp. 167–171 4 text-figs.

Lythgoe, R. J. *vide* Bayliss, L. E.

600.—McCoy, C. M., Tunison, A. V., Crowell, M. and Paul, H. The calcium and phosphorus content of the body of the Brook Trout in relation to age, growth and food. J. biol. Chem. Baltimore 114 1936 pp. 259–263.

601.—MacDonagh, E. J. The fishes from the lagoons of Buenos Aires. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 417-420.

602.—MacDonagh, E. J. Sobre peces del territorio del Rio Negro. Notas Mus. La Plata Buenos Aires 1 1936 pp. 409-422 text-figs. 1-9.

603.—MacDonagh, E. J. Sobre algunos peces marinos. Notas Mus. La Plata Buenos Aires 1 1936 pp. 423-429.

604.—Macfarlane, P. R. C. Salmon of the River Tay, 1934. Salmon Fish. Scotland 1935 5 1936 22 pp.

605.—Macfarlane, P. R. C. Salmon of the River Nith—1935. Salmon Fish. Scotland 1936 3 16 pp.

606.—MacIntosh, F. C. The secretion of urea and chloride by the Elasmobranch stomach. J. biol. Board Canada 1 1935 pp. 497-501 2 text-figs.

607.—McKenzie, R. A. Some notes on the Monkfish or Angler (*Lophius piscatorius* Linn.). Canad. Field Nat. 50 1936 pp. 55-56.

McNairn, N. A. vide Battle, H. J.

608.—Manacop, P. R. The sexual maturity of some commercial fishes caught in Manila Bay. Philipp. J. Sci. Manila 59 1936 pp. 383-391.

609.—Manacop, P. R. A new Phallostethid fish with notes on its development. Philipp. J. Sci. Manila 59 1936 pp. 375-381 2 pls.

610.—Manfredi, P. La piscicoltura agricola in Italia. Natura Milano 26 1936 pp. 128-134 3 text-figs.

611.—Mann, H. Der Einfluss der Ernährung auf die Färbung der Fische. SitzBer. Ges. naturf. Fr. Berlin 1935 8-10 1936 pp. 347-356.

612.—Mann, H. Ein Karpfen mit Eierstockzyste. SitzBer. Ges. naturf. Fr. Berl. 1936 1-3 pp. 85-87.

613.—Marcelet, H. L'huile du *Scyllium stellare* C Bp. Bull. Inst. océanogr. Monaco 704 1936 pp. 1-11.

614.—Marchand, J. M. The South African marine fishes of commercial and angling importance. Fish. Bull. Fish. Mar. Biol. Survey Pretoria 2 1935 160 pp. 115 text-figs.

615.—Marchand, J. M. and Taylor, W. Savings-trawl investigations in South African waters during 1935. Dep. Comm. Ind. Fish. S. Africa Inv. Rep. 8 1936 43 pp. 10 pls.

616.—Marherr, A. Pflege und Zucht des *Characidium fasciatum* Reinh. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 145-147 1 text-fig.

617.—Marherr, A. Junge Aalrauper oder Quappen (*Lota lota* L.) im Aquarium nebst Bemerkungen über Freileben und Fang derselben. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 256-267 1 text-fig.

618.—Marinelli, W. Kraniaum und Visceralskelett. Allgemeine Problem (in). Bolk. Handb. Vergl. Anat. Wirbeltiere 4 Wien 1936 pp. 207-232 text-figs. 194-202.

619.—Marini, T. L. Los Salmónidos en nuestro parque nacional de Nahuel Huapi (Comentarios a los trabajos de piscicultura realizados en el país.) An. Soc. cient. argent. Buenos Aires 121 1936 pp. 1-24.

620.—Marini, T. L. Revisión de las especies de la familia "Squatinidae" en las aguas argentinas ("S. guggenheim" n. sp.). Physis B. Aires 12 1936 pp. 19-30 4 figs.

621.—Markun, M. I. [On the Burbot (*Lota lota*) of the river Kama.] (Russian.) Bull. Inst. Rech. biol. Perm. 10 1936 pp. 211-237. [Engl. summ. p. 236.]

622.—Marples, B. J. The subcutaneous venous system of the Common Dogfish, *Scyliorhinus* [*Scyllium*] *caniculus*. Proc. Zool. Soc. London 1936 pp. 317-329 pl. i 7 text-figs.

623.—Marples, B. J. The blood vascular system of the Elasmobranch fish *Squatina squatina* (Linné). Trans. Roy. Soc. Edinb. 58 1936 Part III pp. 817-840 text-figs. 1-12.

624.—Matsubara, K. Studies on the Scorpaenid fishes of Japan. II. Statistical observations on *Sebastes inermis* (C. et V.). Bull. Jap. Soc. Sci. Fish. 4 1935 pp. 217-223.

625.—Matsubara, K. A new Bramiid fish found in Japan. Bull. Jap. Soc. Sci. Fish. 4 5 1936 pp. 297-300 1 text-fig.

626.—Matsubara, K. Studies on the Scorpaenid fishes of Japan. III. On the external and internal characters of *Sebastichthys longispinis* mihi and *Sebastichthys brevispinis* nom. nov. compared. J. Imp. Fish. Inst. Tokyo 31 1936 pp. 79–96 6 text-figs.

627.—Matsubara, K. A review of two genera of the Japanese Sculpins, *Ereunias* and *Marukawichthys* with special reference to their systematic positions. J. Imp. Fish. Inst. Tokyo 31 1936 pp. 97–114 8 text-figs.

628.—Matsubara, K. A new and a rare Ophidioid fishes from Japan. J. Imp. Fish. Inst. Tokyo 31 1936 pp. 115–118 2 text-figs.

629.—Matsubara, K. Biometry of two species of Japanese cardinal-fishes, with special reference to their taxonomy. J. Imp. Fish. Inst. Tokyo 31 1936 pp. 119–130 6 text-figs.

630.—Matsubara, K. On two new species of fishes found in Japan. Annot. zool. jap. 15 pp. 355–360 3 text-figs.

631.—Matsubara, K. A new Chondrichthyan shark found in Japan. Dobuts. Zasshi Tokyo 48 1936 pp. 380–382.

632.—Matsubara, K. A new Ophidioid fish found in Japan. Dobuts. Zasshi Tokyo 48 1936 pp. 382–384 1 text-fig.

633.—Matsubara, K. Studies on the deep-sea fishes of Japan. I. On a new Apodid fish, *Dysomma japonicus*, with an emendation of the genus *Dysomma*. Dobuts. Zasshi Tokyo 48 1936 pp. 960–962 1 text-fig.

634.—Matsubara, K. Studies on deep-sea fishes of Japan. II. On a new fish belonging to Heteromii. Dobuts. Zasshi Tokyo 48 1936 pp. 963–964 1 text-fig.

635.—Matsui, I. On the tongue and the tongue-lappen of Ayu (*Plecoglossus altivelis* T. & S.). Botany & Zool. Tokyo 4 11 1936 pp. 1906–1912 3 text-figs. [Japanese.]

636.—Matsumoto, H. Upper Miocene vertebrates from Kumanodô, Natori District, Province of Rikuzen. Dobuts. Zasshi Tokyo 48 1936 pp. 475–480 5 text-figs. [Japanese; English summary p. 475.]

637.—Matthews, S. A. The pituitary gland of *Fundulus*. Anat. Rec. Philadelphia 65 1936 pp. 357–367 6 text-figs.

638.—Maury, J. C. O Cretacio de Sergipe. Mon. Serv. Geol. Min. Rio de Janeiro 11 1936. [Fishes pp. 49–57 pl. i fig. 2.]

639.—Maxia, C. Sui primi stadii di sviluppo della vescica natatoria di *Cyprinus carpio*. Boll. Soc. ital. Biol. sper. 11 1936 pp. 716–717.

640.—Mayer, F. *Skiffia bilineata* Bean. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 51–52 1 text-fig.

641.—Mayer, F. *Rasbora urophthalma* E. Ahl. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 100–101 1 text-fig.

642.—Mayer, F. *Leporinus striatus* Kner. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 148–149 1 text-fig.

643.—Mazzeschi, A. and Vannini, E. Nuove ricerche sul precoce differenzamento sessuale delle anguille. Boll. Zool. Torino 7 1936 pp. 57–66 1 text-fig.

644.—Meador, R. G. The innervation of the muscle of accommodation in the eye of the teleost, *Holocentrus*. J. Morph. Philadelphia 59 1936 pp. 163–172 2 text-figs.

645.—Meador, R. G. Accommodation and its reflex pathways in the Teleosts. Yale J. Biol. Med. 8 5 1936 pp. 511–522 3 text-figs.

646.—Meehan, O. L. The life-history of the Bluegill Sunfish (*Heloperca incisor*) (Cuvier and Valenciennes) as determined from the scales. Proc. Louisiana Acad. Sci. 2 1 1935 pp. 139–145 1 text-fig.

647.—Meggett, F. J. Reported occurrence of European fishes on the Tavoy Coast, Burma. Nature London 137 pp. 908–909.

648.—Meierhaus, J. Vessie natatoire et canal pneumatique chez les poissons Cyprinidés. C.R. Soc. Phys. Hist. nat. Genève 52 1 1935 (Suppl. of Arch. Sci. phys. nat. Genève (5) 17 1935) pp. 62–64.

649.—Meinken, H. Über einige in letzter Zeit eingeführte Fische. 11. *Cichlasoma temporale* (Günther). Bl. Aqu. Terr. Stuttgart 47 1936 pp. 6–8 1 text-fig.

650.—Meinken, H. Über einige in letzter Zeit eingeführte Fische. 12. *Lebiasina intermedia* n. spec. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 49–51 1 text-fig.

651.—Meinken, H. Über einige in letzter Zeit eingeführte Fische. 13. *Gymnocorymbus thayeri* Eigenm., der "Schwarze Tetra." Bl. Aqu. Terr. Stuttgart 47 1936 pp. 97–99 1 text-fig.

652.—Meinken, H. Über einige in letzter Zeit eingeführte Fische. 14. *Hydrocinus* cuvieri* (Agassiz). Bl. Aqu. Terr. Stuttgart 47 1936 pp. 149–151 1 text-fig.

653.—Meinken, H. Beiträge zur Fischfauna des mittleren Paraná. II. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 151–153 1 text-fig.

654.—Meinken, H. Über einige in letzter Zeit eingeführte Fische. 15. *Barbus titteya* Deraniyagala. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 193–196 1 text-fig.

Meinken, H. *vide* Holly, M.

655.—Mendoza, G. The ovarian cycle of the viviparous Teleost, *Skiffia bilineata*, a member of the family Goodeidae. (Abstract.) Anat. Rec. Philad. 67 Suppl. 1 1936 p. 62.

Menéndez Puget, L. *vide* Alvarado.

656.—Menzies, W. J. M. The run of Elvers in the River Bann, Northern Ireland. J. Conseil Copenhagen 11 1936 pp. 249–259 text-figs. 1–7.

Menzies, W. J. M. *vide* Järvi, T. H.

657.—Menshikov, M. I. [Contribution to the biology of *Acipenser baeri* and *Acipenser ruthenus* of the River Irtysh.] Scient. Mem. M. Gorki St. Univ. Perm. 2 1 1936 pp. 41–64 2 pls. 2 graphs. [Russian; English summary p. 63.]

658.—Menshikov, M. I. Contribution to the biology of marketable fish of the river Irtysh and its flood drainage within the Uvat district. Bull. Inst. Rech. biol. Perm. 10 4–5 1936 pp. 179–200. [English summary p. 199.]

659.—Menzies, W. J. M. Sea Trout and Trout. London (Arnold) 1936 230 pp. 17 pls. 3 text-figs.

Menzies, W. J. M., also no. 656.

660.—Meschkat, A. Untersuchungen über den Aufbau der Kabeljaunahrung im Bereich der Vestmannainseln. Rapp. Cons. Explor. Mer. Copenh. 99 1936 No. 3 19 pp.

661.—Messerle, N. Experimentelle Untersuchungen über die Entwicklung der sekundären Geschlechtsmerkmale bei Schleierkampfsfischen. Aquar. Berlin 10 1936 pp. 61–66 4 text-figs.

662.—Messerle, N. Untersuchungen über den Geschmackssinn der Fische. Aquar. Berlin 10 1936 pp. 101–106.

663.—Messerle, N. Zur Psychologie der Aquarienfische. Aquar. Berlin 10 1936 pp. 157–161, 175–177.

664.—Meyer, P. La pression colloïdo-osmotique du milieu extérieur des animaux marins. J. Physiol. Path. gen. 34 1936 pp. 5–16.

665.—Meyer, P. F. Kommt *Labrus berggylta* Ascanius (Geflecker Lippfisch) auch bei Warnemünde vor? Eine Richtigstellung. Zool. Anz. Leipzig 114 1936 p. 111.

666.—Michail, D. & Benetato, G. Recherches sur la respiration du nerf optique. C.R. Soc. Biol. Paris 121 1936 pp. 267–269.

667.—Miller, R. R. Classification of a Mojave River fish. J. Ent. Zool. Claremont Cal. 23 1936 pp. 58–59 1 text-fig.

668.—Miller, R. A. and Detwiler, S. R. Comparative studies upon the origin and development of the brachial plexus. Anat. Rec. Philadelphia 65 1936 pp. 273–292 11 text-figs.

669.—Mills, C. A. Source of propulsive power used by Flying Fish. Science N.Y. 83 1936 pp. 80 and 262.

Mishkind, D. I. *vide* Kleiner, J. T.

Misra, K. S. *vide* Hora, S. L.

670.—Modén, O. Andra Fiskfynd. Medd. Värml. Naturh. För. Karlstad 9 1936 p. 7.

671.—Moens, N. L. W.-I. Visscherij en vischfauna van de Noordzeekanaal-boezem. Inleiding. Levende Natuur Amsterdam 1936 pp. 51–55 text-figs. 1 & 2.

672.—Mohr, E. Himirhamphiden Studien IV–VI. Mitt. zool. Mus. Berlin 21 1936 pp. 34–64 14 text-figs.

* Misprint for *Hydrocynus*.

673.—Mohr, E. Hemirhamphiden-Studien VII-IX. Zool. Anz. Leipzig 116 1936 pp. 218-223 2 text-figs.

674.—Moore, E. New York "manages" her fishing resources. Bull. New York zool. Soc. 39 1936 pp. 19-28 9 figs.

675.—Moore, G. A. The germ-cells in the developing gonad of the Trout. Proc. Okla. Acad. Sci. 11 1931 pp. 18-22.

676.—Moore, G. A. Two Lampreys from Oklahoma. Proc. Okla. Acad. Sci. 13 1933 p. 11.

676A.—Morgan, A. Tropical fishes and home aquaria pp. xvi + 254 illustr. London (Rich & Cowan) 1936.

677.—Mori, T. Descriptions of two new genera and seven new species of Cyprinidae from Chosen. Annot. zool. jap. 15 1935 pp. 161-181 pls. xi-xiii.

678.—Mori, T. On the geographical distribution of Korean Salmonoid fishes. Bull. Biogeogr. Soc. Tokyo 6 1936 1935 pp. 1-9 pls. i, ii.

679.—Mori, T. Studies on the geographical distribution of freshwater fishes in Chōsen. Bull. Biogeogr. Soc. Tokyo 6 1936 pp. 35-61 pl. viii.

680.—Mori, T. Studies on the geographical distribution of freshwater fishes in Eastern Asia. 88 pp. 6 maps. Keijo 1936.

681.—Mori, T. Descriptions of one new genus and three new species of Siluroidea from Chōsen. Dobuts. Zasshi Tokyo 48 1936 pp. 671-675 pl. xxiv.

Morin, G. *vide* Binet, L.

682.—Morosowa, T. E. Die Wirkung des Prolans und des unsterilisierten Harns Schwangerer auf die Reifung der Geschlechtsprodukte des Barsches. Zool. J. Moscow 15 1936 pp. 169-174. [Russian; German summary p. 174.]

683.—Mottley, C. McC. A biometrical study of the Kamloops Trout of Kootenay Lake, *Salmo kamloops* Jordan. J. biol. Board Canada 2 1936 pp. 359-377 6 text-figs.

684.—Mottley, C. McC. Rainbows.—Should they be classed as *irideus shasta* or *gairdnerii*? Salmon and Trout Mag. London 83 1936 pp. 150-153.

685.—Mottram, J. C. Defective bones in hand-reared trout. What the X-ray camera revealed. Salmon and Trout Mag. London 84 1936 pp. 227-230.

686.—Mottram, J. C. Experiments on starvation of trout fry. Salmon and Trout Mag. London 84 1936 pp. 264-267 1 text-fig.

687.—Moy-Thomas, J. A. On the structure and affinities of the Carboniferous Cochliodont *Helodus simplex*. Geol. Mag. London 73 1936 pp. 488-503 11 text-figs. pls. xiv & xv.

688.—Moy-Thomas, J. A. The structure and affinities of fossil Elasmobranch fishes from the Lower Carboniferous rocks of Glencartholm, Eskdale. Proc. Zool. Soc. London 1936 pp. 761-788 pls. i & ii 19 text-figs.

689.—Moy-Thomas, J. A. The evolution of the pectoral fins of fishes and the tetrapod fore-limb. School Sci. Rev. London 68 1936 pp. 592-599 5 text-figs.

690.—Mršić, W. Erfahrungen mit der Einbürgerung der Regenbogenforelle in Jugoslawien. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 326-346 + 5 sheets of tables.

691.—Muchamediarow, T. Zu der Frage des Studiums der Migrationen des *Coregonus migratorius* (Georgi) durch die Merkzei Chenmethode. Bull. Inst. sci. Biol. Géogr. Irkutsk. 7 1-2 1936 pp. 130-136. [Russian; German summary p. 136.]

692.—Mukerji, D. D. Structural modifications of the pelvic fins and basipterygia of the torrential fishes, with special reference to the function of adhesion. Proc. Indian Sci. Congr. Calcutta 22 1935 pp. 318 (abstract only).

693.—Mukerji, D. D. Notes on the systematic position of the two gobioid fishes, *Gobiella pellucida* Smith and *G. Birtwistlei* Herre, with special remarks on the validity of the genus. Rec. Ind. Mus. Calcutta 38 1936 pp. 9-13 2 text-figs.

694.—Mukerji, D. D. Report on fishes. Part II. Sisoridae and Cyprinidae. Mem. Conn. Acad. Arts Sci. 10 1936 pp. 323-359 20 text-figs.

Mukerji, D. D. *vide* Hora, S. L.

- 695.—Munda, A. Die künstliche Zucht des Huchens in Jugoslawien und die hiebei gewonnenen biologischen Erfahrungen. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 313-320.
- 696.—Musper, K. A. F. R. Einige Bemerkungen zur fossilen Fischfauna von Padang (Sumatra). De Ingenieur in Nederl.-Ind. IV. Mijnbouw en Geologie "De Mijningenieur" Batavia 3 4 1936 pp. 70-74 (*non vidi*).
- 697.—Musper, K. A. F. R. Einige Bemerkungen zur fossilen Fischfauna von Padang (Sumatra). Geol. Zentralb. (Palaeont.) Leipzig 9 1936 p. 51 (abstract of 696).
- 698.—Mužinić, S. Teichwirtschaft in Jugoslawien. Verh. int. Vereinig. Limnol. Beograd 7 1935 pp. 295-307 6 text-figs.
- 699.—Myers, G. S. Report on the fishes collected by H. C. Raven in Lake Tanganyika in 1920. Proc. U.S. Nat. Mus. 84 1936 pp. 1-15 pl. i.
- 700.—Myers, G. S. A third record of the Albulid fish *Dixonina nemoptera* Fowler, with notes on an Albulid from the Eocene of Maryland. Copeia Ann Arbor Mich. 1936 pp. 83-85.
- 701.—Myers, G. S. A note on the Stephanoberycid fishes. Copeia Ann Arbor Mich. 1936 p. 118.
- 702.—Myers, G. S. A new Polynemid fish collected in the Sadong River, Sarawak, by Dr. William T. Hornaday, with notes on the genera of Polynemidae. J. Wash. Acad. Sci. 26 1936 pp. 376-382 1 text-fig.
- 703.—Myers, G. S. On the Indo-Australian fishes of the genus *Scatophagus*, with a description of a new genus, *Selenotoca*. Proc. Biol. Soc. Washington 49 1936 pp. 83-86.
- 704.—Myers, G. S. A new Characid fish of the genus *Hypessobrycon* from the Peruvian Amazon. Proc. Biol. Soc. Washington 49 1936 pp. 97-98.
- 705.—Myers, G. S. A new genus of Gymnotid eels from the Peruvian Amazon. Proc. Biol. Soc. Washington 49 1936 pp. 115-116.
- 706.—Myers, G. S. and Reid, E. D. Description of a new Blennioid fish of the genus *Acanthemblemaria* from the Pacific coast of Panama. Univ. Southern Calif. Pub. The Hancock Pacific Expeditions 2 2 1936 pp. 7-10.
- 707.—Nachr. Aquar. Terrar.-ver. Berlin 1936.
- 708.—Naef, A. Kurze Mitteilungen zur Entwicklung von Acraniern und Selachiern. Verh. schweiz. naturf. Ges. 117 1936 pp. 329-330.
- 709.—Nagata, Y. Transplantation of testis into ovariectomized *Oryzias latipes*. Zool. Mag. Tokyo 48 1936 pp. 102-108 7 text-figs. [Japanese; English summary p. 102.]
- 710.—Nakamura, S. Larvae and young fishes found in the vicinity of Kominato, II-VI. J. Imp. Fish. Inst. Tokyo 31 1936 pp. 131-166 14 + 18 + 9 + 6 text-figs.
- 711.—Nall, G. N. Sea-trout of the Kyle of Sutherland district, 1934-35. Salmon Fish. Scotland 1936 1 28 pp. 3 pls.
- 712.—Nall, G. H. Sea-trout of the Laxford system (Loch Stack and Loch More). Salmon Fish. Scotland 1936 2 23 pp. 2 pls.
- 713.—Nall, G. H. Notes on Sea-trout from the Dee tidal nets, Aberdeen, 1935. Salmon Fish. Scotland 1936 4 22 pp. 4 pls.
- 714.—Nardi, F. Über den Einfluss von Hunger und erhöhter Temperatur auf den Regenerationsverlauf bei Fischen. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 298-315 5 text-figs.
- 715.—Nardi, F. Zur Genese der Fischschuppe. Biol. Zbl. Leipzig 56 1936 pp. 631-639 3 text-figs.
- 716.—Neave, F. The development of the scales of *Salmo*. Trans. roy. Soc. Can. (3) 30 5 1936 pp. 55-72 3 pls.
- 717.—Neubaur, R. and Jaeckel, S. Die Schlei und ihre Fischereiwirtschaft. Schr. naturw. Ver. Schl.-Holst. 21 1936 p. 440.
- 718.—Neveu-Lemaire, M. Traité d'Helminthologie médicale et vétérinaire. 8° 1515 pp. 787 text-figs. Paris 1936.
- Newell, G. E. *vide* Grove, A. J.
- 719.—Nichols, J. T. On *Caranx ignobilis* (Forskål). Copeia Ann Arbor 1936 pp. 119-120.

720.—Nichols, J. T. On *Decapterus scombrinus* (Valenciennes). Amer. Mus. Nov. N.Y. 835 1936 6 pp.

721.—Nichols, J. T. and Breder, C. M. A southern and eastern record of two Pacific Flying Fishes, *Cypselurus californicus* and *altipennis*. Copeia Ann Arbor 1936 p. 166.

722.—Nichols, J. T. and Firth, F. E. A new Triacanthid fish and other species from deep water off Virginia. Amer. Mus. Nov. N.Y. 883 1936 5 pp. 1 text-fig.

723.—Nichols, J. T. and LaMonte, F. R. *Pagothenia*, a new Antarctic fish. Amer. Mus. Nov. N.Y. 839 1936 4 pp. 1 text-fig.

724.—Nielsen, E. Some few preliminary remarks on Triassic fishes from East Greenland. Medd. Grønland. 112 3 1936 pp. 1-55 19 text-figs.

725.—Nigrelli, R. F. Some tropical fishes as hosts for the metacercaria of *Clinostomum complanatum* (Rud. 1814) (= *C. marginatum* R. 1819). Zoologica New York 21 1936 pp. 251-256 2 pls.

Nigrelli, R. F. *vide* Breder, C. M.

726.—Nikolsky, G. W. Über einige postglaciale Veränderungen der Ichthyofauna des nordöstlichen Europa. Zool. Jahrb. Jena (Syst.) 68 1936 pp. 533-544 1 text-fig.

727.—Nicol'sky, G. Deformity in the operculum of the common Crucian, *Carassius carassius* L. (Russian, English summary.) Bull. Soc. Nat. Moscou Sect. Biol. 45 1936 pp. 327-330 text-fig. 1.

728.—Nikolski, G. W. Sur la variabilité géographique de *Gobio gobio* (L.) du nord-est de Kazachstan et de la Sibérie occidentale. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 457-473 1 text-fig. 1 chart. [Russian; French summary p. 472.]

729.—Nishi, S. Ankorauföje pri la ĝenerala diferencigo de la trunkomuskolaro de amniotoj. Folia anat. jap. Tokyo 12 1934 pp. 397-404 3 text-figs.

730.—Niu, M. C. Notes on the placoid scales in the oral cavity of *Mustelus manazo* Bleeker. Sci. Rep. Nat. Univ. Peiping 1 2 1936 pp. 29-38 7 text-figs.

731.—Noble, G. K. The Four-eyed Fish. Nat. Hist. N.Y. 36 1935 pp. 34-36 1 pl. 1 text-fig.

732.—Noble, G. K. The function of the corpus striatum in the social behaviour of fishes. (Abstract.) Anat. Rec. Philadelphia 63 (Suppl. 3) 1936 p. 34.

733.—Noble, G. K. The induction of brooding behaviour in the Jewel Fish. (Abstract.) Anat. Rec. Philad. 67 Suppl. 1 1936 pp. 50-51.

734.—Nojima, S. On a new species of *Liparis*. Trans. Sapporo Nat. Hist. Soc. 14 pp. 179-180 1 text-fig.

735.—Norman, J. R. A new fish of the genus *Clupea* from Chile. Ann. Mag. Nat. Hist. (10) 17 1936 pp. 491-492.

736.—Norman, J. R. Reported occurrence of European fish on the Tavoy Coast, Burma. Nature London 137 p. 321.

737.—Norris, H. W. The general morphology of the elasmobranch hypophysis. (Abstract.) Anat. Rec. Philadelphia 64 (Suppl. 3) 1936 p. 35.

738.—Nybelin, O. Till kännedomen om stensimpans och bergsimpans förekomst i Sverige. Fauna och Flora Uppsala 1936 pp. 107-117 2 text-figs.

Oakley, K. P. *vide* Edmunds, F. H.

739.—Obrutschew, D. Zur Stratigraphie des mittleren Devons von Leningrad Provinz. Mém. Soc. russe Mineral 62 1933 pp. 405-420 14 text-figs. [Russian; German summary p. 419.]

Ochrajmkin, D. I. *vide* Lindberg.

740.—Odiorne, J. M. The degeneration of melanophores in *Fundulus*. J. exp. Zool. Philadelphia 74 1936 pp. 7-39 5 pls. 5 text-figs.

741.—Odum, E. P. Notes on the history of the germ cells in the Toadfish (*Opsanus tau*). J. Elisha Mitchell sci. Soc. Chapel Hill 52 1936 pp. 235-246 pls. xviii, xix.

742.—Okada, S. Breeding habits of a river Sculpin, *Cottus pollux* Günth. Zool. Mag. Tokyo 48 1936 pp. 923-928 3 text-figs. [Japanese; English summary p. 923.]

743.—Oppenheimer, J. M. Historical introduction to the study of Teleostean development. *Osiris* Bruges 2 1936 pp. 124-148 6 pls.

744.—Oppenheimer, J. M. The development of isolated blastoderms of *Fundulus heteroclitus*. J. exp. Zool. Philadelphia 72 1936 pp. 247-269 15 text-figs.

745.—Oppenheimer, J. M. Transplantation experiments on developing Teleosts (*Fundulus* and *Perca*). J. exp. Zool. Philadelphia 72 1936 pp. 409-437 29 text-figs.

746.—Oppenheimer, J. M. Processes of localization in developing *Fundulus*. J. exp. Zool. Philadelphia 73 1936 pp. 405-444 32 text-figs.

747.—Opitz, R. Lebensbilder aus den Hunsruekschiefer Meer. Natur. u. Folk Frankfurt a.M. 65 1935 pp. 504-509 4 text-figs.

748.—Oshima, M. [Ecological studies on the land-locked Salmon found in the interior of Formosa.] Botany & Zool. Tokyo 4 1936 pp. 337-349. [Japanese.]

749.—Otterström, C. V. Danmarks Adførsel af Laks og Ørred i 1935. Ferskvandsfiskeribl. Kjøb. 34 1936 pp. 173-177.

750.—Otterström, C. V. Die Turbinen und die abwärts wandernden jungen Lachse und Forellen (sowie Aale). 3. Teil. J. Conseil Copenhagen 11 1936 pp. 71-93 12 text-figs.

751.—Otterström, C. V. Spildevands-Fiskedamme. Ferskvandsfiskeribladet, 34 1936 no. 4-5 pp. 1-12 10 text-figs.

752.—Otterström, C. V. Fisketrapper. Ferskvandsfiskeribladet 1936 no. 2-3 39 pp. 28 text-figs.

753.—Otterström, C. V. Über das Fehlen der Bauchflossen bei Plötzen, Brachsen und Karpfen. Arch. Hydrobiol. Stuttgart 29 1935 pp. 178-179.

754.—Otterström, C. V. Saumon et Truite. Directives pour leur différenciation. Bull. français de Pisciculture Orléans 1935 10 pp. 23 text-figs.

755.—Oya, T. and Kuragake, T. The determination of the amount of connective tissue in fish. (Japanese; English summary.) [Nihon Suisan

Gakkwai Si 4 1935 pp. 196-197 *non vidi*.] Abstract in Japan. J. Zool. 6 1936 p. (82).

756.—Ozaki, M. The identification of the species of *Oncorhynchus* in the east coast of Camchatka. (Japanese; English summary.) [Nihon Suisan Gakkwai Si 4 1936 pp. 321-324 *non vidi*.] Abstract in Japan J. Zool. 6 1936 p. (83).

757.—Ozolins, N. Das Blutbild und die Atmungsintensität des *Misgurnus fossilis* bei verschiedenen Atmungsbedingungen. Latv. biol. Biedr. Raksti 5 1935 pp. 101-128.

758.—Palmer, R. H. Ocean Sunfish in Habana waters. Science N.Y. N.S. 83 1936 p. 597.

759.—Panin, K. I. On the occurrence of *Sardinops melanosticta*, Temm. et Schl. in the waters of Eastern Kamchatka. C.R. Acad. Sci. Leningrad N.S. 1936 3 pp. 41-43.

760.—Panin, K. Über das Vorkommen der pazifischen Iwashi-Sardine [*Sardinops melanosticta* (Schl.)] in den Gewässern von Ostkamtschatka. Zool. Anz. Leipzig 115 1936 pp. 149-152.

761.—Paris, P. Les captures de pêcheur dans nos eaux douces. Tableaux de détermination. Bull. sci. Bourgogne Dijon 5 1936 pp. 89-121 2 pls.

762.—Pape, A. Beiträge zur Naturgeschichte von *Pleuronectes pseudoflesus*, eines Bastards zwischen Scholle und Flunder. Wiss. Meeresuntersuch. Abt. Kiel (N.F.) 22 1936 pp. 53-88 27 text-figs.

763.—Parker, G. H. Color changes in Elasmobranchs. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 55-60.

764.—Parker, G. H. Integumentary color changes in the newly-born Dogfish, *Mustelus canis*. Biol. Bull. Woods Hole 70 1936 pp. 1-7 1 pl.

765.—Parker, G. H. The reactivation by cutting of severed melanophore nerves in the Dogfish *Mustelus*. Biol. Bull. Woods Hole 71 1936 pp. 255-258 3 text-figs.

766.—Parker, G. H. Are there antidromic responses in the melanophore system? (Abstract.) Anat. Rec. Philadelphia 67 Suppl. 1 1936 p. 37.

767.—Parrott, A. W. The marine Cockabully. (*Tripterygion varium* Forster.) Observations on its variability, age, and rate of growth. N.Z. J. Sci. Tech. 18 1 1936 pp. 31-39 5 text-figs.

768.—Pasteels, J. Études sur la gastrulation des vertébrés méroblastiques. I. Téléostéens. Arch. Biol. Liège 47 1936 pp. 205-308 37 text-figs.

769.—Paucă, M. Originea și evoluțiunea faunei ihtiologice terțiare și actuale din Europa. Bul. Soc. Nat. România București 7 1935 pp. 6-9. (French summary p. 9.)

Paul, H. *vide* McCay, C. M.

770.—Pearse, A. S. Estuarine animals at Beaufort, North Carolina. J. Elisha Mitchell sci. Soc. Chapel Hill 52 1936 pp. 174-222. (*Pisces* pp. 208-211.)

771.—Peckham, H. H., Gaige, H. T. and Hubbs, C. L. Ichthyologia et herpetologia Americana. Univ. Michigan Press Ann Arbor 8° 1936 22 pp. 1 pl. 1 text-fig.

772.—Pelkewijk, J. J. ter and Tinbergen, N. Roodkaakjes. Levende Nat. Amsterdam 41 5 1936 pp. 129-137 16 text-figs.

773.—Pellegrin, J. Sur une collection de poissons du Moyen-Congo recueillie par Madame Petit-Renaud. Ann. Soc. Sci. nat. Charente-Inf. N.S. 1 7 1934 pp. 121-127 2 text-figs.

774.—Pellegrin, J. La faune ichthyologique du lac Rodolphe. Verh. int. Vereinig. Limnol. Beograd 7 2 1935 pp. 415-416.

775.—Pellegrin, J. 2^e notice sur les titres et travaux scientifiques de M. Jacques Pellegrin. 66 pp. 4°. Paris 1936.

776.—Pellegrin, J. Poissons (in) Mission au Tibesti (1930-31) dirigée par M. Marius Dalloni. Deuxième mémoire. Mem. Acad. Sci. Paris 62 1936 p. 52.

777.—Pellegrin, J. Les poissons géants des eaux douces. Bull. Ass. franç. Sci. 65 1936 pp. 221-224.

778.—Pellegrin, J. Sur la présence de la Tilapia de Zill dans le Sud du Maroc. Bull. Soc. Sci. nat. Maroc. 16 1 pp. 1-2.

779.—Pellegrin, J. La présence de l'Arius de Heudelot au Maroc. Bull. Soc. Sci. nat. Maroc 16 1936 p. 146.

780.—Pellegrin, J. Sur un Sparidé peu connu de Madagascar, le *Pachymetopon gibbosum* Pellegrin. Bull. Acad. Malgache Tananarive N.S. 18 1936 pp. 145-147.

781.—Pellegrin, J. Contribution à l'Ichthyologie de l'Angola. Arq. Mus. Bocage Lisboa 7 1936 pp. 45-62 3 text-figs.

782.—Pellegrin, J. Poissons nouveaux du Haut-Laos et de l'Annam. Bull. Soc. zool. France 61 1936 pp. 243-248.

Pellegrin. Zool. Rec. for 1935 *Pisces* 731, for 1935 read 1936.

783.—Pellegrin, J. and Chevey, P. Cyprinidés nouveaux du Tonkin. Bull. Soc. zool. France 61 1936 pp. 18-27 4 text-figs.

784.—Pellegrin, J. and Chevey, P. Poissons nouveaux ou rares du Tonkin et de l'Annam. Bull. Soc. zool. France 61 1936 pp. 219-231 8 text-figs.

785.—Pellegrin, J. and Chevey, P. Poissons nouveaux ou rares du Tonkin et de l'Annam. Bull. Soc. zool. Fr. 61 1936 pp. 375-379 2 text-figs.

786.—Pellegrin, J. and Fang, P. W. A new Homalopteroid, *Paraprotomyzon multifasciatus* nov. gen. nov. sp. from Eastern Szechuan, China. Absts. Pap. Sci. Conf. Nanning 1935 p. 665.

Pentelow, F. T. K. *vide* Thaysen, A. C.

787.—Perceva, T. A. Key to Pelagic Eggs of Fishes of the Barents Sea. 36 pp. 37 text-figs. Moscow 1936.

788.—Perruche, L. L'étude microscopique des écailles des poissons. Bull. Soc. franç. micr. Paris 3 1934 pp. 53-59 3 text-figs.

Person, S. A. *vide* Schmidt, P. J.

789.—Pesson, P. Un poisson téléostéen peu connu sur nos marchés; *Peristethion cataphractum* L., vulgairement le Malarmat. Bull. Soc. sci. Bretagne 11 3 & 4 1935 p. 177.

790.—Petit, G. Remarques sur la répartition géographique des Dipeustes. C.R. Soc. Biogéographie Paris 13 111 1936 pp. 42-46.

- 791.—Petit, G. and Budker, P. Contributions à l'étude de la différenciation des dents cutanées, liée à la présence de cryptes sensorielles, chez quelques espèces de Sélaciens. Bull. Inst. oceanogr. Monaco **695** 1936 pp. 1-46 text-figs. 1-14.
- 792.—Petravicz, J. J. Breeding habits of the Least Darter, *Microperca punctulata* Putnam. Copeia Ann Arbor **1936** pp. 77-82 4 text-figs.
- 793.—Petrow, V. Einige Daten über die Biologie des *Varicorhinus capoeta sewangi* im Ssewan-See. Zool. Anz. Leipzig **115** 1936 pp. 145-149.
- 793A.—Phemister, J. Scotland. The northern Highlands. Brit. Reg. Geol. Geol. Surv. Mus. Edin. [Fishes pp. 67-77 figs. 23, 24.]
- 794.—Pierce, E. L. Rates of digestion of the Yellowtail (*Ocyurus chrysurus*) and the White Grunt (*Haemulon plumieri*). Copeia Ann Arbor **1936** pp. 123-124 1 text-fig.
- 795.—Pietschmann, V. Eine neue Aalfamilie aus den hawaiischen Gewässern. Anz. Akad. Wiss. Wien **72** 1935 pp. 93-94.
- 796.—Pietschmann, V. Die Dornen von *Raia clavata* L. Zool. Anz. Leipzig **115** 1936 pp. 109-110 1 text-fig.
- 797.—Piton, L. Faune de l'Auvergne. Poissons: Famille des Cyprinides. Bull. Soc. Hist. nat. Auvergne **17** 1931 pp. 20-29 1 pl.
- 798.—Piton, L. Faune de l'Auvergne. Poissons (suite). Bull. Soc. Hist. nat. Auvergne **18-19** 1932 pp. 27-47 1 pl.
- 799.—Piton, L. Faune de l'Auvergne. Poissons (fin). Bull. Soc. Hist. Nat. Auvergne **20** 1932 pp. 43-62 6 pls. 3 text-figs.
- 800.—Piton, L. Sur la présence de la Brème-Rosse dans l'Allier. Rev. sci. Bourbonnais **1935** pp. 53-54.
- 801.—Piton, L. Note sur un nouveau Cyprinide tertiaire. Bull. mens. Soc. Lyon **5** 1936 3 pp. 3-4.
- 802.—Pitotti, M. Sull' assorbimento del tuorlo negli embrioni di *Torpedo*. Pubbl. Staz. zool. Napoli **15** 1936 pp. 217-222 5 text-figs.
- 803.—Pitotti, M. La gestruzione dell' novo di Lampreda ("Lampetra fluviatilis L."). Spontamenti de materiali durante la gastrulazione. Rend. Acc. Lincei (6) **23** 3 1936 pp. 209-211 1 text-fig.
- 804.—Piveteau, J. Ressemblances des faunes ichthyologiques du Groenland et du Spitzberg avec celle de Madagascar, au Trias inférieur. C.R. Séances Soc. géol. Fr. **1935** pp. 113-114.
- 805.—Platts, W. C. Grayling.—1. Some comments on its title and description. Salmon and Trout Mag. London **81** 1935 pp. 345-351.
- Platonov, P. vide Schmidt, P. J.
- 806.—Platts, W. C. The Grayling. II. Life history and habitat. Salmon and Trout Mag. London **82** 1936 pp. 35-43.
- 807.—Podionova, T. V. [The ichthyofauna of the Dniepr basin: Fishes of the river Seim.] Trav. Soc. Nat. Kharkiv **53** 1930 pp. 111-115. [Ukrainian.]
- 808.—Popov, A. M. A new genus and species, *Lyczoarces hubbsi*, gen. n. sp. n. (Pisces, Zoarcidae) of the Okhotsk Sea. C.R. Acad. Sci. Moscou N.S. **1935** 4 pp. 303-304 1 text-fig.
- 809.—Pora, E. L'influence des saignées successives sur la composition chimique et physico-chimique du sang des animaux marins. J. Physiol. Path. gen. **34** 1936 pp. 735-745 3 text-figs.
- 810.—Pora, E.-A. Sur les différences chimiques et physico-chimiques, du sang, suivant les sexes chez *Labrus bergylla*. C.R. Soc. Biol. Paris **121** 1936 pp. 102-105.
- 811.—Pora, E.-A. Sur les différences chimiques et physico-chimiques du sang des deux sexes des Sélaciens. C.R. Soc. Biol. Paris **121** 1936 pp. 105-107.
- 812.—Pora, E. A. De l'influence de l'oxygénation du milieu extérieur sur la composition du sang, chez *Scyllium canicula*. C.R. Soc. Biol. Paris **121** 1936 pp. 194-196.
- 813.—Pora, E.-A. Influence du passage du courant continu dans le milieu extérieur, sur la composition du sang, chez *Scyllium canicula*, la région branchiale étant au voisinage de la cathode. C.R. Soc. Biol. Paris **121** 1936 pp. 411-413.

814.—Pora, E. A. Sur les modifications du milieu intérieur de *Scyllium canicula* soumis au courant continu, quand la région branchiale se trouve à la proximité de l'anode. C.R. Soc. Biol. Paris 121 6 1936 pp. 503-504.

815.—Pora, E. A. Sur les modifications que produit le courant électrique continu, dans le milieu intérieur du *Scyllium canicula* male orienté dans la direction de passage du courant pendant des temps variables. C.R. Soc. Biol. Paris 121 6 1936 pp. 507-508.

816.—Pora, E. A. Un nouvel appareil pour la contention et la saignée de nombreux Téléostéens marins et d'eau douce. Bull. Inst. océanogr. Monaco 699 1936 pp. 1-4 3 text-figs.

817.—Portevin, G. Les poissons électriques. Terre et la Vie Paris 6 1936 pp. 48-49.

818.—Poulsen, E. M. Recent investigations into the stock of Salmon and Sea Trout in the River Gudenaa. Rep. Danish biol. Sta. 40 1935 pp. 9-37 8 text-figs.

819.—Poulsen, E. M. The Herring stocks of the transition area. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 1936 pp. 20-22 2 text-figs.

820.—Poulsen, E. M. Yearly variations in the number of larvae of Autumn spawning Herrings in the Southern part of the transition area. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 pp. 22-24 1 text-fig.

821.—Prantl, F. Sur le genre *Palaeoxyris* Brogn. en Bohême. Bull. internat. Acad. tchèque Sci. Prague 34 1933 pp. 37-42 1 pl.

822.—Prashad, B. and Hora, S. L. A general review of the probable larvivoracious fishes of India. Rec. Malarial Surv. India 6 1936 pp. 621-648 pls. ix-xv.

823.—Pravdin, J. F. Die Volchov-Maräne des Ladoga-Sees (*Coregonus lavaretus baeri* Kessler). Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 567-638 5 pls. [Russian; German summary p. 323.]

824.—Prenant, M. Structure fine et croissance normale des lépidotriches articulés chez les Téléostéens. C.R. Soc. biol. Paris 123 29 1936 pp. 474-475.

825.—Pritchard, A. L. Stomach content analyses of fishes preying upon the young of Pacific Salmon during the fry migration at McClinton Creek, Masset Inlet, British Columbia. Canad. Field Nat. 50 6 1936 pp. 104-105.

826.—Pritchard, A. L. Factors influencing the upstream spawning migration of the Pink Salmon, *Oncorhynchus gorbuscha* (Walbaum). J. biol. Board Canada 2 1936 pp. 383-389 3 text-figs.

827.—Priwolnev, T. J. Zur Biologie von *Salmo trutta*. Trav. Soc. nat. Leningrad (Sect. Zool.) 63 1934 pp. 311-323 6 text-figs. [Russian; German summary p. 322.]

828.—Probatov, A. N. [Materials on studying Acipenseridae of the Amur.] Scient. Mem. Univ. Perm. 1 1 1935 pp. 33-74 1 pl. [Russian; English summary p. 72.]

829.—Probatov, A. N. [Data on the taxonomy and biology of *Coregonus nasus* Pallas of the R. Kara.] Scient. Mem. M. Gorky St. Univ. Perm. 2 1 1936 pp. 3-40 2 graphs. [Russian; English summary p. 38.]

830.—Prosad, K. and Sharan, S. The periodicities of fish scale and tortoise shell by the method of latent splitting. Bull. Patna Sci. Coll. Phil. Soc. 5 1935 pp. 1-4.

831.—Pruthi, H. S. Fish mortality. Science N.Y. N.S. 83 1936 p. 413.

832.—Raabe, H. Études de Micro-organismes parasites des poissons de mer. I. *Nosema ovoideum* Thél. dans la foie des Rougets. Bull. Inst. Océanogr. Monaco 696 1936 pp. 1-12 7 text-figs.

Rachow, A. *vide* Holly, M.

Rae, B. B. *vide* Bowman, A.

833.—Rahimullah, M. On the pyloric caeca in the family Notopteridae. (Abstract.) Proc. Indian Sci. Congr. Calcutta 22 1935 pp. 323.

834.—Raitt, D. S. The Haddock stocks of the North-East Atlantic, 1916-1935. Sci. Invest. Fish. Scotl. 1936 1 1936 32 pp. 7 text-figs.

835.—Raitt, D. S. The age composition of the Haddock stocks of the different fishing regions of the North-east Atlantic covering the period 1916-1935. [in Clark 192]. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 3 no. 2 1936 pp. 4-6.

836.—Raitt, D. S. Stock replenishment and fishing intensity in the Haddock of the North Sea. J. Conseil Copenhague 11 1936 pp. 211-218 5 text-figs.

837.—Ramalho, A. Abondance relative des classes annuelles de Maquereau. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 3 No. 5 1936 3 pp.

838.—Radow, H. Gebänderter indischer Buntbarsch. Aquar. Berlin 10 1936 pp. 17-108 2 text-figs.

839.—Ranzi, S. Risultati di ricerche su varie forme di gestazione. Boll. Zool. Torino 6 1935 pp. 153-157.

840.—Ranzi, S. Zur Kenntnis der Fortpflanzung bei den Selachiern. Naturwissenschaften Berlin 24 1936 pp. 642-646 1 text-fig.

841.—Ranzi, S. Ipofisi e gestazione nei Selaci. Rend. Acc. Lincei (6) 23 1936 pp. 365-368.

842.—Ranzi, S. and Zezza, P. Fegato, maturita sessuale e gestazione in *Trygon violacea*. Pubbl. Staz. zool. Napoli 15 1936 pp. 355-367 9 text-figs.

843.—Rao, S. R. A study of the otoliths of *Psettodes erumei* (Bl. Schn.). Proc. Indian Sci. Congr. Calcutta 22 1935 pp. 319 (abstract only).

844.—Rao, H. S. Pearl-like concretions (calculi) found in the stomach of cartilaginous and bony fishes from the Andaman Sea. Proc. Nat. Inst. Sci. India 2 1936 pp. 93-100 pl. 2.

Rasalan, S. B. *vide* Roxas, H. A.

845.—Rass, T. S. On types of fish eggs and their bearing on the classification of fishes. C.R. Acad. Sci. Moscou N.S. 1936 2 pp. 303-307 3 text-figs.

846.—Rass, T. S. Systematisch-morphologische Studien über zwei nahe-verwandte Arten: *Lumpenus fabricii* (C.V.) und *Lumpenus medius* Reinh. (Pisces, Blenniidae). Acta zool. Stockholm 17 1936 pp. 395-463 16 text-figs. 14 tables.

847.—Rass, T. S. Spawning, eggs and fry of the food-fishes of the Barents-Sea. Breeding and development of fish in subarctic. Int. Rev. Hydrobiol. Leipzig 33 1936 pp. 250-270 3 text-figs.

848.—Rauther, M. Fischreste aus der mesolithischen Kulturschicht der Falkensteinhöhle an der oberen Donau.

Jh. Ver. vaterl. Naturk. Württemb. 91 1935 pp. 121-124 pl. xii.

849.—Raymond, C. J. The value of hatchery trout for stocking rivers. Growth in unstocked rivers. Salmon and Trout Mag. London 83 1936 pp. 135-141.

850.—Regan, C. T. Fishes (in). Natural History. London 1936 pp. 192-296 figs.

851.—Reid, E. D. Revision of the fishes of the family Microdesmidae, with description of a new species. Proc. U.S. Nat. Mus. 84 1936 pp. 55-72 text-figs. 9-12 pl. ii.

Reid, E. D. *vide* Myers, G. S.

852.—Remane, A. Wirbelsäule und ihre Abkömmlinge (in). Bolk. Handb. Vergl. Anat. Wirbeltiere 4 Wien 1936 pp. 1-206 text-figs. 1-193.

853.—Rendahl, H. Untersuchungen über die chinesischen Formen der Gattung *Misgurnus*. Acta zool. fenn. Helsingfors 16 1934 32 pp.

854.—Rendahl, H. Einige neue Fische aus den Weissen Nil. Ann. Zool. Soc. zool.-bot. fenn. Vanamo Helsinki 2 1935 pp. 11-18 6 text-figs.

855.—Rendahl, H. Untersuchungen über die *Misgurnus*-Formen von Japan and Formosa. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 295-309 4 text-figs.

Ricardo, C. K. *vide* Worthington, E. B.

856.—Richardson, E. G. The physical aspects of fish locomotion. J. exp. Biol. Cambridge 13 1936 pp. 63-74 8 text-figs.

857.—Riddell, W. A. The nutritive value of marine products. XI. Proximate analysis of canned British Columbia Coho (Blueback) Salmon. J. biol. Board Canada 2 1936 pp. 463-468.

858.—Riddell, W. A. The nutritive value of marine products. XII. Mineral constituents of some food fishes of British Columbia. J. biol. Board Canada 2 1936 pp. 469-472.

859.—Riddell, W. A. The nutritive value of marine products. XIII. Mineral constituents of the flesh, skin, bone and free liquor in canned British Columbia Coho (Blueback) Salmon. J. biol. Board Canada 2 1936 pp. 473-475.

860.—Ritchie, A. The food and feeding habits of the Haddock (*Gadus aeglefinus*) in Scottish waters. Absts. Thes. Univ. Aberdeen 1935-36 1936 pp. 22-23.

861.—Rivero, L. H. Bibliografía de los trabajos sobre peces publicados por Felipe Poey. Mem. Soc. cubana Hist. nat. 10 1 1936 pp. 43-50.

862.—Rivero, L. H. Six records of the pointed-tailed Ocean Sunfish near Havana, Cuba. Amer. Nat. N.Y. 70 1936 pp. 92-95.

863.—Rivero, L. H. Some new, rare and little-known fishes from Cuba. Proc. Boston Soc. Nat. Hist. 41 1936 pp. 41-76, pls. ix-xiii.

864.—Rivero, L. H. A new shark from Tasmania. Occ. Pap. Boston Soc. Nat. Hist. 8 1936 pp. 267-268 pl. x.

865.—Rivero, L. H. and Hubbs, C. L. Studies of the fishes of the order Cyprinodontes. XV. The characters and relationships of *Furcipenis huberi* and *Alfaro cultratus*. Occ. Pap. Mus. Zool. Univ. Mich. 339 1936 12 pp. 2 pls.

866.—Robertson, G. M. New Cephalaspids from Canada. Amer. J. Sci. New Haven (5) 31 1936 pp. 288-295 4 text-figs.

867.—Robertson, J. A. A preliminary account of the Sprat and Sprat fishery in England. J. Conseil Copenhagen 11 1936 pp. 60-71 5 text-figs.

868.—Robertson, T. A. The occurrence of Lee's phenomenon in the Sprat and the size-relation between fish and scale. J. Conseil Copenhagen 11 1936 pp. 219-228 5 text-figs.

869.—Rocabert, L. Contribució al coneixement de la fauna ictiològica terciària catalana. Butll. Inst. Catalana Hist. nat. 34 1934 pp. 78-107 pls. ii-v.

870.—Rodionova, T. V. Spreading of *Proterorhinus marmoratus* (Pall.) in the basin of the Don River. Proc. Zool.-Biol. Inst. Scient. Res. Charkov 1 1936 pp. 259-260. [Russian.]

871.—Rohn, M. Über das Untereozän von Friedland in Mecklenburg. Z. Geschieforsch. Berlin 12 1936 pp. 150-154 1 text-fig.

872.—Rollefsen, G. Observations on the propagation of the Cod and the Plaice. K. norske Vidensk. Selsk. Trondhjem 7 1935 pp. 33-34 1 text-fig.

873.—Romer, A. S. The Dipnoan cranial roof. Amer. J. Sci. New Haven (5) 32 1936 pp. 241-256 4 text-figs.

Ross, D. M. *vide* Hayes, J. Z.

874.—Roule, L. Les Blennies potamiques péri-méditerranéennes. Verh. int. Vereinig. Limnol. Beograd 7 2 1935 pp. 411-414.

875.—Roule, L. Observation sur la présence dans le Golfe de Gascogne d'un poisson abyssal de l'Atlantique moyen (*Nesiarchus nasutus* Johnson) espèce nouvelle pour la faune française. Bull. Soc. zool. Fr. 60 1936 pp. 439-441.

876.—Roule, L. Rectification. Bull. Soc. zool. Fr. 61 1936 p. 140.

877.—Roule, L. Les Poissons et le monde vivant des eaux. IX. La culture des eaux et l'économie aquicole. 348 pp. 16 pls. 43 text-figs. Paris 1936.

878.—Roxas, H. A. and Rasalan, S. B. The Mullet fishery of Naujan, Mindoro; its effect on the sex ratio of the spawning mullet, *Mugil dussumieri* Cuvier and Valenciennes. Philipp. J. Sci. Manila 59 1936 pp. 259-273 3 text-figs.

879.—Royo y Gomez, J. Los vertebrados del Cretacico español de facies Wealdica. Bol. Inst. geol. Esp. 47 2 1936 pp. 171-176.

880.—Rubaschev, S. J. Abweichungen von der Elternformen in der embryonalen Entwicklung der Bastarde von *Coregonus baeri* Kessl. × *Salmo fario* lac. L. Acta zool. Stockholm 16 1935 pp. 387-408 20 text-figs.

881.—Rubin, M. A. Thermal reception in fishes. J. gen. Physiol. 18 1935 pp. 643-647.

882.—Runnström, S. A study on the life history and migrations of the Norwegian Spring-Herring based on the analysis of the winter rings and summer zones of the scale. Fiskerid. Skrift. ser. Havunders. Bergen 5 No. 2 1936 104 pp. 3 pls. 15 text-figs.

883.—Runnström, S. Investigations on Icelandic Herrings in 1929-35. Rapp. Cons. Explor. Mer Copenh. 99 1936 No. 4 11 pp. 2 text-figs.

884.—Runnström, S. The distribution of the Atlanto-Scandian Spring Herring. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 1936 pp. 24-28 1 text-fig.

885.—Rushton, W. Biological notes. Salmon and Trout Mag. London 82 1936 pp. 57-67.

886.—Russell, F. S. The seasonal abundance of the pelagic young of Teleostean fishes in the Plymouth area. Part III. The year 1935, with a note on the conditions as shown by the occurrence of plankton indicators. J. Mar. biol. Ass. Plymouth N.S. 20 1936 pp. 595-604 4 text-figs.

Rutenberg, E. *vide* Hickling, C. F.

887.—Sachs, W. B. Eine schöne Neueinführung, *Gymnocorymbus thayeri* (?) Eigenm. Bl. Aqu. Terr. Stuttgart 47 1936 pp. 99-100.

888.—Saito, K. Mesozoic Leptolepid fishes from Jehol and Chientao, Manchuria. Rep. First sci. Exped. Manchoukuo Tokyo (2) 3 1936 23 pp. 5 pls. 2 text-figs. [English; Japanese summary pp. 16-23.]

889.—Saito, T. Note on the influence of the sex hormone preparations upon the nuptial coloration of fin and the protrusion of oviduct in *Archeilognatus intermedium*. Dobuts. Zasshi Tokyo 48 1936 pp. 503-505. [English and Japanese.]

Sand, A. *vide* Gray, J.

Sand, A. *vide* Löwenstein, O.

890.—Sanders, M. Zoologische Ergebnisse einer Reise nach Bonaire, Curaçao und Aruba im Jahre 1930. No. 22. Nichtmarine Fische von Bonaire, Curaçao und Aruba. Zool. Jahrb. Jena (Syst.) 67 1936 pp. 448-454.

891.—Satô, M. Studies on the barbels of fishes. I. Histological observations. Botany & Zool. Tokyo 4 1936 pp. 1579-1587 14 text-figs. [Japanese.]

892.—Sato, M. Studies on the barbels of fishes. I. Histological observations (2). Botany & Zool. Tokyo 4 1936 pp. 2052-2058 10 text-figs. [Japanese.]

893.—Sato, S. A note on the Pacific Dog Fish (*Squalus suckleyi*

Girard) in the coastal waters of Hokkaido, Japan. J. Fac. Sci. Hokkaido Univ. Zool. 4 1935 pp. 127-141 6 text-figs.

894.—Sausser, G. Die Grösse des Zellkerns in verschiedenen Tierklassen unter Berücksichtigung des Geschlechtes der Domestikation und Kastration. Z. Zellf. mikr. Anat. Berlin 23 1936 pp. 677-700 8 text-figs.

895.—Savage, R. E. and Wimpenny, R. S. Phytoplankton and the Herring. Part II. 1933 and 1934. Fish. Invest. London (2) 15 1 1936 88 pp. 45 text-figs.

896.—Schäfer, L. W. Die Regeneration der Kiemen und Flossenstrahlen beim Goldfisch (*Carassius auratus*). Jena Z. Naturw. 70 1936 pp. 303-358 pls. xii-xv 12 text-figs.

Schaefer, M. B. *vide* Schultz, L. P.

897.—Scharrer, E. Die Empfindlichkeit der freien Flossenstrahlen des Knurrhahns (*Trigla*) für chemische Reize. Z. vergl. Physiol. 22 1935 pp. 145-154 7 text-figs.

898.—Scharrer, E. Der Blasop. Natur. u. Volk. 66 1936 pp. 135-136 2 text-figs.

899.—Scharrer, E. Der Zitterwels. Natur. u. Volk. 66 1936 pp. 166-168 2 text-figs.

900.—Scharrer, E. Über den Geschmackssinn der Fische. Natur. u. Volk. 66 1936 pp. 319-322 3 text-figs.

901.—Scharrer, E. Über "vegetative" Kerne im Gehirn und Rückenmark der Fische. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 236-240 7 text-figs.

Scheuring, L. *vide* Koch, W.

902.—Shetter, D. S. Shrinkage of trout at death and on preservation. Copeia Ann Arbor 1936 pp. 60-61.

903.—Scheuring, L. Ursachen für Massen-Fischsterben in Gegenwart und Vorzeit. Natur. u. Volk. 66 1936 pp. 357-362 2 text-figs.

904.—Schildt, W. W. Ein Bastard zwischen Plötze und Ukelei. Zool. Anz. Leipzig 113 1936 pp. 74-75 1 text-fig.

905.—Schindler, O. Eine junge Äsche mit sonderbarer Zwillings-Bildung. (*Thymallus thymallus* L.) Natur. u. Volk. 66 1936 pp. 266-270 5 text-figs.

906.—Schindler, O. and Wagler, E. Zur Biologie der Seeforelle (*Trutta lacustris* L.). Int. Rev. Hydrobiol. Leipzig 33 pp. 327-356 11 text-figs.

907.—Schmalhausen, I. Zur Frage über Methodik der vergleichenden Analyse des Wachstums der Fische. Zool. J. Moscow 14 1935 pp. 802-804. [Russian.]

908.—Schmassmann, W. Über die Umweltfaktoren, welche in unsern Flüssen Zeit und Intensität der Fischwanderung bestimmen. Verh. schweiz. naturf. Ges. 117 1936 pp. 328-329.

909.—Schmidt, M. Weitere Pseudofossilien und Problematica. Abh. heidelberg. Akad. Wiss. 22 1936 pp. 18-142 (*Pisces* p. 134) 6 pls.

910.—Schmidt, P. J. On the systematics and distribution of the genus *Agonus* Bloch and Schneider. Copeia Ann Arbor 1936 pp. 58-59.

911.—Schmidt, P. J. On the genera *Davidojordania* Popov and *Bilabria* n. (*Pisces*, *Zoarcidae*). C.R. Acad. Sci. Moscou N.S. 1936 pp. 97-100 1 text-fig.

912.—Schmidt, P. J., Platonov, P. G. and Person, S. A. On the anabiosis of fishes in supercooled water. C.R. Acad. Sci. Moscou N.S. 1936 pp. 305-308 2 text-figs.

913.—Schmidt, W. Über das Auftreten und die Verbreitung einiger Stockfischgattungen im nördlichen Teil des Stillen Ozeans. Zool. J. Moscow 15 1936 pp. 175-183. [Russian; German summary p. 182.]

914.—Schmidt-Nielsen, S., Astad, A., Flood, A., Stene, J. and Sørensen, N. A. Statische Untersuchungen über den Vorrat einiger Knochenfische an Vitamin A. K. norske vidensk. Selskr. Trondheim 1935 II 40 1936 pp. 1-78 24 text-figs.

915.—Schmidtow, A. I. Über das Überleben des Spermas von Acipenserarten unter verschiedenen äusseren Verhältnissen. C.R. Acad. Sci. Leningrad N.S. 1936 3 pp. 89-91.

916.—Schnakenbeck, W. The present state of our knowledge concerning the origin and distribution of Herring populations in Western European waters. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 1936 pp. 28-31.

917.—Schnakenbeck, W. Über den Zahnwechsel beim Hecht. Zool. Anz. Leipzig 114 1936 pp. 69-76 6 text-figs.

918.—Schneberger, E. Growth of the Yellow Perch (*Perca flavescens* Mitchill) in Nebish, Silver and Weber Lakes, Vilas county, Wisconsin. Trans. Wisc. Acad. Sci. Arts Lett. 29 1935 pp. 103-129 5 text-figs.

Schneegans, D. vide Arambourg.

919.—Schneider, C. O. La aclimatación del *Carassius auratus*, Lin., en el Rio Andalien. Comun. Mus. Concepción 1 1936 pp. 11-13.

920.—Schneider, C. O. La distribución geográfica de algunos peces Teleosteos Chilenos. Comun. Mus. Concepción 1 1936 pp. 40-42.

921.—Schneider, C. O. La distribución geográfica de algunos peces Teleosteos Chilenos. Comun. Mus. Concepción 1 1936 pp. 42-44.

922.—Schneider, C. O. La necesidad de estudiar biologicamente el mar chileno. Comun. Mus. Concepción 1 1936 pp. 50-52.

923.—Schneider, C. O. Cooperación de los pescadores a las investigaciones científicas. Comun. Mus. Concepción 1 1936 pp. 53-55.

924.—Schneider, C. O. Algunos peces ocasionales en el litoral de Concepción. Comun. Mus. Concepción 1 1936 pp. 59-61.

925.—Schneider, C. O. El *Odontaspis elegans* (Agassiz) en el Terciario Eoceno de Chile. Comun. Mus. Concepción 1 4 1936 pp. 69-70.

926.—Schreiber, B. Ulteriori osservazioni sull' azione di ormoni preipofisarii sul maschio di anguilla. Boll. Soc. ital. Biol. sper. 10 1935 pp. 818-821 3 text-figs.

927.—Schreitmüller, W. Über Geschlechtsunterschiede und Fortpflanzung von *Pantodon buchholzi* Peters im Aquarium. Zool. Anz. Leipzig 113 1936 pp. 33-40 5 text-figs.

928. — Schreitmüller, W. Über Laichakt und Brutpflege von *Geophagus jurupari* Haecckel (Teufelsangel). Zool. Anz. Leipzig 114 1936 pp. 192-195 1 text-fig.

929. — Schreitmüller, W. Die Zucht des Schmetterlingsfisches. Aquar. Berlin 1936 pp. 1-7 7 text-figs.

930. — Schreitmüller, W. Meine Zuchterfolge bei Kreuzungen der *Mollienisia verifera*. Aquar. Berlin 10 1936 pp. 110-111.

931. — Schreitmüller, W. Eine neuer Maulbrüter. Ueber Zucht und anderes von *Astatotilapia strigigena* Pfeffer (1893). Aquar. Berlin 10 1936 pp. 66-67 1 text-fig.

932. — Schreitmüller, W. Ein neuer Makropode (?). *Macropodus opercularis* L. var. *spechti* Schreitm. Aquar. Berlin 10 1936 pp. 181-182 1 text-fig.

933. — Schreitmüller, W. Originelle Bastarde. Nachr. Aquar. Terrar. Ver. Berlin 1936 p. 218.

934. — Schröder, G. Das Sammeln, Konservieren und Ausstellen von Wirbeltieren. Berlin 1936. 93 pp. 32 pls. 9 text-figs.

935. — Schroeder, W. C. Notes on the Snake Blenny *Lumpenus lampetraeformis* (Walbaum) from the North Atlantic. Copeia Ann Arbor 1936 pp. 125-126.

936. — Schultz, L. P. The spawning habits of the chub, *Mylocheilus caurinus* — a forage fish of some value. Trans. Amer. Fish. Soc. Washington 65 1935 pp. 143-147.

937. — Schultz, L. P. Keys to the fishes of Washington, Oregon, and closely adjoining regions. Univ. Washington Pub. Biol. Seattle 2 4 1936 pp. 103-228 50 figs. including pl. v.

938. — Schultz, L. P. and DeLacy, A. C. Fishes of the American Northwest. A catalogue of the fishes of Washington and Oregon with distributional records and a bibliography. First instalment. J. Pan-Pacific Res. Inst. Honolulu 10 1935 pp. 365-380.

939. — Schultz, L. P. and DeLacy, A. C. Fishes of the American Northwest. Second instalment. J. Pan-Pacific Res. Inst. Honolulu 11 1936 pp. 63-78.

940. — Schultz, L. P. and DeLacy, A. C. Fishes of the American Northwest. Third instalment. J. Pan-Pacific Res. Inst. Honolulu 11 1936 pp. 127-142.

941. — Schultz, L. P. and DeLacy, A. C. Fishes of the American Northwest. Fourth instalment. J. Pan-Pacific Res. Inst. 11 1936 pp. 211-226.

942. — Schultz, L. P. and DeLacy, A. C. Fishes of the American Northwest. Fifth instalment, conclusion. J. Pan-Pacific Res. Inst. Honolulu 11 1936 pp. 275-290.

943. — Schultz, L. P. and Schaefer, M. B. Descriptions of new intergeneric hybrids between certain Cyprinid fishes of northwestern United States. Proc. Biol. Soc. Washington 49 1936 pp. 1-10.

944. — Schultz, L. P. and Thompson, R. J. *Catostomus syncheilus palouzeanus*, a new subspecies of a Catostomid fish from the Palouse River (Columbia R. system). Proc. Biol. Soc. Washington 49 1936 pp. 71-76.

945. — Schuster-Woldan, E. Versuche über die Permeabilität der Fischoberfläche für Neutralrot. Zur Frage der Wechselbeziehungen zwischen Umweltfaktoren und Organismus. Arch. Hydrobiol. Stuttgart 30 1936 pp. 352-358.

Schweizer, W. vide Birrer, A.

946. — Scott, E. O. G. Observations on some Tasmanian fishes. Part III. Pap. Proc. Roy. Soc. Tasmania 1935 1936 pp. 113-129 3 text-figs.

947. — Scott, E. O. G. Observations on fishes of the family Galaxiidae. Part I. Pap. Proc. Roy. Soc. Tasmania 1935 1936 pp. 85-112 4 text-figs.

948. — Seale, A. A new member of the Blenny family. Proc. Calif. Acad. Sci. (4) 23 1936 pp. 85-86.

949. — Segerstråle, C. Fiskeribiologiska undersökningar rörande gösen (*Lucioperca sandra* Cuv.) i östligaste delen av Finska viken. Forh. skand. naturf. Mote 19 1936 pp. 500-506.

950. — Sen, P. On the branchiocephalic system of blood-vessels, together with a note on the dorsal aorta of a common Indian fresh-water Carp, "Rohu," *Labeo Rohita* (Günth.). J. Dpt. Sci. Univ. Calcutta 9 2 1928 pp. 1-20 9 pls.

Sharan, S. vide Prosad, K.

951.—Shaw, G. E. and Shebbeare, E. O. Description of a new species of fish from Northern Bengal. *J. Bombay Nat. Hist. Soc.* **39** 1936 pp. 188–189 1 pl.

952.—Shaw, T. H. Relative growth in the body of *Macropodus chinensis* (Bloch). *Absts. Pap. Sci. Conf. Nanning* 1935 p. 90.

Shebbeare, E. O. *vide* Shaw, G. E.

953.—Shetter, D. S. The jaw-tag method of marking fish. *Pap. Mich. Acad. Sci.* **21** pp. 651–653.

Shetter, D. S. also no. 902.

954.—Shurrager, P. S. An ecological study of the fishes of the Hocking River. *Bull. Ohio biol. Surv.* **5** 5 1932 pp. 377–409 17 maps.

955.—Shurrager, P. S. Potentials from the isolated forebrain and potential summation in the isolated brain of Catfish. *Proc. Soc. exp. Biol.* **35** 1936 pp. 371–374 2 text-figs.

956.—Siedlecki, M. Fluctuations in the number of individuals belonging to different age-groups in the catches of European Salmon (*Salmo salar* L.). *Rapp. Cons. Explor. Mer. Copenh.* **101** Pt. 3 No. 9 1936 10 pp. 6 text-figs.

957.—Sire, M. Sur un cas de dédoublement de la nageoire caudale chez une Bouvière: *Rhodeus amarus* Bloch. (Téléostéen physostome cyprinidae). *Bull. Soc. sci. Bretagne* **10** 1 & 2 1933 pp. 28–39 14 text-figs.

958.—Slastenenko, E. P. The species of the genus *Tripterygion* found in the Black Sea. *C.R. Acad. Sci. Moscou N.S.* **1936** 4 3 pp. 153–156.

959.—Slastenenko, E. P. Revue de la faune ichthyologique de la Mer Noire. *Ann. sci. Univ. Jassy* **22** 1936 pp. 280–296.

960.—Slastenenko, E. P. Notes sur quelques poissons de la Mer Noire. *Ann. sci. Univ. Jassy* **22** 1936 pp. 297–305 pls. iv–viii.

961.—Smedley, N. A case of protective resemblance. *Malayan Nat. Singapore* **2** 1928 p. 48.

962.—Smirnov, A. G. Considerations sur le développement de l'industrie du saumon dans les rivières de la presqu'île de Kola. *Bull. Inst. Freshwater Fish. Leningrad* **20** 1935 pp. 328–335 1 chart. [Russian.]

963.—Smirnov, A. G. Le saumon de la rivière Pinéga, sa biologie et industrie. *Bull. Inst. Freshwater Fish. Leningrad* **20** 1935 pp. 261–263.

964.—Smirnov, A. G. Recherches sur la biologie et la pêche du saumon dans les rivières de la presqu'île de Kola en 1932 et 1933. *Bull. Inst. Freshwater Fish. Leningrad* **20** 1935 pp. 114–201 2 text-figs. 1 chart. [Russian.]

965.—Smirnov, V. P. [Vorläufige Bemerkung über Oligocaenablagerungen am Schwarzen Flusse in der Nähe von Vladikavkas.] *Izv. Ghorskogho Pedagogh. Inst. (Nachr. Gorsky Paedagog. Inst.) Vladikavkas* **3** 1926 pp. 212–216.

966.—Smirnov, V. P. Ruibui. Severo-kavkazskogo Oligotzena. [Les poissons oligocènes du Nord Caucase.] *Trav. Sci. Univ. Usbekistan Samarkand* **5** 1936 pp. 43–132 pls. i–xii. [Russian; French summary p. 91.]

967.—Smith, G. M. and Coates, C. W. Cutaneous melanosis in Lungfishes (Lepidosirenidae). *Biol. Bull. Woods Hole* **71** 1936 pp. 282–285 1 pl.

968.—Smith, G. M., Coates, C. W. and Strong, L. C. Neoplastic diseases in small tropical fishes. *Zoologica New York* **21** 1936 pp. 219–224 3 pls.

969.—Smith, H. M. A walking fish. *Nat. Hist. N.Y.* **37** 3 1936 pp. 248–252.

970.—Smith, H. M. The Archer Fish. *Nat. Hist. N.Y.* **38** 6 1936 pp. 3–11 4 figs.

971.—Smith, H. W. The retention and physiological role of urea in the Elasmobranchii. *Biol. Rev. Cambridge* **11** 1936 pp. 49–82 1 text-fig.

972.—Smith, J. L. B. Two interesting new fishes from South Africa. *Trans. Roy. Soc. S. Afr.* **24** 1 1936 pp. 1–6 pls. i & ii text-figs. 1 & 2.

973.—Smith, J. L. B. New Gobioid and Cyprinoid fishes from South Africa. *Trans. Roy. Soc. S. Afr.* **24** 1 1936 pp. 47–55 pls. iii–v text-figs. 1–3.

Smith, J. L. B. in *Zool. Rec.* for 1935 for 1935 read 1936.

974.—Smith, S. The energy exchanges in the development of the Rainbow Trout. *Abs. Diss. Univ. Cambridge* 1935–36 1936 pp. 39–40.

975.—Smith, S. H. Pisces (in) The Yorkshire Naturalists' Union's seventy-fourth annual report. Naturalist London 1936 p. 37.

976.—Sokolov, N. P. and Chvaliova, M. A. Nutrition of *Gambusia affinis* on the rice fields of Turkestan. J. Animal Ecol. London 5 1936 pp. 390-395 5 text-figs.

977.—Soloviev, M. M. On the problem of the causes of the Haff disease. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 605-608. [Russian; English summary p. 607.]

Somme, S. vide Dahl, K.

Sørensen, N. A. vide Schmidt-Nielsen, S.

978.—Souche, G. Sur un poisson à œil unique. Bull. Sta. biol. Arcachon 32 1 1935 pp. 39-41 2 text-figs.

979.—Souche, G. Sur une anomalie constatée chez un "*Gadus luscus*" L. Bull. Sta. biol. Arcachon 32 1935 pp. 43-44 2 text-figs.

980.—Souche, G. Contribution à l'étude des épines caudales de l' "*Acanthurus chirurgus*" Bl. Bull. Sta. biol. Arcachon 32 1935 pp. 31-38 7 text-figs.

981.—Souché, G. Sur une anomalie présentée par un *Ameiurus nebulosus* Raf. Proc.-verb. Soc. Sci. phys. nat. Bordeaux 1934-35 1936 pp. 12-14 2 text-figs.

982.—Souché, G. Sur un poisson monstrueux. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 106-107.

983.—Souché, G. Sur une Motelle monstrueuse. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 107-108 3 text-figs.

984.—Souché, G. Sur la coloration anormale d'un *Scyllium*. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 117-118 2 text-figs.

985.—Souché, G. Sur une *Raia clavata* Rond. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 119-120.

986.—Souché, G. Sur un *Merlangus vulgaris* Bp. particulier. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 138-139 1 text-fig.

987.—Souché, G. Sur un cas de parasitisme chez *Gadus luscus* L. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 139-140 1 text-fig.

988.—Souché, G. Note sur l'habitat d'*Aspidophorus cataphractus* Lac. Proc.-verb. Soc. Sci. phys. nat. Bordeaux 1933-34 1936 pp. 31-32.

989.—Souché, G. Nouvelles recherches sur l'adducteur de l'arc palatin chez les poissons. Bull. Sta. biol. Arcachon 32 1 1935 pp. 53-72 35 text-figs.

990.—Souché, G. Muscle ptérygo-maxillaire des poissons osseux. Bull. Sta. biol. Arcachon 32 1935 pp. 73-77.

991.—Souché, G. Muscles élévateurs de la mandibule chez les poissons. Bull. Sta. biol. Arcachon 32 1935 pp. 79-103 14 text-figs.

992.—Spartà, A. Contributo alla conoscenza dello sviluppo nei Percidi. Uova ovariche mature di *Epinephelus guaza* L. e stadi post-embryonali e larvali di *Epinephelus alexandrinus* Cuv. e Val. Mem. Com. talassogr. ital. 224 1935 pp. 1-12 1 pl.

993.—Sparta, A. Contributo alla conoscenza di uova, stadi embrionali e post-embryonali in *Macrorhamphosus scolopax* L. Mem. Com. talassogr. ital. 225 1936 pp. 1-14 1 pl.

994.—Spriesterbach, J. Beitrag zur Kenntnis der Fauna des rheinischen Devon. Jahrb. preuss. geol. LdAnst. 55 1 1935 pp. 475-525 pls. xli-1 3 text-figs. (Fishes p. 523).

995.—Stefanini, G. Giacimento miocenico a vertebrati nella Sirtica. Atti Soc. Tosc. Sci. Nat. Pisa Proc. Verb. 43 1934 pp. 27-28.

996.—Stein, G. H. W. Mitteilungen zur Wirbelfauna der östlichen Mark. Pisces. Märk. Tierw. Berlin 1 1936 pp. 234-236.

997.—Steinmann, P. Die Fische der Schweiz. pp. viii + 154 + 45 pls. Aarau (Sauerländer) 1936.

Stene, J. vide Schmidt-Nielsen, S.

998.—Stensiö, E. A. On the Placodermi of the Upper Devonian of East Greenland. Medd. Grönland 97 2 1936 pp. 1-52 30 pls. 26 text-figs.

Stensiö, E. vide Holmgren, N.

Stepanowa, W. S. vide Grieb, H. W.

999.—Steven, G. A. Migration and growth of the Thornback Ray (*Raia clavata* L.). J. Mar. Biol. Ass. Plymouth N.S. 20 1936 pp. 605-614 text-figs. 1 & 2.

1000.—Stewart, N. H. A survey of the fishes in the region of Lewisburg, Pennsylvania. *Proc. Penn. Acad. Sci.* 9 1935 pp. 82–86.

1001.—Stoljarow, W. Die parasitäre Fauna der Cyprinidae in der Fischteichwirtschaft zu Ropscha. *Trav. Soc. Nat. Leningrad* (Sect. Zool.) 63 1934 pp. 343–351. [Russian; German summary p. 350.]

1002.—Stonor, C. R. The importance of iodine in relation to fish. *Ann. Biol. Res. Rep. Southampton* 1934–5 1936 pp. 104–116.

1003.—Storey, M. and Gudger, E. W. Mortality of fishes due to cold at Sanibel Island, Florida, 1886–1936. *Ecology Brooklyn* 17 1936 pp. 640–648.

1004.—Storror, B. and Cowan, D. Herring investigations. *Rep. Dove Mar. Lab. Cullercoats* (3) 3 1935 pp. 11–26.

1005.—Stoyanow, A. A. Correlation of Arizona Paleozoic formations. *Bull. Geo. Soc. Amer. New York* 47 1936 pp. 459–540 pl. i.

1006.—Stromer, E. Ergebnisse der Forschungsreisen Prof. E. Stromers in den Wüsten Ägyptens. VII. Baharija-Kessel und -Stufe mit deren Fauna und Flora. Eine ergänzende Zusammenfassung. *Abh. bayer. Akad. Wiss. N.F.* 33 1936 pp. 1–102 pl. i 21 text-figs.

Strong, L. C. *vide* Smith, G. M.

1007.—Studnicka, F. K. L'union du muscle et du tissu conjonctif. *C.R. Soc. Biol. Paris* 123 33 1936 pp. 929–932.

1008.—Suehiro, Y. On the digestive tract and the food of the fish, *Leuciscus hakonensis* Günther. (Japanese.) [*Suisan Gakkwai Hô* 6 No. 2 1934 pp. 65–70 *non vidi.*] Abstract in *Japan J. Zool.* 6 1936 p. (79).

1009.—Sund, O. The fluctuations in the European stocks of Cod. *Rapp. Cons. Explor. Mer. Copenh.* 101 Pt. 3 No. 1 1936 pp. 1–18 7 text-figs.

Süss, K. *vide* Krawarik, F.

1010.—Suvatti, C. Index to Fishes of Siam 226 pp. 1 pl. 1 chart. Bangkok 1936.

1011.—Suworkina, M. J. Das Wachstumstempo von zwei Formen der

Ladoga-Renken: *Coregonus lavaretus baeri* natio ladoga und *Coregonus lavaretus baeri* natio swirensis. *Trav. Soc. nat. Leningrad* (Sect. Zool.) 63 1934 pp. 352–370. [Russian; German summary p. 369.]

1012.—Suzuki, N. On the lobus electricus and the nervi electrici in *Narke japonica*. *J. Orient. Med.* 25 1936 pp. 1–12 15 text-figs.

1013.—Svetovidov, A. N. On a new Herring from the Caspian Sea, *Caspialosa caspia salina* subsp. n. *C.R. Acad. Sci. Moscou N.S.* 1936 1 pp. 51–52.

1014.—Svetovidov, A. Graylings, genus *Thymallus* Cuvier of Europe and Asia. *Trav. Inst. zool. Acad. Sci. U.R.S.S.* 3 1936 pp. 183–301 5 pls. 3 text-figs. [Russian; English summary p. 294.]

1015.—Svetovidov, A. N. A review of the European species of the genus *Trigla* (Pisces, Triglidae). *Trav. Sta. biol. Sébastopol* 5 1936 pp. 297–317 4 text-figs. [Russian; English summary p. 316.]

1016.—Svetovidov, A. N. *Coregonus lavaretus pidschian* natio bergiellus from the rivers Kara and Sibirtsha. *Trav. Inst. zool. Acad. Sci. U.R.S.S.* 4 1936 pp. 389–424 3 text-figs. [Russian; English summary p. 423.]

1017.—Svetovidov, A. Poissons. Fam. Triglidae (in) Faune de L'U.R.S.S. Moscou & Leningrad 6 no. 9 1936 pp. 1–24 2 text-figs. 3 pls.

1018.—Svetovidov, A. N. A note on *Lotella maximowiczi* Herzenstein (Pisces, Anacanthini). *Annot. zool. jap.* 15 1936 pp. 433–435 2 text-figs.

1019.—Svetovidov, A. N. *Lepidion schmidtii*, eine neue Fischart. *Zool. Anz. Leipzig* 113 1936 pp. 266–269 1 text-fig.

1020.—Svetovidova, A. A. L'âge et la croissance du saumon de la rivière Niva (baie de Kandalakcha). *Bull. Inst. Freshwater Fish. Leningrad* 20 1935 pp. 230–260 15 text-figs. [Russian; French summary p. 230.]

1021.—Svetovidova, A. A. L'âge et le rythme de croissance du Saumon de la rivière Ponoï (presqu'île de Kola). *Bull. Inst. Freshwater Fish. Leningrad* 20 1935 pp. 222–229. [French and Russian.]

1022.—Sweetman, H. L. and Warfel, H. E. Fish mortality produced by oxygen deficiency. Science N.Y. N.S. 84 1936 pp. 314-315 1 text-fig.

1023.—Swingle, H. S. Fish ponds in Alabama. J. Alabama Acad. Sci. 8 1936 p. 27.

1024.—Tanaka, R. The effect of formalin as a disinfectant against the aquatic fungus which attacks the eggs of the pond smelt. Trans. Sapporo nat. Hist. Soc. 14 1935 pp. 138-141.

1025.—Tang, D. S. A tentative list of food fishes of Amoy. Nat. Sci. Bull. Univ. Amoy. 1 1 1934 pp. 21-28.

1026.—Tang, D. S. The Elasmobranchiate fishes of Amoy. Nat. Sci. Bull. Univ. Amoy 1 1394 pp. 29-111 22 text-figs.

1027.—Tang, D. S. An annotated list of the Elasmobranchs of Kwangtung Province. Nat. Sci. Bull. Univ. Amoy 1 2 1935 pp. 165-173.

1028.—Tang, S. F. and Wu, H. W. A preliminary note on the spawning ground of *Trichiurus japonicus* (Schlegel) in Poh-hai. Lingnan Sci. Journ. Canton 15 1936 p. 651.

Tang, D. S. *vide* Chen, T. Y.

1029.—Tåning, Å. V. Young herring and sprat in Faroese waters. Medd. Komm. Havundersog. Kjøb. Fiskeri 10 no. 3 1936 28 pp. 11 text-figs.

1030.—Tåning, Å. V. On the eggs and young stages of the Halibut. Medd. Komm. Havundersog. Kjøb. Ser. Fiskeri 10 No. 4 1936 23 pp. 8 text-figs.

1031.—Tåning, Å. V. Herring larvae in Icelandic waters, 1924-1934. Rapp. Cons. Explor. Mer. Copenh. 99 1936 No. 6 20 pp. 15 text-figs.

1032.—Tåning, Å. V. The Herring stocks of the Faroes, Iceland and Greenland. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 2 1936 pp. 32-33.

1033.—Tåning, Å. V. Review of the fluctuations in the stock of Cod at Greenland, Iceland, and the Faroes and in Danish waters. Rapp. Cons. Explor. Mer. Copenh. 101 Pt. 3 No. 1 1936 pp. 19-21.

Tansley, K. *vide* Bayliss, L. E.

1034.—Tarantetz, A. Some changes in the classification of fishes of the

Soviet Far East with notes on their distribution. Bull. Far Eastern Section Ac. Sci. U.S.S.R. no. 13 1935 pp. 89-101. [Russian; English summary pp. 99-101.]

1035.—Tarantetz, A. J. On the fish-bones found in the dwelling places of the Ihlow Tribe. Bull. Far Eastern Branch Acad. Sci. U.S.S.R. 18 1936 pp. 125-131 13 text-figs. [Russian; English summary p. 131.]

1036.—Tarantetz, A. J. 'A short review of the genera related to *Stichæus* from the Bering, Okhotsk and Japan Seas. C.R. Acad. Sci. Moscou N.S. 1936 1 pp. 145-148.

1037.—Tarantetz, A. Description of three new species of the genus *Icelus* Krøyer (Pisces, Cottidae) from the Sea of Japan and from Okhotsk Sea. C.R. Acad. Sci. Moscou N.S. 1936 4 pp. 149-152 1 text-fig.

1038.—Tarel, M. R. Capture d'un Squalé bleu (*Squalus glaucus* Linné), de ses deux Pilotes (*Scomber ductor* L.) et d'un Poisson volant (*Exocoetus volitans* Bloch) dans le Bassin d'Arcachon. Proc.-verb. Soc. linn. Bordeaux 86 2 1935 pp. 113-114.

Taylor, W. *vide* Marchand, J. M.

1039.—Tchang, T. L. A new genus of Loach from Yunnan. Bull. Fan Memorial Inst. Biol. Peiping 6 1 1935 pp. 17-19 2 text-figs.

1040.—Tchang, T. L. Study of some Chinese Catfishes. Bull. Fan Memorial Inst. Biol. Peiping 7 1936 pp. 33-56 5 text-figs.

Tchang, T. L. *vide* Young, C. C.

1041.—Tchou, S. and Chen, C. H. Fertilization in Goldfish. Contr. Inst. Zool. Peiping 3 1936 pp. 35-58. [English; Chinese summary p. 56.]

1042.—Tchoumaevskaya-Svetovidova, E. V. Matériaux pour servir à la biologie du saumon du fleuve de Mezène (mer Blanche). Bull. Inst. Freshwater Fish. Leningrad 20 1935 pp. 294-311 2 text-figs. [Russian.]

Tee-Van, J. *vide* Beebe, W.

1043.—Teisser, G. Croissance comparée des formes locales d'une même espèce. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 627-634 5 text-figs.

1044.—Tesch, J. J. Length, age distribution and growth of Herring in the Flemish Bight 1935-36. Rapp. Cons. Explor. Mer. Copenh. 100 Pt. 3 1936 pp. 11-14 3 text-figs.

1045.—Tewes, H. Zur Gliedmassenfunktion der Scleroparei, mit Ausblicken auf das Flugproblem von *Dactylopterus*. Jena Z. Naturw. 70 1936 pp. 429-482 pl. xviii 13 text-figs.

1046.—Thaysen, A. C. The origin of an earthy or muddy taint in fish. I. The nature and isolation of the taint. Ann. appl. Biol. Cambridge 23 pp. 99-104.

1047.—Thaysen, A. C. and Pentelow, F. T. K. The origin of an earthy or muddy taint in fish. II. The effect on fish of the taint produced by an odoriferous species of *Actinomyces*. Ann. appl. Biol. Cambridge 23 pp. 105-109.

Théobald, N. *vide* Gillet, S.

1048.—Thévenin, R. The curious life-habits of the Sea Horse. Nat. Hist. N.Y. 37 3 1936 pp. 211-222 15 text-figs.

Thompson, R. J. *vide* Schultz, L. P.

1049.—Thompson, W. F. Conservation of the Pacific Halibut, an international experiment. Rep. Smithson. Instn. 1935 1936 pp. 361-382 pls. i & ii 2 text-figs.

1050.—Thompson, W. F. and Cleve, R. van. Life history of the Pacific Halibut. (2) Distribution and early life-history. Rep. Int. Fish. Comm. Seattle 9 1936 184 pp. 71 figs.

1051.—Thompson, W. F. and Associates. The spawning of the Silver Smelt, *Hypomesus pretiosus*. Ecology Brooklyn 17 1936 pp. 158-168 2 text-figs.

1052.—Thorpe, M. R. A fossil fish in the Connecticut red sandstone. Amer. J. Sci. New Haven (5) 32 1936 pp. 319-321 1 text-fig.

1053.—Thursby-Pelham, D. E. The decline in the Lowestoft Plaice fisheries. J. Conseil Copenhagen 11 1936 pp. 33-42 7 text-figs.

1054.—Tilik, Z. E. Sur la composition chimique du saumon du Nord (*Salmo salar*). Bull. Inst. Freshwater Fish. Leningrad 20 1935 pp. 324-327. [Russian.]

Tin-bergen, N. *vide* Pelkewijk, J. J.

1055.—Tomaschek, H. Beiträge zur Klärung der Frage über das Hören der Fische. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 553-580 18 text-figs.

1056.—Tomita, G. Melanophore reactions to light during the early stages of the Paradise Fish, *Macropodus opercularis*. J. Shanghai Sci. Inst. (4) 2 1936 pp. 237-264 14 text-figs.

1057.—Tomiyana, I. Gobiidae of Japan. Japan. J. Zool. Tokyo 7 1936 pp. 37-112 44 text-figs.

1058.—Torgeson, R. A., Guy, J. H. and Kelley, K. L. Spiracular circulation of the Dogfish. Proc. Penn. Acad. Sci. 6 1932 pp. 96-98.

1059.—Toth, L. A. Effect of epinephrine on rate of water excretion in the Toadfish. Rep. Woods Hole Oceanogr. Inst. 1935 (1936) p. 31.

1060.—Towarnicki, R. Naczynia krwionośne mózgu śluzicy (*Myxine glutinosa*). Über die Blutgefäße des Gehirns von *Myxine glutinosa* L. Bull. int. Acad. Cracovie B II 1935 pp. 261-272 pl. xi 1 text-fig.

1061.—Townsend, L. D. Variations in the meristic characters of flounders from the northeastern Pacific. Rep. Int. Fish. Comm. Washington no. 11 1936 24 pp.

1062.—Townsend, C. H. The largest deep-sea fish. Bull. New York zool Soc. 39 1936 pp. 29-30 1 text-fig.

1063.—Trautman, M. B. and Hubbs, C. L. When do Pike shed their teeth? Trans. Amer. Fisheries Soc. Washington 65 1935 pp. 261-266 2 figs.

Trautman, M. B. *vide* Hubbs, C. L.

Tremblay, J.-L. *vide* Vladykov, V. D.

1064.—Trewavas, E. Dr. Karl Jordan's expedition to South-West Africa and Angola: The fresh-water fishes. Novit. zool. Tring 40 1936 pp. 63-74 pls. i, ii.

1065.—Trotti, L. Contributo alla conoscenza di probabili organi luminosi nell' *Hymenocephalus italicus* Gigli. Ann. Mus. Stor. nat. Genova 59 1936 pp. 160-170 pls. vi-ix.

1066.—Tuchmann, H. Action de l'hypophyse sur la morphogenèse et la différenciation sexuelle de *Girardinus guppii*. C.R. Soc. Biol. Paris 122 17 1936 pp. 162-164.

Tunison, A. V. *vide* McCay, C. M.

1067.—Turner, C. L. The absorptive processes in the embryos of *Parabrotula dentiensis*, a viviparous, deep-sea brotulid fish. J. Morph. Philadelphia 59 1936 pp. 313-325 2 pls.

1068.—Tweedie, W. M. F. A list of the fishes in the collection of the Raffles Museum. Bull. Raffles Mus. Singapore 12 1936 pp. 16-28.

1069.—Uchida, K. On the distinctive characteristics between the two closely allied species, *Hemirhamphus sajori* and *H. kurumeus* (Pisces, Hemirhamphidae). Dobuts. Zasshi Tokyo 48 1936 pp. 295-306 8 text-figs. [Japanese, with English; English summary p. 295.]

1070.—Uchida, K. Note on two remarkable Heterosomatous postlarvae with a greatly elongated and branched dorsal ray. Dobuts. Zasshi Tokyo 48 1936 pp. 497-501 1 text-fig. [Japanese; English summary p. 497.]

1071.—Uchida, K. A note on the pelagic postlarval stages of *Antigonia rubescens* (Pisces, Caprimiformes). Dobuts. Zasshi Tokyo 48 1936 pp. 935-939 2 text-figs. [Japanese; English summary p. 935.]

1072.—Uchida, K. *Coryphaena equisetis* caught in the Southern Japan Sea. [N.S. Gk. S. 4 4 1935 pp. 224-228 1 text-fig. *non vidi*]. Abstract in Japan. J. Zool. 6 1936 p. (82).

1073.—Unger, E. Die Fischmarkierungen in den freien Gewässern Ungarns und die mit Gummiringen markierten Donau Fische. Verh. int. Vereinig. Limnol. Beograd. 7 2 1935 pp. 388-397 pls. i & ii 1 text-fig.

1074.—Unger, E. Fish-tagging experiments in Hungarian natural waters and the problem of india-rubber ring bearing Danube-fishes. Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 207-216 4 text-figs. [English summary p. 215.]

1075.—Upton, M. Influence of changing temperatures on the behavior of Scup (*Stenotomus chrysops*). Rep. Woods Hole Oceanogr. Inst. 1935 (1935) p. 32.

1076.—Vandebroek, G. Contribution à l'étude de la formation des feuillets chez *Scyllium canicula* Cuv. C.R. 2^{me} Congr. Sci. Bruxelles 1935 pp. 1039-1047 4 text-figs.

1077.—Vandebroek, G. Les mouvements morphogénétiques au cours de la gastrulation chez *Scyllium canicula* Cuv. Arch. Biol. Liège 47 1936 pp. 499-582 pls. xv-xvii 39 text-figs.

Vannini, E. *vide* Mazzeschi, A.

1078.—Vasneecov, V. Die Schwanzkiele der Fische. C.R. Acad. Sci. U.S.S.R. Moscow N.S. 4 1936 pp. 289-292.

1079.—Veil, C. Sur la mécanique du changement de couleur chez les poissons. J. Physiol. Path. gen. 34 1936 pp. 824-839.

Veil, C. *vide* Beauvallet, M.

1080.—Vernidub, M. F. Some data concerning the Pacific form of *Hippoglossus hippoglossus*. Trav. Soc. Nat. (Sect. Zool.) Leningrad 65 1936 pp. 143-184 5 text-figs. 5 graphs. [Russian; English summary p. 183.]

1081.—Verrier, M.-L. La vision chez les poissons osseux. Bull. Soc. Hist. nat. Auvergne 15 1929 pp. 37-42.

1082.—Vialli, M. Ricerche preventive sulle cosidette "cellule a cloruri" secondo Keys e Willmer nelle branchie di anguilla. Arch. zool. Torino 22 1936 pp. 25-31.

1083.—Viosca, P. A new Rock Bass from Louisiana and Mississippi. Copeia Ann Arbor 1936 pp. 37-45 3 figs.

1084.—Vladykov, V. D. Occurrence of three species of anadromous fishes on the Nova Scotian Banks during 1935 and 1936. Copeia Ann Arbor Mich. 1936 (3) p. 168.

1085.—Vladykov, V. D. Capsules d'oeufs de Raies de l'Atlantique canadien appartenant au genre *Raja*. Nat. canad. Québec 63 pp. 211-231 7 text-figs.

1086.—Vladykov, V. D. and Tremblay, J.-L. Nouvelles espèces de *Lycodes* (Pisces, Zoarcidae) du Saint-Laurent et revision de toutes les espèces du même genre de l'Atlantique occidentale. Fauna et Flora Laurentianae Quebec 1 pp. 1-45 17 figs.

1087.—Vodjanitzki, W. A. Beobachtungen über die pelagischen Eier der Fische des Schwarzen Meeres. Trav. Sta. biol. Sébastopol 5 1936 pp. 3-43 9 text-figs.

- 1088.—Voigt, E. Die Fische aus der eoänen Brunkohle des Geiseltales. Forschungen u. Fortschr. Berlin 11 1935 pp. 88–89 2 text-figs.
- Wagler, E. *vide* Schindler.
- 1089.—Wailles, G. H. Food of *Clupea pallasii* in Southern British Columbia Waters. J. biol. Board Canada 1 1935 pp. 477–486 1 text-fig.
- 1090.—Wakiya, Y. A review of Salangidae. Dobuts. Zasshi Tokyo 48 1936 pp. 835–845 2 text-figs. [Japanese, with English; English summary p. 835.]
- 1091.—Waldmann, J. Ein Zuchterfolg bei *Apistogramma corumbae* Eigenm. et Ward. Bl. Aqu. Terr. Stuttgart 47 pp. 8–10 1 text-fig.
- 1092.—Walford, L. A. Contributions from the Fleischmann expedition along the West coast of Mexico. Occ. Pap. S. Barbara Mus. 4 1936 pp. 1–10.
- 1093.—Wang, F. C. The fishes of Peiping and its vicinity. Sci. Rep. Nat. Univ. Peiping 1 2 1936 pp. 1–28.
- 1094.—Ward, W. V. The desert fish of Death Valley. Nat. Hist. N.Y. 38 1936 pp. 135–142 9 text-figs.
- 1095.—Warden, C. J., Jenkins, T. N. and Warner, L. H. Comparative Psychology (Vertebrates) 560 pp. 80 text-figs. 8° New York 1936.
- Warfel, H. E. *vide* Sweetman, J. L.
- 1096.—Waring, H. Colour change in the Dogfish (*Scyllium canicula*). Proc. L'pool biol. Soc. 49 1936 pp. 17–64 pls. i–iv 1 text-fig.
- 1097.—Waring, H. A preliminary study of the melanophore-expanding potency of the pituitary gland in the Frog and Dogfish. Proc. L'pool biol. Soc. 49 1936 pp. 65–90.
- 1098.—Waring, H. Colour in the Dogfish, *Scyllium canicula*. Nature London 138 p. 1100.
- Warner, L. H. *vide* Warden, C. J.
- 1099.—Warren, P. S. Two new fossil fish from the Canadian Rockies. Trans. roy. Soc. Can. IV (3) 30 1936 pp. 55–58 2 pls.
- 1100.—Washbourn, R. Metabolic rates of trout fry from swift and slow-running waters. J. Exp. Biol. Cambridge 13 1936 pp. 145–147.
- 1101.—Wastl, H. Comparative observations on heat contracture and excitability at various temperatures in skeletal muscles of cold-blooded animals. I. Acta zool. Stockholm 16 1935 pp. 431–448 5 text-figs.
- 1102.—Waterlot, G. Paléozoologie du bassin de la Sarre. Ann. soc. géol. Nord. Lille 59 1934 pp. 201–213.
- 1103.—Weber, M. and Beaufort L. F. de. The fishes of the Indo-Australian Archipelago 7 Perciformes (continued) Families: Chaetodontidae, Toxotidae, Monodactylidae, Pempheridae, Kyphosidae, Lutjanidae, Lobotidae, Sparidae, Nandidae, Sciaenidae, Malacanthidae, Cepolidae. Leiden 1936 607 pp. 106 text-figs.
- 1104.—Wegner, J. Über den Schützenfisch (*Toxotes jaculator* Pall.). Bl. Aqu. Terr. Stuttgart 47 1936 pp. 169–174 4 text-figs.
- 1105.—Weigmann, R. Zur Kältebeständigkeit poikilothermer Tiere Untersuchung an Schnecken und Fischen. Biol. Zbl. Leipzig 56 1936 pp. 301–322 6 text-figs.
- 1106.—Weiler, W. Ergebnisse der Forschungsreisen Prof. E. Stromers in den Wüsten Ägyptens. II. Wirbeltierreste der Baharija-Stufe (unterstes Cenoman). 16. Neue Untersuchungen an den Fischresten. Abh. bayer. Akad. wiss. N.F. 32 1935 pp. 1–57 3 pls. 6 text-figs.
- 1107.—Weiler, W. Über den ersten Nachweis eines *Glyptorhynchus* (Fam. der Schwertfische) im Alttertiär Ungarns. Zbl. Min. Geol. Paläont. Stuttgart 1936 pp. 160–162 1 text-fig.
- Weisman, A. J. *vide* Kleiner, J. T.
- 1108.—Weissenberg, R. Untersuchungen über den Anlageplan beim Neunaugenkeim. II. Das genauere Verhalten der Gliederung der zentralen Anlagezonen. Anat. Anz. 82 1936 pp. 20–32 5 text-figs.
- Went, A. E. *vide* Lea, E.
- 1109.—Westoll, T. S. On the structures of the dermal ethmoid shield of *Osteolepis*. Geol. Mag. London 73 1936 pp. 157–171 pls. i & ii 4 text-figs.
- 1113.—Westoll, T. S. The Permian Palaeoniscid fauna of Northumberland and Durham. Abstr. Thes. Univ. Durham 1935–36 pp. 14–15.

1114.—Wetzel, O. Die Mikro-palaeontologie des Heiligenhafener Kieseltones (Ober-Eozän). Jber. niedersächs. geol. Ver. Hannover 27 (1936) 1935 pp. 41-72 pls. viii-x.

1115.—White, E. I. On certain Eocene Percoid fishes. Ann. Mag. Nat. Hist. (10) 18 1936 pp. 43-54 3 text-figs.

1116.—White, F. D. The nutritive value of marine products. IX. Proximate analysis of British Columbia canned Pilchard. J. biol. Board Canada 2 1936 pp. 457-460.

1117.—White, F. D. The nutritive value of marine products. X. Proximate analysis of Ling Cod. J. biol. Board Canada 2 1936 pp. 461-462.

1118.—White, E. G. A classification and phylogeny of the Elasmobranch fishes. Amer. Mus. Nov. N.Y. no. 837 1936 16 pp.

1119.—White, E. G. The heart valves of the Elasmobranch fishes. Amer. Mus. Nov. N.Y. no. 838 1936 21 pp. 12 figs.

1120.—White, E. G. Some transitional Elasmobranchs connecting the Catuloidea with the Carcharinoidea. Amer. Mus. Nov. N.Y. no. 879 1936 22 pp. 10 text-figs.

1121.—White, H. C. The food of Kingfishers and Mergansers on the Margaree river, Nova Scotia. J. biol. Board Canada 2 1936 pp. 299-309 2 text-figs.

1122.—White, H. C. Age determinations of Salmon parr by effect of rate of growth on body proportions. J. biol. Board Canada 2 1936 pp. 379-382 4 text-figs.

1123.—White, H. C. The homing of Salmon in Apple River, N.S. J. biol. Board Canada 2 1936 pp. 391-400 4 text-figs.

1124.—White, H. C. The food of Salmon fry in eastern Canada. J. biol. Board Canada 2 1936 pp. 499-506 2 text-figs.

1125.—Whitley, G. A new species of lantern fish from New Zealand, with remarks on the genus *Serpa* (family Myctophidae). Aust. Zool. 3 1936 pp. 160-163 1 text-fig.

1126.—Whitley, G. P. The Australian Devil Ray, *Daemomanta alfredi*

(Krefft), with remarks on the superfamily Mobuloidea (Order Batoidei). Aust. Zool. Sydney 8 1936 pp. 164-188 pl. xii text-figs. 1-3.

1127.—Whitley, G. Ichthyological genotypes: some supplementary remarks. Aust. Zool. Sydney 8 1936 pp. 189-192.

1128.—Whitley, G. P. More ichthyological miscellanea. Mem. Qd. Mus. Brisbane 11 1936 pp. 23-51 pl. iv text-figs. 1-6.

1129.—Whitley, G. P. Fische im Sydney-Gebiet. Aquar. Berlin 1936 pp. 8-12 4 text-figs.

1130.—Whitley, G. P. Devil Ray! Aust. Mus. Mag. Sydney 6 1936 pp. 4-12 10 text-figs.

1131.—Wilby, G. V. On the Gobiesocid genus *Rimicola*. Copeia Ann Arbor Mich. 1936 p. 116.

1132.—Wilby, G. V. A second record of the Cottoid fish *Asemichthys taylori* Gilbert. Copeia Ann Arbor Mich. 1936 p. 117 1 text-fig.

1133.—Wiman, C. Beobachtungen an solnhofener Fossilien. Problems of Palaeontology Moscow 1 1936 pp. 217-221 1 pl.

1134.—Wimpenny, R. S. The ova and larvae of *Mugil capito* Cuv. from Lake Qarun, Egypt. Ann. Mag. Nat. Hist. (10) 17 pp. 405-412 2 text-figs.

Wimpenny, R. S. *vide* Savage, R. E.

1135.—Winge, O. Kønbestemmelse og Kønchromosomer. Forh. skand. naturf. Møte 19 1936 pp. 162-176 text-figs.

1136.—Wohlfahrt, T. A. Das Ohrlabrynth der Sardine (*Clupea pilchardus* Walb.) und seine Beziehungen zur Schwimmblase und Seitenlinie. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 371-410 28 text-figs.

1137.—Wohlfahrt, T. A. Verschmelzung der Otolithen von Sacculus und Lagna im Labrynth einer Sardine (*Clupea pilchardus* Walb.). Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 698-702 5 text-figs.

1138.—Wohlfahrt, T. A. Ein neuer Versuch über das Tonunterscheidungsvermögen der Fische. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 135-140.

1139. — Wolf, B. *Pisces* (in). *Animalium Cavernarum Catalogus Tier-Catalog*. 1936 pp. 695–699.

1140. — Woltereck, R. Die Zukunft des Türkischen Fischereiwesens und das Staatliche Fischerei-Institut in Balta-Liman. *Int. Rev. Hydrobiol.* Leipzig 33 1936 pp. 280–294 2 text-figs.

1141. — Woltereck, R. Die moderne Entwicklung des Fischereiwesens in einigen der hauptsächlichsten Fischereiländer. *Int. Rev. Hydrobiol.* Leipzig 33 1936 pp. 440–451.

1142. — Wood, A. Fish remains from the North Wales Coalfield. *Geol. Mag.* London 73 1936 pp. 481–488 3 text-figs.

1143. — Wood, H. Scottish Herring race investigations. *Rapp. Cons. Explor. Mer. Copenh.* 100 Pt. 2 1936 pp. 34–35.

1144. — Woodward, A. S. On *Tomognathus*, a Teleostean fish from the English Chalk. *Ann. Mag. Nat. Hist.* (10) 17 1936 pp. 304–306 pl. vi.

1145. — Worthington, E. B. and Ricardo, C. K. Scientific results of the Cambridge Expedition to the East African Lakes, 1930–1. No. 15. The fish of Lake Rudolf and Lake Baringo. *J. Linn. Soc. London Zool.* 39 1936 pp. 353–389 2 text-figs.

Wu, H. W. *vide* Tang, S. F.

Wu, U. C. *vide* Lin, M. C.

1146. — Wunder, W. Demoll u. Maier. Handbuch der Binnenfischerei Mitteleuropas 2 B. Stuttgart 1936. 340 pp. 10 pls. 213 text-figs.

1147. — Wunder, W. Unzweckmässige und zweckmässige Verheilung schwerer Verletzungen beim Karpfen. *Verh. Deutsch. zool. Ges Leipzig* 38 1936 pp. 240–245.

1148. — Wunder, W. Merkwürdige Aushheilung von Verletzungen beim Karpfen. *Arch. Entw. Mech. Org.* Berlin 134 1936 pp. 551–561 5 text-figs.

1149. — Wunder, W. Das Verhalten des Karpfens beim Ausschlüpfen aus dem ei und in den ersten Lebenstagen. *Aquar. Berlin* 10 1936 pp. 81–84 7 text-figs.

1150. — Wundsch, H. H. Gesichtspunkte für die fischereiliche Bewirtschaftung grosser Seen. *Verh. int. Vereinig. Limnol. Beograd.* 7 2 1935 pp. 347–356.

1151. — Wykes, U. Observations on pigmentary co-ordination in Elasmobranchs. *J. exp. Biol. London* 13 1936 pp. 460–466 1 text-fig.

1152. — Yasaki, Y. and Haneda, Y. Über einen neuen Typus von Leuchtorgan im Fische. *Proc. Imp. Acad. Tokyo* 12 1936 pp. 55–57 4 text-figs.

1153. — Young, C. C. and Tchang, T. L. Fossil fishes from the Shanwang series of Shantung. *Bull. Geol. Soc. China Nanking* 15 1936 pp. 197–205 2 pls. 4 text-figs.

1154. — Young, J. Z. The innervation and reactions to drugs of the viscera of Teleostean fish. *Proc. roy. Soc. London B* 120 1936 pp. 303–318 12 text-figs.

1155. — Young, R. T. and Fox, D. L. The structure and function of the gut in Surf Perches (Embiotocidae) with reference to their carotenoid metabolism. *Biol. Bull. Woods Hole* 71 1936 pp. 217–237 6 text-figs.

1156. — Zarnecki, St. La migration des tacons de la truite de mer du Dunajec à la mer. *C.R. Acad. Cracovie* 1936 8 p. 7.

Zeza, P. *vide* Ranzi.

1157. — Žlábek, K. Sur une affection particulière du coeur d'une Carpe. *Biol. generalis Wien* 12 1 1936 pp. 69–88 4 pls. 6 text-figs.

1158. — Zlateff, I. [Über einige Krankheiten unserer Fische.] *Arb. biol. Meerssta Varna* 5 1936 pp. 67–80. [Bulgarian; German summary pp. 76–79.]

Zonov, N. *vide* Chabakov, A.

II.—SUBJECT INDEX.

GENERAL.

Origin of vertebrates; HINTZ, 397: fishes dangerous to man; HABERNOLL, 379: suggestions for ichthyological study in Chile, SCHNEIDER, 922, 923: vernacular names; CHOPE, 185.

Technique.—Of collecting, preserving and exhibiting; SCHRÖDER, 934: of photographing fishes; BEEBE, 64, BOYER, 113: KERFF, 524.

Bibliographical and historical.—Ichthyology in North America; PECKHAM, GAIGE & HUBBS, 771: history of study of Teleostean development; OPPENHEIMER, 743: early figures of *Ranzania truncata*; GUDGER, 368: early fish-teratology; GUDGER, 369: bibliography of cave-fishes; WOLF, 1139: works of HORNOLD, 468: of PELLEGRIN, 775: of F. Poej; RIVERO, 861: reissue of works of AMEGHINO, 20.

ECONOMICS.

General: DAKIN, 215: ROULE, 877: WOLTERECK, 1141: fishing gear; MARCHAND & TAYLOR, 615: fish-traps; OTTERSTRØM, 751, 752: measurement of dead and preserved fish; SHETTER, 902: fish-culture; CABANES, 148: INUKAL, 487: MANFREDI, 610: MOTTRAM, 685: STOLJAROW, 1001: source of calcium in *Salmo trutta*; MCCAY, TUNISON, CROWELL & PAUL, 600: stimulation of breeding activity; MOROSOWA, 682: acclimatisation of *Salmo irideus*; MRŠIĆ, 690: of Salmonidae in Argentina, MARINI, 619: of *Micropterus salmoides* in S. Africa, HARRISON, 391: food of freshwater fish; KARSINKIN, 518: protection against fungus; TANAKA, 1024: earthy taint in freshwater fish; THAYSEN, 1046: THAYSEN & PENTELow, 1047: enemies of Pacific Salmonidae, PRITCHARD, 825: fish fauna and sewage, LIEBERMANN, 571: effects of industrial poisons on fish; HELFER, 399: biological control of mosquitoes by fish; PRASHAD & HORA, 822: SOKOLOV & CHVALIOVA, 976: medicinal uses of *Anguilla*; HORNOLD, 454: fishes as intermediate hosts of helminth parasites of man and domestic animals; NEVEU-LEMAIRE, 718: nutritional value to man of various fishes; BAILEY, 50: CARTER, 158: OYA & KURAGAKE, 755: RIDDELL, 857, 858, 859: TILIK, 1054: WHITE, 1116, 1117: vitamin A content; SCHMIDT-NIELSEN, ASTAD, FLOOD, STENE & SØRENSEN, 914: edibility of Selachii; KIESELBACH, 525: economic value of marine fishes of northern Europe; EHRENBAUM, 252: Tasmanian whitebait-constituents;

SCOTT, 948: Technique and results of fish-marking; BOWMAN & RAE, 112: GODSIL, 341: KASK, 519: SHETTER, 953: UNGER, 1073, 1074: electrical method of tag-detection, DAHLGREN, 214: scale-reading; LEA & WENT, 565: PERRUCHE, 788: PROSAD & SHARAN, 830: scale-reading in Salmonidae; JÄRVI & MENZIES, 495: in *Salmo salar*, HUTTON, 481: otolith-reading; RAO, 843: HORNOLD, 466.

Investigations of fisheries of:—lakes; ALM, 18: ELSTER, 256: WUNSCH, 1150: Iceland; RUNNSTRØM, 883: North Sea; GRAHAM, 348: European fresh waters; KARSINKIN, 518: England (freshwater); AVON, 47: S. H. SMITH, 975: East Anglia, England; THURSBY-PELHAM, 1053: Denmark; OTTERSTRØM, 749, 750, 751, 752: POULSEN, 818: Holland; KORRINGA, 539: MOENS, 671: Germany; LUNDBECK, 595: Schleswig-Holstein; NEUBAUER & JAECKEL, 717: R. Loire; HORNOLD, 465: France (freshwater), PARIS, 761: Switzerland; SCHMASSMANN, 908: STEINMANN, 997: Jugoslavia; MRŠIĆ, 690: MUŽINIĆ, 698: Central Europe; WUNDER, 1146: Greece; ATHANASSOPOULOS, 34: ATHANASSOPOULOS, 38: Turkey; WOLTERECK, 1149: U.S.S.R.; DANILTCHENKO, 219: KOUTCHINA, 549, 550: SMIRNOV, 962, 963, 964: SVETOVIDOVA, 1020, 1021: TCHOUMAEVSKAYA-SVETOVIDOVA, 1042: Siberia; MENSHIKOV, 658: Eastern Siberia, DYBOWSKI, 248: R. Amur; PROBATOV, 828: Russian Turkestan; LINDBERG, 577: Lake Issyk-kul, Turkestan; BERG, 74: LINDBERG, 576: Suez; GRUVEL, 367: EGYPT, 273: Morocco; LE GALL, 317: L. Rudolf and Lake Baringo; WORTHINGTON & RICARDO, 1145: South Africa; MARCHAND, 614: MARCHAND & TAYLOR, 615: India (Travancore); JOHN, 499: China; CHEN & TANG, 174: LIN & WU, 574: Chekiang, China; LIN, 572: Amoy, China; TANG, 1025: Philippines; ROXAS & RASALAN, 878: MANACOP, 608: Australia; DAKIN, 215: United States (freshwater); HUBBS & TRAUTMAN, 478: New York State (freshwater); MOORE, 674: Alabama; SWINGLE, 1023: California; CLARK, 190: Louisiana; GUNTER, 377: R. St. Laurence; VLADYKOV & TREMBLAY, 1086: Canada; BAILEY, 50: BATTLE, HUNTSMAN, JEFFERS, JEFFERS, JOHNSON & MCNAIRN, 56;

CARTER, 158: DENSTEDT & BROCKLESBY, 231: GRAHAM, 349: WHITE, 1124: Nova Scotia; WHITE, 1121, 1122, 1123: British Columbia, FOERSTER, 282: PRITCHARD, 826: RIDDELL, 858: WHITE, 1116, 1117.

Investigations on:—*Acipenser baeri*, *ruthenus*, MENSHIKOV, 657: *A. schrenki*, *Huso dauricus*; PROBATOV, 828: *Clupea harengus*; ANDERSSON, 22: BATTLE, HUNTSMAN, JEFFERS, JEFFERS, JOHNSON & MCNAIRN, 56: ERDMANN, 260, 261: FARRAN, 274: FURNESTIN, 314, 315: GALL, 319-321: GILSON, 335: GRAHAM, 349: HARDY, 386: HENDERSON, 400: HENDERSON, LUCAS & FRASER, 401: HODGSON, 430: LUCAS, 590, 591: *Clupea harengus*; LUCAS & HENDERSON, 592: POULSEN, 819: RUNNSTRÖM, 882, 883, 884: SAVAGE & WIMPENNY, 895: STORROW & COWAN, 1004: TÄNING, 1031: TESCH, 1044: *C. pallasii*, DAHLGREN, 214: WAILES, 1089: *C. sprattus*, ROBERTSON, 867, 868: *Sardinops caerulea*; CLARK, 190: RIDDELL, 858: WHITE, 116: *Salmo salar*; AVON, 47: BERG, 81: CALDERWOOD, 152: DAHL, 212: DANILTCHENKO, 219: HAGMAN, 382: HUNTSMAN, 479: KOUTCHINA, 549, 550: MACFARLANE, 604, 605: SIEDLECKI, 956: SMIRNOV, 962-964: SVETOVIDOVA, 1020: TCHOUMAEVSKAYA-SVETOVIDOVA, 1042: TILIK, 1054: WHITE, 1122, 1123, 1124: *S. salar* and *S. trutta*; OTTERSTRÖM, 749, 750: POULSEN, 818: *S. trutta*; ELAM, 253: GERRISH, 326: GERRISH, 327: HARLE & KEMP, 388: MOTTRAM, 685, 686: NALL, 711-713: RAYMOND, 849: RUSHTON, 885: *Hucho hucho*; KULMATYKI, 558: MUNDA, 695: *Oncorhynchus gorbuscha*; BAILEY, 50: CARTER, 158: PRITCHARD, 826: RIDDELL, 858: *O. keta*; INUKAI, 487: *O. kisutch*; RIDDELL, 857, 858, 859: *O. nerka*; BAILEY, 50: CALDERWOOD, 153: CARTER, 158: FOERSTER, 282, 283: RIDDELL, 858: *Coregonus nasus* and *C. lavaretus pidschian*; PROBATOV, 829: *C. exiguus albellus*; BIRNER & SCHWEIZER, 97: *C. wartmanni nobilis*; BIRNER & SCHWEIZER, 93: *Hypomesus olidus*; TANAKA, 1024: *Esox lucius*; RIDDELL, 858: *Anguilla vulgaris*, HRONYOLD, 454-467, 469: MENZIES, 656: *Cyprinus carpio*; JABLONSKAYA, 493: KIRPICHNIKOV & BALKASHINA, 531: *Notemigonus crysoleucas auratus*; COOPER, 205: *Gadus aeglefinus*, CLARK,

192: RAITT, 834-836: *G. callarias*, SUND, 1009: TÄNING, 1033: *Merluccius merluccius*, HICKLING, 417: *Lucioperca sandra*; SEGERSTRÅLE, 949: *Micropterus salmoides*; HARRISON, 391: *M. dolomieu*; LANGLOIS, 561: *Scomber scomber*; RAMALHO, 837: *Thunnus thynnus*; ATHANASSOPOULOS, 34: FRADE & DENTINKO, 300: *Ophiodon elongatus*; WHITE, 1117: *Hippoglossus hippoglossus*; JESPERSEN, 496, 497: *H. stenolepis*; THOMPSON, 1049: THOMPSON & CLEVE, 1050: *Pleuronectes microcephalus*, BOWMAN & RAE, 112: *P. platessa*; BLEGVAD, 100: BÜCKMAN, 136: KOTTHAUS, 546: THURSBY-PELHAM, 1053.

STRUCTURE.

General.—Of Pteraspidae; BROTZEN, 127: Selachii; WHITE, 1118, 1120: Ganoidei; HOLLY, 435: Haplomi; BERG, 80: *Serrivomer*; BEEBE & CRANE, 68: *Monognathus* spp., BERTIN, 88: *Uegitlanis*; DAVID, 221: some Scleroparei, MATSUBARA, 628, 627: *Zebrias synapturoides*, CHABANAUD, 167: of Egyptian Cretaceous fishes; WEILER, 1106: absorptive processes of embryo, TURNER, 1067: histology of regenerating parts; SCHÄFER, 896.

Cytology.—Of melanophores; BEHRE, 69: FRANZ, 303, 304: GRAUPNER & FISCHER, 351: WARING, 1096, 1097: Of melanosis; SMITH & COATES, 937: Of fertilization; TCHOU & CHEN, 1041: size of nuclei; SAUSER, 894.

Tegumentary System.—Of Siluroidea; BHATTI, 92: epidermis (histology); AUST, 46: luminous organs; TROTTI, 1065: YASAKI & HANEDA, 1152: caudal keel, VASNECOV, 1078: placoid scales; NIU, 730: PETIT & BUDKER, 791: PIETSCHEMANN, 796: scales; BAYRAKÇI, 62: †BRYANT, 134: FACH, 270: KOBAYASI, 534: LEA & WENT, 565: NEAVE, 715: PROSAD & SHARAN, 330: †WETZEL, 1114: caudal spines of *Acanthurus*; SOUCHE, 980.

Nervous system.—Brain; GILLASPY, 332, 333: lobus electricus; SUZUKI, 1012: brain and spinal cord (histology), SCHARRE, 901: Cranial nerves; ATODA, 44: Metamerism and nerve-supply; MILLER & DETWILER, 668: innervation of snout; KRAWARİK &

SÜSS, 552: of muscle of accommodation; MEADER, 644: innervation of electrical organ; SUZUKI, 1012: of pectoral fins; HARRIS, 389: of viscera; YOUNG, 1154: Neurofibrillae; HOERR, 431.

Sense-organs.—Nasal organ; CHABANAUD, 165: Eye; MEADER, 644: NOBLE, 731: VERRIER, 1081: retina; BAYLISS, LYTHGOE & TANSLEY, 61: vestigial eyes; GÉRARD, 325: cartilage of bulbus opticus; KISCH, 532: ear; BOWEN, 111: TOMASCHEK, 1055: WOHLFAHRT, 1137: otoliths; CHAINE, 169: otoliths, HORNOLD, 460, 467: acustico-lateralis system; GÉRARD, 324: WOHLFAHRT, 1136: lateral-sensory system; ALLIS, 17: DENNY, 230: PETIT & BUDKER, 791: organs of taste; SCHARRER, 897: sense-organs of tongue; MATSUI, 635: of barbels; SATÔ, 891, 892: of skin; FAHRENHOLZ, 271: CORDER, 206.

Alimentary System.—Of Ammocoete; BARRINGTON, 55: of Notopteridae; RAHMULLAH, 833: of *Leuciscus hakonensis*; SUEHIRO, 1008: of *Prionotus carolinus*; BLAKE, 98: Digestive system of *Cymatogaster aggregatus*; YOUNG & FOX, 1155: Mouth of *Toxotes*; SMITH, 970: WEGNER, 1104: reversed symmetry; BORING & HANHSIN, 109: placoid scales of oral cavity; NIU, 730: teeth, succession; HIYAMA, 424: gill-rakers; BERTOLINI, 89: histology of stomach; ISHIDA, 489: of intestine; ISHIDA, 488: KATO, 520: of pyloric caeca; RAHMULLAH, 833: swim-bladder, HORA, 445: JONG, 501.

Myology.—NISHI, 729: HARRIS, 389: SOUCHE, 989, 990, 991: TEWES, 1045: Union of muscle and connective tissue (histology); STUDNICKA, 1007.

Osteology.—†Of Placodermi; STENSIÖ, 993: †of *Helodus simplex*; MOY-THOMAS, 687: † of *Tomognathus mordax*; WOODWARD, 1144: of Phallostethidae; BAILEY, 51: †of Crossopterygii; GROSS, 364: dermal bones and scales of Rhipidistia; †WESTOLL, 1110: skull; †ALLIS, 17: CHABANAUD, 164: †HILLS, 421: HOLMGREN & STENSIÖ, 442: MARINELLI, 618: †ROMER, 873: †WESTOLL, 1109: visceral skeleton; HOLMGREN & STENSIÖ, 442: MARINELLI, 618: ribs; EMELIANOV,

257: †vertebrae of Pristidae; STROMER, 1006: vertebral column; BERTIN, 87: vertebral column and unpaired fins; REMANE, 852: Fins; BERTIN, 87: FAITELSON, 272: Caudal skeleton of Isospondyli; HOLLISTER, 434: pectoral fins and girdle; TEWES, 1045: fin-rays; GARRAULT, 322: PRENANT, 824: skeletal abnormalities; BALÉ, 52: SIRE, 957.

Vascular System.—BIBORSKI, 94: BOINE-RODZEWIĆ, 102: FLORENTIN, 281: MARPLES, 622, 623: SEN, 950: TORGESON, GUY & KELLEY, 1058: TOWARNICKI 1060: heart-valves of Selachii; WHITE, 1119: lymphatics; BUEAWA, 144.

Respiratory System.—Gill-lamellae; ACRIVO, 5: Branchial epithelium; BEVELANDER, 90, 91: interbranchial septum; CHABANAUD, 166.

Reproductive System.—CHIANG, 179: DULZETTO, 245: FACCIOLO, 269: cells of Sertoli; FRORIEP, 311: placenta; CALZONI, 154: accessory reproductive organs in *Gambusia affinis*; COLLIER, 202: gonopodium; RIVERO & HUBBS, 865.

Excretory System.—BROEK, 126.

Endocrine Organs.—HAGEN, 381: KRAWARIK, 551: hypophysis; CARERE COMES, 156: HOWES, 472: LANGE, 560: MATTHEWS, 627: NORRIS, 737: thyroid; LIEBER, 570: thymus; HILL, 420: corpus ultimobranchialis; GIACOMINI, 331.

Comparative Morphology.—ALLIS, 17: BROEK, 126: EMELIANOV, 257: GRAHAM-SMITH, 350: HOLMGREN & STENSIÖ, 442: MARINELLI, 618: NISHI, 729: REMANE, 852.

DEVELOPMENT.

Historical.—OPPENHEIMER, 743.

General.—KORSCHULT, 540: *Scyliorhinus canicula*; VANDEBROEK, 1076: of *Albula vulpes*; HOLLISTER, 433: *Carassius auratus*; HO, 428: *Cyprinus carpio*; WUNDER, 1149: *Tanichthys albonubes*; CHEN, 173: *Misgurnus fossilis*; GRIEB, 362: *Gulaphallus falcifer*; MANACOP, 609: *Eleginus*

navaga; CHALDINOWA, 170: *Macrorhamphosus scolopax*; SPARTÀ, 993: *Epinephelus guaza*, *alexandrinus*; SPARTÀ, 992: *Pagellus acarne*; GAETANI, 316: *Mugil capito*; WIMPENNY, 1134: *Cottus pollux*; OKADA, 742: *Hippoglossus stenolepis*; THOMPSON & CLEVE, 1650.

Eggs.—BEEBE, 64: ELIZAROVA, 254: HALE, 383: HAYES & ROSS, 395: KO-CHING, 536: PERCEVA, 787: RASS, 845, 847: TÄNING, 1030: THOMPSON & CLEVE, 1050: VLADYKOV, 1085: VODJANITZKI, 1087: properties of egg-membranes; KAMADA, 505: pigmentation and melanophores; FRANZ, 303: vitellogenesis; KONOPACKA, 538.

Embryos.—MOHR, 673: gastrulation; PASTEELS, 768: PITOTTI, 863: VANDEBROEK, 1077: germ-layers in *Scyllium canicula*; VANDEBROEK, 1076: double embryos, SCHINDLER, 935.

Larvae and Young.—BERTIN, 84, 85, 86: CADENAT, 150: GRIEB, 362: MCKENZIE, 607: NAKAMURA, 710: PERCEVA, 787: RASS, 847: SCHREITMÜLLER, 927: TÄNING, 1029, 1030, 1031: UCHIDA, 1070, 1071: VODJANITZKI, 1087: WEBER & DE BEAUFORT, 1103: pigmentation; FRANZ, 303.

Organogeny and Histogenesis.—in *Petromyzon*; WEISSENBERG, 1108: skin; AUST, 46: melanophores; GRAUPNER & FISCHER, 351: lateral line organs; AUER, 45: scales; BAYRAKCI, 62: FACH, 270: NARDI, 715: NEAVE, 716: actinotrichia; GARRAULT, 322: paired fins and fin-girdles; FAITELSON, 272: brachial plexus; MILLER & DETWILER, 668: jaws and teeth; EYKEN, 265-268: tooth-succession; SCHNAKENBECK, 917: swim-bladder; JONG, 531: MAXIA, 639: kidney and mouth; NAEF, 708: labyrinthic organ; BADER, 48: endocrine organs; HAGEN, 381: thymus; HILL, 420: sex-differentiation; CHIANG, 180: reproductive organs; DULZETTO, 245: origin of germ-cells; BENNINGTON, 72: DILDINE, 240: MOORE, 675: ODUM, 741: spermatogenesis in *Betta splendens*; BENNINGTON, 72: gametogenesis and hermaphroditism; BARIGOZZI, 53.

Experimental Embryology.—AUER, 45: LUTHER, 596-598: MILLER &

DETWILER, 668: OPPENHEIMER, 744-746: WEISSENBERG, 1108: sources of developmental energy; SMITH, 974.

PHYSIOLOGY.

General.—BUDDENBROCK, 137: WARREN, JENKINS & WARNER, 1095: of European freshwater fishes; WUNDER, 1146: shedding of teeth and denticles in *Selachii*; BUDKER, 139, 140: luminescence; YASAKI & HANEDA, 1152.

Functions of:—caudal keel; VASNECOV, 1078: pectoral fins and muscles of *Scleroparei*; TEWES, 1045: free fin rays in *Trigla*; SCHARRER, 897: pyloric caeca; LUZZATTI, 599: swim-bladder; FRANZ, 302: MEIERHAUS, 648: Secretion and absorption of gas in swim-bladder; AKITA, 15, 16.

Movements and Equilibration.—Locomotion; GRAY, 352: GRAY & SAND, 353: RICHARDSON, 856: fin movements; HARRIS, 389: function of caudal fin; GROVE & NEWELL, 366: orientation in *Plectognaths*; BREDER & HARRIS, 120: locomotion in *Periophthalmus*; KREJCI-GRAF, 553: flight, MILLS, 669: equilibration; HARRIS, 390: LOWENSTEIN & SAND, 589.

Muscle.—WASTL, 1101.

Electric Discharge.—COATES & COX, 199: FESSARD, 277.

Nutrition.—Digestion; BARRINGTON, 55: BATTLE, HUNTSMAN, JEFFERS, JEFFERS, JOHNSON & MCNAIRN, 56: ISHIDA, 489: KARSINKIN, 518: in stomachless fishes; ISHIDA, 491: rate of digestion; KARPEWITSCH & BOKOWA, 516: PIERCE, 794: feeding-rate and temperature; KUBO, 555: enzymes; CIARANFI, 187: absorption; LUZZATTI, 599: absorption of calcium from water; MCCOY, TUNISON, CROWELL & PAUL, 600: function of pyloric appendages; LUZZATTI, 599: liver; CIARANFI, 187: influence of food on liver-glycogen; ISHIDA, 490: concretions in stomach; RAO, 844: food values; JABLONSKAJA, 493: KARSINKIN, 517: vitamins and growth; EVANS, 263: diet and bone; MOTTRAM, 685: nourishment of embryo in *Selachii*; RANZI, 840: of embryo in ovoviviparous and viviparous species; CALZIONE, 154: PITOTTI, 802: RANZI, 839: TURNER, 1067.

Blood.—BAUDIN, 58, 59: BUDDENBROCK, HENSCHEL & FRIEDRICH, 138: FRIEDRICH, 308: MEYER, 664: OZOLINS, 757: PORA, 809: 812, 813: influence of electric current; PORA, 814, 815: sexual differences; PORA, 810, 811: rate of flow; FRITSCH, 310: regeneration of lost blood; BAUDIN, 57: blood and lymph; BOREI, 108: technique; PORA, 816.

Metabolism.—Of fat in ova of *Salmo salar*; LOVERN, 588: of urea; SMITH, 971: of urea and chloride in Elasmobranchs; MACINTOSH, 606: of iodine; STONOR, 1002: of carotenoids; YOUNG & FOX, 1155: metabolic rate; CLAUSEN, 197: WASHBURN, 1100: anabiosis and resistance to supercooling; SCHMIDT, PLATONOV & PERSON, 912: resistance to cold; WEIGMANN, 1105.

Excretion.—BEVELANDER, 90: of urea; GRAFFLIN, 345: of inorganic phosphate; GRAFFLIN, 346: of water; TOTH, 1059: renal function; GRAFFLIN & GOULD, 347.

Osmotic Relations.—FONTÈS, LINDENBURG & GROSS, 289: HENSCHEL, 402: VIALI, 1082: water-absorption and weight; FONTÈS, BRUNER & LINDENBERG, 286-288: colloido-osmotic pressure; MEYER, 664: permeability of surfaces; SCHUSTER-WOLDAN, 945.

Respiration.—BADER, 48: CLAUSEN, 197: FEY, 278: HORA, 444: OZOLINS, 757: respiratory exchange in nerves; MICHAEL & BENETATO, 666.

Healing and Regeneration.—Healing of wounds; WUNDER, 1147: regeneration; SCHÄFER, 896: of lost blood; BAUDIN, 57: effects of hunger and heightened temperature on regeneration; NARDI, 714.

Reproduction and Development.—Sex determination; DILDINE, 240: sex-determination and differentiation; BREIDER, 123: sexual differentiation, MAZZESCHI & VANNINI, 643: experiments on development of secondary sexual characters; MESSERLE, 661: sexual precocity; JOHANSEN, 498: intersexes; LÖNNBERG & GUSTAFSON, 586, 587: sex-reversal; ESTHER, 262: KINOSHITA, 527, 528: hermaphroditism; BARIGOZZI, 53: embryonic hermaphroditism; DILDINE, 240:

general physiology of reproductive period; GNUSCHKE, 340: gonads; CHIANG, 179: effect of light and temperature on gonads; DILDINE, 241: ovarian cycle in a viviparous fish; MENDOZA, 655: histochemistry of oocytes; KONOPACKA, 538: spermatogenic waves; CHIANG, 181: induced maturation of spermatozoa in *Anguilla*; FONTAINE, 285: copulation; COLLIER, 232: survival of spermatozoa; SCHMIDTOW, 915: fertilization; ROLFSON, 872: TCHOU & CHEN, 1041: conditions of fertilization and development of eggs in *Eleginus navaga*; CHALDINOWA, 170: properties of egg-membranes; KAMADA, 535: susceptibility of eggs to shock; DEVOLD, 238: effect of temperature on development of eggs; HO, 428: influence of pH and salinity on development of eggs; ELIZAROVA, 254: physiology of developing egg; KO-CHING, 536: source of developmental energy; HAYES & ROSS, 395: SMITH, 974: liver and gravity; RANZI & ZEZZA, 842: see also under "hormones."

Hormones.—Thyroid; LIEBER, 570: pituitary; LANGE, 560: MATTHEWS, 637: hypophysis and gestation in *Selachii*; RANZI, 841: action of prehypophysial hormone on male *Anguilla vulgaris*; SCHREIBER, 926: effect of pituitary hormone on reproductive act; KOCH & SCHEURING, 535: pituitary and gravity; CARERE COMES, 156: pituitary and morphogenesis; TUCHMANN, 1066: effect on ovipositor of adrenal extract; BARNES, KANTER & KLAUANS, 54: influence of testis on secondary sexual characters; NAGATA, 709: effect of epinephrine; TOTH, 1059: effect of human male hormone; KLEINER, WEISMAN, MISHKIND & COATES, 533: effects of hormones on reproduction; MOROSOWA, 682: hormonal induction of brooding; NOBLE, 733: of nuptial phenomena; SAITO, 389: reaction of melanophores to Crustacean eye-stalk extract; ABRAMOWITZ, 2.

Colour.—Pigments; FOX, 298: carotenoids; LÖNNBERG, 584, 585: colour patterns; GOODRICH, 342: nuptial coloration; KINOSHITA, 529: influence of food on coloration; MANN, 611: colour changes; TOMITA, 1056: WARING, 1096, 1097: in young *Mustelus canis*; PARKER, 764: effect of

light-intensity on colour-change; BROWN, 129: microphysiology of melanophores; BEHRE, 69: FRANZ, 303: GRAUPNER & FISCHER, 351: degeneration of melanophores; ODIORNE, 740: reaction of melanophores to Crustacean eye-stalk extract; ABRAMOWITZ, 2: pigmentary effector system; ABRAMOWITZ, 1, 3, 4: BEAUVALLLET & VEIL, 63: HOGGEN, 432: PARKER, 763-766: SMITH & COATES, 967: VEIL, 1079: WARING, 1096-1098: pigmentary coordination; WYKES, 1151.

Chemical Constitution.—Proximate, analyses of food-fishes; CARTER, 158: RIDDELL, 857: TILIK, 1054: WHITE, 1116, 1117: mineral content; BIALASZEWICZ & KUPFER, 93: RIDDELL, 858, 859: vitamin A content; SCHMIDT-NIELSEN, ASTAD, FLOOD, STENE & SORENSSEN, 914: quantity and composition of connective tissues; OYA & KURAGAKE, 755: properties of fish oils; BAILEY, 50: CHARNLEY, 171: DENSTEDT & BROCKLESBY, 231: MARCELET, 613: composition of actinotrichia in Teleostei; GARRAULT, 322: earthy taint in freshwater fish; THAYSEN, 1046: THAYSEN & PENTELOW, 1047.

Effects of:—hypnotics; AITKEN, 13: drugs; YOUNG, 1154: poisons; HELFER, 399: RUSHTON, 885: nicotine; ELLISOR, 255: of ultraviolet light; KOSTOMAROV, 545: radium and X-rays; RUSHTON, 885: Influence of temperature on resistance to toxic substances; BINET & MORIN, 95.

Nervous System.—Functions of fore-brain; HOSCH, 470: NOBLE, 732: blood-supply of brain; FLORENTIN, 281: visceral nerves; YOUNG, 1154: GRAY & SAND, 354: LE MARE, 567: respiratory exchange in nerves; MICHAEL & BENETATO, 666: electrical discharges of central nervous system; SHURRAGER, 955: pigmentary effector system; see under "Colour."

Senses.—Vision; MEADER, 645: VERRIER, 1081: visibility and vision; CLARKE, 193: depth and vision; CLARKE, 194: carotenoid pigments and sight; LÖNNBERG, 584: visual purple; BAYLISS, LYTHGØE & TANSLEY, 61: hearing; EVANS, 264: FRISCH, 309: TOMASCHEK, 1055: WOHLFAHRT, 1136,

1138: taste; MESSERLE, 662: SCHARRER, 897, 900: temperature perception; BULL, 146: RUBIN, 881: function of lateral line organs; GÉRARD, 324: RUBIN, 881.

Responses to Stimuli.—Phototaxy; BREDER & HARRIS, 120: TEWES, 1045: photokinesis; FRANCIS & HORTON, 301: rheotaxis and thigmotaxis; FRANCIS & HORTON, 301.

Psychology.—BULL, 145, 146: HAFEN 380: MESSERLE, 663: WARDEN, JENKINS & WARNER, 1095.

ETHOLOGY.

General.—DANIEL, 217: REGAN, 850.

Bionomics of:—air-breathing fishes; HORA, 444: blind fishes; GÉRARD, 325: HUBBS & INNES, 477: cave fishes; JORDAN, 502: cave fishes; KARAMAN, 515 p. 65: cave-fishes (bibliography); WOLF, 1139: electric fishes; PORTEVIN, 817: SCHARRER, 899: aquarium fishes; AQUAR., 25: AQUARIUM, 26: ARNOLD & AHL, 32: HOLLY, MEINKEN & RACHOW, 439: MORGAN, 676A: NACHR., 707: NIGRELLI, 725: subarctic fishes; RASS, 847: marine fishes of northern Europe; EHRENBAUM, 252: fishes of Black Sea; VODJANITZKI, 1087: fishes of Switzerland; STEINMANN, 997: Indian freshwater fishes; HORA & MUKERJI, 452: fishes of Lakes Rudolf and Baringo; WORTHINGTON & RICARDO, 1145: fishes of Wisconsin lakes; COUEY, 208: *Lampetra fluviatilis*; IVANOVA-BERG, 492: *Myxine glutinosa*; GUSTAFSON, 378: Polypteridae; JÜRGENS, 504: *Acipenser baeri* and *A. ruthenus*; MENSHIKOV, 657: *A. schrenki* and *Huso dauricus*; PROBATOV, 828: *Squalus suckleyi*; SATO, 893: *Daemomanta alfredi*; WHITLEY, 1130: Clupeidae of Faroes; TÅNING, 1029: *Clupea harengus*; ANDERSSON, 22: BATTLE, HUNTSMAN, JEFFERS, JEFFERS, JOHNSON & MCNAIRN, 56: DAVIS, 226: DEWBERRY, 239: FURNESTIN, 314, 315: GALL, 319-321: GILSON, 335: GRAHAM, 349: HARDY, 386: HENDERSON, 400: HENDERSON, LUCAS & FRASER, 401: HODGSON, 430: LUCAS, 591: LUCAS & HENDERSON, 592: POULSEN, 819, 820: RUNNSTRÖM, 882, 883, 884: SAVAGE & WIMPENNY, 895:

SCHNACKENBECK, 916: TANING, 1031,
 1032: TESCH, 1044: *C. pallasi*;
 DAHLGREN, 214: WAILLES, 1089: *C.*
sprattus, ROBERTSON, 867: *Sardinops*
caerulea; CLARK, 189, 190: DEN-
 STEDT & BROCKLESBY, 231: *Caspialosa*
 spp.; BORČA, 107: *Pomolobus pseudo-*
harengus; BREDER & NIGRELLI, 121:
Salmo salar; AVON, 47: BERG, 75:
 DAHL, 212: DAHL & SOMME, 213:
 DANILČENKO, 218, 219: HUNTSMAN,
 479: HUTTON, 481: JÄRVI & MENZIES,
 495: KOUTCHINA, 549, 550: MACFAR-
 LANE, 604, 605: SIEDLECKI, 956:
 SMIRNOV, 963, 964: SVETOVIDOVA,
 1020, 1021: TCHOUMAEVSKAYA-SVETO-
 VIDOVA, 1042: WHITE, 1122, 1123:
S. trutta; ANDRÉ, 23: GERRISH, 328:
 JÄRVI & MENZIES, 495: MENZIES, 659:
 NALL, 711-713: PRIWOLNEV, 827:
 SCHINDLER & WAGLER, 906: *S.*
kamloops, MOTTLEY, 683: *Hucho hucho*;
 MUNDA, 695: *Oncorhynchus* sp.;
 OSHIMA, 748: *O. gorbusha*; PRITCH-
 HARD, 826: *O. nerka*; FOERSTER, 282:
 of *Coregonus exiguus albellus*; BIRER
 & SCHWEIZER, 97: *C. wartmanni nobilis*;
 BIRER & SCHWEIZER, 96: *C. nasus* and
C. lavaretus pidschian, PROBATOV, 829:
C. lavaretus pidschian; SVETOVIDOV,
 1016: *C. lavaretus baeri*; PRAVDIN,
 823: *C. migratorius*, KOSHOW, 541:
 MUCHAMEDJAROW, 691: *Thymallus*
thymallus, GERRISH, 328: PLATTS,
 806: *Thymallus* spp.; SVETOVIDOV,
 1014: *Hypomesus pretiosus*; THOMP-
 SON, 1051: *Pantodon buchholzi*;
 SCHREITMÜLLER, 929: *Esox lucius*;
 FUHRMANN, 313: KARSINKIN, 517:
Thoracocharax securis; MEINKEN, 653:
Leporinus spp., MEINKEN, 653: *Chara-*
cidium fasciatum; MARHERR, 616:
Cyprinus carpio; JABLONSKAJA, 493:
Leuciscus idus; MENSHIKOV, 658:
Rutilus rutilus lacustris; MENSHIKOV,
 658: *Barbus titteya*; MEINKEN, 654:
Varicorhinus capoeta sevangi; PETROW,
 793: *Tanichthys albonubes*; CHEN,
 173: Indian Cobitidae; HORA, 445:
Rita rita, D'ABREU, 211: *Anguilla*
vulgaris; ATHANASSOPOULOS, 40, 42, 43:
 HORNOLD, 454-467, 469: MAZZESCHI &
 VANNINI, 643: MENZIES, 656: *Serrivomer*,
 BEEBE & CRANE, 68: *Anableps dowei*;
 COATES, 198: *Cyprinodon hubbsi*; CARR,
 157: *Rivulus* sp.; MEINKEN, 653: *Hippo-*
campus; HOSSFELD, 471: THÉVENIN,
 1048: *Gadus aeglefinus*, CLARK, 192:
 RAITT, 835: *G. callarias*, MESCHKAT,
 660: SUND, 1009: TANING, 1033:
Lota lota; MARHERR, 617: MARKUN,

621: *L. maculosa*; CAHN, 151:
Merluccius merluccius, HICKLING, 417:
Epinephelus aeneus; CADENAT, 149:
Micropterus salmoides; HARRISON,
 391: *M. dolomieu*; LANGLOIS, 561:
M. pseudaplites; LANGLOIS, 562:
Helioperca incisor; MEEHEAN, 646:
Catnotus flabellaris flabellaris; LAKE,
 559: *Perca fluviatilis*; BAUDIN, 58:
 GRIEB & STEPANOWA, 361: MENSHIKOV,
 658: *Pomatomus saltatrix*; GALL, 317,
 318: *Stenotomus chrysops*, UPTON,
 1075: *Mullus barbatus*; DESBROSSES,
 236, 237: *M. dussumieri*; ROXAS &
 RASALAN, 878: *Astatotilapia strigi-*
gena; SCHREITMÜLLER, 931: *Etroplus*
suratensis; RANDOW, 838: *Hemi-*
chromis bimaculatus, NOBLE, 733:
Symphysodon discus; HEGENER, 396:
Toxotes, SMITH, 970: *Polycentrus*
schomburgki; ASCHAUER, 33: *Amphi-*
prion spp., HERRE, 405: *Scomber*
scomber, RAMALHO, 837: *Parathunnus*
 and *Neothunnus*; BEEBE, 66: *Thun-*
nus thynnus; CRANE, 209: *Tridentiger*
bifasciatus; HIYAMA, 426, 427:
Lycodes spp., VLADYKOV & TREMBLAY,
 1086: *Anabantoidea*; BADER, 49:
 HOCH, 429: *Anabas scandens*; SMITH,
 969: *Betta splendens*; DOMANTAY,
 243: *Dactylopterus*; TEWES, 1045:
Pleuronectes microcephalus, BOWMAN &
 RAE, 112: *P. platessa*, BÜCKMANN,
 136: *P. flesus* × *P. platessa*; PAPE,
 762: *Hippoglossus hippoglossus*; JES-
 PENSEN, 493: VERNIDUB, 1080: *H.*
stenolepis; THOMPSON, 1049: THOMP-
 SON & CLEVE, 1050: *Tetrodon lago-*
cephalus; SCHARRER, 898: Movements
 and tracks of *Periophthalmus*; KREJCI-
 GRAF, 553: flight; FORBES, 290:
 LOEB, 581: MILLS, 669: TEWES, 1045.

Special adaptations.—Adaptive struc-
 tures; MUKERJI, 692: in Loricariidae;
 GILTAY, 338: diet and dentition,
 HIYAMA, 424: protective behaviour;
 WARDEN, JENKINS & WARNER, 1095:
 protective function of spines; JACOBS,
 494: protective resemblance in *Syn-*
nathus biaculeatus; SMEDLEY, 961:
 colour-resemblance to background;
 LUKJANOVA, 594: colour-change;
 BROWN, 129: PARKER, 763, 764:
 intimidating and warning device;
 TEWES, 1045: Commensalism; HERRE,
 405.

Breeding habits.—BREDER, 117, 118:
 CAHN, 151: CHALDINOWA, 170: DES-
 BROSSES, 236: FONTAINE, 285: HICK-
 LING & RUTENBERG, 418: HIYAMA,

427: HOOVER, 443: IVANOVA-BERG, 492: KATO, 521: MCKENZIE, 607: OKADA, 742: PELKWIJK & TINBERGEN, 772: PETRAVICZ, 792: RASS, 847: ROLLEFSEN, 872: SCHREITMÜLLER, 927, 928: SCHULTZ, 936: TANG & WU, 1028: TÄNING, 1030: THOMPSON, 1051: VODJANITZKI, 1087: WALDMANN, 1091: WARDEN, JENKINS & WARNER, 1095: WOOD, 1143: WORTHINGTON & RICARDO, 1145: in *Selachii*, RANZI, 840: ovovivipary and vivipary, RANZI, 839: parental care, NOBLE, 733: seasonal abundance of young; RUSSELL, 886: sexual maturity; MANACOP, 608: SVETOVIDOV, 1014.

Food and Feeding habits.—ATHANASSOPOULOS, 36: BATTLE, HUNTSMAN, JEFFERS, JEFFERS, JOHNSON & MCNAIRN, 56: COUEY, 208: D'ABREU, 211: HAREGA, 387: JABLONSKAJA, 493: KARSINKIN, 517: MESCHKAT, 660: MOTTRAM, 686: PIERCE, 794: RITCHIE, 860: SATO, 893: SMITH, 970: SOKOLOV & CHVALIOVA, 976: SUEHIRO, 1008: WAILES, 1089: WEGNER, 1104: WHITE, 1124: WORTHINGTON & RICARDO, 1145: filter-feeders among *Selachii*; BERTOLINI, 89: Indian fishes feeding on mosquito larvae; PRASHAD & HORA, 822.

Social behaviour.—LANGLOIS, 582: NOBLE, 732: WARDEN, JENKINS & WARNER, 1095.

Migrations.—ATHANASSOPOULOS, 40-43: BLEGVAD, 100: BREDER & NIGRELLI, 121: BUDDENBROCK, 137: CLARK, 189, 190: DAHL, 212: DAHL & SOMME, 213: DAHLGREN, 214: DESBROSSES, 236: HUNTSMAN, 479: IVANOVA-BERG, 492: KOSHOW, 541: PRITCHARD, 826: SAVAGE & WIMPENNY, 895: STEVEN, 999: VLADYKOV, 1084: WARDEN, JENKINS & WARNER, 1095: WHITE, 1123: ZARNECKI, 1156: vertical migration; LUCAS, 599.

Growth.—BLEGVAD, 100: CADENAT, 150: CIEGLEWICZ, 188: DESBROSSES, 237: EBINA, 250: GALL, 317: GERISH, 328: HO, 428: HORNLYD, 457, 464: KOUTCHINA, 549, 550: KULMATYCKI, 558: MEEHEAN, 646: MOTTLEY, 683: NAKAMURA, 710: PARROTT, 767: RASS, 846: RENDAHL, 855: ROBERTSON, 868: RUNNSTROM, 882: SCHNEBERGER, 918: SHAW, 952:

STEVEN, 999: SUWORKINA, 1011: SVETOVIDOV, 1014, 1016: SVETOVIDOVA, 1020, 1021: TESCH, 1044: comparative growth of localized races, TEISSER, 1043: growth and climate; COOPER, 205: technique of comparative analysis of growth; SCHMALHAUSEN, 907: rate of growth and proportions, WHITE, 1122 age and growth, CLARKE, 196: diet and growth in *Carassius auratus*; EVANS, 263: growth phenomena in *Rhipidistia*; WESTOLL, 1109: postembryonic growth of notochord, retina, cartilage and gut epithelium; COHEN & BERRILL, 201: of gill-lamella; ACRIVO, 5: scales and growth; BAYRAKCI, 62: increase in scale-numbers; KOUMANS, 548: dental succession in *Esox lucius*; TRAUTMAN & HUBBS, 1063: regeneration; HASE, 392: giant freshwater fish; PELLEGRIN, 777: longevity; BREDER, 119.

Ecology.—BUDDENBROCK, 137: CHEVEY, 176: CLARKE, 193: FINDENEGG, 279: JOHNSON, 500: KOSKOW, 541: LIEBERMANN, 571: MACDONAGH, 601: OSHIMA, 748: SCHNEBERGER, 918: SHURRAGER, 945: WASHBOURN, 1100: of coal-measure fauna; WOOD, 1142: acclimatization; SCHNEIDER, 919: metabolism in rapid and quiet waters; CLAUSEN, 197: periodical abundance and paucity; BERG, 81: effect of temperature on behaviour; UPTON, 1075: ecology and variation; AMEMIYA, 21: limnology; BÜREN, 147: environment of *Aspidophorus cataphractus*; SOUCHÉ, 988: of *Cyprinodon macularius*; WARD, 1094.

Enemies, Diseases and Mortality.—**Enemies**; AVON, 47 pp. 31-64: WHITE, 1121: predators on fry of Salmonidae; PRITCHARD, 825: parasites; ATHANASSOPOULOS, 35: NEVEU-LEMAIRE, 718: NIGRELLI, 725: RAABE, 832: SOUCHÉ, 986, 987: STOLJAROW, 1001: ZLATEFF, 1158: pathology; ARNÉ, 31: JUNG, 503: MANN, 612: SOLOVIEV, 977: ŽLÁBEK, 1157: neoplasms; SMITH, COATES & STRONG, 968: mortality of eggs; DEVOLD, 238: of fry; FOERSTER, 282: causes of mortality; AIYAR, 14: FASTEN, 275: HUTCHINSON, 480: PRUTHI, 831: SCHARER, 898: SCHEURING, 903: STOREY & GUDGER, 1003: SWEETMAN & WARFEL, 1022: causes of mortality and fossilization; WIMAN, 1133.

GENETICS, VARIATION AND EVOLUTION.

Genetics.—BREIDER, 122, 124, 125: GORDON, 343, 344: KIRPICHNIKOV & BALKASHINA, 531: KOSSWIG, 542, 543: KOSSWIG, 543: WINGE, 1135: sex-determination; BREIDER, 123: CASTLE, 160: DILDINE, 240: hermaphroditism and sex-reversal; AIDA, 12: BRUUN, 133: ESTHER, 262: reversion to type; MESSERLE, 661: hybridization; BEL-LAMY, 71: BREDER, 117: DRJAGIN, 244: KOSSWIG, 544: PAPE, 762: PITON, 800: RUBASCHEV, 880: SCHILDE, 904: SCHULTZ, 930, 933: SCHREITMÜLLER & SCHAEFER, 943: SVETOVIDOV, 1016.

Variation.—AMEMIYA, 21: CLARK, 189: FOLLETT, 284: FOWLER, 296: KIRILLOV, 530: PARROTT, 767: RENDAH, 852: biometrical studies; EBINA, 250: HASS, 391A: HILE, 419: MATSUBARA, 624, 629: MEEHEAN, 646: MOTTLEY, 683: SVETOVIDOV, 1016: TOWNSEND, 1061: growth changes; HORA, 446: variation with age and locality; SCHROEDER, 935: races and local form; JOHNSEN, 500: KORCHIN & KROGIUS, 554: ROULE, 874: TEISSER, 1043: dimorphism; KUDÔ & ASADA, 556: secondary sexual characters; COLLIER, 202: DESBROSSES, 237: HIYAMA, 427: HORA & MISRA, 450: IKEDA, 483: KINOSHITA, 529: LÖNNBERG & GUSTAFSON, 586, 587: MOTTLEY, 683: SAUSER, 894: SLASTENENKO, 958: WILBY, 1131, 1132: chemical sexual differences; PORA, 810, 811: intersexes; LÖNNBERG & GUSTAFSON, 586, 587: teratology; GEYER, 330: GUDGER, 369: IKEDA, 486: LEGENDRE, 586: NICOLSKY, 727: OTTERSTRÖM, 753: SIRE, 957: SOUCHE, 978, 979, 981-985: WOHLFAHRT, 1137: WUNDER, 1148: melanosis; SMITH & COATES, 967: double embryos; SCHINDLER, 905: abnormalities in asymmetry of Pleuronectidae; BALÉ, 52: ambicoloration of Heterosomata; GUDGER, 373, 374: GUDGER & FIRTH, 375.

Evolution.—General; GREGORY, 356, 357: HORA, 444, 445: HUBBS, 475: PAUČÁ, 769: in Triassic period; BROUGH, 128: evolution along genetically determined lines in northern Cretaceous Teleostei; CHABAKOV, 163: of orbital region in Holocephali; HOLM-

GRÉN, 441: of fins; HARRIS, 390: of pectoral fins; MOY-THOMAS, 689: of pancreas; BARRINGTON, 55: fin-structure and form of body; GILTAY, 336: parallelism and growth-rates; RASS, 846: cave-fishes; DAVID, 221.

DISTRIBUTION.

(a) MARINE.

General.—BEEBE & CRANE, 68: BRUUN, 130: PETIT, 790: SVETOVIDOV, 1017: WHITLEY, 1128: of *Anguilla*; CHEVEY, 177: of *Caranx ignobilis*; NICHOLS, 719: of *Decapterus* spp.; NICHOLS, 720.

Arctic.—VLADYKOV & TREMBLAY, 1086: Iceland and Greenland; TÄNING, 1032: Barents Sea; PERCEVA, 787: North Pacific; SCHMIDT, 913.

North Temperate and Subarctic.—BRUUN, 131: SCHMIDT, 910: TARANETZ, 1036: THOMPSON & CLEVE, 1050: VLADYKOV & TREMBLAY, 1086: WILBY, 1132: North Atlantic; BRUUN, 132: BUEN, 142: FAUNE, 276: NICHOLS & FIRTH, 722: Western Atlantic; GUDGER, 372: FIRTH, 280: Atlantic coast of U.S.A.; PEARSE, 770: Northeastern Atlantic; SOUCHÉ, 988: European waters; SVETOVIDOV, 1015: FAROS; TÄNING, 1032: Irish Atlantic Slope; FRASER-BRUNNER, 305: Scotland; WOOD, 1143: N.W. Europe; GALL, 319: HODGSON, 430: RUNNSTRÖM, 884: Norway; DAHL & SOMME, 213: Denmark; DUNCER, 247: Denmark and Baltic; ANDERSSON, 22: Baltic; MEYER, 665: Northern Germany; DUNCER, 246: North Sea; CLARKE, 195, 196: English Channel; DESBROSSES, 234, 235: France; ROULE, 875, 876: Belgium; HOLLY, 437, 438: Portugal; FRADE, 299: W. Africa; FOWLER, 297: Morocco; PELLEGRIN, 779: Mediterranean; ATHANASSOPOULOS, 39, 41: BUEN, 143; WIMPENNY, 1134: Palestine; LUKE & KEITH-ROACH, 593: Black Sea; BORCÉA, 107: SLASTENENKO, 958-960: VODJANITZKI, 1087: Caspian Sea; SVETOVIDOV, 1013: North Pacific; BELL & KASK, 70: SCHMIDT, 913: Northeastern Pacific; TOWNSEND, 1061: SCHULTZ, 937: SCHULTZ & DELACY, 938-942: North-western Pacific; TARANETZ, 1034: WAKIYA, 1090: BOLIN, 103:

Kamchatka; OZAKI, 756: PANIN, 759, 760: Eastern Siberia; DYBOWSKI, 248: Okhotsk Sea; POPOV, 808: SCHMIDT, 911: Japan Sea and Sea of Okhotsk; TARANETZ, 1037: Japan Sea; LINDBERG, 575: LINDBERG & OCHRAMKIN, 579: UCHIDA, 1072: Korea; MORI, 678: Japan and Bering Sea; BOLIN, 104: Japan; KAMOHARA, 506-514: MATSUBARA, 625, 630-634: NOJIMA 734: SVETOVIDOV, 1018, 1019: TOMIYAMA, 1057: China; FOWLER, 291-293: KIMURA, 526: LIN, 573: TANG, 1026.

Tropical. — BERTIN, 88: BRUUN, 131: CHEVEY, 175: TWEEDIE, 1068: Atlantic; BEEBE & TEE-VAN, 67: FOWLER, 297: Yucatan; HUBBS, 475: G. of Mexico; GUDGER, 371: LONGLEY, 582: PALMER, 758: W. Indies; LONGLEY, 583: RIVERO, 862, 863: Bahamas; GUDGER, 370: Eastern Atlantic; BUDKER, 141: West Africa; CADENAT, 149: PESSON, 789: Belgian Congo; GILTAY, 336: Suez Canal; GRUVEL, 367: Indo-Pacific; HERRE, 412: MYERS, 703: MUKERJI, 693: SUVATTI, 1010: TWEEDIE, 1068: Indian Ocean; DERANIYAGALA, 233: Burma; HORA & MUKERJI, 453: Burma; MEGGITT, 647: NORMAN, 736: Ceylon; DERANIYAGALA, 232: Malay Peninsula; HERRE, 413: Indo-Australian Archipelago; HARDENBERG, 384, 385: WEBER & DE BEAUFORT, 1103: Celebes and Pelew Islands; HERRE, 408: Celebes and Philippines; HERRE, 406: Philippines; HERRE, 409: Formosa; TOMIYAMA, 1057: China Sea; CHEVEY, 178: China; FOWLER, 292, 293: TANG, 1026, 1027: Hong Kong; HERRE, 410: Fiji; SEALE, 948: Hawaii; PIETSCHMANN, 795: Eastern Pacific; BREDER, 116: CLARK, 191: MYERS, 700: MYERS & REID, 706: NICHOLS & BREDER, 721: WALFORD, 1092: Gulf of Panama; REID, 851: South temperate, Chile; GINSBURG, 339: NORMAN, 735: SCHNEIDER, 920, 921, 924: TOWNSEND, 1062: Argentina; MACDONAGH, 602, 603: MARINI, 620: S. Africa; MARCHAND, 614: SMITH, 972: Australia; WHITLEY, 1128, 1129: Tasmania; RIVERO, 864: SCOTT, 946: New Zealand; GRIFFIN, 363: WHITLEY, 1125.

Antarctic. — NICHOLS & LAMONTE, 723.

(b) FRESHWATER.

Palearctic.—General; BERG, 76, 82: Europe; ROULE, 874: North-eastern Europe; NIKOLSKY, 726: Russia; GRIEB & STEPANOWA, 361: KOUTCHINA, 549: MARKUN, 621: SMIRNOV, 964: SVETOVIDOVA, 1020, 1021: L. Ladoga; PRAVDIN, 823: R. Don; RODIONOVA, 870: Ukraine; PODIONOVA, 807: Sweden; FRIEDENFELT, 307: MODÉN, 670: NYBELIN, 738: Lithuania; LITYŇSKI, 580: Germany; STEIN, 996: Schleswig-Holstein; DUNCKER, 246: Austria; FINDENEGG, 279: Switzerland; BÜREN, 147: STEINMANN, 997: France; PITON, 797, 798, 799: Spain; BUEN, 142: Italy; GRIDELLI, 360: LARGATOLLI, 564: Jugoslavia; KARAMAN, 515: Greece; ATHANASSOPOULOS, 37: Roumania; BORCÉA, 107: Bulgaria; CHICHKOFF, 182-184: Palestine and Trans-Jordania; LUKE & KEITH-ROACH, 593: Suez; GRUVEL, 367: Western Siberia; NIKOLSKI, 728: Russian Turkestan; BERG, 77: LINDBERG, 577: L. Issyk-Kul, Turkestan; DEMENTIEV, 229: Eastern Siberia; DEJAGIN, 244: DYBOWSKI, 248: LINDBERG, 578: Kamchatka; KROCHIN & KROGIUS, 554: Chosen (Korea), MORI, 677-681: China; FU, 312: HERRE, 410, 411, 414: HERRE & LIN, 415: KIMURA, 526: LIN, 572, 573: MORI, 680; RENDAHL, 853: TCHANG, 1040: WANG, 1093: Szechuan; PELLEGRIN & FANG, 786: Yunnan; TCHANG, 1039: Japan; IKEDA, 482, 484, 485: Formosa; RENDAHL, 855; TOMIYAMA, 1057.

Nearctic. — BERG, 82: Canada; DOAN, 242: British Columbia; DYMOND, 249: U.S.A.; CARR, 157: HUBBS & COOPER, 476: SCHULTZ & THOMPSON, 944: STEWART, 1000: VIOSCA, 1083: U.S.A. (estuarine); PEARSE, 770: Northwest U.S.A.; SCHULTZ, 937: SCHULTZ & DELACY, 938-942: California; MILLER, 667: HERRE, 406: Mexico; CAMPO, 155.

Indian.—MOHR, 672: PELLEGRIN, 782: India, Burma and Ceylon; HORA, 449: India; HORA, 445, 446: HORA & MUKERJI, 452: JOHN, 499: MUKERJI, 694: SHAW & SHEBBEARE, 951: Ceylon; DERANIYAGALA, 233: Burma; HORA & MUKERJI, 451: Assam; HORA, 447: Malay Peninsula; HERRE, 413: TWEEDIE, 1068: Siam; FOWLER, 294:

SUVATTI, 1010: French Indo-China; CHEVEY, 177: PELLEGRIN & CHEVEY, 784: Tonkin; PELLEGRIN & CHEVEY, 783: Tonkin and Annam; PELLEGRIN & CHEVEY, 785: Indo-Australian; KOUMANS, 547: Indo-Australian Archipelago; WEBER & DE BEAUFORT, 1103: SCHREITMÜLLER, 932: Sumatra; MUSPER, 696, 697: Borneo; HARDENBERG, 384: Borneo and Philippines; HERRE, 412: Philippines; HERRE, 409: MANACOP, 609: China; CHEVEY, 176.

Ethiopian.—Africa; BORODIN, 110: DAVID, 220: FOWLER, 296: SMITH, 973: WORTHINGTON & RICARDO, 1145: Morocco; PELLEGRIN, 778: West Africa; AHL, 8: Tibesti; PELLEGRIN, 776: Congo; DAVID, 222: PELLEGRIN, 773: Angola; PELLEGRIN, 781: South-west Africa and Angola; JORDAN, 502: TREWAVAS, 1064: White Nile, Sudan; RENDAHL, 854: L. Rudolf; PELLEGRIN, 774: East Africa; HERRE, 407: L. Tanganyika; MYERS, 699: Transvaal, N. Rhodesia and Katanga; DAVID, 223.

Neotropical. — Antilles; BREIDER, 124: West Indies: SANDERS, 890: Mexico; HUBBS & INNES, 477: Yucatan; HUBBS, 475: Guatemala; FOWLER, 295: Panama; HERRE, 412: S. America; AHL, 7: MACDONAGH, 601: Brazil; AHL, 9, 11: GILTAY, 337: Amazon; AHL, 6: MEINKEN, 650: MYERS, 704, 705: Paraná; MEINKEN, 653: R. Plate; LIEBERMANN, 571: Argentine; AHL, 9: MACDONAGH, 602: MARINI, 619: Chile; SCHNEIDER, 919-921.

Australian.—Indo-Australian Archipelago; WEBER & DE BEAUFORT, 1103: Celebes; AHL, 10: New Guinea; HARDENBERG, 385: HERRE, 412: Australia; WHITLEY, 1128-1129: Tasmania; SCOTT, 947: New Zealand; GRIFFIN, 363.

(c) FOSSIL.

Silurian; BROTZEN, 127: Devonian; BROTZEN, 127: BRYANT & JOHNSON, 135: COOPER, 203: EDMUNDS & OAKLEY, 251: GROSS, 364, 365: HILLS, 422: OBRUTSCHER, 739: PHEMISTER, 793A: ROBERTSON, 866: SPRESTERBACH, 994: STENSIÖ, 998: STOYANOW, 1005: Carboniferous; ALVARADO & MENENDEZ PUGET, 19: BERG, 78: BRANSON, 115: COOPER, 204: DELÉ-

PINE, 228: GUNNELL, 376: KELLER, 522: MOY-THOMAS 687, 688: PRANTL, 821: WATERLOT, 1102: WOOD, 1142: Permian; BRANSON, 114: CHABAKOV, 162: HAUGHTON, 393: HILZHEIMER, 423: WESTOLL, 1113: Mesozoic; ARAMBOURG & SCHNEEGANS, 30: Triassic; BERG, 83: HAUGHTON, 394: NIELSEN, 724: PIVETEAU, 804: SCHMIDT, 909: THORPE, 1052: WARREN, 1099: Jurassic; BERG, 79: CHABAKOV & ZONOV, 163A: DECHASEAUX, 227: GREGORIO, 355: SAITO, 888: WIMAN, 1133: Cretaceous; ARAMBOURG, 27, 28: ARAMBOURG & SCHNEEGANS, 29: CAYEUX, 161: CHECCHIA-RISPOLI, 172: DALINKE-VICIUS, 216: ERASMO, 259: HERNÁNDEZ-PACHECO, 403: MAURY, 638: ROYO Y GOMEZ, 879: SAITO, 888: WOODWARD, 1144: Tertiary; COCKRELL, 200: CROOKSHANK, 210: DAVIES, 224: ERASMO, 258: LERICHE, 568: MUSPER, 696, 697: PAUČ, 769: Eocene; AMEGHINO, 20: ARAMBOURG, 27, 28: DAVIS, 225: HESSE, 416: KONGIEL, 537: MYERS, 700: ROHN, 871: SCHNEIDER, 925: VOIGT, 1088: WETZEL, 1114: WHITE, 1115: Oligocene; BEREGOV, 73: GILLET & THEOBALD, 334: LERICHE, 569: PITON, 801: SMIRNOV, 965, 966: WEILER, 1107: Niocene; BOGACHEV, 101: MATSUMOTO, 636: ROCABERT, 869: STEFANINI, 995: YOUNG & TCHANG, 1153: Quaternary; GEYER, 329: NIKOLSKY, 723: RAUTHER, 848: subfossil; TABANETZ, 1035.

SYSTEMATIC.

GENERAL WORKS.

Natural History, REGAN, 850; races, DAVIS, 226; SCHNAKENBECK, 916; growth-rate and specific differentiation, RASS; types of eggs and classification, RASS, 845; genotypes, WHITLEY, 1127; aquarium fishes, ARNOLD & AHL, 32; HOLLY, MEINKEN & RACHOW, 440; fishes of Schleswig-Holstein, DUNCKER, 246; fishes of northwestern America, SCHULTZ, 937; SCHULTZ & DELACY, 938-942; of Black Sea, SLASTENENKO, 959, 960; of Siam, SUVATTI, 1010; marine fishes of

Belgian Congo, GILTAY, 336; of West Africa, FOWLER, 297; of South Africa, MARCHAND, 614; of North Atlantic, FAUNE, 276; of northern Europe, EHRENBAUM, 252; freshwater fishes of France, PARIS, 761; of Auvergne, PITON, 797, 798, 799; of Switzerland, STEINMANN, 997; of Travancore, with local names, JOHN, 499; of Peiping, China; WANG, 1093; of Africa, FOWLER, 296; of L. Rudolf and L. Baringo, WORTHINGTON & RICARDO, 1145; Cretaceous fishes of la Serrania de Ronda, Málaga, HERNÁNDEZ-PACHECO, 403; of Egypt, STROMER, 1006; evolution in European Upper Cretaceous, CHABAKOV, 163; WEILER, 1106; Coproliths of N. African Cretaceous, CAYEUX, 161.

MARSIPOBRANCHII.

Phylogeny, GREGORY 357.

†HETEROSTRACI.

Pteraspidae of Poland, BROTZEN Ark. Zool. Stockholm 28A 22.

†*Astraspis*, structure, BRYANT 134.

†*Brachypteraspis* gen. n., type *Pteraspis latissima* Zych p. 31; *B. heintzi* p. 46 pl. vii fig. 3 text-fig. 16, *grossi* p. 47 pl. viii fig. 1 text-fig. 17 spp. n., Devonian of Poland, BROTZEN t.c.

†*Eryptychiis*, structure, BRYANT, 134.

†*Protaspis arnelli* sp. n., Devonian of Poland, BROTZEN t.c. p. 20 pls. i-iii, pl. iv fig. 2 text-figs. 3, 6-8.

†CEPHALASPIDA.

Of Canada, ROBERTSON Amer. J. Sci. New Haven (5) 31 p. 288.

†*Cephalaspis patteni* p. 289 figs. 1, 2, *canadensis* p. 292 fig. 3, *acadica* p. 293 fig. 4, spp. n. Devonian of Canada, ROBERTSON t.c.

CYCLOSTOMATA.

PETROMYZONIDAE.

Sense-organs of skin, FAHRENHOLZ 271.

Reactions of *Ammocoete* larva, FRANCIS & HORTON 301.

Ichthyomyzon concolor, from Oklahoma, MOORE 676.

Lampetra fluviatilis, migrations and spawning, IVANOVA-BERG 492; dimorphism, KUDÔ & ASADA 556; gastrulation, PITOTTI 803.—*L. japonica* f. *praecox* form. n. (= *L. mitsukurii* major Hatta), JOHANSEN Animadv. Syst. Mus. Zool. Inst. Biol. Univ. Tomskensis 2 1935 p. 1.

Petromyzon marinus on Nova Scotia Banks, VLADYKOV 1034; embryology, WEISSENBERG 1108.

Reighardina unicolor, from Oklahoma, MOORE 676.

MYXINIDAE.

Myxine glutinosa, bloodvessels of brain, TOWARNICKI 1060; body-fluids, BOREI 108; bionomics, GUSTAFSON 378.

SELACHII.

Origin and phylogeny, GREGORY 357; structure, phylogeny and classification, WHITE 1118, 1120; †of Permian of Russia, CHABAKOV 162; †of Triassic of Greenland, figs., NIELSEN 724; †of Cretaceous of Lithuania, figs., DALINKEVICIUS 216; †of Tertiary of N. Africa, figs., ERASMO 258; †of Patagonian Eocene, AMEGHINO 20; pigmentary effector system, HOGBEN 432.

†*Palaeoxyris*, BAYER 60; *P. bohemica*, *appendiculata*, figd., PRANTL 821.

†ICHTHYOTOMI.

†*Chondrenchelys problematica*, structure of teeth, affinities, MOY-THOMAS 688.

EUSELACHII

†Of Cretaceous and Eocene of Morocco, ARAMBOURG 27; †of Tertiary of Spain, ROCABERT 869; †of Upper Miocene of Japan, MATSUMOTO 636; †distribution of Tertiary spp., LERICHE 568; of Cuban waters, RIVERO 863; of Kwangtung, China, TANG 1027; of North-Western Pacific, TANG 1026; hypophysis, NORRIS 737; dermal denticles, PETIT & BUDKER 791; shedding of teeth and denticles, BUDKER 139, 140; heart valves, WHITE 1119; urea physiology and evolution, SMITH 971; secretion of urea and chloride, MACINTOSH 606; physiology, PORA 809; pigmentary effector system, VEIL 1079; pigmentary coordination, WYKES 1151.

INCERTAE SEDIS.

†*Hamatus* gen. n. *phosphoriensis* sp. n. Permian of Wyoming, BRANSON Univ. Missouri Studies 5 2 1930 p. 60 pl. xvi figs. 8-10.

Pleurotremata.

†Of Russian Jurassic, CHABAKOV & ZONOV 163A.

ODONTASPIDAE.

†*Odontaspis* spp. from Cretaceous of Patagonia, *incurva*, *exigua*, *attenuata* figd., ERASMO 259; *O. (Synodontaspis) striatula* sp. n. Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935 p. 26 pl. iv figs. 84-95.

†*Scapanorhynchus raphiodon*, *subulatus*, *latus*, *tenuis*, *gracilis*, figd., from Cretaceous of Patagonia, ERASMO 259.

HEXANCHIDAE.

†*Notidanus nikitini* sp. n. Jurassic of Moscow basin, CHABAKOV & ZONOV Trans. Centr. geol. prosp. Inst. Leningrad & Moscow 34 1935 p. 6 figs. 112-114.

LAMNIDAE.

Cetorhinus maximus, young stages, figd. and described, CASCIA 159; filtering mechanism, BERTOLINI 89.

†*Lamna bauriculata maroccana* var. n. Cretaceous of Morocco, ARAMBOURG Bull. Soc. géol. Fr. (5) 5 1935 p. 426 pl. xix figs. 3-5; †*L. vincenti*, Cretaceous, †*cattica*, Tertiary of Patagonia, figd., ERASMO 259.

†*Orthacodus venulosus* sp. n. Jurassic of Moscow basin p. 8 figs. 1-88, var. *typica* p. 8, *angulata*, *angulata intermedia*, *levis* p. 9, nov., CHABAKOV & ZONOV Trans. Centr. geol. prosp. Inst. Leningrad & Moscow 34 1935.

†*Oxyrhina fastigiata*, Cretaceous, *hastalis*, Tertiary, of Patagonia figd. ERASMO 259; †*O. primaeva* sp. n. Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935 p. 30 pl. v figs. 114-118.

ORECTOLOBIDAE.

†*Crossorhinops*: *Palaeoscyllium minus*, Smith Woodward, placed in this genus, WHITE Amer. Mus. Nov. 837 p. 15.

†*Ginglymostoma lithuanica* p. 11 pl. i figs. 19-20, *parvula* p. 12 pl. i fig. 21 spp. n., Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935.

Rhineodon typus figd., BEEBE 65; GUDGER 371; off New York, GUDGER 372; off Bahamas, GUDGER 370; Cochin China, CHEVEY 175.

SCYLIORHINIDAE.

Scyliorhinus canicula, vascular system, MARPLES 622; germ-layers, VANDEBROEK 1076; gastrulation, VANDEBROEK 1077; colour-change, WARING 1096, 1097, 1098; locomotion, GRAY & SAND 353; equilibration, LÖWENSTEIN & SAND 589; GRAY & SAND 354; LEMARE 567; *S. torrei* sp. n. W. Indies, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 43 pl. ix.

Scyllium canicula vide *Scyliorhinus canicula*; *S. vincenti*, egg-case, HALE 383.

CARCHARINIDAE.

Carcharias glaucus, in B. of Biscay, TAREL 1038; placenta, CALZONI 154; *C. kamoharui* sp. n., MATSUBARA Dobuts. Zasshi Tokyo 48 p. 380.

†*Eugaleus Beaufei* p. 430 pl. xix figs. 28-35, *minutissimus* p. 430 pl. xx figs. 13-15, spp. n. Eocene of Morocco, ARAMBOURG Bull. Soc. géol. Fr. (5) 5 1935.

Mustelus canis, ear, BOWEN 111; colour change, PARKER 764, 765; *M. manazo*, placoid scales, NIU 730.

Sphyrna tudes, spiracular circulation, TORGESON, GUY & KELLEY 1058.

CESTRACIONTIDAE.

†*Cestracion upnikensis* sp. n. Cretaceous of Lithuania, DALINKEVICIUS t.c. p. 13 pl. i figs. 29-33.

†HYBODONTIDAE.

†*Acrodus giedroyci* sp. n. Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935 p. 14 pl. i figs. 34-35.

†*Ctenacanthus costellatus*, figd., MOY-THOMAS 688.

†*Goodrichia* gen. n., *eskdalensis* sp. n., MOY-THOMAS Proc. Zool. Soc. 1936 p. 771 figs. 9-11.

†*Hybodus* (*Polyacrodus*) *grewingkii* sp. n. Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935 p. 14 pl. i figs. 36-38.

†*Synechodus*; *Spinax major* Ag. referred to this genus, DALINKEVICIUS 216.

†*Tristychius arcuatus* figd., MOY-THOMAS 688.

†COCHLIODONTIDAE.

Ancestral to Holocephali, MOY-THOMAS 687, 688.

†*Deltodus mercurii*, geological range, BRANSON 115.

†*Diclitodus*, affinities, MOY-THOMAS 687.

†*Helodus simplex*, structure and affinities, MOY-THOMAS 687.

†*Oracanthus armigerus* figd., MOY-THOMAS 688.

Pleuroplax, affinities, MOY-THOMAS 687.

Sandalodus minor sp. n., Devonian of Colorado, BRYANT J. Paleont. Menasha Wis. 10 p. 657 fig. 1.

†*Centrophorus balticus* sp. n. Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935 p. 6 pl. i figs. 5-9 text-figs. 4-7.

Cirrhigaleus vide *Phaenopogon*.

Phaenopogon, synonym of *Cirrhigaleus*, HERRE 404.

Scymnorhinus brevipinnis sp. n. S. Africa, SMITH Trans. Roy. Soc. S. Afr. 24 p. 1 text-figs. 1-2.

Squalus acanthias, ear, BOWEN 111.

S. acanthias, *suckleyi*, spiracular circulation, TORGESON, GUY & KELLY 1058; *S. cubensis* p. 45 pls. x-xi, *barbouri* p. 47 pl. xii, spp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41; *S. tasmaniensis* sp. n. Tasmania, RIVERO Occ. Pap. Boston Soc. Nat. Hist. p. 267 pl. x.

PRISTIOPHORIDAE.

†*Marckgrafia* gen. n., type *M. libyca* sp. n., Cretaceous Egypt, WEILER Abh. bayer. Akad. Wiss. N.F. 32 1935 p. 9 pl. i figs. 13-16, 47-49, pl. ii figs. 10-12.

SQUATINIDAE.

Of Argentina, MARINI Physis B. Aires 12 41.

Squatina guggenheimi p. 23 fig. 2, *punctata* pp. 22, 27 fig. 4, spp. n., Argentina, MARINI t.c.; †*S. decipiens* sp. n. Cretaceous of Lithuania, DALINKEVICIUS Vyt. Didž. Univ. Kaunas 9 1935 p. 7 pl. i figs. 10-17; *S. squatina*, vascular system and relationships, MARPLES 623.

HYPOTREMATA.

TORPEDINIDAE.

Narcine ommata sp. n. Pacific coast of Central America, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 383.

Narke japonica, lobus electricus and nervi electrici, SUZUKI 1012.

Torpedo, nutrition of embryo, PITOTTI 802; *T. ocellata*, chemistry of muscles, BIALASZEWICZ & KUPFER 93.

PRISTIDAE.

†*Dalpiazia* gen. n. type *Stromeri* sp. n., Cretaceous of Tripoli, CHECCHIA-RISPOLI Mem. real. Acc. d'Italia 4 1933 p. 1 pl. i.

†*Ganopristis* gen. n. *leptodon* sp. n., Cretaceous of Morocco, ARAMBOURG Bull. Soc. géol. Fr. (5) 5 1935 p. 421 pl. xix fig. 11.

†*Onchosaurus maroccanus* sp. n., Cretaceous of Morocco, ARAMBOURG t.c. p. 421 pl. xix fig. 8.

†*Peyeria* gen. n. type *P. libyca* sp. n., Cretaceous Egypt, WEILER Abh. bayer. Akad. wiss. N.F. 32 1935 p. 7 pl. i figs. 35-41, pl. ii fig. 3.

RAIIDAE.

Raja North-western Pacific spp., TARANETZ 1034; eggs of Canadian Atlantic spp., VLADYKOV 1085; *R. batis*, pituitary, HOWES 472; *R. clavata*, spines, PIETSCHMANN 796; migrations and growth, STEVEN 999; *R. kenojei*, synonymy pp. 89 and 99, *smirnovi* described pp. 90 and 99, *violacea* notes, TARANETZ 1034.

†*Raja* (*Dynobatis*) *gotoi* sp. n., Miocene of Japan, MATSUMOTO Dobuts. Zasshi Tokyo 48 pp. 475 and 478 fig. 4.

MYLIOBATIDAE.

Classification and synonymy, WHITLEY 1126.

Aodon edentulus, filtering mechanism, BERTOLINI 89.

Daemomanta alfredi figd., WHITLEY 1130.

Indomanta tombazii gen. et. sp. n. Indian Ocean, WHITLEY Aust. Mus. Mag. Sydney 6 p. 11.

Mobula in Red Sea, ANON 24.

HOLOCEPHALI.

†Cochliodontidae are ancestral to the Holocephali, MOY-THOMAS 687, 688.

CHIMAERIDAE.

Chimaera, relation between orbit and forebrain, HOLMGREN 441; *C. cubana* sp. n. W. Indies, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 50 text-fig. 1 pl. xiii.

†PLACODERMI.

Relationships and phylogeny, GREGORY 357; of Australian Devonian, HILLS 422.

RHENANIDA.

†*Gemündina stürtzi*, figd., OPITZ 747.

†ARTHRODIRA.

Of Upper Devonian of East Greenland, STENSIÖ 998; of Devonian of Arizona, STOYANOW 1005 p. 502 pl. i.

†*Chelyophorus verneuili* figd., GROSS 365.

†*Coccosteus osseus*, figd., structure and relationships, HILLS 421.

†*Dinichthys* sp., from Devonian of Canada, figd., WARREN 1099.

†*Holonema radiatum*, Devonian of Spitzbergen, figd., HEINTZ 398.

†*Phyllolepis*, included in Arthrodira *P. orvini*, described and figd., STENSIÖ 998.

PISCES.

Relationship to higher vertebrates, GREGORY 357.

PALAEOPTERYGII.

†Of Triassic of Greenland, NIELSEN 724.

†ARCHISTIA

Evolution, BROUGH 128.

New family, GYMNONISCIDAE, proposed for:

†*Gymnoniscus* gen. n., type *Phanero-steon pauper* Fritsch, BERG C.R. Acad. Sci. U.R.S.S. 4 (3) no. 7 (111) p. 345.

New family, TELEOPTERINIDAE, proposed for:

†*Teleopterina* gen. n. type *T. improvisa* nom. n. for *Rhadinichthys gracilis* Eastman nec Newberry & Worthen, BERG C.R. Acad. Sci. U.R.S.S. 4 (13) no. 7 (111) p. 346 fig.

†PALAEONISCIDAE.

†Of Permian of Russia, CHABAKOV 162; of Northumberland and Durham, WESTOLL 1113.

†*Acrolepis* sp. figd., HAUGHTON 394.

†*Amblypterus angustus*, figd., ALVARADO & MENENDEZ PUGET 19 pl. iii.

†*Colobodus*, SCHMIDT 909 p. 134 text-figs. 65, 66 pl. vi fig. 26.

†*Elonichthys cupidineus* Lambe referred to *Dollopterus* (Perleididae) q.v., BERG 83.

†*Palaeoniscinotus czekanowskii* described and figd., BERG 79.

PLATYSOMIDAE.

†*Platysomus brewsteri* sp. n. Lower Triassic of Canada, WARREN Trans. Roy. Soc. Can. IV (3) 30 p. 55 pl. i.

†CATOPTERIDAE.

Origin and evolution, BROUGH 128; of Permian of Russia, CHABAKOV 162.

†PHOLIDOPLEURIDAE.

†*Australosomus stockleyi* sp. n. Triassic of E. Africa, HAUGHTON Quart. J. Geol. Soc. London 92 p. 58 pl. vi figs. 1, 2.

†PERLEIDIDAE.

†*Dollopterus*: *Elonichthys cupidineus* Lambe, referred to this genus, BERG 83.

CLADISTIA.

POLYPTERIDAE.

†Of Egyptian Cretaceous, STROMER 1006.

CHONDROSTEI.

General account, HOLLY 435.

†ANGUSTIDONTIDAE, new family proposed for:

†*Angustidontus* gen. n., type *seriatus* sp. n. ? Carboniferous of U.S.A., COOPER J. Paleont. Menasha Wis. 10 p. 93 pl. xii figs. 1-4, 7-10, *A. gracilis* sp. n., COOPER l.c. pl. xii figs. 5, 6, 11.

ACIPENSERIDAE.

Vascular system, BOINO-RODZEWIĆ 102.

Acipenser spp., survival of spermatozoa, SCHMIDTOW 915; *A. baeri*, *ruthenus*, bionomics, MENSNIKOV 657; *A. schrenki*, bionomics, PROBATOV 828.

Huso dauricus, bionomics, PROBATOV 828.

†BELONORHYNCHII.

†SAURICHTHYIDAE.

†*Saurichthys*, from Permian of Germany, HILZHEIMER 423.

NEOPTERYGII.

PROTOSPONDYLI

†GIGANTODONTIDAE n. fam. (near Eugnathidae) proposed for:

†*Stromerichthys* gen. n., type *S. aethiopicus* sp. n., Cretaceous Egypt, WEILER Abh. Bayer. Akad. Wiss. N.F. 32 1935 p. 26 pl. iii figs. 7, 17, 20, 23 text-figs. 2, 3.

†SEMIONOTIDAE.

Origin, BROUGH 128.

†*Dapedius* sp., scales figd., GREGORIO 355.

†*Lepidotus* spp. figd., WEILER 1106.

†*Lepidotus hourcqui* sp. n. Lias of Madagascar, DECHASEAUX Bull. Soc. géol. Fr. (5) 5 p. 527 figs. 1 & 2.

†*Semionotus fultus*, in Trias of U.S.A. figd., THORPE 1052.

AMIIDAE.

General account, HOLLY 435.

†*Protosphyraena* sp., Cretaceous of Patagonia, figd., ERASMO 259.

†PYCNODONTIDAE.

†*Anomoedus* sp. figd., WEILER 1106 p. 31.

†*Coelodus* sp. figd., WEILER t.c. p. 32.

GINGLYMODI.

LEPIDOSTEIDAE.

General account, HOLLY 435.

Lepidosteus osseus, effect of hypnotics, AITKEN 13.

ISOSPONDYLI.

Phylogeny, GREGORY & CONRAD 358.

Caudal skeleton, HOLLISTER 434.

†LEPTOLEPIDAE.

†*Leptolepis congolensis* sp. n. Cretaceous (?) of W. Africa, ARAMBOURG & SCHNEEGANS Ann. Paléont. Paris 24 p. 149 pl. i figs. 3, pl. ii fig. 3, pl. iii figs. 2-4, 6, text-figs. 7, 8.

†*Leptolepis* sp., Cretaceous of Patagonia, figd., ERASMO 259; †*L.* sp., conditions of fossilization, figs., WIMAN 1133.

Lycopera davidi, figd. and described, *tokunagai* sp. n., Jurassic or Cretaceous of Manchuria p. 10 pl. v figs. 5-6, SAITO Rep. First sci. Exped. Manchoukuo (2) 3.

Manchurichthys gen. n. type *uwatokoi* sp. n. Jurassic or Cretaceous of Manchuria, SAITO t.c. p. 11 pl. v figs. 1-4 text-fig. 2.

PLETHODONTIDAE.

†*Anogmus* figd., STROMER 1006 pl. i figs. 9, 10.

†*Paranogmus* gen. n. type *P. doederleini* sp. n. Cretaceous Egypt, WEILER Abh. bayer. Akad. wiss. N.F. 32 1935 p. 32 pl. iii figs. 8, 16, 26 text-figs. 4-6; †*P. doederleini* figd., STROMER 1006 p. 46.

†*Plethodus libycus* sp. n., Cretaceous Egypt, WEILER Abh. bayer. Akad. wiss. N.F. 32 1935 p. 38 pl. iii figs. 15, 21, 22.

ICHTHYODECTIDAE.

Portheus sp. figd., WEILER 1106 pl. ii fig. 28.

ALBULIDAE.

†Of N. American Eocene, MYERS 700.

Albula, name preoccupied in Salangidae, q.v., WAKIYA 1090.

Albula vulpes, larva figd., HOLLISTER 433.

CHANIDAE.

†*Parachanos* gen. n. type *Leptosomus aethiopicus* Weiler, Cretaceous of Gaboon, ARAMBOURG & SCHNEEGANS C.R. Seances Soc. geol. Fr. 1935 p. 170 (preliminary note); and Ann. Paléont. Paris 24 p. 141 pl. i figs. 1, 2, 4, 6, pl. ii figs. 1, 2, 4, pl. iii figs. 1, 5, 7 text-figs. 2, 4-6.

KNERIIDAE.

Kneria polli sp. n. Angola, TREWAVAS Novit. zool. Tring 40 p. 64 pl. i figs. 1 and 2.

CLUPEIDAE.

Of Belgian Congo, GILTAY 336; †of Oligocene of North-Caucasus, SMIRNOV 966.

Alosa sapidissima, caught in sea, VLADYKOV 1084.

Caspialosa, revision of Black Sea species, BORCÉE 107; *C. caspia salina* subsp. n., Caspian Sea, SVETOIDOV C.R. Acad. Sci. Moscow N.S. 1936 1 p. 51.

Clupea, synopsis of spp. p. 492, *bentincki* sp. n. Chile p. 491, NORMAN Ann. Mag. Nat. Hist. (10) 17; †*C. engrauliformis* (= *Leptolepis sprattiformis caucasica* Smirnov) p. 50 pl. i figs. 1-8, †*sardino-sprattus* p. 59 pl. iii fig. 12, spp. n., †*ventricosa antiqua* var. n. p. 19 pl. iii figs. 13-15, Oligocene of North Caucasus, SMIRNOV Trav. Sci. Univ. Usbekistan Samarkand 5; †*C. lanceolata, ventricosa* figd., BOGACHEV 101.

Clupea harengus, general account, DEWBERRY 239; races and populations, DAVIS 226; ANDERSON 22; WOOD 1143; GALL 319, 320, 321; HODGSON 430; TÄNING 1032; bionomics, FURNESTIN 314, 315; POULSEN 819; RUNNSTRÖM 882, 883, 884; SCHNAKENBECK 916; vertical migrations, LUCAS 590; larvae in Icelandic waters, TÄNING 1031; *C. pallasi*, food, WAILES 1089; *C. sprattus*, bionomics, ROBERTSON 867, 868.

Corica bleekeri sp. n. Borneo, HARDENBERG Treubia 15 p. 229; *C. perakensis* sp. n. Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12 p. 5 pl. i.

†*Diplomystus brevicardus alter* var. n., Oligocene of North Caucasus, SMIRNOV t.c. p. 61 pl. iii fig. 16.

Engraulis encrasicolus, influence of external conditions on development of eggs, ELIZAROVA 254.

Hilsa reevesi and *H. kanagurta* compared, CHABANAUD 168.

Ilisha dolloi, synonymy, GILTAY 336.

Pristigaster, synonym of *Ilisha*, GILTAY 336.

Pomolobus pseudoharengus caught in sea, VLADYKOV 1084; bionomics, BREDER & NIGRELLI 121.

Sardina pilchardus, races, GALL 317; ear, swim bladder and lateral line, WOHLFAHRT 1136, 1137; *S. melanosticta*, local variation, AMEMIYA 21; *S. (Sardinops) melanosticta* in Kamchatka waters, PANIN 750; *S. (Sardinops) caerulea*, variation and bionomics, CLARK 189, 190.

SALMONIDAE.

Of Korea, MORI 678.

Coregonus of Sweden, FREIDENFELT 306; hybridization of Eastern Siberian spp., DRJAGIN 244; *C. cylindraceus*, subsp., BERG 82; *C. lavaretus baeri*, described statistically and figd., PRAVDIN 823; growth, SUWORKINA 1101; *C. lavaretus pidschian natio bergiellus natio n.*, Russian Turkestan, SVETOVIDOV Trav. Inst. zool. Acad. Sci. U.R.S.S. 4 p. 392 fig. 1; *C. baeri*, hybrid with *Salmo fario*, RUBASCHEV 880; *C. nasus*, bionomics and taxonomy, PROBATOV 829; *C. migratorius*, migrations, KOSHOU 541; MUCHAMEDIAROW 691; *C. wartmanni nobilis*, economics and bionomics, BIRRER & SCHWEIZER 96; *C. exiguus albellus*, BIRRER & SCHWEIZER 97.

Hucho hucho, bionomics, MUNDA 695; growth in Poland and Jugoslavia, KULMATYCKI 558.

Leucichthys artedi variation and local forms, HILE 419.

Oncorhynchus, spp. of Kamchatka OZAKI 756; *O. nerka*, lake form in Kamchatka, KROCHIN & KROGIUS 554; life-history, FOERSTER 282.

Salmo, nomenclature of Western American spp, MOTTLEY 684; *S. salar* influence of rate of growth on proportions, WHITE 1122; developing eggs, HAYES & ROSS 395; fat metabolism in ova, LOVERN 588; food of fry, WHITE 1124; periodic abundance, BERG 81; migrations, DAHL 212; DAHL & SØMME 213; homing, WHITE 1123; ecology, DANILČENKO 218; ethology and economics in U.S.S.R., BERG 75; DANILTCHENKO 219; KOUTCHINA 549, 550; SMIRNOV 962, 963, 964; SVETOVIDOVA 1020, 1021; TCHOUMANAIEVSKAYA - SVETOVIDOVA 1042; chemistry and economics, TILIK 1054; see also under Economics and Ethology in subject index; *S. salar* and *S. trutta*, identification, OTTERSTRÖM 754; *S. trutta*, development of germ-cells, MOORE 675; experimental embryology, LUTHER 596, 597, 598; calcium absorption, McCAY, TUNISON, CROWELL & PAUL 600; metabolism in swift and slow-running waters, WASHBOURN 1100; migrations in Polish waters, ZARNECKI 1156; bionomics, etc., MENZIES 659; hybrid with *Coregonus baeri*, RUBASCHEV 880;

(“*Trutta lacustris*”), bionomics, SCHINDLER & WAGLER 906; *S. irideus*, hermaphroditism, BRUNN 133; development of jaws and teeth, EYKEN 265, 266, 267, 268; development of lateral line, AUER 45; *S. marmoratus*, GRIDELLI 360.

Salmo kamloops, biometrical study, MOTTLEY 683.

Thymallus spp., bionomics, SVETOVIDOV 1014; *T. thymallus*, bionomics, colour, etc., PLATTS 805, 806.

OSMERIDAE.

Of Korea, MORI 678.

Eperlanus chinensis, referred to *Protosalanx*, Salangidae, q.v. WAKIYA 1090.

Hypomesus pretiosus, spawning habits, THOMPSON 1051; *H. olidus*, protection against fungus, TANAKA 1024.

Osmerus mordax, spawning habits and sex-ratio, HOOVER 443.

SALANGIDAE.

Of Korea, MORI 678.

Revision, WAKIYA 1090.

Albula chinensis, precedes *A. vulpes*, WAKIYA t.c. p. 835.

Protosalanx. *Eperlanus chinensis* Basilevsky is a *Protosalanx*, WAKIYA l.c.

GALAXIIDAE.

SCOTT Pap. Proc. Roy. Soc. Tasmania 1935 1396 pp. 85-112.

Galaxias (*Galaxias*) *johnstoni* p. 92 fig. 1, Tasmania, *scopus* p. 95 fig. 2, Clarke Is. Tasmania, *parkeri* p. 99 fig. 3, Tasmania, spp. n. *Agalaxis* subgen. n. type *Cobitis zebratus* Castelnau p. 105, SCOTT t.c.

Saxilaga gen. n., type *Galaxias cleaveri* Scott p. 105, *S. anguilliformis* sp. n. Tasmania p. 106 fig. 4, *Lixagasa* subgen. n. type *Galaxias burrowsius* Phillipps p. 110, SCOTT t.c.

Galaxias punctatus, SCHNEIDER 920.

STERNOPTYCHIDAE.

In Cuban waters, RIVERO 863.

STOMIATIDAE.

†*Tomognathus mordax* described and figd., WOODWARD 1144.

ENCHODONTIDAE.

†*Enchodus* sp. figd., STROMER 1006.

†*Enchodus* sp. figd., WEILER 1106 pl. ii figs. 19, 20, 24.

†Gen. et sp. n. indet., WEILER t.c. p. 40 pl. ii fig. 14, 17-18, 21-23 pl. iii fig. 19.

PANTODONTIDAE.

Pantodon buchholzi, breeding habits and young, SCHREITMÜLLER 927; bionomics, SCHREITMÜLLER 929.

MORMYRIDAE.

Of African lakes, BORODIN 110.

Gnathonemus histrio sp. n. West Africa p. 250 fig. 6, *rehni* sp. n. L. Victoria p. 250 fig. 7, FOWLER Proc. Acad. nat. Sci. Philad. 88.

Marcusenius adustus sp. n. Cameroons p. 247 fig. 4, *M. plagiostoma* described p. 248, *M. macularius* sp. n. West Africa p. 248 fig. 5, FOWLER t.c.

Marcusenius cubangoensis sp. n. Angola, PELLEGRIN Arq. Mus. Bocage Lisboa 7 p. 48.

Marcusenius longianalis, melanophores, FRANZ 304.

Petrocephalus vanderbilti p. 246 fig. 2, *guttatus* p. 246 fig. 3, spp. n. West Africa, FOWLER t.c.

HAPLOMI.

Classification, BERG 80.

ESOCIDAE.

Esox lucius, otolith, CHAINE 169; dental succession, SCHNAKENBECK 917.

INIOMI.

SYNODONTIDAE.

Saurida normani sp. n. Tortugas, LONGLEY Yearb. Carn. Instn. Washington 1935 p. 87.

MYCTOPHIDAE.

Diaphus dumerili in Cuban waters, RIVERO 863.

Serpa, list of spp. p. 162, *S. conspicua*, p. 160 fig. sp. n. New Zealand, WHITLEY Aust. Zool. Sydney 8.

LYOMERI.

MONOGNATHIDAE, fam. nov. proposed for;

Monognathus gen. n., *laningi* figs. 1 and 3, *jesperseni* spp. n. N. Atlantic, *brunni* sp. n. figs. 2 and 4 China Sea, BERTIN Bull. Soc. zool. Fr. 61 p. 538.

SACCOPHARYNGIDAE.

Larvae, BERTIN C.R. Acad. Sci. Paris 203 p. 1540; *Leptocephalus pseudo-latissimus* sp. n., BERTIN.

APODES.

Of New Zealand, GRIFFIN 363; Gonads of Mediterranean spp., FACCIOLA 269.

Leptocephalus described by Ströman, BERTIN 85.

Leptocephalus types in the British Museum, BERTIN 86.

Heteromyrus gen. n., *atolli* sp. n. Hawaii, in separate family, PIETSCHMAN Anz. Akad. Wiss. Wien 72 1935 p. 93.

ANGUILLIDAE.

Anguilla japonica in French Indo-China, CHEVEY 177; *A. mauritiana*, in French Indo-China, CHEVEY 178; *A. vulgaris* in eastern Mediterranean, ATHANASSOPOULOS 40, 42, 43; epidermis, AUST 46; otoliths, HORNOLD 460, 467; bionomics, HORNOLD 454-469; locomotion, GRAY 352; precocious sexual differentiation, MAZZESCHI & VANNINI 643; induced sexual maturity, FONTAINE 285; action of pituitary hormone on testis, SCHREIBER 926; osmotic regulation in gills, VIALLI 1082.

MURAENIDAE.

Muraena, Chinese spp., LIN 573; *M. unicolor*, in Mediterranean, ATHANASSOPOULOS 39.

Rabula rotchii sp. n. Galapagos, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 384.

SERRIVOMERIDAE.

Serrivomer revision and osteology, BEEBE & CRANE 68.

NEMICHTHYIDAE.

Nemichthys scolopaceus, distribution, FRASER-BRUNNER 305.

CYEMIDAE.

Cyema atrum, caudal fin, BERTIN 87,

CONGRIDAE.

Congermuraena mystax larva, BERTIN 86.

Poutawa gen. n. type *Congrus habenatus* Richardson, GRIFFIN Trans. Roy. Soc. N.Z. 66 p. 16.

ECHELIDAE.

Larvae, BERTIN 86.

Ophichlinus greeni sp. n., Tasmania, SCOTT Pap. Proc. Roy. Soc. Tasmania 1935 1936 p. 114 fig. 2.

OPICYHTHIDAE.

Caecula philippinensis sp. n., Philippines, HERRE Philipp. J. Sci. Manila 59 p. 358 pl. i fig. 1.

Ophisurus serpens larva, BERTIN 86.

DYSOMMIDAE.

Dysomma japonicus sp. n. Japan, MATSUBARA Dobuts. Zasshi Tokyo 48 p. 961 fig. 1.

SYNAPHOBANCHIDAE.

Of North Atlantic, BRUUN 131.

HETEROMI.

NOTACANTHIDAE.

Notacanthus macrorhynchus sp. n. Japan, MATSUBARA Dobuts. Zasshi Tokyo 48 p. 963 fig.

SYNENTOGNATHI.

BELONIDAE.

Ablennes pacificus sp. n. W. coast of Mexico, WALFORD Occ. Pap. S. Barbara Mus. 4 1936 p. 4 text-fig. 1.

Belone acus, development of swim bladder, JONG 501.

Belone. †*Palaeorhynchoides* subgen. n. (?) type *crior* sp. n. p. 88 text-figs. 13, 14 (?), *brevirostris* sp. n. p. 89, Oligocene of North Caucasus, SMIRNOV Trav. sci. Univ. Usbekistan 5.

HEMIRHAMPHIDAE.

Of Japan, HIYAMA 425.

Dermogenys revision, MOHR 672 pp. 34-55; notes, MOHR 673; *D. pusillus* development of swim bladder, JONG 501.

Hemirhamphodon revision, MOHR 672 pp. 59-64.

Hemirhamphus sajori, kurumensis distinguished and figd., UCHIDA 1069; *H. tweedei* sp. n., Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12 p. 6 pl. ii.

Nomorhamphus, revision, MOHR 672 pp. 55-58.

Zenarchopterus notes, MOHR 673; *Z. pappenheimi*, MOHR t.c. p. 221.

EXOCHOETIDAE.

Cypselurus alienus figd., HERRE 412; *C. californicus, altipennis*, distribution, NICHOLS & BREDER 721.

Parexocoetus papilio sp. n. Costa Rica, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 384.

OSTARIOPHYSI.

CYPRINOIDEA.

CHARACIDAE.

Of African lakes, BORODIN 110.

Alestes abeli sp. n. West Africa, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 255 fig. 8.

Alestes nurse nana var. n., L. Rudolf, PELLEGRIN Verh. int. Vereinig. Limnol. Beograd 7 1935 p. 416 (see also Miss. Sci. Omo 2 1935 p. 133, Zool. Rec. for 1935).

Anoptichthys gen. n., p. 3 type *jordani* sp. n. Mexico p. 5, HUBBS & INNES Occ. Pap. Mus. Zool. Univ. Mich. 342.

Aphyocharax nasutus sp. n. Argentine, AHL Zool. Anz. 114 p. 20.

Astyanax fasciatus altior subsp. n. Yucatan, HUBBS Carn. Inst. Washington Publ. 457 p. 176 pl. i fig. 1.

Brycinus imberi described, FOWLER t.c. p. 254.

Cheirodon leuciscus sp. n. Argentine, AHL t.c. p. 19.

Gymnocorymbus thayeri figd., MEINKEN 651; notes, SACHS 887.

Hemigrammocharax Monardi sp. n., Angola, Pellegrin Arq. Mus. Bocage, Lisboa 7 p. 49 [first named and briefly diagnosed in Programm. Internat. Congr. Zool. Lisbon 1935 sect. 9].

Hydrocinus cuvieri figd., MEINKEN 652.

Hyphessobrycon maculicauda p. 22, *nigrifrons* p. 23, spp. n. Brazil, AHL t.c. *H. innesi* sp. n. Peruvian Amazon, MYERS Proc. Biol. Soc. Washington 49 p. 97.

Lebiasina intermedia sp. n. Amazon, MEINKEN Bl. Aqu. Terr. 47 p. 49 fig.

Micralestes rochefoucauldi p. 256 fig. 23, *stigmatura* p. 257 fig. 9, *grandi* p. 260 fig. 13, spp. n., West Africa, *acutidens*, *stormsi*, *hilgendorfi* figd., FOWLER t.c.; *M. argyrotaenia* sp. n. Angola, TREWAVAS Novit. zool. Tring 40 p. 65 pl. i fig. 3.

Myloplus arnoldi sp. n. Amazon, AHL t.c. p. 25.

Opisthanodus haerteli figd., AQUAR 25 p. 91.

Petersius, restriction, TREWAVAS t.c. p. 66; *P. barnardi* sp. n. Portuguese East Africa, HERRE Proc. Biol. Soc. Washington 49 p. 100.

Phenacogaster suborbitalis sp. n. Brazil, AHL t.c. p. 24.

ANOSTOMIDAE.

Leporinus striatus figd., MEYER 642.

CITHARINIDAE.

Distichodus with *Distichodura* subgen. n. for type *D. affinis* Günther, and *Distichodomicroura* subgen. n. for type *D. maculatus* Boulenger, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 266 fig. 18.

Ichthyoborus besse described and figd., FOWLER t.c. p. 261 fig. 14.

Microstomatichthyoborus bashforddeani described, FOWLER t.c. p. 263 fig. 15.

Nannaethiops with *Rhabdaethiops* subgen. n. for type *N. tritaeniatus* Boulenger, FOWLER t.c. p. 264 figs. 16, 17.

Nannocharax micros sp. n. Cameroons, p. 268 fig. 19, *N. hollii* sp. n. Ubangi-Shari p. 271 fig. 21, FOWLER t.c. *Lepinannocharax* subgen. n., type *N. pteron* sp. n. Ubangi-Shari, FOWLER t.c. p. 271 fig. 22.

Ra, synonym of *Ichthyoborus*, FOWLER t.c. p. 261.

Tristichodus christyi synonym of *Microstomatichthyoborus bashforddeani*, FOWLER.

GYMNOTIDAE.

Oedemognathus gen. n. type *O. exodon* sp. n. Amazon, MYERS Proc. Biol. Soc. Washington 49 p. 115.

ELECTROPHORIDAE.

Electrophorus electricus, electric discharge, COATES & COX 199.

CATOSTOMIDAE.

Catostomus syncheilus syncheilus, distribution, *C. syncheilus palouseanus* subsp. n. U.S.A. p. 72, SCHULTZ & THOMPSON Proc. Bio. Soc. Washington 49; *C. wigginsi* sp. n. Mexico, HERRE & BROCK in HERRE Proc. Biol. Soc. Washington 49 p. 11.

CYPRINIDAE.

Of Atrek basin, Russian Turkestan, BERG 77; Of African lakes, BORODIN 110; of Michigan, HUBBS & COOPER 476; of Kashmir, MUKERJI 694; of mesolithic period of Upper Danube, RAUTHER 848; Function of swim bladder, MEIERHAUS 648; hybrids, SCHULTZ & SCHAEFER 943.

Abramis brama × *Scardinius erythrophthalmus*, hybrid, in Allier, France, PITON 800.

Acanthorhodeus lanchiensis sp. n. China, HERRE & LIN Bull. Chekiang Prov. Fish. Exp. Sta. 2 no. 7 p. 17 fig. 5.

†*Alburnus gambariani* nom. nud., BOGACHEV 101 p. 16.

Alburnus lucidus × *Leuciscus rutilus* hybrid, SCHILDE 904.

Barbus lestradei sp. n. L. Tanganyika, DAVID Rev. zool. Bot. afr. 28 p. 150 fig. 1; *B. haasianus* sp. n. N. Rhodesia, DAVID Senckenbergiana 18 p. 73 fig.; *B. hypostomatus* p. 51 fig. 2, *chiumbensis* p. 53 fig. 3, spp. n. Angola, PELLEGRIN Arq. Mus. Bocage, Lisboa 7; *B. tongaensis* sp. n. White Nile, RENDAHL Ann. Zool. Soc. zool.-bot. fenn. Vanamo 2 2 1935 p. 14 figs. 3-5; *B. senticeps* sp. n. Cape Province, SMITH Trans. Roy. Soc. S. Afr. 24 p. 54 text-fig. 3; *B. dorsolineatus* p. 67 pl. i fig. 4, *breviceps* p. 68 pl. i fi. 5, *mocoensis* p. 68 pl. ii fig. 6, spp. n. Angola, TREWAVAS Novit. zool. Tring 40; †*B. lichiiensis* p. 199 pl. i fig. 2 text-fig. 2, †*scotti* p. 201 pl. ii fig. 1 text-fig. 2 spp. n. Miocene of China, YOUNG & TCHANG Bull. geol. Soc. China 15; *B.*

barbus bergi subsp. n., Bulgaria, CHICHKOFF Ann. Univ. Sofia 31 3 1935 pp. 305 and 311 pl. i; *B. barbus, cyclolepis*, notes, CHICHKOFF 184; *B. dorsalis* figd.; *B. puckelli* synonym of *B. dorsalis*, HORA 446; *B. tor, putitora, progeneius, hexagonolepis* figd., HORA 447; *B. titteya* described and figd., MEINKEN 654. †*Barbus* sp. n. (not named), Oligocene of France, PITON Bull. mens. Soc. Linn. Lyon 5 3 p. 3. *Clypeobarbus* subgen. n., type *B. kemoensis* sp. n. Ubangi-Shari, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 272 fig. 52. *Vanderbiltella* subgen. n. type *B. lepidura* sp. n. Ubangi-Shari p. 273 figs. 29 and 30-45, *B. tomiensis* sp. n. p. 275 fig. 28, FOWLER t.c. *B. (Emeromius) castra-sibutum*, Ubangi-Shari p. 280 fig. 27, *macroceps*, Belgian Congo p. 281 fig. 48, *tegulifer*, Cameroons p. 283 fig. 47, *Stigmasemion* Ubangi-Shari p. 284 fig. 46, *trinituatus* Belgian Congo p. 285 fig. 49, spp. n., FOWLER t.c. *Lanceobarbus* subgen. n., type *B. tanensis* Günther, FOWLER t.c. p. 287 fig. 50. *B. (Labeobarbus) brevifilis*, PELLEGRIN & CHEVEY 785; *B. (Puntius) annamensis* sp. n. Annam, PELLEGRIN & CHEVEY Bull. Soc. zool. France 61 p. 225 fig. 3.

Barilius with *Sagittabarilius* subgen. n., type *B. salmolucius* Nichols & Griscom, FOWLER t.c. p. 293.

Beirabarbus gen. n. type *palustris* sp. n. Portuguese East Africa, HERRE Proc. Biol. Soc. Washington 49 p. 99.

Carassius auratus, sex differentiation and reproductive cycles, CHIANG 180, 181; conditions of growth, EVANS 263; growth, HO 428; acclimatization in Chile, SCHNEIDER 919; *C. auratus gibelio* figd., GASOWSKA 323.

Cheondra cooperi Girard, probably a hybrid, SCHULTZ & SCHAEFER 943.

Cirrhhina fulungea figd., HORA 446.

Coreoleuciscus gen. n. type *splendidus* sp. n. Chosen (Korea), MORI Annot. zool. jap. 15 1935 p. 161 pl. ii fig. 1.

Crossochilus benasi sp. n. Tonkin, PELLEGRIN & CHEVEY t.c. p. 226 fig. 4.

Cyclocheilichthys microstoma sp. n. Tonkin, PELLEGRIN & CHEVEY t.c. p. 227 fig. 5.

Cyprinus carpio, genetics, KIRPICHNIKOV & BALKASHINA 531; nerves

and nerve-endings of snout, KRAWARIK & SÜSS 552; development of swim-bladder, MAXIA 639; development, WUNDER 1149; healing of wounds and teratology, WUNDER 1147, 1148; pathology, ŽLÁBEK 1157; *C. carpio multi-taeniata* var. n. Tonkin, PELLEGRIN & CHEVEY Bull. Soc. zool. France 61 p. 220.

Discognathus gracilis p. 26, *caudofasciatus* p. 223 figs. 2, 2, spp. n. Tonkin, PELLEGRIN & CHEVEY t.c.

Engraulicypris with *Anchovicypris* subgen. n., type *E. congicus* Nichols & Griscom, FOWLER t.c. p. 294; and *Rastrineobola* subgen. n., type *Neobola argenteus* Pellegrin, FOWLER t.c. p. 296.

Ericymba buccata, colour-change, BROWN 129.

Gobio gobio, subspp. of Western Siberia, *sibiricus* subsp. n. p. 470 fig. 1, NIKOLSKI Trav. Inst. zool. Acad. Sci. U.R.S.S. 3.

Gobiobotia macrocephalus p. 166 pl. ii figs. 4, 5, *brevibarba* p. 168 pl. xii figs. 3, 4, *naktongensis* p. 169 pl. xii figs. 1, 2, spp. n. Korea, MORI Annot. zool. jap. 15 1935.

Hemiculter jabouillei sp. n. S. China, CHEVEY Bull. Soc. zool. France 60 1935 p. 431 fig. 3.

Labeo dero, sexual dimorphism, HORA & MISRA 450; *L. dero, dyocheilus* figd., *L. devdevi* sp. n. p. 324, HORA Rec. Ind. Mus. 38; *L. lypus* sp. n. Burma, FOWLER Proc. Acad. Nat. Sci. Philad. 87 p. 512 figs. 6 and 7; *L. lukulae loangoensis* subsp. n. Chiloango, FOWLER Proc. Acad. Nat. Sci. Philad. 88 p. 289 fig. 53; *L. xanthogenys* sp. n. Tonkin, PELLEGRIN & CHEVEY Bull. Soc. zool. France 61 p. 221; *L. tongaensis* sp. n. White Nile, RENDAHL t.c. p. 11 figs. 1, 2; *L. rohita*, aorta, SEN 950.

Leptobarbus Tchangi sp. n. Tonkin, PELLEGRIN & CHEVEY Bull. Soc. zool. Fr. 61 p. 377 fig. 2.

Leuciscus rutilus × *Alburnus lucidus*, hybrid, SCHILDE 904; *L. hakonensis* digestive tract and food, SUEHIRO 1008; †*L. oswaldi* nom. nud., BOGACHEV 101 p. 16; †*L. miocenicus* sp. n. Miocene of China, YOUNG & TCHANG Bull. Geol. Soc. China 15 p. 197 pl. i fig. 1 text-fig. 1; spp. of Quaternary of Saxony, GEYER 329.

Microphysogobio longidorsalis p. 171 pl. xiii figs. 1, 2, *koreensis* p. 173 pl. xiii figs. 3, 4, *spp. n.* Korea, MORI Annot. zool. jap. 15 1935.

Mylocheilus caurinus, spawning, SCHULTZ 936.

Onychostoma ovalis p. 22 fig. 3, *macracanthus* p. 24 fig. 4, *spp. n.* Tonkin, PELLEGRIN & CHEVEY t.c.

Opsopoedus emiliae, in Ontario, DOAN 242.

Phoxinus phoxinus psychology, HAFEN 380; scales, FACH 270.

Pseudolaubuca angustus *sp. n.* Yangtzekiang, KIMURA J. Shanghai Sci. Inst. (3) 3 1935 p. 109 fig.

Pseudopungtungia *gen. n.* type *P. nigra* *sp. n.* Chosen (Korea), MORI Annot. zool. jap. 15 1935 p. 164 pl. ii figs. 2, 3.

†*Pseudorasbora macrocephala* *sp. n.* Miocene of China, YOUNG & TCHANG t.c. p. 203 pl. ii fig. 2 text-fig. 4.

Rasbora urophthalma figd., MEYER 641.

Rhinichthys atratulus (Hermann) prior to *R. atronasus*, HUBBS 473.

Siphateles mohavensis, local forms, MILLER 667.

Spinibarbus macracanthus *sp. n.* Annam, PELLEGRIN & CHEVEY Bull. Soc. zool. Fr. 61 p. 376 fig. 1.

Tanichthys albonubes, development and bionomics, CHEN 173.

Triborodon, Japanese *spp.*, IKEDA 484; *T. hakonensis*, secondary sexual characters, IKEDA 483.

Tylognathus fowleri *sp. n.* Annam, PELLEGRIN & CHEVEY Bull. Soc. zool. France 61 p. 222.

Varicorhinus lemassoni p. 19 fig. 1, *graffeuili* p. 21 fig. 2 *spp. n.* Tonkin, PELLEGRIN & CHEVEY t.c.; *V. capoeta sevangi*, bionomics, PETROW 793.

COBITIDAE.

Of Kashmir, HORA 445; Key to Japanese genera, based on scale characters, KOBAYASI 534.

Cobitis biwae, defined and figd., *taenia striata* *subsp. n.*, Japan pp. 984 and 991 figs. 10-13, IKEDA Dobuts. Zasshi Tokyo 48.

Misgurnus, analysis and synopsis of Chinese *spp.* and *subsp.*, RENDAHL 853; Japanese forms, *anguillicaudatus formosanus* *subsp. n.* Formosa p. 302, RENDAHL Mém. Mus. roy. Hist. nat. Belg. (2) 3; *M. anguillicaudatus*, defined and figd., IKEDA 485; *M. fossilis*, postembryonic development, GRIEB 362.

Nemachilus kengtungensis *sp. n.*, Burma, FOWLER Proc. Acad. Nat. Sci. Philad. 87 p. 509 fig. 1; *N. cheni* *sp. n.* China, HERRE & LIN Bull. Chekiang Prov. Fish. Exp. Sta. 2 no. 7 p. 20 figs. 6, 6a; *N. deterrai* p. 331 text-figs. 4, 5, pl. xii figs. 5, 6, *hutchinsoni* p. 314 text-figs. 6, 7, pl. xii figs. 1, 2, *panguri* p. 318 text-figs. 8, 9, pl. xii figs. 3, 4, *spp. n.*, Kashmir, HORA Mem. Conn. Acad. Arts Sci. 10; *N. pulcher* var. *taeniata* var. *n.*, Tonkin, PELLEGRIN & CHEVEY Bull. Soc. zool. France 61 p. 229 fig. 6; *N. spilopterus nasifilis* var. *n.* Annam, PELLEGRIN Bull. Soc. zool. France 61 p. 247.

Oreonectes sayu *sp. n.* China, HERRE & LIN Bull. Chekiang Prov. Fish. Exp. Sta. 2 no. 7 p. 19.

Paralepidocephalus *gen. n.*, type *yui* *sp. n.* Yunnan, TCHANG Bull. Fan. Memorial Inst. Biol. 6 1935 p. 17 figs. 1, 2.

Paraprotomyzon *gen. n.* type *P. multifasciatus* *sp. n.*, Szechuan, PELLEGRIN & FANG Abst. Pap. Sci. Conf. Nanning 1935 p. 64.

SILUROIDEA.

Of China, TCHANG 1040; of African lakes, BORODIN 110; †of Egyptian Cretaceous, WEILER 1106.

Dermal skeleton, BHATTI 92.

ARIIDAE.

Arius digulensis *sp. n.* New Guinea, HARDENBERG Treubia 15 p. 369; *A. heudeloti*, from Morocco, PELLEGRIN 779; †“*A. schafferi*” not an otolith, KÜMEL 557.

†*Arius* *sp.* from Tertiary of N. Africa, figd., ERASMO 258.

Hemipimelodus aaldereni *sp. n.* New Guinea, HARDENBERG t.c. p. 367.

SILURIDAE.

Callichrous in India, Burma and Ceylon, HORA 449; *C. weberi* sp. n. Borneo, HARDENBERG Treubia 15 p. 232.

Parasilurus microdorsalis sp. n. Korea, MORI Dobuts. Zasshi Tokyo 48 p. 671 pl. xxiv fig. 1. *P. asotus*, cranial nerves, ATODA 44; respiration, FEY 278.

Silurus, in India, Burma and Ceylon, HORA, 449; *S. wynaadensis* figd., TCHANG 1040.

BAGRIDAE.

Auchenoglanis grandis sp. n. Congo, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 312 fig. 96.

Chrysichthys stappersii, DAVID 220; *C. pitmani* sp. n. E. Africa, FOWLER t.c. p. 312 figs. 97-100.

Coreobagrus gen. n., type *C. brevicorpus* sp. n. Korea, MORI Dobuts. Zasshi Tokyo 48 p. 672 pl. xxiv fig. 2.

Leiocassis sinyanensis sp. n., China, FU Bull. Fan Memorial Inst. Biol. 6 1935 p. 178 fig. 1; *L. ussuriensis*, young figd., LINDBERG 578; *L. chinensis* figd., TCHANG 1040.

Olyra, in a separate family, HORA 448.

Rita rita, food, D'ABREU 211.

AMEIURIDAE.

Ameiurus, colour change, ABRAMOWITZ 1; *A. melas*, natalis, nebulosus, size and weight, LANGLOIS 563; *A. nebulosus*, physiology, RUBIN 881.

Ictalurus punctatus, effects of hypnotics, AITKEN 13.

AMBLYCEPIDAE.

Akysis prashadi sp. n. Bruma, HORA Rec. Ind. Mus. 38 p. 200 figs. 1, 2.

Liobagrus mediadiposalis sp. n., Korea, MORI Dobuts. Zasshi Tokyo 48 p. 673 pl. xxiv fig. 3.

SISORIDAE.

Of Kashmir, MUKERJI 694.

Euchiloglanis macrotrema figd., PELLEGRIN & CHEVEY 784.

Glyptothorax horai sp. n., India SHAW & SHEBBEARE J. Bombay Nat. Hist. Soc. 39 p. 188 1 pl.

Pareuchiloglanis gen. n., type *P. poilanei* sp. n. Annam, PELLEGRIN Bull. Soc. zool. France 61 p. 245.

Paroreoglanis gen. n. type *P. delacouri* sp. n. Laos, PELLEGRIN t.c. p. 244.

Pseudecheneis sulcatus figd., TCHANG 1040.

AMPHILIIDAE.

Amphilius platychir cubangoensis var. n. Angola, PELLEGRIN Arq. Mus. Bocage Lisboa 7 p. 56.—*A. lentiginosus* sp. n. Angola, TREWAVAS Novit. zool. Tring 40 p. 71 pl. ii figs. 10 & 11.

SCHILBEIDAE.

Eutropius with *Proeutropius* subgen. n. type *Silurus congensis* Leach, FOWLER Proc. Acad. Nat. Sci. Philad. 88 p. 307.

CLARIIDAE.

Of India, Burma and Ceylon, HORA 449.

Clarias dayi sp. n. India, HORA Rec. Ind. Mus. 38 p. 350 figs. 3, 4; *C. hilli* p. 299 figs. 59-62, *ekibondoi* p. 300 figs. 63-66, *varispinis* p. 301 figs. 67-70, *gracilis* p. 303 figs. 75-78, Congo, *melanopogon* p. 301 figs. 71-74, *hollyi* p. 304 figs. 79-82, Cameroons, spp. n., FOWLER Proc. Acad. nat. Sci. Philad. 88; *C. cavernicola* sp. n. South-west Africa, TREWAVAS Novit. zool. Tring 40 p. 70 pl. ii figs. 7-9; habitat, JORDAN 502 p. 25.

Heteropneustes, HORA 448.

Uegitglanis, osteology and relationships, DAVID 221.

MOCROCIDAE.

Chiloglanis fasciatus sp. n. Angola, PELLEGRIN Arq. Mus. Bocage Lisboa 7 p. 58.

Synodontis schoutedeni p. 416, *nigri-ventris* p. 417 spp. n. Congo, DAVID Rev. zool. bot afr. 28; *S. serratus tanganyica* subsp. n. L. Tanganyika, BORODIN zool. Jahrb. (Syst) 68 p. 9.

PIMELODIDAE.

Heptapterus ornaticeps sp. n. Brazil, AHL t.c. p. 110.

Microglanis ater sp. n., Brazil, AHL zool. Anz. Leipzig 116 p. 109.

Rhamdia guatemalensis subsp. defined pp. 179-207, *R. g. decolor* p. 201 pl. i fig. 3, *R. g. stygaea* p. 203 pl. i fig. 2 subsp. n. Yucatan, HUBBS Carn. Inst. Washington Publ. 457; *R. amatitlanensis* sp. n. Guatemala, FOWLER Proc. Acad. Nat. Sci. Philad. 87 p. 518 figs. 9, 10.

LORICARIIDAE.

Synopsis of genera, GILTAY Mém. Mus. Hist. nat. Belg. (2) 3 p. 499.

Hemiancistrus albocinctus sp. n. Brazil, AHL zool. Anz. Leipzig 116 p. 111.

Hemipseilichthys key to spp. p. 1, *regani* sp. n. Brazil p. 6 fig. 2, GILTAY Bull. Mus. Hist. nat. Belg. 12 no. 14.

MICROCYPRIINI.

CYPRINODONTIDAE.

Of Dutch West Indies, SANDERS 890.

Alfaro cultratus, relationship, RIVERO & HUBBS 865.

Allophallus gen. n. *kidderi* sp. n., Yucatan, HUBBS Carn. Inst. Washington Publ. 457 p. 232 pl. viii figs. 2, 3.

Anableps, eye, NOBLE 731.

Aphyosemion calabaricus sp. n. Nigeria, AHL SitzBer. Ges. naturf. Fr. 1936 p. 402; *A. margaretae* sp. n. Congo, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 320 fig. 130.

Aplocheilichthys vanderbilti sp. n. L. Victoria, FOWLER t.c. p. 318 figs. 128 & 129; *A. pumilus* notes, MYERS 699.

Belonesox belizanus maxillosus subsp. n. Yucatan, HUBBS t.c. p. 228 pl. vii figs. 3, 5.

†*Cyprinodon primulus* sp. n. Tertiary of Argentina, COCKERELL Amer. Mus. Nov. N.Y. 886 p. 3; *C. hubbsi* sp. n., Florida U.S.A., CARR Copeia Ann Arbor 1936 p. 160 fig. 1; *C. variegatus artifrons* subsp. n. Yucatan, HUBBS t.c. p. 223 pl. vi figs. 1-5; *C. macularius*, habitat, WARD 1094.

Floridichthys carpio polyommus p. 214 pl. iii figs. 1-3, *F. c. barbouri* p. 216 pl. iv figs. 1-8 subsp. n., Yucatan, HUBBS t.c.

Fundulus, physiology of melanophores, ABRAMOWITZ 3, 4; hypophysis, MATTHEWS 637; *F. grandissimus* sp. n. Yucatan, HUBBS t.c. p. 209 pl. ii figs.

3, 4; *F. heteroclitus*, colour-change, ODIORNE 740; experimental embryology, OPPENHEIMER 744, 745, 746.

Furcipennis huberi, relationship, RIVERO & HUBBS 865.

Gambusia affinis, copulatory mechanism, COLLIER 202; acclimatization in Turkestan, SOKOLOV & CHVALIOVA 976; *G. nicaraguensis* p. 225, *G. yucatan* p. 226 pl. vii figs. 1, 2, 4, subsp. n. and systematic notes, HUBBS t.c.

Garmanella gen. n., *G. pulchra* sp. n. Yucatan, HUBBS t.c. p. 218 pl. v figs. 1-10.

Girardinus guppii, physiology, TUCHMANN 1066.

Haplocheilichthys jeanneli sp. n., Omo, PELLEGRIN Verh. int. Vereinig. Limnol. Beograd 7 1935 p. 416 (see also Miss. Sci. Omo 2 1935 p. 136 fig. 3, Zool. Rec. for 1935).

Jenynsia lineata, teeth figd., MACDONAGH 602.

Lamprichthys curtianalis sp. n. Lake Tanganyika, DAVID Rev. zool. Bot. Afr. 28 p. 153.

Lebistes reticulatus, sex-determination, DILDINE 240.

Limia, biometrical and genetical revision, BREIDER 124; *L. vittata*, sex-determination, BREIDER 123.

Mollienisia notes on Yucatan spp. pp. 238-248; *Mollienisia sphenops* subsp. defined, p. 238-245; *M. s. altissima* subsp. n. Yucatan, p. 242 pl. ix figs. 1-3; hybrid *M. s. altissima* × *M. velifera* p. 245 pl. viii fig. 4, HUBBS t.c.

Platypoecilus, genetics of hybrids, BELLAMY 71; *P. maculatus* and *xiphidium*, genetics, KOSSWIG 542, 543.

Poeciliopsis, notes p. 235, key to genera of Poeciliopsinae p. 232, HUBBS t.c.

Profundulus scapularis sp. n., Guatemala, FOWLER Proc. Acad. Nat. Sci. Philad. 87 p. 522 figs. 21-26.

†*Prolebias*: †*Ismene* subgen. n. type *mutila* sp. n., Miocene of Transcaucasia, BOGACHEV Trud. Azerbaid nauchissled. neft. Inst. Baku 31 p. 20 pl. ii figs. 4 & 5.

Pseudoxiphophorus bimaculatus peninsulæ subsp. n., Yucatan, HUBBS t.c. p. 230 pl. viii fig. 1.

Rivulus myersi sp. n., Yucatan, HUBBS t.c. p. 210 pl. ii figs. 1, 2.

Skiffia bilineata figd., MAYER 640; ovarian cycle, MENDOZA 655.

PHALLOSTETHIDAE.

Osteology and relationships, BAILEY 51.

Gulaphallus falcifer sp. n., Philippines, MANACOP Philipp. J. Sci. Manila 59 p. 375 pls. i, ii.

SOLENICHTHYES.

Relationships, BOLIN 106.

MACRORHAMPHOSIDAE.

Macrorhamphosus scolopax, development, SPARTA 993.

INDOSTOMIDAE.

Indostomus paradoxus, relationships, BOLIN 106.

SYNGNATHIDAE.

Of Belgian coast, HOLLY 438; of Cuba, RIVERO 863.

Hippocampus regulus notes, HUBBS 475.

Nannocampichthys gen. n. p. 22, *gigas* sp. n., Burma, p. 23 text-fig. 2, HORA & MUKERJI Rec. Ind. Mus. 38.

Syngnathus martini sp. n., Philippines, HERRE Philipp. J. Sci. 59 p. 358 pl. i fig. 2; *S. jaumei* sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 58; *S. biaculeatus*, protective resemblance, SMEDLEY 961.

ANACANTHINI.

MACRURIDAE.

Coelorhynchus hubbsi sp. n. Japan, MATSUBARA Annot. zool. jap. 15 p. 358 figs. 2 & 3.

Hymenocephalus italicus luminous organs, TROTTI 1065.

MERLUCCIIDAE.

†*Spinogadus* gen. n. *errans* sp. n. Oligocene of North-Caucasus, SMIRNOV Trav. Sci. Univ. Uzbekistan, Samarkand 5 p. 68 pls. v-vi figs. 22-26, 30 text-figs. 6-9.

GADIDAE.

Swim bladder, JONG 501.

Key to eggs in Barents Sea, PERCEVA 787.

Origin and distribution of North Pacific gadidae, SCHMIDT 913.

Eleginus navaga, fertilization, eggs and larvae, CHALDINOWA 170.

Gadus aeglefinus, races, RAITT 834; food, RITCHIE 860; *G. callarias*, reproduction, ROLLEFSEN 872; bionomics, TÅNING 1033.

Lepidion schmidti sp. n. Japan, SVETOVIDOV Zool. Anz. 113 p. 266 fig. 1.

Lota lota, bionomics, MARHEER 617; *L. lota kamensis* subsp. n. Russia, MARKUN Bull. Inst. Rech. biol. Perm. 10 p. 214; *L. maculosa*, spawning habits, CAHN 151.

Lotella maximowiczi, *phycis*, figd. and compared, SVETOVIDOV 1018.

†*Motella tricirrata antiqua* var. n. Oligocene of North-Caucasus, SMIRNOV Trav. Sci. Univ. Uzbekistan, Samarkand 5 p. 63 pl. iv figs. 17-18.

Physiculus tosaensis sp. n. Japan, KAMOHARA Annot. zool. jap. 15 p. 446 fig. 1.

Raniceps raninus, melanophores, FRANZ 303.

ALLOTRIIGNATHI.

LAMPRIDIDAE.

Lampris regius, described and figd., BELL & KASK 70.

TRACHYPTERIDAE.

Regalicus glesne, off Portugal, FRADE 299.

BERYCOMORPHI.

†*Kemtichthys sadeki* referred to *Pomadasys*, WHITE 1115.

POLYMIXIDAE.

Polymixia lowei in Cuban waters, RIVERO 863; *P. nobilis virginica* subsp. n. N. Atlantic, NICHOLS & FIRTH Amer. Mus. Nov. 883 p. 2.

TRACHICHTHYIDAE.

Gephyroberyx darwini, from off Virginia, FIRTH 280.

MONOCENTRIDAE.

Monocentris japonicus, structure and function of fin-spines, JACOBS 494.

HOLOCENTRIDAE.

Holocentrus ascensionis, innervation of accommodation muscle, MEADER 644.

XENOBERYCES.

STEPHANOBERYCIDAE.

Notes, MYERS 701.

Acanthochaenus lutkenii, MYERS 701.

Stephanoberyx gillii, synonym of *Acanthochaenus lutkenii* Gill, MYERS 701.

ZEOMORPHI.

Of Japan, KAMOHARA 506, 506A.

CAPOIDAE.

Antigonia rubescens, postlarvae, UCHIDA 1071.

Capros aper, postlarvae compared with *Antigonia*, UCHIDA 1071.

PERCOMORPHI.

PERCOIDEA.

Otoliths of Perciformes, CHAINE 169.

SERRANIDAE.

Of West Africa, CADENAT 149.

Acropoma japonicum, luminous organ, YASAKI & HANEDA 1152.

Alphestes immaculatus sp. n. Eastern Pacific, BREDER Bull. Bingham Oceanogr. Coll. 2 Art. 3 p. 22 fig. 9.

†*Blabe* gen. n., *crawleyi* sp. n. Eocene of Egypt, WHITE Ann. Mag. Nat. Hist. (10) 18 p. 54 fig. 1.

Callanthias ruber, distribution and relationships, DESBROSSES 234, 235.

Cephalopholis popino sp. n. W. coast of Mexico, WALFORD Occ. Pap. S. Barbara Mus. 4 1936 p. 3.

Enneistius acanthistius figd., BREDER t.c.

Epinephelus guaza, *alexandrinus*, development, SPARTÀ 992.

Labrax lupus, melanophores, FRANZ 303.

Mycteroperca, of Pacific coast of Americas, WALFORD 1092.

Paralabrax auroguttatus p. 1, *loro* p. 2, spp. n., W. coast of Mexico, WAL-

FORD t.c.; *P. maculata* sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 59.

Paranthias pinguis sp. n. W. coast of Mexico, WALFORD t.c. p. 2.

Percichthys melanops, SCHNEIDER 920.

Percilia gillissi, SCHNEIDER 920.

Pronotogrammus aureorubens sp. n. Tortugas, LONGLEY Yearb. Carn. Instn. Washington 1935 p. 88.

Serranus notospilus, *tortugarum* spp. n. Tortugas, LONGLEY Yearb. Carn. Instn. Washington 1935 p. 87.

Siniperca cha-tsi, young figured, LINDBERG 578.

†*Smerdis macrurus* figd., BEREBOV 73.

PRIACANTHIDAE.

†*Pristigenys substriatus* figd., WHITE 1115.

Pseudopriacanthus, synonym of *Pristigenys*, WHITE 1115; *P. lucasani* sp. n. Eastern Pacific, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 388.

CHILODIPTERIDAE.

Apogon parri sp. n. Lower California, BREDER Bull. Bingham Oceanogr. Coll. Art. 3 p. 18 fig. 7.

Epigonus emended to include *Hynnodus*, *Parahynnodus* and *Scepterias* p. 120, *E. atherinoides* and *E. robustus* described, MATSUBARA 629.

Fodifoa gen. n. for type *Foa fistulosa* Weber, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 26.

Hynnodus vide *Epigonus*.

Parahynnodus vide *Epigonus*.

Scepterias vide *Epigonus*.

PERCIDAЕ.

Austroperca nom. nov. for *Torrentaria* Jordan nec Hodgson MS. in Gray, HUBBS Occ. Pap. Mus. Zool. Univ. Mich. 341.

Catonotus flabellatus flabellatus, bionomics, LAKE 559.

Lucioperca sandra, bionomics, SAGER-STRALE 949.

Microperca punctulata, breeding-habits, PETRAVICZ 792.

Perca flavescens, physiology, RUBIN 881; growth in Wisconsin lakes, SCHNEBERGER 918; †*P. ignota* sp. n., Oligocene of North Caucasus, SMIRNOV Trav. Sci. Univ. Usbekistan Samarkand 5 p. 110 pl. ix figs. 40, 42, pl. x fig. 47b, pl. xi figs. 1-5.

†*Percarina oligocenica* sp. n. p. 113 pl. ix figs. 41, 43, pl. xii figs. 10-15, *maritima pulchra* var. n. p. 118 pl. ix figs. 44-46 pl. xii, Oligocene of North Caucasus, SMIRNOV t.c.

Torrentaria vide *Austroperca*.

CENTRARCHIDAE.

Reproductive habits, BREDER 117.

Ambloplites ariommus sp. n. Southern U.S.A., VIOSCA Copeia Ann Arbor 1936 p. 37 fig. 1.

Eupomotis gibbosus, physiology, RUBIN 881.

Helioperca incisor, life-history, MEEHEAN 646.

Lepomis pallidus, physiology, RUBIN 881.

Micropterus pseudaplites, aggregational behaviour, LANGLOIS 562; *M. salmoides*, acclimatized in Africa, HARRISON 391.

Pomoxis annularis, in Ontario, KENNEDY 523.

†*Priscacara campi* sp. n., Eocene of Washington, U.S.A., HESSE J. Geol. Chicago 44 p. 746 pl. i.

CEPOLIDAE.

Cepola krusensterni, *mesoprion*, squamation, KOUMANS 548.

LATILIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

Branchiostegus sericus sp. n. Hong-kong, HERRE Hong Kong Naturalist 6 p. 285.

Caulolatilus intermedius sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 61.

POMATOMIDAE.

Pomatomus saltatrix, bionomics, GALL 317, 318.

CARANGIDAE.

Of China, FOWLER 293.

Alectis hopkinsi figd., BREDER 116; *A. ciliaris*, change of proportions with age, NAKAMURA 710.

Caranx ignobilis, description and distribution, NICHOLS 719.

Decapterus scombrinus and related spp., NICHOLS 720.

Lichia albacora, SCHNEIDER 920.

Naucrates ductor, in B. of Biscay, TAREL 1038.

BRAMIDAE.

Of China, FOWLER 293.

Taractes key to spp. p. 298, *T. platycephalus* sp. n. p. 297 fig. 1, MATSUBARA Bull. Jap. Soc. Sci. Fish. 4.

Coryphaena equisetis, in Japan Sea, UCHIDA 1072.

CENTROPOMIDAE.

Lates niloticus rudolfianus, WORTHINGTON & RICARDO 1145 p. 376.

LUTJANIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

Lutjanus maxweberi, *L. quoyi*, notes, WEBER & DE BEAUFORT t.c.

Mesoprion erythrozona, is *nomen nudum*, WEBER & DE BEAUFORT t.c.

Ocyurus chrysurus, feeding habits, PIERCE 794.

LEBOTIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

LIOGNATHIDAE.

Eucinostomus pseudogula harengulus and *E. gula*, notes, HUBBS 475; *E. poeyi* sp. n. G. of Mexico and Caribbean Sea, LONGLEY Yearb. Carn. Instn. Washington 1935 p. 88.

POMADASIDAE.

Key to Eastern Pacific spp., BREDER Bull. Bingham Oceanogr. Coll. 2 Art. 3 p. 31.

Anisotremus mowbrayi sp. n. Eastern Pacific, BREDER t.c. p. 29 fig. 11.

Haemulon plumieri, feeding habits, PIERCE 794.

Paraconodon orthoptistis sp. n. Eastern Pacific, BREDER Bull. Bingham Oceanogr. Coll. 2 Art. 3 p. 27 fig. 10.

†*Pomadasy sadeki*, notes, WHITE 1115.

SCIAENIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

Johnius fauvelii Peters note, WEBER & DE BEAUFORT t.c.; *J. weberi* sp. n. Borneo, HARDENBERG Treubia 15 p. 251.

MULLIDAE.

Mullus barbatus and *surmuletus*, CORRADINI 207; bionomics, DESBROSSES 236, 237; *M. dussumieri*, bionomics, ROXAS & RASALAN 878.

SPARIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

†*Chrysophrys*, Tertiary of Spain, figd., ROCABERT 869.

Eynniss cardinalis growth, EBINA 250.

Pachymetopon key to spp., PELLEGRIN 780.

Pagellus acarne, development, GAETANI 316.

Paradentex marshalli sp. n. Australia, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 27; *P. bitorquatus* variation, WHITLEY t.c.

Sparus longispinis, sex reversal, KINOSHITA 527.

Stenotomus chrysops, influence of temperature on behaviour, UPTON 1075.

MONODACTYLIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

PEMPHERIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

TOXOTIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

Toxotes lorentzi, *chatereus*, figd., WEBER & DE BEAUFORT t.c.; *T. jaculator*, structure of mouth, WEGNER 1104; SMITH, 970.

KYPHOSIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

CHAETODONTIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

Chaetodon with *Tetrachaetodon* subgen. n. for type *C. plebeius* Cuvier & Valenciennes, WEBER & DE BEAUFORT Fishes of Indo-Austr. Arch. 7 p. 53; *C. zanzibariensis*, *C. melapterus*, notes, WEBER & DE BEAUFORT t.c.

EPHIPPIDAE.

Platax melanosoma, note, WEBER & DE BEAUFORT t.c.

SCATOPHAGIDAE.

Scatophagus notes, MYERS 703.

Selenotoca gen. n. type *Scatophagus multifasciatus* Richardson, MYERS Proc. Biol. Soc. Washington 49 p. 84.

NANDIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

Polycentrus schomburgki, bionomics, ASCHAUER 33.

OPLEGNATHIDAE.

Oplegnathus fasciatus, development of compound teeth, HIYAMA 424.

CICHLIDAE.

Of African lakes, BORODIN 110; of L. Tanganyika, DAVID Rev. zool. Bot. afr. 28 p. 153; MYERS 699; of Yucatan, HUBBS 475.

Apistogramma weisei sp. n. Amazon AHL Mitt. zool. Mus. Berlin 21 p. 268; *A. ornatipectinis* sp. n. Amazon and Br. Guiana, AHL SitzBer. Ges. naturf. Fr. Berl. 1936 p. 141; *A. corumbae* breeding habits, WALDMANN 1091.

Astatore misprint for *Astatoreochromis* FOWLER Proc. Acad. Nat. Sci. Philad. 88 p. 333.

Astatotilapia strigigena, bionomics, SCHREITMÜLLER 931.

Chaetobranchopsis bitaeniatus sp. n. Amazon, AHL SitzBer. Ges. naturf. Fr. Berl. 1936 p. 139.

Cichlasoma arnoldi sp. n. Amazon, AHL t.c. p. 139; *C. caeruleogula* p. 525 fig. 43, *gordon-smithi* p. 529 figs. 44, 45, spp. n. Guatemala, FOWLER Proc. Acad. Nat. Sci. Philad. 87; *C. heterospilum* Mexico p. 255 pl. x fig. 3, *C. champotonis*

Yucatan p. 257 pl. xi fig. 1 spp. n., *C. urophthalmus* subsp. defined, pp. 263–279; *C. u. alborum* p. 268 pl. xiii fig. 3, *C. u. aguadae* p. 270 pl. xiv fig. 7, *C. u. cienagae* p. 271 pl. xii fig. 4, pl. xiv figs. 4–6, *C. u. amarum* p. 272 text-fig. 1, *C. u. conchitae* p. 274 pl. xii fig. 3, *C. u. zebra* p. 275 pl. xiii fig. 2, pl. xv figs. 1–6, *C. u. mayorum* p. 277 pl. xiii fig. 1, pl. xiv figs. 1–3 pl. xv figs. 7–12 subsp. n. Yucatan; *C. meeki*, *C. octofasciatum* notes and figs.; HUBBS Carn. Inst. Washington Publ. 457; *C. temporale* figd., MEINKEN 649.

Crenicara praetoriusi sp. n. Amazon, AHL Mitt. zool. Mus. Berlin 21 p. 265.

Ectodus descampsi figd., BORODIN t.c.

Geophagus jurupari, breeding habits, SCHREITMÜLLER 928.

Haplochromis centropristoides victorianus subsp. n. L. Victoria, BORODIN Zool. Jahrb. (Syst.) 68 p. 18; *H. tenuis, fasciatus*, figd., BORODIN t.c.

Haplochromis lamprogenys p. 330 fig. 137, *pitmani* p. 332 figs. 26 and 147–149, L. Victoria spp. n., FOWLER Proc. Acad. nat. Sci. Philad. 88; *H. philander dispersus* subsp. n. South Africa, TREWAVAS Novit. zool. Tring 40 p. 73.

Julidochromis macrolepis figd., BORODIN t.c.

Herichthys pearsei sp. n., Yucatan, HUBBS t.c. p. 279 pl. x fig. 2.

Lamprologus cunningtoni nyassae p. 22, *modestus nyassae* p. 23 subsp. n. L. Nyasa, BORODIN t.c. *L. pleurostigma, elongatus* fig., DAVID t.c. p. 158 fig. 5.

Limnochromis permaxillaris sp. n. L. Tanganyika, DAVID t.c. p. 155 fig. 4.

Neochromis simotes nyassae subsp. n. L. Nyasa, BORODIN t.c. p. 23.

Pelmatochromis loveridgei, tanganyicae, xenotilapiaformis figd., BORODIN t.c.

Perissodus burgeoni sp. n. L. Tanganyika, DAVID t.c. p. 156. *P. gracilis* sp. n., L. Tanganyika, MYERS Proc. U.S. Nat. Mus. 84 p. 6 pl. i b.

†*Priscacara* (vide also Centrarchidae) placed in this family, HESSE 416.

Symphysodon discus, bionomics, HEGENER 396.

Telmatochromis bifrenatus sp. n. L. Tanganyika, MYERS t.c. p. 12 pl. i, A.

Tilapia fasciata tanganaicae subsp. n. L. Tanganyika p. 29, *T. nadinae* figd., BORODIN t.c.; *T. zillii*, in Morocco, PELLEGRIN 778; *T. guinasana* sp. n. South-west Africa, TREWAVAS Novit. zool. Tring 40 p. 72; *T. nilotica* of L. Rudolf and Baringo, WORTHINGTON & RICARDO 1145 pp. 378, 387.

Tylochromis macrophthalmus sp. n. L. Tanganyika, DAVID t.c. p. 154 figs. 2, 3.

CEPOLIDAE.

Of Indo-Australian Archipelago, WEBER & DE BEAUFORT 1103.

DITREMIDAE.

Amphistichus argenteus, colour variety, FOLLET 284.

Cymatogaster aggregatus, gut and carotenoid metabolism, YOUNG & FOX 1155.

POMACENTRIDAE.

Amphiprion spp., symbiosis with anemones, HERRE 405.

Dascyllus trimaculatus and *albisella*, colour-differences, CHUTE 186.

Demoisellea peregrina sp. n. Costa Rica, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 389.

LABRIDAE.

Halichoeres tenuispinis, synonyms *tremebundus*, *bleekeri*, Dobuts Zasshi Tokyo 48 1936 p. 274 3 figs. (in Japanese); *H. poecilopterus*, sex reversal, KINOSHITA 528.

Julidio maculosus sp. n. Galapagos, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 390.

Labrus bergylla, in Baltic, MEYER 665; *L. ossifagus* life-history, sexual dimorphism and intersexes, LÖNNBERG & GUSTAFSON 586, 587.

†*Nummopalatus multidentis*, Tertiary of Spain, figd., ROCABERT 869.

Pimslometopon maculatus, distribution, SCHNEIDER 920.

Thalassoma umbrostigma, diet and liver-glycogen, ISHIDA 490.

GADOPSIDAE.

†*Merluccius* sp. of Caucasian Oligocene made type of †*Spinogadus* gen. n., and referred to Gadopsidae, SMIRNOV 966.

AMMODYTIDAE.

Ammodytes of Belgian coast, HOLLY 437; *A. marinus*, KIRILLOV 530.

OPISTHOGNATHIDAE.

Gnathypops bermudezi sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 66.

PINGUIPEDIDAE.

Neopercis flavofasciata sp. n. Japan, KAMOHARA Dobuts. Zasshi Tokyo 48 pp. 306 & 309 fig. 2.

Parapercis nipponensis sp. n. Japan, KAMOHARA Dobuts. Zasshi Tokyo 48 pp. 929 & 933 fig. 4.

PERCOPHIIDAE.

Macrias amissus, figd., TOWNSEND 1062.

TRICHONOTIDAE.

Taeniolabrus marleyi sp. n. Durban, SMITH Trans. Roy. Soc. S. Afr. 24 p. 4 pl. 1-2.

URANOSCOPIDAE.

Ichthyoscopus sannio sp. n. Australia, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 45.

NOTOTHENIIDAE.

Notothenia microlepidota, synonymy, MACDONAGH 603.

Pagothenia gen. n. p. 2, *P. antarctica* sp. n. p. 3 fig. 1, Antarctic Ocean, NICHOLS & LAMONTE Amer. Mus. Nov. N.Y. 839.

TEUTHIDOIDEA.

TEUTHIDIDAE (= ACANTHURIDAE).

Acanthurus chirurgus, structure of caudal spines, SOUCHE 980.

TRICHIUROIDEA.

GEMPYLIDAE.

Mimasea gen. n. *M. taeniosoma* sp. n. Japan, KAMOHARA Dobuts. Zasshi, Tokyo 48 pp. 929 & 930 fig. 1.

Nesiarchus nasutus in French waters, ROULE 875, 876.

TRICHIURIDAE.

†*Trichiurides miocaenicus*, Tertiary of Spain, figd., ROCABERT 869.

Trichiurus, Chinese spp., LIN 573; *T. nitens* figd., BREDER 116; *T. japonicus*, spawning habits, TANG & WU 1028.

SCOMBROIDEA.

Of China, FOWLER 292.

SCOMBRIDAE.

Cybiosarda elegans figd., WHITLEY t.c. 1128.

†*Cybium* sp., Tertiary of Spain, figd., ROCABERT 869; *C. commerson*, *guttatum*, distribution, *C. semifasciatum* figd., WHITLEY 1128.

Neothunnus, food, BEEBE 66; *N. argentivittatus*, notes, BEEBE & TEE-VAN 67.

†*Palaeoscomber* gen. n. type *spinosus* sp. n., Oligocene of North Caucasus, SMIRNOV Trav. Sci. Univ. Uzbekistan, Samarkand 5 p. 89 pl. vii figs. 31-32 text-figs. 15-19.

Parathunnus, food, BEEBE 66; *P. atlanticus*, notes, BEEBE & TEE-VAN 67.

Sarda, Pacific spp., WALFORD 1092.

†*Scomber* (*caucasicus*?) Oligocene of North Caucasus, SMIRNOV t.c. p. 101 pl. vii fig. 33.

Scomberomorus regalis young, HUBBS 475.

Thunnus thynnus, bionomics, CRANE 209; *T. nicolsoni* sp. n. Queensland, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 30 text-fig. 2.

ISTIOPHORIDAE.

†*Glyptorhynchus* sp. from Hungarian Oligocene figd., WEILER 1107.

Histiophorus americanus, synonym of *Makaira albicans* Latreille, WHITLEY 1127.

Istiophorus gladius young figd., DERANIYAGALA 232; *I. volador* figd., BLANCKENBURG 99.

Makaira albicans, prior name for *Histiophorus americanus*, WHITLEY 1127.

XIPHIIDAE.

Xiphias of Indian Ocean, DERANIYAGALA 232.

Xiphias gladius off Danish coast, DUNCKER 247.

GOBIOIDEA.

ELEOTRIDAE.

Of Japan, TOMIYANA Japan J. Zool. Tokyo 7 pp. 37-112.

Eleotris limosus sp. n. S. Africa, SMITH Trans. Roy. Soc. S. Afr. 24 p. 52 pls. iv & v B; *E. pisonis oxycephala tanakae* form. n. Japan, TOMIYAMA t.c. p. 41.

Eviota macrophthalmus p. 47 fig. 6, *grammistes*, p. 47 fig. 7, spp. n., TOMIYANA t.c.

Lizettea gen. n. type *L. pelewensis* sp. n. East Indies, HERRE Philipp. J. Sci. Manila 59 p. 276 pl. i fig. 1.

Odontobutis potamophila figd., CHEVEY 176.

Oxyeleotris Indo-Australian spp., *O. urophthalmus novae guineae* var. n. p. 130, KOUMANS Zool. Meded. Leiden 19; *O. fimbriatus*, squamation, KOUMANS 548.

GOBIIDAE.

Of Japan, TOMIYANA Japan J. Zool. Tokyo 7 pp. 37-112.

Aboma aliciae sp. n., Malay Peninsula HERRE Bull. Raffles Mus. Singapore 12 p. 10 pl. vii.

Amblygobius shatinensis sp. n., Hong Kong, HERRE Hong Kong Nat. 7 p. 184.

Australaphia gen. n. p. 48, *A. annona* sp. n. Australia p. 49 text-fig. 6, WHITLEY Mem. Qd. Mus. Brisbane 11.

Chaenogobius cylindricus sp. n. Japan, TOMIYANA t.c. p. 92 fig. 39.

Chasmichthys dolichognathus, gulosus, eggs and young, NAKAMURA 710.

Chloea sarchynnus, nuptial coloration, KINOSHITA 529.

Cryptocentrus geniornatus fig., HERRE 412; *C. yatsui* p. 81 fig. 31, Formosa, oni p. 82 fig. 32 Japan spp. n., TOMIYANA t.c.

Ctenogobius duospilus sp. n. Hong Kong, HERRE Hong Kong Naturalist 6

p. 286; *C. opalescens* sp. n. Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12 p. 15 pl. xi; *C. villadolida* sp. n. Philippines, HERRE Philipp. J. Sci. Manila 59 p. 361 pl. ii fig. 3; *C. whitleyi* sp. n. Hong Kong, HERRE Hong Kong Nat. 7 p. 184; *C. meggitti* sp. n. Burma, HORA & MUKERJI Rec. Ind. Mus. 38 p. 30 pl. i fig. 3-4 text-fig. 6.

Gnatholepis hendersoni p. 7 pl. iii, mingi p. 8 pl. iv, spp. n. Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12.

Gobiella, synonym of *Gobiopterus*, q. v. MUKERJI 693.

Gobiopterus, synonymy, definition and distribution, MUKERJI 693.

Gobius variation, JOHNSEN 500; *G. assoi* sp. n. Mediterranean, BUEN Bol. Soc. esp. Hist. nat. 36 p. 239 figs. 1, 2; *G. bequaerti*, figd., FOWLER 297 p. 1006; *G. microps*, variation, statistical study, HASS 391a; *G. vonbondei*, p. 47 text-fig. 1 pls. iii and v A, *gulosus* p. 49 text-fig. 2, spp. n. S. Africa, SMITH Trans. Roy. Soc. S. Afr. 24.

Heteropomomus gen. n. type *Rhinogobius barbatus* Tomiyana, TOMIYANA t.c. p. 58.

Macrodontogobius gen. n., type *M. wilburi* sp. n. Pelew Islands, East Indies, HERRE Philipp. J. Sci. Manila 59 p. 279 pl. i fig. 2.

Maro haydeni sp. n., Philippines, HERRE t.c. p. 363 pl. ii fig. 6.

Oxyurichthys saru sp. n. Japan, TOMIYANA t.c. p. 78 fig. 29.

Paratynlastes gen. n., type *P. africanus* sp. n., coast of Belgian Congo, GILTAY Bull. Mus. Hist. nat. Belg. 11 no. 36 1935 p. 11 fig. 3.

Proterorhinus marmoratus, in Don basin, RODIONOVA 870.

Pterogobius elapoides, young, NAKAMURA 710.

Quisquilius malayanus sp. n. Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12 p. 11 pl. viii.

Rhinogobius bergi sp. n., Eastern Siberia, LINDBERG Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 pp. 402 & 407 figs. 7-10.

Schismatogobius roxasi sp. n. Philippines, HERRE Philipp. J. Sci. Manila 59 p. 362 pl. ii fig. 5.

Smilogobius cinctus, p. 12 pl. ix, *singaporensis* p. 13 pl. x, spp. n. Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12 p. 12 pl. ix.

Stiphodon pelewensis sp. n. Pelew Islands, East Indies, HERRE Philipp. J. Sci. Manila 59 p. 282.

Tamanka sinensis sp. n. Hong Kong, HERRE Hong Kong Naturalist 6 p. 288.

Tridentiger bifasciatus, synonyms, variation and spawning habits, HIYAMA 426, 427.

Vaimosa valigouva sp. n. Ceylon, DERANIYAGALA *Spolia zeylanica* (B) 19 p. 219 text-fig. 1; *V. balteata* fig., HERRE 412; *V. brocki* p. 9 pl. v, *mawaia* p. 9 pl. vi spp. n., Malay Peninsula, HERRE Bull. Raffles Mus. Singapore 12; *V. chinensis* sp. n. Hong Kong, HERRE Hong Kong Naturalist 6 p. 287; *V. horiae* sp. n. Pelew Islands, East Indies, HERRE Philipp. J. Sci. Manila 59 p. 280; *V. montalbani* sp. n. Philippines, HERRE t.c. p. 359 pl. i fig. 3.

CALLIONYMOIDEA.

CALLIONYMIDAE.

Brachycallionymus gen. n., HERRE & MYERS type *B. mirus* sp. n., HERRE Celebes & Philippines, HERRE Proc. Biol. Soc. Washington 49 p. 12.

Callionymus sokonumeri sp. n. Japan, KAMOHARA Annot. zool. jap. 15 p. 448 fig. 2; *C. valenciennesi*, copulation, KATO 521.

BLENNIOIDEA.

BLENNIIDAE.

Blennius fluviatilis, galerita, distribution and synonymy, ROULE 874.

Chasmodes herklotsi sp. n. Hong Kong, HERRE Hong Kong Naturalist 6 p. 288 fig.

Cirripectes caninus sp. n. Moluccas, HERRE Philipp. J. Sci. Manila 59 p. 284.

Lembeichthys gen. n., *celebensis* sp. n. Celebes, HERRE t.c. p. 283 pl. i fig. 3.

Petroscirtes gorrorensis sp. n. East Indies, HERRE t.c. p. 285; *P. auratus* sp. n. Fiji, SEALE Proc. Calif. Acad. Sci. (4) 23 p. 85.

Salarias burmanicus sp. n. Burma, HORA & MUKERJI Rec. Ind. Mus. 38 p. 34 p.li fig. 1.

CLINIDAE.

Acanthemblemaria hancocki sp. n. Pacific coast of Panama, MYERS & REID Univ. S. Calif. Pub. The Hancock Pacific Exp. 2 no. 2 p. 7.

Crockeridius gen. n., *odysseus* sp. n. Galapagos, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 391.

Otenichthys interrupta sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 69.

Labrisomus nigricinctus sp. n. Cuba, RIVERO t.c. p. 68.

Paraclinus ocellatus sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 67.

Scartella atrimana sp. n. Galapagos, CLARK t.c. p. 393.

Tripterygion varium, variation, PARROTT 767; *T. nikolskii* synonym of *T. tripteronotus*, SLASTENENKO 958.

STICHAEIDAE.

Anoplarchus alectrophorus synonymy, key to subsp., TARANETZ 1034.

Cryptacanthodes maculatus, excretion, GRAFFLIN 345.

Eumesogrammus, review, TARANETZ 1036.

Stichaeopsis, review, TARANETZ 1036.

Stichaeus, review, TARANETZ 1036; *S. ochriamkini* sp. n., *S. punctatus pulcherrimus* subsp. n., Japan Sea, TARANETZ Bull. Far Eastern Sect. Ac. Sci. U.S.S.R. 13 1935 p. 96.

PHOLIDIDAE.

Plectobanchus diaphanocarus Schmidt synonym of *Leptoclinus maculatus*, TARANETZ 1034.

LUMPENIDAE.

Lumpenus fabricii, medius, biometrical analysis, RASS 846; *L. lampetraeformis*, variation, SCHROEDER 935.

MICRODESMIDAE.

Revision, REID Proc. U.S. Nat. Mus. 84 pp. 55-72.

Cerdale bilineatus sp. n. Galapagos, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 394.

Microdesmus hildebrandi sp. n. G. of Panama, REID t.c. p. 67 fig. 9, f, fig. 11, c, pl. ii fig. 6.

ZOARCIDAE.

Bilabria gen. n. for type *Lycenchelys ornatus* Soldatov, SCHMIDT C.R. Acad. Sci. Moscou N.S. 1936 1 p. 98 fig.

Davidojordania, revision of genus, SCHMIDT 911; *D. abei* sp. n., MATSUBARA Dobuts. Zasshi Tokyo 48 p. 382 fig.

Gymnelopsis ocellatus identical with *G. brashnikovii*, TARANETZ 1034.

Lycoides caudimaculatus sp. n., MATSUBARA J. Imp. Fish. Inst. Tokyo 31 p. 115 fig. 1.

Lycodes spp. of R. St. Laurence and Western Atlantic, VLADYKOV & TREMBLAY Fauna et Flora Laurentianae 1 pp. 1-45; *L. vachonii* p. 23 pl. i figs. 3-4, pl. ii fig. 5 *atratus* p. 26 pl. ii fig. 6, *lavalei* p. 31 pl. ix fig. 9, pl. v figs. 10-11 spp. n., R. St. Laurence, *L. vahlii maculatus* p. 27 pl. iii figs. 7-8, *L. reticulatus laurentianus* p. 34 pl. v fig. 11, pl. vi fig. 12, *L. turneri atlanticus* p. 38 pl. vii figs. 14-16, subspp. n. St. Laurence, *L. turneri atlanticus squamosa morpha* n. St. Laurence, p. 39, VLADYKOV & TREMBLAY t.c.

Lycogramma crystallonota Schmidt, synonym of *Allolepis hollandi*, TARANETZ 1034.

Lyczoarces gen. n. type *hubbsi* sp. n. Okhotsk Sea, POPOV C.R. Acad. Sci. Moscow 1935 4 p. 303 fig.

OPHIDIIOIDEA.

BROTULIDAE.

Glyptophidium japonicum sp. n. Japan, KAMOHARA Dobuts. Zasshi Tokyo 48 pp. 306 & 310 fig. 3.

Parabrotula dentiens, intra-ovarian embryonic nutrition, TURNER 1067.

Pyramodon ventralis described and figd., MATSUBARA 628.

Siremo everriculi sp. n. Australia, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 47 pl. vi fig. 2.

OPHIDIIDAE.

Genypterus blacodes, variation, SCOTT 946.

Ophidion nigracauda, iris spp. n. Eastern Pacific, BREDER Bull. Bingham Oceanogr. Coll. 2 Art 3 p. 44 figs. 15 & 16.

FIERASFERIDAE.

Carapus affinis dentition, RIVERO 863.

STROMATEOIDEA.

NOMEIDAE.

Nomeus gronovii, intestinal epithelium, KATO 520.

STROMATEIDAE.

Of China, FOWLER 293.

ANABANTOIDEA.

ANABANTIDAE.

Anabas petherici chadensis subsp. n. Chad Basin, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 322 fig. 24; *A. pekkolai* sp. n. White Nile, RENDAHL Ann. Zool. Soc. zool.-bot. fenn. Vanamo 2 2 1935 p. 16 fig. 6.

Betta splendens, spermatogenesis, BENNINGTON 72.

Macropodus opercularis, labyrinthic organ, BADER 48; colour-change in early stages, TOMITA 1056; *M. opercularis spechti* var. n. Dutch East Indies, SCHREITMÜLLER Aquar. 1936 p. 181 fig.

MUGILOIDEA.

SPHYRAENIDAE.

Of China, FOWLER 291.

MUGILIDAE.

Mugil cephalus, digestion, ISHIDA 489.

Mugil capito, breeding in L. Qarun, Egypt, eggs and larvae figd., WIMPENNY 1134.

Myxus malayanus sp. n. Celebes, HERRE Philipp. J. Sci. 59 p. 286.

ATHERINIDAE.

Atherina sp., melanophores, FRANZ 303; swim-bladder, JONG 501; *A. mocho*, melanophors, GRAUPNER & FISCHER 351; †*A. schelkovnikovi* sp. n. Miocene of Transcaucasia, BOGACHEV Trud. Azerbaid nach-issled. neft. Inst. Baku 31 p. 19.

Atherion elymus, egg, larvae and young, NAKAMURA 710.

Hubbsiella gen. n. type *Menidia clara* Evermann & Jenkins, BREDER Bull. Bingham Oceanogr. Coll. 2 Art 3 p. 6 figs. 2-4.

Lomanetia gen. n. type *Melanotaenia multisquamata* Weber & Beaufort, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 25.

Menidia colei sp. n., Yucatan, HUBBS Carn. Inst. Washington Publ. 457 p. 248 pl. x fig. 1.

Telmathierina key to spp. p. 177, *ladigesi* sp. n. Celebes p. 175, AHL Zool. Anz. 114.

POLYNEMOIDEA.

POLYNEMIDAE.

Of China, FOWLER 291.

Synopsis of genera, MYERS J. Wash. Acad. Sci. 26 p. 379.

Filimanus gen. n. for type *Polynemus melanochir* Cuvier & Valenciennes, MYERS t.c. p. 380.

Polynemus hornadayi sp. n. Sarawak p. 376 fig. 1; synopsis of spp. p. 382, MYERS t.c.

SCLEROPAREI.

Functions and physiology of pectoral fins, TEWES 1045.

SCORPAENIDAE.

Sebastichthys brevispinis nom. nov. for *S. elegans* Jordan & Starks p. 79, compared with *S. longispinis*, MATSUBARA J. Imp. Fish. Inst. Tokyo 31.

Sebastes inermis, biometry, MATSUBARA 624.

TRIGLIDAE.

Of U.S.S.R., SVETOVIDOV 1017.

Lepidotrigla kanagashira sp. n. Japan, KAMOHARA Dobuts. Zasshi Japan 48 p. 1007 fig. 2.

Peristedion Japanese spp., KAMOHARA 508; *P. pothumaluva* sp. n. Ceylon, DERANIYAGALA Spolia Zeylanica (B) 19 p. 221 text-figs. 2 & 3; *P. cataphractum*, from W. Africa, PESSON 789.

Prionotus carolinus, digestive system, BLAKE 98.

Pterygotrigla macrorhynchus sp. n. Japan, KAMOHARA Dobuts. Zasshi Japan 48 p. 481 fig.

Trigla, European spp., SVETOVIDOV 1015; sense organs of free fin-rays, SCHARRER 897.

PATAECIDAE.

Pataecus with *Aetapcus* subgen. n. type *Pataecus maculatus* Günther, SCOTT Pap. Proc. Roy. Soc. Tasmania 1935 1936 p. 124; *P. (A.) armatus* described and figd., SCOTT t.c.

COTTIDAE.

Alcichthys elongatus synonymy TARANETZ 1034.

Artedielloides synonym of *Artediellus* TARANETZ 1034.

Asemichthys taylori figd., WILBY 1132.

Aspicottus diagnosis, TARANETZ 1034.

Astrocottus gen. n. p. 330, type *A. leprops* sp. n., Japan p. 331 text-fig. 27 pl. xxxiv, BOLIN Proc. U.S. Nat. Mus. 83.

Atopocottus gen. n. type *A. tribranchius* sp. n. Japan, BOLIN Proc. U.S. Nat. Mus. 84 p. 30 fig. 6.

Cottus minutus volki, LINDBERG 578; *C. gobio*, *poecilopus*, in Sweden, NYBELIN 738; *C. pollex*, breeding habits and development, OKADA 742.

Ereunias grallator and *Marukawichthys ambulator* compared, MATSUBARA 627.

Eurymen gyrinus synonymy, TARANETZ t.c. 1034.

Evermanniana gen. n. for type *Blennicottus clarki* Evermann & Goldsborough, TARANETZ Bull. Far Eastern Sect. Ac. Sci. U.S.S.R. 13 1935 p. 91.

Hemitrypterus americanus, excretion, GRAFFLIN 345.

Icelinus revision, with *Medicelinus* subgen. n. type *I. burchami* Evermann & Goldsborough p. 156, and *Penicelinus* subgen. n., type *I. fimbriatus* Gilbert p. 156, BOLIN Copeia 1936 no. 3.

Icelus synonymy, TARANETZ 1034; *I. gilberti*, Japan Sea and Okhotsk Sea, p. 149 fig., *rastrinoides* Japan Sea p. 150, *perminovi*, Okhotsk Sea, p. 151, spp. n., TARANETZ C.R. Acad. Sci. Moscou 1936 4.

Malacocottus derjugini Popov synonym of *M. zonurus*, TARANETZ 1034.

Marukawichthys ambulator compared with *Ereunias grillator*, MATSUBARA 627.

Megalocottus synonym of *Myoxocephalus*, TARANETZ 1034.

Myoxocephalus octodecimspinosus, *scorpius*, excretion, GRAFFLIN 345; *M. octodecimspinosus*, excretion, GRAFFLIN 346; GRAFFLIN & GOULD 347.

Novircuzenius subgen. n. of *Ricuzenius*, type *R. nudithorax* sp. n. Japan, BOLIN Proc. U.S. Nat. Mus. 84 p. 27 fig. 5.

Phasmatocottus gen. n., *clenopterygius* sp. n. Japan, BOLIN t.c. p. 33 fig. 7.

Platycottus, synonym of *Gilbertidia*, TARANETZ 1034.

Stlegicottus gen. n. *xenogrammus* sp. n. Bering Sea, BOLIN t.c. p. 36 fig. 8.

Stlengis, key to spp. p. 327, *S. distoechus* sp. n. Japan p. 328 text-fig. 26 pl. xxxiv A, BOLIN Proc. U.S. Nat. Mus. 83.

Taurocottus synonym of *Trichocottus*, TARANETZ 1034.

AGONIDAE.

Agonus, review of genus, SCHMIDT 910.

Bothragonus occidentalis sp. n. Japan Sea, LINDBERG Bull. Acad. Leningrad 1935 p. 1223 figs. 1 & 2.

Percis matsuii sp. n., MATSUBARA Annot. zool. jap. 15 p. 355 fig. 1.

LIPARIDAE.

Liparis takashimensis sp. n. Japan, NOJIMA Trans. Sapporo Nat. Hist. Soc. 14 p. 179 fig.

GASTEROSTEIDAE.

Of Kurile Islands, IKEDA 482.

Relationships, BOLIN 106.

Gasterosteus aculeatus, breeding habits, figd., PELKWIJK & TINBERGEN 772.

Spinachia, variation, JOHNSEN 500.

HETERSOMATA.

Osteology and phylogeny, CHABANAUD 164; interbranchial septum, CHABANAUD 166; key to eggs in Barents Sea, PERCEVA 787.

PSETTODIDAE.

Psettodes arumei, otoliths, RAO 843.

BOTHIDAE.

Of northeastern Pacific, TOWNSEND 1061.

Ambicoloration, GUDGER 373, 374; GUDGER & FIRTH 375.

Achiropsetta gen. n., *tricholepis* sp. n. Tierra del Fuego, NORMAN Discovery Rep. 2 1930 p. 362 fig. 47.

Chascanopsetta megastoma sp. n. Japan, KAMOHARA Dobuts. Zasshi Tokyo 48 pp. 306 & 308 fig. 1.

Hippoglossina diagnosed, GINSBURG J. Wash. Acad. Sci. 26 p. 129; *H. mystacium* sp. n. Chile, GINSBURG t.c. p. 130 fig. 1.

Monolene asaedae sp. n. Pacific coast of Mexico, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 385.

Paralichthys patagonicus, *brasiliensis*, *vorax*, *lethostigma*, notes, GINSBURG t.c.

Psettina ijimae postlarva, UCHIDA 1070.

Pseudorhombus isosceles notes, GINSBURG t.c.

PLEURONECTIDAE.

Of northeastern Pacific, TOWNSEND 1061.

†*Hippoglossoides macroptera* sp. n., Oligocene of North-Caucasus, SMIRNOV Trav. Sci. Univ. Usbekistan, Samarkand 5 p. 83 pl. viii fig. 37 text-fig. 11.

Hippoglossus hippoglossus, bionomics, JESPERSEN 496, 497; eggs, larvae, young, TÄNING 1030.

Hippoglossus stenolepis, bionomics and life-history, THOMPSON 1049; THOMPSON & CLEVE 1050; notes, VERNIDUB 1080.

Hyposopsetta macrocephala sp. n. Eastern Pacific, BREDER Bull. Bingham Oceanogr. Coll. 2 Art. 3 p. 4 fig. 1.

Limanda schrencki figd., LINDBERG & OCHERJAMKIN 579.

Liopsetta obscura figd., LINDBERG & OCHERJAMKIN 579.

Platichthys flesus, of Baltio, CIEGLE-WICZ 188.

Platichthys flesus and *Pleuronectes platessa*, physiological characters, FRIEDRICH 308; HENSCHHEL 402; characters of hybrid, PAPE 762.

Pleuronectes platessa, vascular system, BIBORSKI 94; physiological characters of races, BUDDENBROCK, HENSCHHEL & FRIEDRICH 138; physiology of eggs, DEVOLD 238; reproduction, ROLLEFSON 872; *P. microcephalus*, bionomics, BOWMAN & RAE 112.

†*Protopsetta parvula* sp. n. Oligocene of North Caucasus, SMIRNOV t.c. p. 84 pl. viii fig. 38 text-fig. 12.

Pseudopleuronectes americanus, excretion, GRAFFLIN 345; GRAFFLIN & GOULD 347.

Reinhardtius hippoglossoides post-larvae, TÄNING 1030.

Samariscus japonicus sp. n. Japan, KAMOHARA Dobuts. Zasshi Japan 48 p. 1006 fig. 1.

Nasal organ of Achirinae, CHABANAUD 165.

Achirus lineatus notes, HUBBS 475; *A. zebrinus* sp. n. Pacific coast of Central America, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 386.

Brachirus annularis referred to *Zebrias*, q.v., CHABANAUD 167 p. 404.

Solea senegalensis notes, CHABANAUD 168; *S. vulgaris*, size, CLARKE 195.

Zebrias: *Holonodus* subgen. n., type *Z. synapturoides* (Jenkins), CHABANAUD Bull. Soc. Zool. Fr. 61 p. 383; *Z. regani annularis*, notes; subgen. *Pseudaesopia* revoked, CHABANAUD t.c.

CYNOGLOSSIDAE.

Symphurus melanurus sp. n. Pacific coast of Mexico, CLARK Proc. Calif. Acad. Sci. (4) 21 p. 386.

HAPLODOCI.

BATRACHOIDIDAE.

Opsanus tau notes, HUBBS 475; germ-cells, ODUM 741.

PEDICULATI.

Phylogeny, GREGORY & CONRAD 359.

LOPHIIDAE.

Lophius piscatorius, excretion, GRAFFLIN 345; breeding and young, MCKENZIE 607; *L. laevis* Lacep., nec Latreille, synonym of *Sympterichthys unipennis*, WHITLEY 1127.

Sympterichthys unipennis, prior name for *Lophius laevis* Lacep. nec Latreille, WHITLEY 1127.

CHAUNACIDAE.

Chaunax nuttingii notes, NICHOLS & FIRTH 722.

LINOPHRYNIDAE.

Cryptolychnus, synonym of *Allector* Heller & Snodgrass, FOWLER 297 p. 1368.

PLECTOGNATHI.

Orientation movements in response to light, BREDER & HARRIS 120.

†*Stephanodus* sp. figd., WEILER 1106 p. 42 pl. iii fig. 9, 10.

TRIACANTHIDAE.

Triacanthodes lineatus sp. n. Tortugas, LONGLEY Yearb. Carn. Instn. Washington 34 1935 p. 88; *T. zebra* sp. n. N. Atlantic, NICHOLS & FIRTH Amer. Mus. Nov. 883 p. 2 fig. 1.

BALISTIDAE.

Of Japan, KAMOHARA 507.

Alutera ventralis sp. n. G. of Mexico, LONGLEY Yearb. Carn. Instn. Washington 34 1935 p. 89.

Navodon gen. n. type *Balistes australis*, WHITLEY Austr. Zool. 6 1930 p. 179.

Nelus gen. n. type *Monacanthus vittatus*, WHITLEY t.c. p. 179.

TETRODONTIDAE.

Canthigaster punctatissimus reticulatus subsp. n. Eastern Pacific, BREDER Bull. Bingham Oceanogr. Coll. 2 Art. 3 p. 50 figs. 17, 18.

Cyprichthys gen. n. for type *Tetraodon mappa* Lesson, WHITLEY Mem. Qd. Mus. Brisbane 11 p. 51.

Tetraodon lagocephalus, stranded, SCHARRER 898.

MOLIDAE.

In Gulf of Mexico, PALMER 758.

Masturus lanceolatus from W. Indies, RIVERO 862.

Ranzania truncata early figs., GUDGER 368.

XENOPTERYGII.

GOBIESOCIDAE.

Of Australia, SCOTT 946.

Aspasmogaster tasmaniensis, described and figd., SCOTT 946.

Gobiesox ramsdeni sp. n. Cuba, RIVERO Proc. Boston Soc. Nat. Hist. 41 p. 73.

Rimicola eigenmanni, secondary sexual characters, WILBY 1131.

Sicyases yumurina sp. n. Cuba, RIVERO t.c. p. 74.

Volgiolus cardinalis, colour, SCOTT 946.

OPISTHOMI.

MASTACEMBELIDAE.

Mastacembelus catchpolei sp. n. Belgian Congo, FOWLER Proc. Acad. nat. Sci. Philad. 88 p. 323 fig. 25; *M. mutumbotombo* sp. n. Angola, PELLEGRIN Arq. Mus. Bocage Lisboa 7 p. 61.

CROSSOPTERYGII.

†Of Triassic of Greenland, NIELSEN 724.

†RHIPIDISTIA.

Of Permian of Russia, CHABAKOV 162; of German Devonian, GROSS 364.

Growth phenomena and taxonomic characters, WESTOLL 1109.

†*Eusthenopteron foordi*, described and figd., GROSS 365.

†*Glyptopomus rolandi* sp. n. Devonian of Latvia, GROSS Zbl. Min. Geol. Paläont. Stuttgart 2 p. 73 figs. 6, 9.

†*Osteolepis macrolepidotus* structure, WESTOLL 1109.

Porolepis siegenensis p. 133 pl. vii figs. 3, 4, 8, pl. viii figs. 1, 2, text-fig. 1, *hefteri* p. 133 pl. viii fig. 3 text-fig. 1, spp. n., Devonian of Germany, GROSS Palaeont. Ztschr. Berlin 18.

†ACTINISTIA.

Of Permian of Russia, CHABAKOV 162

†*Mawsonia libyca* sp. n. Cretaceous Egypt, WEILER Abh. Bayer. Akad. Wiss. N.F. 32 1935 p. 11, pl. i figs. 5-10, 12, 17-29, 31-34, 42-46, 50-52, pl. ii figs. 4, 9, 27, 35-36, pl. iii figs. 1-6, 11, 13, 18, text-fig. 1 figd., STROMER 1006 p. 39 fig. 1.

†*Stromerichthys aethiopicus*, STROMER 1006 p. 39 fig. 1 p. 44 fig. 2.

†*Whiteia* sp. figd., NIELSEN 724 figs. 8-12.

DIPNEUSTI.

†Of Permian of Russia, CHABAKOV 162; of Devonian of Australia, HILLS 422; distribution, PETIT 790; homologies of bones of cranial roof, ROMER 873; evolution, STROMER 1006; general account of Dipnoi, HOLLY 436.

†*Conchodus parvulus* sp. n. Devonian of Colorado, BRYANT J. Paleont. Menasha Wis. 10 p. 659 fig. 4.

†*Dipnorhynchus* sp. from Devonian of Australia, described and figd., HILLS 422.

†*Dipterus valenciennesi* and *platycephalus*, figd., WESTOLL 1109; †*D. johnsoni* sp. n. Devonian of Colorado, BRYANT t.c. p. 658 figs. 2, 3.

Lepidosiren paradoxa, melanosis, SMITH & COATES 967.

Protopterus sense-organs, CORDIER 206.

†CONODONTS.

†*Acodus circulator* p. 245 pl. xxix fig. 1, *simplex* p. 246 pl. xxix fig. 2, spp. n., GUNNELL J. Paleont. Tulsa 5 1931.

†*Fortscottella* gen. n. type *gigantea* sp. n., Carboniferous of Missouri p. 251 pl. xxix fig. 30, *serrata* p. 251 pl. xxix fig. 29, *semiserrata* p. 251 pl. xxix fig. 29 spp. n. Carboniferous of Missouri, GUNNELL t.c.

†*Gnathodus roundyi* sp. n. Carboniferous of Missouri, GUNNELL t.c. p. 249 pl. xxix fig. 19 & 20.

†*Hindeodella*, Carboniferous of Missouri, GUNNELL t.c.

†*Holmesella* gen. n. type *quadrata* sp. n. Carboniferous of Missouri, GUNNELL t.c. p. 252 pl. xxix figs. 31 & 32.

†*Idiognathodus* gen. n. type *claviformis* sp. n. Carboniferous of Missouri, p. 249 pl. xxix figs. 21 & 22; *delicatus*

p. 250 pl. xxix figs. 23-25, *arcuatus* p. 250 pl. xxix fig. 26 spp. n. Carboniferous of Missouri, GUNNELL t.c.

†*Lonchodina peculiaris* sp. n. Carboniferous of Missouri, GUNNELL t.c. p. 248 pl. xxix fig. 18.

†*Lonchodus simplex* figd., *L. confluens* sp. n. Carboniferous of Missouri, p. 248 pl. xxix fig. 17, GUNNELL t.c.

†*Prioniodina*, Carboniferous of Missouri, GUNNELL t.c.

†*Prioniodus tridentatus* p. 246 pl. xxix fig. 3, *lexingtonensis*, p. 246 pl. xxix fig. 4, *subacodus*, p. 246 pl. xxix fig. 5, *clarki* p. 247 pl. xxix fig. 8, *missouriensis*, p. 247 pl. xxix fig. 9, *conjunctus* p. 247 pl. xxix fig. 7, *bidentatus*, p. 247 pl. xxix fig. 6, spp. n. Carboniferous of Missouri, GUNNELL J. Paleont. Tulsa 5 1931.

†*Scolopodus ellipticus* sp. n. Carboniferous of Missouri, GUNNELL t.c. p. 248 pl. xxix fig. 10.

XIV. AMPHIBIA AND REPTILIA.

ARRANGED BY

MALCOLM A. SMITH, M.R.C.S.

CONTENTS.

| | PAGE |
|-----------------------------|------|
| I. TITLES | 2 |
| II. SUBJECT INDEX | 26 |
| III. PALÆONTOLOGY | 32 |
| IV. SYSTEMATIC INDEX | 33 |

I.—TITLES.

1.—**Abbayes, H.** des. La faune des Tritons (Batraciens Urodèles) des environs de Rennes (I.-et-V.). Remarques sur la fréquence des espèces et sur la forme hybride *Molge Blasii* de l'Isle. Bull. Soc. sci. Bretagne **9** 1 & 2 1932 pp. 19–22.

2.—**Abbayes, H.** des. Contribution à l'étude des voies urogénitales males des Tritons (Batraciens Urodèles). Bull. Soc. sci. Bretagne **11** 1 & 2 1934 pp. 3–44 text-figs.

3.—**Acharji, M. N. & Ray, H. C.** A new species of *Oligodon* from the United Provinces (India). Rec. Ind. Mus. Calcutta **38** 1936 pp. 519–520 figs.

4.—**Acolat, L.** Contribution à l'anatomie comparée du cœur, en particulier du ventricule, des Batraciens et des Reptiles. Bull. Soc. Hist. nat. Doubs **46** 1936 pp. 71–81 text-fig.

5.—**Aharoni, I.** Reptilia and Amphibia, pp. 418–422, in Luke & Keith-Roach's "The Handbook of Palestine and Trans-Jordan." London 1934.

6.—**Ahl, E.** Zweie neue Froscharten der Gattung *Leptodactylus* aus Südamerika. Verof. Deutsch. Kolonial-u.-Uebersee-Mus. I 1936 pp. 389–392.

7.—**Ahl, E.** Beschreibung der Kaulquappe des *Hyperolius aylmeri* aus Sierra Leone. Zool. Anz. Leipzig **114** 9/10 1936 p. 282–283.

Albrecht, M. see Marcus, H.

8.—**Aldrich, T. H. & Jones, W. B.** Footprints from the Coal Measures of Alabama. Mus. Pap. Alabama Mus. Nat. Hist. **9** 1930 pp. 13–67, pls. in pag.

9.—**Aleschin, B.** Die schilddrüse in der Entwicklung und in der Metamorphose von *Rana temporaria*. Acta zool. Stockholm **17** 1936 pp. 1–54 text-figs.

10.—**Anderson, H. T.** The jaw musculature of the Phytosaur, *Mach-aeropsopus*. J. Morph. Philadelphia **59** 1936 pp. 549–588 7 pls.

Andrews, E. W. see Schmidt, K. P.

11.—**Angel, F.** Reptiles et Batraciens de Syrie et de Mésopotamie récoltés par M. P. Pallary. Bull. Institut. Egypte **18** 1936 pp. 107–116.

12.—**Angel, F.** Matériaux herpétologiques recueillis à Madagascar par M. Roger Heim, chargé de Mission. Description de deux formes nouvelles. Bull. Mus. Paris (2) **8** 1936 pp. 125–129.

13.—**Angel, F.** Description d'une nouvelle espèce du genre *Philochortus* provenant des confins Saharo-Soudanais et tableau synoptique des espèces du genre. Bull. Soc. Zool. Fr. **61** 1936 pp. 100–105.

14.—**Angel, F.** Un Léopard nouveau de la famille des Dibamidés. Bull. Mus. Hist. nat. Paris (2) **7** 6 1935 pp. 354–356 text-fig.

15.—**Angel, F.** Sur quelques formes nouvelles de Reptiles et de Batraciens du Sahara central. Bull. Soc. Zool. Fr. **61** 1936 pp. 273–277.

16.—**Anon.** Spawning of the Common Toad. Nature London **138** 3498 1936 p. 835.

17.—**Anon.** Snake Worship in India. Times London June 1 1936 p. 9.

18.—**Arambourg, C.** Les Vertébrés Fossiles des Phosphates du Maroc. Bull. Soc. géol. Fr. **5** 5 6–7 1935 pp. 434–439.

19.—**Atlas, M.** The effect of temperature on the development of *Rana pipiens*. Physiol. Zool. Chicago **8** 1935 pp. 290–310.

20.—**Augusta, J.** Ein Stegocephalen-Koprolith aus dem Mährischen Perm. Cbl. Min. Geol. Paläont. Stuttgart **B** 8 1936 p. 334.

21.—**Augusta, J.** Ein Stegocephalen-Bauchpanzer aus dem Mährischen Perm und Bemerkungen zu den Bauchpanzern der Gattung *Melanerpeton*. Cbl. Min. Geol. Paläont. Stuttgart **10** 1936 p. 453.

22.—**Augusta, J.** Kritische Bemerkungen zum Auftreten der Gattung *Discosaurus* Credner im Mährischen Perm. Cbl. Min. Geol. Paläont. Stuttgart **1** 1936 p. 26.

- 23.—Babbitt, L. H. Soft-shelled Turtles in Vermont. [*Amyda spinifera*]. Bull. Boston Soc. nat. Hist. No. 78 1936 p. 10.
- 24.—Bailey, J. R. *Microhyla carolinensis* in Northeastern Tennessee. Copeia Ann Arbor 1936 p. 115.
- Bailey, R. M. see Conant, R.
- 25.—Ball, S. C. The distribution and behavior of the Spadefoot Toad in Connecticut. Trans. Conn. Acad. Arts Sci. 32 1936 pp. 351-379 pls.
- 26.—Barbour, T. A Salamander new to Cape Cod. Bull. Boston Soc. nat. Hist. 78 1936 p. 9.
- 27.—Barbour, T. Two introduced Lizards in Miami, Florida. Copeia Ann Arbor 1936 p. 113.
- 28.—Barbour, T. & Shreve, B. Notes on Cuban Anoles. Occ. Pap. Boston Soc. Nat. Hist. 8 1935 pp. 249-254.
- 29.—Barbour, T. & Shreve, B. New races of *Tropidophis* and of *Ameiva* from the Bahamas. Proc. New Eng. Zool. Club 16 1936 pp. 1-3.
- 30.—Barker, P. E. The Common Cobra in the Dooars. J. Darjeeling Nat. Hist. Soc. 11 2 1936 p. 81.
- 31.—Barker, P. E. The Lesser Black Krait, *Bungarus lividus*. J. Darjeeling N.H. Soc. 10 1936 pp. 131-132.
- 32.—Barnett, B. & Macfarlane, R. G. Snake Venom for Hæmatemesis. Brit. Med. J. 3963 1936 p. 1286.
- 33.—Barratt, A. Hæmatemesis treated with Snake (Russell's Viper) Venom by mouth. Brit. Med. J. 3960 1936 p. 1083.
- 34.—Bartenef, A. Material zur allgemeinen Charakteristik der paläarktischen Fauna. I. Amphibien. Arch. Naturgesch. Leipzig (N.F.) 5 1936 pp. 215-229.
- 35.—Bartenef, A. Über die Pontische fauna. Zool. J. Moscow 14 1935 pp. 762-784. (In Russ., German summ.)
- 36.—Bassina, J. A. Abhängige und unabhängige entwicklung des präsumptiven materials der beginnenden gastrula. Proc. Zool. Biol. Inst. Sci. Res. Charkov 1 1936 pp. 27-41 text-figs. (Germ. summ. p. 42.)
- 37.—Belliugi, J. B. A "tame" Crocodile. Field May 16 1936 p. 1187 photo.
- 38.—Benham, W. B. A reptilian jaw from Kakanui, South Island, New Zealand. Trans. Proc. Roy. Soc. N.Z. 65 3 1935 pp. 232-238.
- 39.—Bergounioux, F.-M. *Broilia manuascensis*, nov. sp., Tortue Paludine de l'Oligocene de Manosque. Bull. Soc. géol. Fr. 5 6 1-3 1936 pp. 59-62.
- 40.—Bergounioux, F.-M. Monographie des Chéloniens fossiles conservés au Laboratoire de Géologie de la Faculté des Sciences de Lyon. Trav. Lab. Géol. Lyon 31 26 1936 pp. 1-40 pls.
- 41.—Bergounioux, F.-M. Sur l'origine du groupe des Trionychoïdes. C.R. Acad. Sci. Paris 203 21 1936 pp. 1087-8.
- 42.—Bergounioux, F.-M. Contribution à l'étude paléontologique des Chéloniens. Mem. Soc. géol. Fr. (N.S.) 11 2-3 1935 (Mem. 25), pp. 7-215 text-figs. & pls.
- 43.—Berk, L., Cheetham, R. W. S. & Shapiro, H. A. The biological basis of sexual behaviour in Amphibia. III. The rôle of distance receptors in the establishment of the mating reflex (coupling) in *Xenopus laevis*: the Eyes. J. Exp. Biol. Cambridge 13 1936 pp. 60-62.
- 44.—Berney, F. L. Gould's Monitor (*Varanus gouldiae*). Queensl. Nat. Brisbane 10 1 1936 pp. 12-14.
- 45.—Berry, C. T. & Lynn, W. G. A new Turtle, *Peritresius virginianus*, from the Miocene of Virginia. Proc. Amer. Phil. Soc. Philad. 76 2 1936 pp. 175-190 pls.
- 46.—Bertau, M. Zur Entwicklungsgeschichte des geruchsorgans der Krokodile. Z. Anat. Entw. Gesch. Berlin 104 1935 pp. 168-202 text-figs.
- Bertrand, M. see Willem, V.
- 47.—Bessiger, C. Ein Diagramm über den Entwicklungsgang einer Reihe von 5 Stück *Triturus (Cynops) ensicauda* vom Ei bis zur Verwandlung. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 14-16 text-figs.
- 48.—Beuchelt, H. Bau, Funktion und Entwicklung der Begattungsorgane der männlichen Ringelnatter (*Natrix natrix* L.) und Kreuzotter (*Vipera berus* L.). Gegenbaurs morph. Jahrb. Leipzig 78 1936 pp. 445-516.

49.—Bhattacharya, G. C. Tadpoles of *Rana tigrina* feeding on Mosquito Larvae. Curr. Sci. Bangalore 5 4 1936 p. 206.

49A.—Bieling, R., Demnitz, A., Schaumann, O., Schloszberger, H., Schuckmann, W. & Schwarz, E. Die europäischen und mediterranen Ottern und ihre Gifte. Grundlagen zur Darstellung eines wirksamen Schlangenserums. Behringwerkmitt. Marburg-Lahn 7 1936, 362 pp., pls. in pag.

50.—Bignardi, C. Sulle ghiandole della volta buccale in *Crocodilus niloticus* e *Alligator mississippiensis*. Boll. Zool. Torino 7 1936 pp. 67-72.

51.—Bignardi, C. Contributo alla conoscenza della volta buccale nei Cheloni. Monit. zool. ital. Firenze 47 1936 pp. 69-77 text-figs.

52.—Bird, C. G. The distribution of Reptiles and Amphibians in Asiatic Turkey, with notes on a Collection from the Vilayets of Adana, Gaziantep and Malatya. Ann. Mag. Nat. Hist. (10) 18 1936 pp. 257-281 pls.

Black, E. G. see Reynolds, A. E.

53.—Blair, W. F. A note on the ecology of *Microhyla olivacea*. Copeia Ann Arbor 1936 p. 115.

54.—Blanchard, F. N. The number of eggs produced and laid by the four-toed Salamander, *Hemidactylium scutatum* (Schlegel) in Southern Michigan. Pap. Mich. Acad. S.A.L. 21 1935 (1936) pp. 567-573 photos.

55.—Blume, H. Begattung bei *Desmognathus*. Blätt. Aquar. Terr. Stuttgart 47 1936 p. 65.

56.—Boast, G. O. Calling the Turtle [*Trionyx*]. Field March 7 1936 p. 520 photo.

Bock, A. V. see Dill, D. B.

57.—Boelaert, R. Ademhalings-mechanisme bij het Reptiel *Uromastix*. Mem. Mus. Hist. nat. Belge (2) 3 1936 pp. 775-784 text-figs.

Bogert, C. M. see Cowles, R. B.

58.—Bogoescu, C. *Vipera ammodytes* in Jud. Bacău. Bul. Soc. Nat. Romania București 3 1933 pp. 7-8.

59.—Boonstra, L. D. Die Versamplings van Fossiele as basis van die Paleontologiese Studie. S. Afr. J. Sci. Cape Town 32 1935 pp. 332-340.

60.—Boonstra, L. D. A note on the synonymy of the two Deinocephalians, *Dinophoneous ingens* Broom and *Jonkeria pugnax* (Broom). S. Afr. J. Sci. Cape Town 32 1935 pp. 329-331.

61.—Boonstra, L. D. Some features of the Cranial Morphology of the Tapinocephalid Deinocephalians. Bull. Amer. Mus. Nat. Hist. 72 (11) pp. 75-98 text-figs. & pls.

62.—Boonstra, L. D. On the cranial morphology of some Titanosuchid Deinocephalians. Bull. Amer. Mus. Nat. Hist. 72 3 1936 pp. 99-116 text-figs. & pls.

Boquet, P. see Cesari.

63.—Borell, A. E. A new Reptile from Yosemite. Yosemite Nature Notes 13 (12) 1934 p. 96. [Non vidi.]

64.—Boring, A. M. A survey of the Amphibia of North China based on the collection by E. Licent S. J. in the Musée Hoangho-Paiho. Peking Nat. Hist. Bull. X 1935-36 p. 327-351.

65.—Boring, A. M. The Amphibia of Hong-Kong. Part III. Hong-Kong Nat. 7 1936 pp. 11-14 text-figs.

Boring, A. M. see Chang, T. K.

66.—Boulenger, G. A. Notice biographique sur Fernand Lataste. Proc. verb. Soc. linn. Bordeaux 86 2 1935 pp. 109-113.

67.—Boulenger, E. G. "Amphibia and Reptilia" in Regan's Natural History. (Popular.) London 1936 pp. 297-392.

68.—Braestrup, F. W. The distinctness of the Eremian Faunal Region. Nordiska naturforsk. Helsingfors 1936 pp. 1-2.

69.—Bragg, A. N. The ecological distribution of some North American Anura. Amer. Nat. 70 730 1936 pp. 459-466 maps.

70.—Bragg, A. N. Notes on the Breeding Habits, and Embryos of *Bufo cognatus* with a Description of the Tadpole. Copeia Ann Arbor 1936 pp. 14-20 text-figs.

71.—Brandis, G. Noch einiges zur Fortpflanzung von *Limnodynastes tasmaniensis*. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 64-65.

72.—**Brandt, B. B.** The Frogs and Toads of Eastern North Carolina. *Copeia Ann Arbor* 1936 pp. 215-223.

73.—**Brayna, W. F.** Exterminating snakes. *Field July* 1936 p. 215.

74.—**Brink, H. E.** Die Skildklier en Metamorphose by die Amphibia. *Ann. Univ. Stellenbosch (A.)* 14 1 1936 pp. 1-111 text-figs.

75.—**Broek, A. J. P. v. d.** Das Nierensystem der Vertebraten, eine theoretische Betrachtung. *Gegenbaurs morph. Jahrb. Leipzig* 77 1936 pp. 467-509 text-figs.

76.—**Broili, F.** Weitere Beobachtungen an *Ctenochasma*. *SitzBer. bayer. Akad. Wiss. Wien* 1936 1 pp. 137-156 text-figs.

77.—**Broili, F. & Schröder, J.** Beobachtungen an Wirbeltieren der Karrooformation. XV. Ein Therocephalier aus den unteren Beaufort-Schichten. *SitzBer. bayer. Akad. Wiss. Wien* 1936 1 pp. 1-20 text-figs.

78.—**Broili, F. & Schröder, J.** Beobachtungen an Wirbeltieren den Karrooformation. XX. Beobachtungen an *Erythrochamps* Haughton. XXI. Über *Procolophon* Owen. *S.B. bayer. Akad. Wiss. Wien* 1936 2 pp. 229-256 text-figs. & pls.

79.—**Brongersma, L. D.** Ein "neuer" Javanischer Fundort von *Phrynoglossus laevis laevis* (Gthr.). *Zool. Meded. Leiden* 18 1935 pp. 265-266.

80.—**Brongersma, L. D.** Herpetological note XIII [*Pseudothecadactylus, Dendroaspis*]. *Zool. Meded. Leiden* 19 1936 p. 136.

81.—**Broom, R.** Review of some recent work on South African fossil reptiles. *Ann. Transv. Mus.* 18 4 1936 pp. 397-413.

82.—**Broom, R.** The South African Procolophonina. *Ann. Transv. Mus.* 18 1936 pp. 387-391 text-figs.

83.—**Broom, R.** On the structure of the Skull of a new type of Dinoccephalian Reptile. *Proc. Zool. Soc. London* 1936 pp. 733-742 text-figs.

84.—**Broom, R.** On some New Genera and Species of Karroo Fossil

Reptiles, with notes on some others. *Ann. Transv. Mus.* 18 1936 pp. 349-386 text-figs.

85.—**Broom, R.** On the structure of the skull in the Mammal-like Reptiles of the Suborder Therocephalia. *Philos. Trans. London B* 226 529 1936 pp. 1-42 pls.

Busniza, T. see Dornesco, G. T.

86.—**Burt, C. E.** Notes on a collection of Lizards from Western Mexico and Tropical America. *Trans. Amer. micr. Soc. Menasha* 54 2 1935 pp. 167-178.

87.—**Burt, C. E.** A Key to the Lizards of the United States and Canada. *Kansas Acad. Science* 38 1935 pp. 255-305.

88.—**Burt, C. E.** The nomenclature of Western Coral King Snakes *Lampropeltis zonata* L. versus *L. multicincta*. *Copeia Ann Arbor* 1936 pp. 94-98.

89.—**Burt, C. E.** Contributions to the Herpetology of Texas. I. Frogs of the genus *Pseudacris*. *Amer. Midl. Nat. Notre Dame* 17 4 1936 pp. 770-775.

90.—**Burt, C. E.** Contributions to Texan herpetology. IV. Sand Snakes of the genus *Tantilla*. *Trans. Amer. micr. Soc. Menasha* 55 2 1936 pp. 239-243.

91.—**Cambrook, J. D.** Snake venom and its use in dental haemorrhage. *Proc. Roy. Soc. Med. (Odont.)* 29 1936 pp. 281-284 photos.

92.—**Camp, C. L.** Permian Vertebrates from New Mexico. *Proc. Geol. Soc. Amer.* (1935) 1936 p. 417.

93.—**Campo, R. M. del.** Contribuciones al conocimiento de la fauna de Actopan, Hgo. IV. Vertebrados observados en la época de las Secas. *An. Inst. Biol. Mexico* 7 2-3 1936 pp. 271-286 photos.

94.—**Campo, R. M. del.** Nota acerca de la distribución geográfica de los Reptiles ponzoñosos en Mexico. *An. Inst. Biol. Mexico* 6 3-4 1935 pp. 291-300.

95.—**Canella, M. F.** Metabolismo dei grassi e gestazione nei Vertebrati. Rassegna critica e osservazioni sul fegato e i corpi adiposi di *Seps chalcides* (Cuv.) Bonap. *Arch. zool. Torino* 23 1936 pp. 97-119.

96.—Carr, A. F. A key to the breeding-songs of the Florida Frogs. *Florida Nat.* 7 (2) 1934 pp. 19-23. [Non vidi.]

97.—Case, E. C. Description of a Collection of Associated Skeletons of *Trimerorhachis*. *Contr. Mus. Pal. Univ. Michigan* 4 13 1935 pp. 227-273.

98.—Case, E. C. A Nothosaur from the Trias of Wyoming. *Contr. Mus. Pal. Univ. Michigan* 5 1 1936 pp. 1-36.

Cernov, S. A. *see* Terentiev, P. V.

99.—Césari, E., & Boquet, P. Recherches sur les antigènes des venins et les anticorps des sérums antivenimeux. (2ième mémoire.) Venin de *Cerastes cornutus* et sérums antivipérins (*C. cornutus*). *Ann. Inst. Pasteur Paris* 56 2 1936 pp. 171-185.

100.—Césari, E., & Boquet, P. Recherches sur les antigènes des venins et les anticorps des sérums antivenimeux. (3ième mémoire.) Venin de *Naja tripudians* et sérum anticobraïque. *Ann. Inst. Pasteur Paris* 56 5 1936 pp. 511-534.

101.—Chang, M. L. Y. Note préliminaire sur la classification des Salamandres d'Asie orientale. *Bull. Soc. Zool. Fr.* 60 1936 pp. 424-427.

102.—Chang, M. L. Y. Contribution à l'étude morphologique, biologique et systématique des Amphibiens urodèles de la Chine. *Paris* 1936 156 pp. text-figs. & pls.

103.—Chang, T. K., & Boring, M. A. A survey of the Amphibia of Southeast China: An analysis of the basis of species distribution. *Peking Nat. Hist. Bull.* 10 1935-36 pp. 253-273.

104.—Chatterjee, B. M. The Anatomy of *Uraeotyphlus menon* Annandale. I. Digestive, Circulatory, Respiratory and Urino-genital systems. *Anat. Anz. Jena* 81 1936 pp. 392-414 text-figs.

Cheetham, R. W. S. *see* Berk, L.

105.—Chiang, T.-H. Sex differentiation in *Rana nigromaculata*. *Sci. Rep. Univ. Chekiang* 2 1 1936 pp. 99-104.

Chiang, T. H., *see* Tsai, B.

106.—Chiossi, E. Contributo alla conoscenza dei rapporti tra ghiandola parotide e labiale in *Tropidonotus natrix*. *Boll. Zool. Torino* 7 1936 pp. 13-15.

107.—Chope, R. P. Adder and its young. *Rep. Devons. Ass. Adv. Sci.* 68 1936 pp. 133-135.

108.—Chopra, R. N., Das, N. N. & Mukherjee, S. N. A study on the activation of tissue-growth (in vitro) with Cobra venom. *Ind. J. Med. Res.* 24 1936 pp. 267-271.

109.—Citterio, V. La cellule enterocromaffini in *Alligator mississippiensis*. *Arch. Zool. Torino* 22 1936 pp. 17-21.

Clark, E. L. *see* Clark, E. R.

110.—Clark, E. R., Clark, E. L., & Rex, O. R. Observations on polymorphonuclear leukocytes in the living animal. *Amer. J. Anat.* 59 1936 pp. 123-173 text-figs.

111.—Clausen, H. J. Observations on the Brown Snake *Storeria dekayi* (Holbrook), with especial reference to the habits and birth of the young. *Copeia Ann Arbor* 1936 pp. 98-102.

112.—Clausen, H. J. The effect of aggregation on the respiratory metabolism of the Brown Snake *Storeria dekayi*. *J. cell. comp. Physiol.* 8 1936 pp. 367-377.

Clausen, H. J. *see* Noble, G. K.

Clegg, J. *see* Wagstaffe, R.

113.—Collins, H. H. Morphological anomalies in the amphibian *Triturus viridescens*. *Proc. Penn. Acad. Sci.* 6 1932 pp. 165-167.

114.—Collins, H. H. Observations on the life history of the amphibian *Triturus viridescens* in Western Pennsylvania. *Proc. Penn. Acad. Sci.* 6 1932 pp. 164-165.

115.—Collins, R. L. & Lynn, W. G. Fossil Turtles from Maryland. *Proc. Amer. Phil. Soc. Philad.* 76 2 1936 pp. 151-173 pls.

116.—Conant, R. *Virginia valeriae* *valeriae* in Pennsylvania. *Herpetologica* 1 1936 No. 1. p. 17.

117.—Conant, R. & Bailey, R. M. Some herpetological records from Monmouth and Ocean Counties, New Jersey. *Occ. Pap. Mus. Zool. Univ. Michigan* No. 328 1936 pp. 1-10.

Conant, R. *see* Dunn, E. R.

118.—Cooper, K. W. Demonstration of a hatching secretion in *Rana pipiens* Schreber. *Proc. Nat. Acad. Sci. Washington* 22 6 1936 pp. 433-4.

119.—Corkill, N. L. Notes on Sudan Snakes. 40 pp. map. Khartoum 1935.

Corteggiani, E. *see* Gautrelet, J.

120.—Cowles, R. B. Casual notes on the Poikilothermous Vertebrates of the Umzumbi Valley, Natal, South Africa. *Copeia Ann Arbor* 1936 pp. 4-8.

121.—Cowles, R. B. & Bogert, C. M. The herpetology of the Boulder Dam Region (Nev., Ariz., Utah). *Herpetologica Chicago* 1 1936 pp. 33-42.

122.—Craigie, E. H. Notes on cyto-architectural features of the Lateral Cortex and related parts of the Cerebral Hemisphere in a series of Reptiles and Birds. *Trans. roy. Soc. Can.* (3) 30 5 1936 pp. 87-113 pls.

123.—Creaser, C. W. & Gorbman, A. Specificity of the pituitary gonadotropic factor as demonstrated in Amphibia. *Copeia Ann Arbor* 1936 pp. 91-94.

124.—Crookshank, H. The Gondwana System Fossils in the Mahadevas Mem. geol. Surv. Ind. 66 2 1936 p. 238.

125.—Cunha, J. G. de Barros E. Ofidios de Massangulo, Distrito do Niassa. *Mem. Mus. Zool. Coimbra* (1) 83 1935 pp. 1-16.

126.—Cunningham, B. & Hurwitz, A. P. Water absorption by Reptile Eggs during incubation. *Amer. Nat.* 70 731 1936 pp. 590-595.

127.—Cyrén, O. Ormar i fantasi och verklighet. (Popular.) Stockholm 1934 249 pp.

Cyren, O. *see* Lantz, L. A.

Das, N. N. *see* Chopra.

128.—Davies, A. M. Tertiary Faunas. London 1935 I 406 pp. text-figs.

129.—Davis, A. G. The London Clay at Sheppey and the Location of its Fossils. *Proc. Geol. Ass. London* 47 4 1936 p. 334.

130.—Davis, D. D. The distribution of Bidder's organ in the Bufonidae. *Zool. Ser. Field Mus. Nat. Hist.* 20 1936 pp. 115-125.

131.—Davis, D. D. The terminology of Reptilian musculature. *Herpetologica* I 1936 pp. 12-17.

132.—Davis, D. D. Courtship and mating behavior in Snakes. *Zool. Ser. Field Mus. N.H.* 20 1936 pp. 257-290 text-figs.

133.—Dawson, A. B. Changes in the lateral-line organs during the life of the newt, *Triturus viridescens*. A consideration of the endocrine factors involved in the maintenance of differentiation. *J. exp. Zool. Philadelphia* 74 1936 pp. 221-237 3 pls. text-figs.

Demnitz, A. *see* Bieling, R.

134.—Dempster, W. T. The brain case and endocranial cast of *Eryops megalcephalus* (Cope). *J. comp. Neurol.* 62 1935 pp. 171-196 text-figs.

135.—Denis, J. Observations sur l'altitude atteinte par les vipères dans les Pyrénées. *Bull. Soc. zool. Fr.* 61 1936 pp. 404-405.

136.—Deraniyagala, P. E. P. The snake *Oligodon albiventer* (Günther). *Ceylon J. Sci. (B)* 20 1 1936 pp. 89-91.

137.—Deraniyagala, P. E. P. A Boa new to Ceylon. *Ceylon J. Sci. B* 19 1936 pp. 336-337 text-fig.

138.—Deraniyagala, P. E. P. The nesting habits of the Leathery Turtle. *Ceylon J. Sci. B* 19 1936 pp. 331-336 text-figs.

139.—Deraniyagala, P. E. P. Some postnatal changes in the Leathery Turtle. *Ceylon J. Sci. B* 19 1936 pp. 225-239 pls.

140.—Deraniyagala, P. E. P. A further comparative study of *Caretta gigas*. *Ceylon J. Sci. B* 19 1936 pp. 241-251 text-figs.

141.—Deraniyagala, P. E. P. A new Crocodile from Ceylon. *Ceylon J. Sci. B* 19 1936 pp. 279-286 text-figs. & pls.

142.—Deraniyagala, P. E. P. Reproduction of the Estuarine Crocodile of Ceylon. *Ceylon J. Sci. B* 19 1936 pp. 254-277 text-figs. & pls.

143.—Dérognat, M. Les oeufs fossiles de Dinosaurs. *Terre et la Vie Paris* (2) 5 6 1935 pp. 195-201 text-figs.

144.—Deshpande, D. S. A report of a Bull-Frog (*Rana tigrina*) devouring a Sparrow. *Proc. Indian Sci. Congr. Calcutta* 22 1935 pp. 321-322.

145.—Dill, D. B., Edwards, H. T., Bock, A. V. & Talbot, J. H. Properties of Reptilian blood. III. The Chuckwalla (*Sauromalus obesus*, Baird). J. Cell. Compar. Physiol. **6** 1935 pp. 37–42.

146.—Dill, D. B. & Edwards, H. T. Properties of Reptilian blood. IV. The Alligator (*Alligator mississippiensis* Daudin). J. cell. comp. Physiol. **6** 1935 pp. 243–254.

Dill, D. B. see Edwards, H. T.

147.—Ditmars, R. L. The Reptiles of North America. [Popular.] New York 1936 476 pp. pl. & col.-pls.

148.—Dittus, P. Interrenalsystem und chromassine Zellen im Lebensablauf von *Ichthyophis glutinosus* L. Z. wiss. Zool. Leipzig **147** 1936 pp. 459–512 text-figs.

149.—Dornesco, G. T. & Busnita, T. Sur la nature de l'appareil de Golgi des cellules nerveuses des Ganglions Spinaux de la Grenouille. Arch. Anat. micr. Paris **31** 3 1935 pp. 417–450 text-figs.

150.—Drehobl, O. Beiträge zur Haltung und Pflege aquatischer Schildkröten. Blätt. Aquar. Terr. Stuttgart **47** 1936 pp. 129–133 text-fig.

151.—Dunn, E. R. Notes on North American *Leptodeira*. Proc. Nat. Acad. Sci. **22** 1936 pp. 689–698.

152.—Dunn, E. R. Notes on American Mabuyas. Proc. Acad. Nat. Sci. Philad. **87** 1935 (1936) pp. 533–557.

153.—Dunn, E. R. The Amphibians and Reptiles of the Mexican expedition of 1934. Proc. Acad. Nat. Sci. Philad. **88** 1936 pp. 471–477.

154.—Dunn, E. R. & Conant, R. Notes on Anacondas, with descriptions of two new species. Proc. Acad. Nat. Sci. Philad. **88** 1936 pp. 503–506 pl.

155.—Dunn, E. R. & Piatt, J. A new *Amphisbaena* from Brazil. Proc. Acad. Nat. Sci. Philad. **88** 1936 pp. 527–528.

156.—Eaton, T. H. The myology of Salamanders with particular reference to *Dicamptodon ensatus* (Eschscholtz). J. Morph. Philadelphia **60** 1936 pp. 31–72 text-fig. pl.

157.—Edwards, H. T. & Dill, D. B. Properties of Reptilian blood. II. The

Gila monster (*Heloderma suspectum* Cope). J. cell. comp. Physiol. **6** 1935 pp. 21–35.

Edwards, H. T. see Dill, D. B.

158.—Eggert, B. Zur Morphologie und Physiologie des Ultimobranchialen Körpers der Eidechsen. Zool. Anz. Leipzig **114** 1936 pp. 119–128 text-figs.

159.—Eggert, B. Zur Morphologie und Physiologie der Eidechsen-Schilddrüse. II. Über die Wirkung von hohen und niedrigen Temperaturen, von Thyroxin und von thyreotropem Hormon auf die Schilddrüse. Z. wiss. Zool. Leipzig **147** 1936 pp. 537–594 text-figs.

160.—Eggert, B. Zur Morphologie und Physiologie der Eidechsen-Schilddrüse. III. Über die nach Entfernung der Schilddrüse auftretenden allgemeinen Ausfallserscheinungen und über die Bedeutung der Schilddrüse für die Häutung und für die Kältstarre. Z. Wiss. Zool. Leipzig **148** 1936 pp. 221–260 text-figs.

161.—Eggert, B. Zur Entwicklungsphysiologie der epithelkörper von *Triton alpestris* Laur. und *Salamandra maculosa* Laur. Arch. Entw. Mech. Org. Berlin **135** 1936 pp. 269–281 text-figs.

162.—Ekman, G. Organisatorer i den embryonala ulvecklingen. Forh. skand. naturf. Mete. **19** 1936 pp. 124–128 text-figs.

163.—Emelianow, S. W. Die Morphologie der Tetrapodenrippen. Zool. Jahrb. Jena Anat. **62** 1936 pp. 173–274 text-figs.

164.—Emmel, L. Freilebende Schildkröten in der näheren Umgebung von Frankfurt a. M. (Eukheimer Ried). Nat. u. Volk **66** 10 1936 pp. 544–546 pls.

165.—Etkin, W. The phenomena of Anuran metamorphosis. J. Morph. Philadelphia **59** 1936 pp. 69–88 text-figs. 1 pl.

166.—Evans, Ll. T. The development of the Choledochus and Pancreatic ducts in the Gecko, *Gymnodactylus kotschyi*. Z. Anat. EntwGesch. Berlin **104** 1935 pp. 258–265 text-figs.

167.—Evans, L. T. Mechanical factors involved in the development of the Viscera of the Gecko, *Gymnodactylus kotschy*. Z. Anat. EntwMech. 106 1936 pp. 11–19 text-figs.

168.—Evans, L. T. Social behavior of the normal and castrated Lizard, *Anolis carolinensis*. Science N.Y. 83 2144 1936 p. 104.

169.—Evans, L. T. The development of the cochlea in the Gecko, with special reference to the cochlea-lagena ratio and its bearing on vocality and social behaviour. Anat. Rec. Philadelphia 64 1936 pp. 187–201 text-figs.

Fankhauser, G. see Harvey, E. N.

170.—Faouzi, H. On the occurrence of the Leathery Turtle, *Dermochelys coriacea* Linn. in Egyptian Mediterranean Waters. Proc. Zool. Soc. London 1936 (1937) p. 1175.

171.—Fejérváry, G. J. de. Notes on a very little-known lizard: *Lacerta princeps* Blanfr., with description of the male specimen preserved in the Vienna Natural History Museum. Ann. hist.-nat. Mus. Hung. 30 1936 pp. 1–21 pl.

172.—Fejérváry, G. J. de. Apró Közlemények. Mit tudunk a Komodói óriás gyikről? Term. Tud. Közl. Budapest 59 1927 pp. 283–285 photo.

173.—Ferreira, J. B. O Ofidismo. No seu aspecto histórico e actual. Acad. Cien. Lisboa 1935 47 pp. photos.

174.—Fisher, E. M. Some observations on *Xantusia vigilis* Baird. Copeia Ann Arbor 1936 pp. 172–176 text-fig.

175.—Fitch, H. S. Amphibians and Reptiles of the Rogue River Basin, Oregon. Amer. Midl. Nat. Notre Dame 17 3 1936 pp. 634–652.

176.—Fitch, H. S. Natural History of the Alligator Lizards. Trans. Acad. Sci. St. Louis 29 1 1935 pp. 3–38 pls.

177.—Flower, S. S. Further notes on the duration of life in Animals.—II. Amphibians. Proc. Zool. Soc. London 1936 pp. 369–394.

178.—Force, E. R. The relation of the knobbed anal keels to age and sex in the Lined Snake (*Tropidoclonion lineatum*). Pap. Mich. Acad. S. A. L. 21 1935 (1936) pp. 613–617.

179.—Fox, D. L. Structural and chemical aspects of animal coloration. Amer. Nat. 70 730 1936 pp. 477–493.

180.—Franzi, L. Sul meccanismo d'azione di alcuni veleni ofidici. Arch. Fisiol. 35 1936 pp. 466–498.

181.—Fraser, A. G. The Snakes of Deolali. J. Bombay N.H. Soc. 39 1936 pp. 58–82 text-figs. & pl.

182.—Freytag, G. Über die systematische Stellung des *Tylosotriton kweichowensis* Fang and Chang. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 30–32 text-figs.

183.—Frothingham, L. Observations on young Box Turtles. Bull. Boston Soc. Nat. Hist. No. 78 1936 pp. 3–8 photos.

184.—Fu, T. S. Study of the Amphibians of Honan. Bull. Fan Memorial Inst. Biol. Peiping 6 5 1936 pp. 239–254.

185.—Fuchs, H. Von dem *Ductus angularis oris* der Arrauschildkröte. Nachr. Ges. Wiss. Göttingen (6) 1 Biol. 1931 pp. 131–147 text-figs.

186.—Fulchignoni, E. Effetti del veleno crotalico sulla capacità di lavoro del Gastrocnemio isolato di *Rana*. Arch. Fisiol. 35 1936 pp. 377–387 text-figs.

187.—Gaige, H. T. Some Reptiles and Amphibians from Yucatan and Campeche, Mexico. Carnegie Inst. Wash. Pub. No. 457 pp. 289–304.

188.—Galgano, M. Intorno all'influenza del clima sulla spermatogenesi di *Rana esculenta*, L. Arch. ital. Anat. 35 1936 pp. 511–541 text-figs.

189.—Ganguly, S. N. Studies on Indian snake venoms. Part III. Enzymes in Daboia and Cobra venoms. Ind. J. med. Res. 24 1936 pp. 287–294.

190.—Ganguly, S. N. and Malkana, M. T. Studies on Indian snake venoms. Part II. Cobra venom: its chemical composition, protein fractions and their physiological actions. Ind. J. med. Res. 24 1936 pp. 281–286.

191.—Ganguly, S. N. & Malkana, M. T. Studies of Indian snake venoms. Part I. Daboia venom: its chemical composition, protein fractions and their physiological action. Ind. J. Med. Res. 23 1936 pp. 997–1006.

192.—Gautrelet, J., Halpern, N. & Corteggiani, E. Action du venin de *Vipera aspis* sur la température et les échanges respiratoires; action antagoniste de l'a-dinitrophénol. C.R. Soc. Biol. Paris **121** 4 1936 pp. 319–321.

193.—Gicklhorn, J. Der Weg und die Veränderungen des Harnstoffs in der Niere von *Salamandra maculosa*. Protoplasma Leipzig **26** 1 1936 pp. 70–89 text-figs.

194.—Gigoux, E. E. Sobre los Saurofidos Chilenos. Riv. Univ. Santiago **21** 1 1936 pp. 63–68.

195.—Gilbert, P. A. The Black Snake (*Pseudechis porphyriacus*). Proc. Roy. Zool. Soc. N.S. Wales 1935 pp. 34–37.

196.—Gilmore, C. W. Osteology of *Apatosaurus* with special reference to specimens in the Carnegie Museum. Mem. Carnegie Mus. **11** 4 1936 pp. 175–294 text-figs. & pls.

197.—Giovannoli, L. *Scaphiopus holbrookii* in Kentucky. Copeia Ann Arbor 1936 p. 69.

198.—Gislén, T. On the history of evolution and distribution of the European Pelobatids. Zoogeogr. Jena **3** 1936 pp. 119–131 text-figs.

199.—Gislén, T. Ett par Skånska grodor. Skånes Nat. **22** 1935 pp. 125–142 figs.

200.—Githens, T. S. Studies on the venoms of North American Pit Vipers. J. Immunol. Baltimore **29** 1935 pp. 165–173.

201.—Gloyd, H. K. The status of *Crotalus unicolor* Van Lidth de Jeude and *Crotalus pulvis* Ditmars. Herpetologica Chicago **1** 1936 pp. 65–68.

202.—Gloyd, H. K. The subspecies of *Crotalus lepidus*. Occ. Pap. Mus. Zool. Mich. No. 337 1936 pp. 1–5 pl.

203.—Gloyd, H. K. A Mexican subspecies of *Crotalus molossus* Baird & Girard. Occ. Pap. Mus. Zool. Mich. No. 325 1936 pp. 1–5.

204.—Gnanamuthu, C. P. The respiratory mechanism of the frog. J. exp. Zool. Philadelphia **74** 1936 pp. 157–165 text-figs.

205.—Goff, C. C. Distribution and variation of a new subspecies of Water Snake, *Natrix cyclopion floridana*, with

a discussion of its relationships. Occ. Pap. Univ. Zool. Mich. No. 327 1936 pp. 1–10 map.

Gorbman, A. see Creaser, C. W.

206.—Grant, C. Herpetological notes from Northern Indiana. Proc. Indiana Acad. Sci. **45** 1936 pp. 323–333.

207.—Grant, C. Secondary sexual differences and notes on the Mud Turtle, *Kinosternon subrubrum* in Northern Indiana. Amer. Mid. Nat. San Diego **16** 5 1935 pp. 798–800.

208.—Grant, C. Breeding of *Pseudemys elegans* in California and notes on other captive Reptiles. Copeia Ann Arbor 1936 pp. 112–113.

209.—Grant, C. Two New Reptilian Records from Jost van Dyke, B.V.I., with Notes on Distribution and Squamation. Copeia Ann Arbor 1936 pp. 9–14.

210.—Grant, C. The Southwestern Desert Tortoise, *Gopherus agassizi*. Zoologica New York **21** 1936 pp. 225.

211.—Grant, C. An extraordinary Tortoise shell. Copeia Ann Arbor 1936 pp. 231–232 text-fig.

212.—Grasset, E. & Zoutendyk, A. The antigenic characteristics and relationship of Viperine Venoms based on the cross neutralizing action of heterologous antivenomous sera. Trans. Soc. Trop. Med. Hyg. Lond. **30** 3 1936 pp. 347–354.

213.—Gray, P. The development of the Amphibian kidney. Part III. The post-metamorphic development of the kidney, and the development of the vasa efferentia and seminal vesicles in *Rana temporaria*. Quart. J. micr. Sci. London N.S. **78** 3 1936 pp. 445–473 text-figs. & pls.

214.—Greenhall, A. M. A cannibalistic Hog-Nose Snake. Copeia Ann Arbor 1936 p. 171.

215.—Gregorio, A. de. Monografia dei Fossili Liassici di Monte San Giuliano conservato nel mio privato gabinetto geologico. Ann. Géol. Paléont. Palermo **53** 1930 pp. 1–57 pls.

216.—Gressitt, J. L. New reptiles from Formosa and Hainan. Proc. biol. Soc. Washington **49** 1936 pp. 117–121.

217.—Grijs, P. de. *Prionodactylus rahmi*, eine neue Eidechse aus den Anden. Zool. Anz. Leipzig **116** 1936 pp. 27-30.

218.—Grobbelaar, C. S. The musculature of the pipid genus *Xenopus*. S. Afr. J. Sci. Cape Town **32** 1935 p. 395.

219.—Guiher, R. E. A comparative study of the Mesenteries of three species of the genus *Triturus*. Proc. Penn. Acad. Sci. **9** 1935 pp. 110-112.

220.—Haas, G. Über das kopfskelett von *Chalcides guentheri* (*Seps monodactylus*). Acta zool. Stockholm **17** 1936 pp. 55-74 text-figs.

221.—Haas, G. Zum bau des Primordialcraniums und des Kopfskelettes von *Ablepharus pannonicus*. Acta Zool. **16** 1935 pp. 409-429 text-figs.

222.—Habernoll, A. Natur und Bedeutung der tierbedingten Unfälle in Deutschland. SitzBer. Ges. naturf. Fr. Berlin 1935 8-10 1936 pp. 403-441.

223.—Hall, L. B. Smooth Snakes in captivity. Field Feb. **1** 1936 p. 238.

Halpern, N. see Gautrelet, J.

224.—Halton, W. L. Alabama reptiles. Mus. Pap. Alabama Mus. Nat. Hist. **11** 1931 pp. 1-145.

225.—Hamburger, V. The larval development of reciprocal species hybrids of *Triton taeniatus*, Leyd. (and *Triton palmatus*, Duges) × *Triton cristatus*, L'aur. J. exp. Zool. Philadelphia **73** 1936 pp. 319-373 4 pls. text-figs.

226.—Hanaoka, K-I. Experiments on the nuptial coloration of the common Japanese newt, *Triturus pyrrhogaster* (Boie). J. Fac. Sci. Hokkaido Univ. Zool. **5** 1936 pp. 113-119 text-figs.

227.—Hanut, C. J. Recherches préliminaires sur l'emploi des solutions diluées de venin de *Bothrops atrox* comme hemostatiques. C.R. Soc. biol. Paris **123** 36 1936 pp. 1232-1234.

228.—Hanut, C. J. Recherches préliminaires sur l'emploi comme hémostatiques, des mélanges de venin de *Bothrops atrox* et de sérum antithrombotique. C.R. Soc. biol. Paris **123** 36 1936 pp. 1234-1235.

229.—Hanut, C. J. La coagulation in vitro du plasma par les venins des *Bothrops* dépend - elle uniquement d'une action thrombotique. C.R. Soc. Biol. Paris **122** 22 1936 pp. 796-798.

230.—Hanut, C.-J. Le "plasma de venin" de *Bothrops atrox* peut-il servir à l'étude de la transformation du prosérozyme en sérozyme? C.R. Soc. biol. Paris **123** 29 1936 pp. 517-519.

231.—Harvey, E. N. & Fankhauser, G. The tension at the surface of the eggs of the Salamander, *Triturus* (*Diemyctylus*) *viridescens*. J. cell. comp. Physiol. Phila. **3** 1933 pp. 463-473.

Hassler, W. G. see Noble, G. K.

232.—Heller, F. Eine oberpliocene Wirbeltierfauna aus Rheinhessen. N. Jahrb. Min. Geol. Paläont. Stuttgart **76** 1 1936 p. 99.

233.—Hellmich, W. Zur näheren Analyse der geographischen Variabilität. Forsch. u. Fortschr. **10** 1934 pp. 358-359.

234.—Hellmich, W. Über ein merkwürdiges Verhalten eines Salamanders (*Salamandra salamandra almanzoris*). Blätt. Aquar. Terr. Stuttgart **47** 1936 pp. 103-105.

235.—Hellmich, W. Auf durch- und kriechtierfang in zentral-spanischen Gebirgen. Blätt. Aquar. Terr. Stuttgart **46** 1935 pp. 251-256 photos.

Hellmich, W. see Müller, L.

236.—Hennig, E. Ein Dentale von *Kentrurosaurus aethiopicus* Hennig. Palaeontographica Stuttgart Suppl. **7** 1 2 3 1936 pp. 309-312 text-figs.

237.—Hennig, W. Über einige Gesetzmäßigkeiten der geographischen Variation in der Reptiliengattung *Draco* L.: "parallele" und "konvergente" Rassenbildung. Biol. Zbl. Leipzig **56** 9 & 10 1936 pp. 549-560.

238.—Hennig, W. Revision der gattung *Draco* (Agamidae). Temminckia Leiden **1** 1936 pp. 153-220 text-figs. & maps.

239.—Herklots, G. A. C. Land Snakes of Hongkong. Part III. Hong Kong Nat. **6** 3 & 4 1935 pp. 192-206 text-figs. & pls.

Herre, W. see Wolterstorff, W.

240.—Herrick, C. J. A topographic analysis of the Thalamus and Midbrain of *Amblystoma*. J. comp. Neurol. 62 1935 pp. 239–260.

241.—Hibbard, C. W. & Leonard, A. B. The occurrence of *Bufo punctatus* in Kansas. Copeia Ann Arbor 1936 p. 114.

242.—Hickok, W. O. & Willard, B. Dinosaur foot tracks near Yocumtown, York County, Pennsylvania. Proc. Penn. Acad. Sci. 7 1933 pp. 55–58 text-figs.

243.—Hilsman, H. M. Seasonal changes in the Gonads of the amphibian, *Triturus viridescens*. Proc. Penn. Acad. Sci. 6 1932 pp. 174–178.

Hines, M. see Mather, V.

Hirano, T. see Sato, M.

244.—Holden, H. F. The absorption spectra in some modified Snake Venoms. Aust. J. exper. Biol. med. Sci. Adelaide 14 2 1936 pp. 121–130.

245.—Hoover, E. E. On the birth of a *Constrictor constrictor imperator* in captivity. Copeia Ann Arbor 1936 p. 62.

Horié, H. see Uchida, T.

246.—Howell, A. B. Morphogenesis of the shoulder architecture. Part IV. Reptilia. Quart. Rev. Biol. Baltimore 11 2 1936 pp. 183–208 text-figs.

247.—Huene, F. F. von. Ein Stahlickeria-Schädel. Cbl. Min. Geol. Paläont. Stuttgart 11 1936 p. 507.

248.—Huene, F. F. von. Ein grosser *Pliosaurus* aus dem schwäbischen Ornamenten. Jb. Ver. vaterl. Naturk. Württemb. 90 1934 pp. 31–46 text-figs.

249.—Huene, F. F. von. *Henodus chelyops*, ein neuer Placodontier. Palaeontographica Stuttgart 84B 4–6 1936 pp. 99–147 text-figs.

250.—Huene, F. F. von. Übersicht über Zusammensetzung und Bedeutung der Thecodontia. Cbl. Min. Geol. Paläont. Stuttgart 4 1936 p. 162.

251.—Huene, F. F. von. The Constitution of the Thecodontia. Amer. J. Sci. New Haven (5) 32 189 1936 pp. 207–217.

252.—Huene, F. F. von. Neue Fährten aus der Trias. Cbl. Min. Geol. Paläont. Stuttgart B 7 1935 p. 290.

253.—Huene, F. F. von. Ichthyosaurierreste aus Timor. Cbl. Min. Geol. Paläont. Stuttgart B8 1936 p. 327.

254.—Huene, F. F. von. Die Fossilen Reptilien des Südamerikanischen Gondwanalandes an der Zeitenwende. Ergebnisse der Sauriergrabungen in Südbrasilien 1928–29. Lief. II. Tübingen 1936 pp. 93–159 text-figs. & pls.

255.—Huene, F. von. Kurze Übersicht über die Geschichte der Vertebraten. Eine graphische Darstellung. Paläont. Z. Berlin 18 3/4 1936 pp. 198–201.

256.—Huene, F. F. von. Neue Beobachtungen an *Mixosaurus*. Paläont. Z. Berlin 17 3–4 1935 pp. 159–162 text-figs.

257.—Hull, J. E. Concerning two British Snakes. Vasculum Newcastle 22 2 1936 pp. 55–59.

258.—Humphrey, R. R. Notes on altitudinal distribution of Rattlesnakes. Ecology Brooklyn 17 2 1936 pp. 328–329.

259.—Humphrey, R. R. Studies on sex reversal in *Amblystoma*. J. exp. Zool. Philadelphia 73 1936 pp. 1–22 3 pls. text-figs.

Hurwitz, A. P. see Cunningham, B.

260.—Ide-Rozas, A. Die cytologischen verhältnisse bei der regeneration von Kaulquappenextremitäten. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 552–608 text-figs.

261.—Irichimowitsch, A. I. Die gesetzmässigkeiten des Wachstums während der Metamorphose bei Amphibien. II. Biol. Zbl. Leipzig 56 11–12 1936 pp. 639–656 text-figs.

262.—Jacobi, L. Ovoviviparie bei einheimischen Eidechsen. Vergleichende untersuchungen an den Eiern und am Ovidukt von *Lacerta agilis*, *Lacerta vivipara* & *Anguis fragilis*. Z. wiss. Zool. Leipzig 148 1936 pp. 401–464.

263.—Janensch, W. Über Bahnen von Hirnvenen bei Saurischiern und Ornithischiern, sowie einigen anderen fossilen und rezenten Reptilien. Paläont. Z. Berlin 18 3/4 1936 pp. 181–198 text-figs.

264.—Janensch, W. Ein aufgestelltes Skelett von *Dicraeosaurus hansemanni*. Palaeont. Stuttgart Suppl. 7 1 2 1935 pp. 301–308 pls.

265.—Jewett, S. G. Notes on the Amphibians of the Portland, Oregon, area. Copeia Ann Arbor 1936 pp. 71–72.

266.—Jones, R. N. C. An encounter with a Hamadryad (*Naia bungarus*). J. Bombay N.H. Soc. 39 1936 p. 185.

Jones, W. B. see Aldrich, T. H.

267.—Jürgens, W. Der madagassische Hundskopfschlinger, *Corallus madagascariensis*. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 32–35 photo.

268.—Kanberg, H. Ueber einige zum Teil seltene Schildkröten aus Indien, China und Ost-Africa. Aquar. Berlin 10 1936 pp. 185–189 photos.

269.—Katznelson, Z. S. Über die Entwicklungsquellen des latero-ventralen Teiles der Rumpfmuskeln sowie der Kaudalen Muskulatur bei Amphibien. C.R. Acad. Sci. Moscou N.S. 1935 4 4–5 pp. 211–213; and again in C.R. Acad. Sci. Leningrad 2 1 1935 pp. 64–67.

270.—Katznelson, Z. S. Untersuchungen über die Entwicklung der myotomalen Muskulatur der Urodelen. C.R. Acad. Sci. Leningrad N.S. 4 1–2 1935 pp. 51–54 figs.

271.—Katznelson, Z. S. Die Teilung der Kerne in der Myogenese. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 427–442.

272.—Katznelson, Z. S. Entwicklung der myotomalen Muskulatur bei Urodela. Z. mikr. anat. Forsch. Leipzig 40 1936 pp. 474–530 text-figs.

273.—Kauffeld, C. F. New York the type locality of *Rana pipiens* Schreber. Herpetologica I 1936 p. 11.

274.—Kaywin, L. A cytological study of the digestive system of anuran larvae during accelerated metamorphosis. Anat. Rec. Philadelphia 64 1936 pp. 413–437 2 pls.

275.—Kellaway, C. H. & Le Messurier, D. H. The vaso-depressant action of the Venom of the Australian Copperhead (*Denisonia superba*). Aust. J. exper. Biol. med. Sci. Adelaide 14 1 1936 pp. 57–76.

276.—King, W. A new Salamander (*Desmognathus*) from the Southern Appalachians. Herpetologica Chicago 1 1936 pp. 57–60 figs.

277.—Kingham, J. R. Reptiles and Amphibians from Princess Charlotte Bay, North Queensland. Rec. S. Aust. Mus. Adelaide 5 3 1935 p. 366.

278.—Klauber, L. M. A Key to the Rattlesnakes with summary of characteristics. Trans. San Diego Soc. Nat. Hist. 8 1936 pp. 185–276.

279.—Klauber, L. M. A statistical study of the Rattlesnakes. Occ. Pap. San Diego Soc. Nat. Hist. No. 1 1936 pp. 1–24.

280.—Klauber, L. M. *Crotalus mitchellii*, the Speckled Rattlesnake. Trans. San Diego Soc. Nat. Hist. 8 1936 pp. 149–184 2 pls. figs.

281.—Klauber, L. M. The Californian King Snake, a case of pattern dimorphism. Herpetologica I 1936 pp. 18–27.

282.—Klauber, L. M. Horned Toads of the *coronatum* group. Copeia 1936 pp. 103–110.

283.—Kleinholz, L. H. Studies in reptilian color changes. I. A preliminary report. Proc. Nat. Acad. Sci. Washington 22 7 1936 pp. 454–456.

284.—Klingelhöffer, W. Glashauser für Terrarien. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 82–91 text-figs. photos.

285.—Klobusitzky, D. von & König, P. Biochemische Studien über die Gifte der Schlangengattung *Bothrops*. Arch. exp. Path. Pharmac. 1936 181 pp. 387–398 & 182 pp. 577–583.

286.—Knouf, R. A. The developmental pattern of ectodermal placodes in *Rana pipiens*. J. comp. Neurol. 62 1935 pp. 17–65 text-figs.

287.—Knowlton, G. F. Lizard digestion studies. Herpetologica I 1936 pp. 9–10.

288.—Knowlton, G. F. & Thomas, W. L. Food habits of Skull Valley Lizards. Copeia No. 1 1936 pp. 64–65.

289.—Kolosvary, G. v. & Szalai, T. Die Veränderungen des Erdkörpers und die Evolution des Lebens. Festschrift f. Embrik Strand 1 pp. 84–97 Riga 1936.

Konz, W. see Wieland, H.

- 290.—Kopstein, F. Herpetologische notizen. XII. Ein Beitrag zur Herpetofauna von Celebes. XIII. Ueber *Vipera russelli* von Java. XIV. Ueber die Jugend form von *Dendrelaphis pictus inornatus* Blgr. XV. Ueber *Bungarus javanicus* Kopst. Treubia Buitenzorg 15 3 1936 pp. 255-266 pl.
- 291.—Korschelt, E. Vergleichende Entwicklungsgeschichte der Tiere. 2 vols. 1314 pp. text-figs. Jena 1936.
- 292.—Krassawzeff, B. A. Zur Biologie von *Bufo bufo bufo* L. Archiv f. Hydrobiologie 24 1932 p. 185.
- 293.—Krull, H. Beobachtungen an *Trimeresurus (Lachesis) wagleri* Boie. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 154-159 photos.
- 294.—Kuhn, O. Über morphogenetische Schilddrüsenhormonwirkungen in frühen Entwicklungsstadien. Nachr. Ges. Wiss. Göttingen (6) 1 Biol. 1933 pp. 13-35.
- 295.—Kuhn, O. Fossilium Catalogus. I. Animalia. Part 75: Crocodilia. The Hague 1936 144 pp.
- Kumpf, K. F. *see* Noble, G. K.
- 296.—Kunst, J. Vergleichende Untersuchungen an Anurenieren insbesondere an der Niere von *Xenopus laevis* Daud. Zool. Jahrb. Jena (Anat.) 61 1936 pp. 51-76 text-figs.
- 297.—Kusuki, Y. An experiment on the water balance in a salamander. J. Fac. Sci. Hokkaido Univ. Zool. 4 1936 pp. 143-158.
- 298.—Ladeiro, J. M. Um caso de atlodimia no *Tropidonotus natrix* Linn. Mem. Mus. Zool. Coimbra (IV) 2 1935 pp. 1-4 photo.
- 299.—Laféteur, F. Sur des ossements de Téléosaure du Corallien de l'Île de Ré. Ann. Soc. Sci. nat. Charente-Inf. N.S. 1 6 1933 pp. 113-120 pls.
- 300.—Lambert, P. P. Contribution à l'hystophysiologie rénale chez les Urodèles. Arch. Biol. Liège 47 1936 pp. 125-178 text-figs.
- 301.—Langelaan, J. W. On the nuclei of the striped muscle fibre of the frog. Arch. néerl. Sci. Ser. III C 21 1 1936 pp. 1-5 text-figs.
- 302.—Langelaan, J. W. On the texture of the muscle-fibre. Arch. néerl. Sci. Ser. III C 21 1 1936 pp. 6-17 text-figs.
- Lantz, L. A. *see* Wolterstorff, W.
- 303.—Lantz, L. A. & Cyrén, O. Contribution à la connaissance de *Lacerta saxicola* Eversmann. Bull. Soc. zool. Fr. 61 1936 pp. 159-181 text-figs.
- 304.—Larsen, A. De brune Frøers og Løvfroens Forekomst paa Bornholm. Flora og Fauna Kjøbenh. 42 5 1936 p. 136.
- 305.—Laurent, P. Contribution à la connaissance de la faune des Vertébrés du Maroc (Batraciens, Reptiles). Bull. Soc. Hist. nat. Alger. 26 9 1935 pp. 344-348.
- 306.—Lederer, G. (*Dasypeltis scabra*, L.), eine dermerkwürdigsten Schlangen. Aquar. Berlin 10 1936 pp. 37-38.
- 307.—Lederer, G. Beobachtungen an Klapperschlangen. Zool. Garten Leipzig 8 1936 pp. 132-136.
- 308.—Leese, R. G. & Rawlins, S. P. The three British Snakes. Field 1936 p. 32 photo.
- 309.—Lehmensick, R. Die Regulation einer natürlich entstandenen Skelettanomalie bei einem Varan (*Varanus niloticus*) nebst Bemerkungen zur Homologiefraage. Gegenbaurs morph. Jahrb. Leipzig 78 1936 pp. 36-47 text-figs.
- 310.—Leigh, S. J. Age and Growth of Pythons. Field 1936 p. 404 photo.
- 311.—Leigh, S. J. Breeding of Pythons. Field Dec. 1936 p. 1556.
- Le Messurier, D. H. *see* Kellaway, C. H.
- Lenke, *see* Rosenfeld.
- Leonard, A. B. *see* Hibbard, C. W.
- Liao, K. M. *see* Tehang, T. L.
- 312.—Linsdale, J. Variation in the Dotted Burrowing Snake, *Chilomeniscus stramineus*. Copeia Ann Arbor 1936 pp. 232-234.
- Liosner, L. D. *see* Woronzowa, M. A.
- 313.—Lipsett, J. C. & Piatt, J. Experimental Hybridization of *Triturus v. viridescens* and *Triturus v. symmetrica*. Copeia Ann Arbor 1936 pp. 1-3.
- 314.—Liu, C.-C. Secondary sex characters of Chinese Frogs and Toads. Field Mus. Nat. Hist. Zool. 22 1936 pp. 115-156 pls.

- 315.—Lloyd, B. The distribution of the Grass Snake in Hertfordshire, with notes on its behaviour. Trans. Herts. nat. Hist. Soc. 20 2 1936 pp. 30-40.
- 316.—Loveridge, A. African Reptiles and Amphibians in Field Museum of Natural History. Field Mus. Nat. Hist. Zool. 22 1936 pp. 1-111.
- 317.—Loveridge, A. New geckos of the genus *Hemidactylus* from Zanzibar and Manda Islands. Proc. Biol. Soc. Wash. 49 1936 pp. 59-62.
- 318.—Loveridge, A. Scientific results of an expedition to Rain Forest Regions in Eastern Africa. V. Reptiles. Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 209-337 pls.
- 319.—Loveridge, A. Scientific results of an expedition to Rain Forest Regions in Eastern Africa. VII. Amphibians. Bull. Mus. Comp. Zool. Harvard 79 1936 pp. 369-430 pls.
- 320.—Loveridge, A. A new Lacertid (*Bedriagaia moreaui*) from Tanganyika Territory. Proc. New Eng. Zool. Cl. 15 1936 pp. 67-70.
- 321.—Loveridge, A. New Tree Snakes of the genera *Thrasops* and *Dendraspis* from Kenya Colony. Proc. Biol. Soc. Wash. 49 1936 pp. 63-66.
- 322.—Lüdiche, M. Über die Atmung von *Emys orbicularis*, L. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 83-106 1 pl. text-figs.
- 323.—Lull, R. S. Fossils (Popular). London & New York 1935 114 pp. text-figs.
- 324.—Lynn, W. G. Reptile records from Stafford County, Virginia. Copeia Ann Arbor 1936 pp. 169-171.
- 325.—Lynn, W. G. A study of the thyroid in embryos of *Eleutherodactylus nubicola*. Anat. Rec. Philadelphia 64 1936 pp. 525-539 2 pls.
- Lynn, W. G. see Berry, C. T.
- Lynn, W. G. see Collins, R. L.
- Macfarlane, R. G. see Barnett, B.
- 326.—Mahendra, B. C. A case of Polymely in the Indian Bull-Frog, *Rana tigrina* Daud. Proc. Indian Acad. Sci. 4 6 1936 pp. 483-493 text-figs. pl.
- 327.—Mahendra, B. C. Geckos and Superstition. J. Bombay Nat. Hist. Soc. 38 1936 pp. 631-632.
- 328.—Mahendra, B. C. Contributions to the osteology of the Ophidia. I. The Endoskeleton of the so-called "Blind-Snake," *Typhlops braminus* Daud. Proc. Ind. Acad. Sci. Bangalore 3 1936 pp. 128-142 figs.
- 329.—Mahendra, B. C. On two collections of the Ophidian genus *Cylindrophis* Wagler. Proc. Ind. Acad. Sci. B 4 1936 pp. 230-238 text-figs.
- 330.—Mahendra, B. C. Contributions to the bionomics, anatomy, reproduction and development of the Indian House-gecko, *Hemidactylus flaviviridis* Rüppel. Part I. Proc. Ind. Acad. Sci. 4 1936 pp. 250-281 6 pls.
- 331.—Mahendra, B. C. The vertebral column of the Anura. Current Science 4 1936 pp. 744-747 text-figs.
- 332.—Maki, M. Monograph of the Snakes in Japan. Tokyo 1931-32 in English and Japanese 240 pp. text-figs. 85 col. pls.
- 333.—Maleci, O. Sul nucleo del nervo abducente nei Rettili con particolare riguardo ai Cheloni. Monit. zool. ital. Firenze 47 1936 pp. 265-274 text-figs.
- Malkana, M. T. see Ganguly, S. N.
- 334.—Mallick, S. M. K. The use of tapioca in immunisation with snake venoms. Ind. J. Med. Res. 23 1936 pp. 993-996.
- Mallick, S. M. K. see Taylor, J.
- 335.—Manuilowa, N. A. Untersuchung der linsenbildenden Fähigkeit des Augenbeckers einiger Anura in verschiedenen Entwicklungsstadien. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 531-552.
- 336.—Marcus, H. & Albrecht, M. Die erste Entwicklung von Lunge und Trachea, bei *Hypogeophis*. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 1-21 text-figs.
- 337.—Mariani, A. I. Zur Überwinterung unserer Wasserfrösche. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 63-64.
- 338.—Mather, V. & Hines, M. Studies in the innervation of skeletal muscle. Amer. J. Anat. 54 1934 pp. 177-202 3 pls.

- 339.—Mathews, A. A. L. Evidence of a Flying Reptile from the Permian. *Proc. Geol. Soc. Amer.* 1935 (1936) p. 397.
- 340.—Matsukura, Y. Über die Entwicklung des Vornierenkanälchensystems der japanischen Kröte (*Bufo formosus*). *Folia anat. japon.* 13 1935 pp. 417–448 text-figs.
- 341.—Mattox, N. T. Annular rings in the long bones of Turtles and their correlation with size. *Trans. Illinois Acad. Sci.* 28 2 1936 pp. 255–256.
- 342.—Mehl, M. G. *Hierosaurus coleii*: a new aquatic Dinosaur from the Niobrara Cretaceous of Kansas. *J. sci. Labs. Denison Univ.* 31 1–2 1936 pp. 1–20 pls.
- 343.—Meisenheimer, M. Die jahrescyclischen Veränderungen der Schilddrüse von *Rana temporaria* L. und ihre Beziehungen zur Häutung. *Z. wiss. Zool. Leipzig* 143 1936 pp. 261–297 text-figs.
- 344.—Mercier, J. Contribution à l'étude des Métriorhynchidés (Crocodiliens). *Ann. Paléont. Paris* 22 1933 pp. 97–119 text-figs.
- 345.—Mertens, R. Eine übersichene "Herpetologia europaea." *Senckenbergiana Frankfurt.* 18 1–2 1936 pp. 75–78.
- 346.—Mertens, R. Eine neue Natter der Gattung *Helicops* aus Inner-Afrika. *Zool. Anz. Leipzig* 114 9/10 1936 pp. 284–285.
- 347.—Mertens, R. Schildkröten Beobachtungen im Freiland-Terrarium. *Blätter für Aquarien- und Terrarienkunde* 47 1936 pp. 268–272 photos.
- 348.—Mertens, R. Über einige für die Insel Bali neue Reptilien. *Zool. Anz.* 115 Heft 5/6 1936 pp. 126–129.
- 349.—Mertens, R. Riesenwuchs bei einer Schildkröte, *Chinemys reevesii* Gray. *Zool. Anz.* 114 Heft 7/8 1936 pp. 206–209 1 pl.
- 350.—Mertens, R. Eine bemerkenswerte variation des Schildkrötenpanzers. *Isis* 1934–36 (1936) pp. 15–19 text-figs.
- Miller, A. H. *see* Miller, L.
- 351.—Miller, L. & Miller, A. H. The Northward occurrence of *Bufo californicus* in California. *Copeia Ann Arbor* 1936 p. 176.
- 352.—Mitsch, H. *Physignathus lesueurii*. *Aquar. Berlin* 10 1936 pp. 38–40.
- 353.—Mookerjee, H. K. The development of the vertebral column and its bearing on the study of organic evolution. 23rd Ind. Sc. Congr. Indore Calcutta Zool. 1936 pp. 1–37.
- 354.—Moret, L. *Rhinochelys amaberti*, nouvelle espèce de Tortue marine du Vraconien de la Fauge, près du Villard-de-Laus (Isère). *Bull. Soc. géol. Fr.* 5 5 8–9 1935 pp. 605–618 text-figs.
- 355.—Morris, F. K. Central Asia in Cretaceous Time. *Bull. Geol. Soc. Amer. Washington D.C.* 47 9 1936 p. 1477.
- 356.—Mosauer, W. The re-discovery of *Anolis gadovii*. *Herpetologica Chicago* 1 1936 pp. 61–63.
- 357.—Mosauer, W. Description of a new *Phyllodactylus* from Mexico, with remarks on the status of *P. tuberculosus*. *Copeia Ann Arbor* 1936 pp. 141–146 text-fig.
- 358.—Mosauer, W. The myology of the trunk region of snakes and its significance for ophidian taxonomy and phylogeny. *Pub. Univ. Calif. Los Ang.* I 1935 pp. 81–120 text-figs.
- 359.—Mosauer, W. A new Xantusiid Lizard of the genus *Lepidophyma*. *Herpetologica* I 1936 pp. 3–5.
- 360.—Mosauer, W. The Reptiles and Amphibians of Tunisia. *Pub. Univ. Calif. Los Ang.* I 1934 pp. 49–64 text-fig.
- 361.—Mosauer, W. The Reptilian fauna of sand dune areas of the Vizcaino Desert and of North-Western Lower California. *Occ. Pap. Mus. Zool. Michigan No.* 329 1936 pp. 1–22 2 pls.
- 362.—Mosauer, W. The toleration of solar heat in desert Reptiles. *Ecology* 17 1936 pp. 56–66.
- Mukherjee, S. N. *see* Chopra, R. N.
- 363.—Müller, G. *Coluber najadum* Eichw. (*Zamenis dahlí* Fitz.) un serpe nuovo per la fauna italiana. *Atti Mus. Stor. nat. Trieste* 12 1934 pp. 151–152.

364.—Müller, L. Über die Artberechtigung von *Chelodina sulcifera* Gray. Zool. Anz. Leipzig **116** 1936 pp. 273–287 text-figs.

365.—Müller, L. Beiträge zur Kenntnis der Schildkrötenfauna von Mexico. Zool. Anz. Leipzig **113** 1936 pp. 97–114 text-figs.

366.—Müller, L. & Hellmich, W. Amphibien und Reptilien, I. Teil: Amphibia, Chelonia, Loricata. Wiss. Ergebnisse Deutsch. Gran Chaco-Exped. Amphibien u. Reptilien Teil **1** 120 pp. text-figs. & pls. Stuttgart 1936.

367.—Mulvany, D. P. F. An adventure with a Cobra. J. R. Army Med. Corps **66** 1 1936 pp. 36–38.

368.—Mustill, F. J. A Hamadryad's Nest and Eggs. J. Bombay N.H. Soc. **39** 1936 pp. 186–187.

369.—Nagao, T. *Nipponosaurus sachalinensis*, a new genus and species of Trachodont dinosaur from Japanese Saghalien. Journ. Fac. Sci. Univ. Hokkaido Geol. & Min. **3** 2 1936 pp. 185–220 12 pls.

370.—Nakamura, S. Colour-change of *Hyla arborea japonica* Guenther. [In Jap.] Botany & Zool. Tokyo **4** 3 1936 pp. 619–623.

Necker, W. L. *see* Schmidt, K. P.

371.—Netting, M. G. Wehrle's Salamander *Plethodon wehrlei* Fowler & Dunn, in Pennsylvania. Proc. Penn. Acad. Sci. **10** 1936 pp. 28–30.

372.—Netting, M. G. The Amphibians and Reptiles of Indiana County, Pennsylvania. Proc. Penn. Acad. Sci. **10** 1936 pp. 25–28.

373.—Netting, M. G. Hand list of the Amphibians and Reptiles of Pennsylvania. Carnegie Mus. Pennsylvania Herpetology Leaflet **1** 1936 No. pag.

374.—Netting, M. G. *Rhadinaea flavilata* (Cope) in Texas. Copeia Ann Arbor **1936** p. 114.

375.—Netting, M. G. Hibernation and migration of the Spotted Turtle, *Clemmys guttata* (Schneider). Copeia Ann Arbor **1936** p. 112.

376.—Netting, M. G. Notes on a collection of Reptiles from Barro

Colorado Island, Panama Canal Zone. Ann. Carnegie Mus. **25** 1936 pp. 113–120.

377.—Netting, M. G. The Chain Snake, *Lampropeltis getulus getulus* (L.) in West Virginia and Pennsylvania. Ann. Carnegie Mus. **25** 1936 pp. 77–82.

378.—Netting, M. G. *Hyla rosenbergi* Boulenger, an addition to the fauna of the Panama Canal Zone. Ann. Carnegie Mus. **25** 1935 pp. 15–16.

379.—Neveu-Lemaire, M. Traité d'Helminthologie médicale et vétérinaire. Paris 1936. 1515 pp. Hôtes intermédiaires des Helminthes. Reptilia, Batrachians pp. 1415–1420.

380.—Nishimura, G. On the hibernation of Manchurian *Bufo b. asiaticus* Steindachner. [In Jap., summary in Engl.] Zool. Mag. Tokyo **48** 1936 pp. 485–488.

381.—Noble, G. K. & Clausen, H. J. The aggregation behavior of *Storeria dekayi* and other Snakes, with especial reference to the sense organs involved. Ecol. Monog. N.Y. **6** 1936 pp. 269–316 photos.

382.—Noble, G. K. & Clausen, H. J. Factors controlling the form and color of scales on the regenerated tails of Lizards. J. Exp. Zool. **73** 1936 pp. 209–228 2 pls.

383.—Noble, G. K. & Hassler, W. G. Three Salientia of geographic interest from southern Maryland. Copeia **1936** pp. 63–64.

384.—Noble, G. K. & Kumpf, K. F. The function of Jacobson's Organ in Lizards. J. Genet. Psychol. **48** 1936 pp. 371–382.

385.—Nobre, A. Fauna marinha de Portugal. II. Descrição dos Reptis marinhos de Portugal pp. 1–5 figs. Fauna Marinha de Portugal **1** Vertebrados Pôrto 1935 574 pp.

386.—Ohuye, T. On the cells with Russell Bodies in the coelomic fluid of *Triturus pyrrhogaster* (Boie). [In Jap., summary in Engl.] Zool. Mag. Tokyo **48** 1936 pp. 545–551.

387.—Okada, Y. Studies on the Lizards of Japan. Contribution I. Gekkonidae. Sci. Rep. Tokyo Bun. Daig. (B) **2** 42 1936 pp. 233–289 text-figs. & pls.

388.—Okada, Y. Report of the first Scientific Expedition to Manchoukuo under the Leadership of Shigeyasu Tokunga, June–October 1933. Amphibia and Reptilia of Jehol. Tokyo 1935 76 pp. text-figs. & col. pls.

389.—Okada, Y. A new Cave-Gecko, *Gymnodactylus yamashinae*, from Kumejima, Okinawa group. Proc. Imp. Acad. Tokyo 12 2 1936 pp. 53–54 text-figs.

390.—Okutomi, K. Die Entwicklung des Kopfskelettes beim japanischen Krallensalamander. Zool. Jahrb. Jena (Anat.) 61 1936 pp. 1–44 text-figs.

391.—Olson, E. C. The Ilio-sacral attachment of *Eryops*. J. Paleont. Menasha Wis. 10 7 1936 pp. 648–651 text-figs.

392.—Olson, E. C. Notes on the Skull of *Youngina capensis* Broom. J. Geol. Chicago 44 4 1936 p. 523.

393.—Olson, E. C. The dorsal axial musculature of certain primitive Permian tetrapods. J. Morph. Philadelphia 59 1936 pp. 265–311 text-figs.

394.—Pariser, K. El desarrollo y la relación numérica entre los sexos en los híbridos interespecíficos obtenidos por fecundación artificial en el género *Triton* (*Molge*). Rev. Espan. Biol. Madrid 5 1936 pp. 11–93 text-figs.

395.—Parker, H. W. Reptiles and Amphibians collected by the Lake Rudolf Rift Valley Expedition, 1934. Ann. Mag. Nat. Hist. (10) 18 1936 pp. 594–609 text-figs.

396.—Parker, H. W. A collection of Reptiles and Amphibians from the mountains of British New Guinea. Ann. Mag. Nat. Hist. (10) 17 1936 pp. 66–93 text-figs.

397.—Parker, H. W. Some extinct snakes of the West Indies. Ann. Mag. Nat. Hist. (10) 18 pp. 227–233.

398.—Parker, H. W. Dr. Karl Jordan's Expedition to South-West Africa and Angola: Herpetological Collections. Nov. Zool. 40 1936 pp. 115–146 text-figs.

399.—Parker, H. W. The Amphibians of the Mamfe Division, Cameroons. Proc. Zool. Soc. London 1936 pp. 135–163 text-figs. & pl.

400.—Parker, H. W. Revised list of Reptiles (excluding Chelonians) and Amphibians collected in the Seychelles. Tr. Linn. Soc. 19 1936 pp. 444–446.

401.—Parker, H. W. A collection of Reptiles and Amphibians from the Upper Orinoco. Bull. Mus. hist. nat. Belgique 12 1936 no. 26 pp. 1–4.

402.—Parker, H. W. Amphibians from Liberia and the Gold Coast. Zool. Meded. Lieden 19 1936 pp. 87–102.

403.—Parrington, F. R. On the Tooth-replacement in Theriodont Reptiles. Philos. Trans. London (B) 226 532 1936 pp. 121–142 text-figs.

404.—Pasteels, J. Sur la formation de l'entoblaste primaire chez la Tortue *Clemmys leprosa* Schw. C.R. Soc. Biol. Paris 123 34 1936 pp. 1027–1029.

405.—Pasteels, J. Sur la répartition des territoires de l'œuf de Discoglosse avant la gastrulation. C.R. Soc. Biol. Paris 121 13 1936 pp. 1390–1394.

Pasteur, F. *see* Phisalix, M.

406.—Patterson, B. *Caiman latirostris* from the Pleistocene of Argentina and a Summary of South American Cenozoic Crocodilia. Herpetologica Chicago 1 1936 pp. 43–54 pl.

407.—Payne, L. G. The Natterjack Toad. London Nat. 1935 pp. 83–87 pl.

Pehani, H. *see* Seliskar, A.

408.—Pellegrin, J. Mission au Tibesti. Étude préliminaire de la faune du Tibesti. Reptiles, Batraciens pp. 50–52. Mém. Acad. Sci. Paris 62 1936.

409.—Pesson, P. Notes de faunistique armoricaine. Bull. Soc. sci. Bretagne 12 3–4 1935 pp. 190–199.

410.—Pesson, P. Sur un cas de néoténie partielle chez un *Triton*. Bull. Soc. sci. Bretagne 12 1 & 2 1935 pp. 67–70 fig.

411.—Peter, K. Die innere Entwicklung des Chamäleonkeimes nach der Furchung bis zum Durchbruch des Urdarms. Z. Anat. Entw. Gesch. Berlin 104 1935 pp. 1–60 text-figs.

412.—Peyer, B. Die Triasfauna der Tessiner Kalkalpen. X. *Clavazia schinzi* nov. gen. nov. spec. Abh. schweiz. paläont. Ges. 57 1936 no. 3 pp. 1–61 text-figs. & pls.

- 413.—Pflaumer, K. Etwas vom Darwinfrosch (*Rhinoderma darwini*) und dessen Brutpflege. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 16-18 photo.
- Piatt, J. *see* Dunn, E. R.
- Piatt, J. *see* Lipsett, J. C.
- 414.—Phisalix, M. & Pasteur, F. Action des diverses radiations sur les venins, les sérums antivenimeux naturels ou préparés et leurs mélanges neutres avec les venins, les bactéries et le virus rabique, ainsi que sur la bile et la cholestérine. Bull. Soc. zool. Fr. 61 1936 pp. 316-322.
- 415.—Picado, C. Serpentes venenosas occorrentes em Costa Rica. Mem. Inst. Butantan 8 1933-34 pp. 389-397 2 pls. [Non vidi.]
- 416.—Pitman, C. R. S. A guide to the Snakes of Uganda. Part III, pp. 211-229. Part IV, pp. 259-281. Uganda Journal 3 1936 text-figs. & col. pls. Part V, pp. 41-61. Part VI, pp. 126-150. Uganda Journal 4 1936 text-figs. & col. pls.
- 417.—Piveteau, J. Origin et évolution morphologique des Amphibiens Anoures. C.R. Acad. Sci. Paris 203 21 1936 pp. 1084-1086.
- 418.—Piveteau, J. Une forme ancestrale des Amphibiens Anoures dans le Trias inférieur de Madagascar. C.R. Acad. Sci. Paris 202 19 1936 pp. 1607-1608.
- 419.—Piveteau, J. L'évolution parallèle et son mécanisme. La Terre et la Vie 6 1936 pp. 30-36 text-figs.
- 420.—Piveteau, J. Le Dyrosaurus. Crocodilien de l'Éocène inférieur de l'Afrique du nord. Ann. Paléont. Paris 24 2 1935 pp. 51-71.
- 421.—Podhradský, J. A contribution to the knowledge of the nutritive importance of the substances dissolved in water for water-animals. (Engl. summary.) Bull. Éc. sup. Agron. Brunn (C) 5 1925 pp. 1-53.
- 422.—Politzer, G. Zur Kausalanalyse der Linsenregeneration. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 349-358 text-figs.
- 423.—Pomerat, C. M. Experimental studies on the nuptial pads of male *Triturus viridescens*. Biol. Bull. Woods Hole 70 1936 pp. 50-55 2 pls.
- 424.—Pomini, F. Osservazioni sistematiche ed ecologiche sugli Anfibi del Veneto. Arch. zool. Torino 23 1936 pp. 241-272 text-figs.
- 425.—Popp, B. *Uromastix acanthinurus*. Aquar. Berlin 10 1936 pp. 75-76 text-fig.
- 426.—Porsch, R. Lehrreiche Züchterei. Aquar. Berlin 10 1936 p. 51.
- 427.—Prashad, B. Animal Remains from Harappa. Mem. Archaeol. Surv. India No. 51 1936 pp. 1-62 pls.
- 428.—Puschig, R. Kleinere tierkundliche Mitteilungen. 3. Schwarze Smaragdchse und andere melanistische Kärntner Kreichtiere. Carinthia II 123-124 1934 pp. 90-93.
- 429.—Ramaswami, L. S. The cranial morphology of the genera *Kaloula* Gray and *Phrynella* Boulenger (Anura). Proc. Zool. Soc. London 1936 (1937) pp. 1137-1155 text-figs.
- 430.—Ramaswami, L. S. The morphology of the bufonid head. Proc. Zool. Soc. London 1936 (1937) pp. 1157-1169 text-figs.
- Rawlins, S. P. *see* Leese, R. G.
- 431.—Ray, H. C. On the venous system of the Common Indian Rat Snake, *Ptyas mucosus* (Linn.). J. Morph. Phila. 59 1936 p. 517.
- Ray, H. C. *see* Acharji, M. N.
- 432.—Reese, A. M. The origin of the notochord in *Alligator mississippiensis*. Anat. Rec. Philadelphia 64 1936 pp. 405-408 1 pl.
- 433.—Remane, A. Wirbelsäule und ihre Abkommlinge. In "Bolk. Handb. Vergl. Anat. Wirbeltiere" 4 pp. 1-205 Wien 1936.
- 434.—Reuss, F. A. T. Europäische Giftschlangen. Deutsch. Almanach Berlin 1935 pp. 145-165 text-figs. & map.
- Rex, O. R. *see* Clark, E. R.
- 435.—Reynolds, A. E. & Black, E. G. The Salamanders of Putnam County. Proc. Indiana Acad. Sci. 45 1936 pp. 287-294.
- 436.—Riabinin, A. N. A sauropterygian vertebra from Franz-Joseph Land. Trans. arctic Inst. Leningrad 58 1936 pp. 143-146. [Eng. summ. p. 145.]

436A.—**Riabinin, A.** Two Dinosaurian vertebrae from the Lower Cretaceous of Transcasian Steppes. *Mém. Soc. russe Mineral* **60** 1 1931 pp. 110–113 pls.

436B.—**Riabinin, A.** On the Age and Fauna of the Dinosaur beds of the Amur river. *Mém. Soc. russe Mineral* **59** 1 1930 pp. 41–51 text-figs.

436C.—**Riabinin, A.** On the Dinosaurian remains from the Upper Cretaceous of the Lower Parts of the Amudaria River. *Mém. Soc. russe Mineral* **60** 1 1931 pp. 114–118 pl.

437.—**Risley, P. L.** Centrioles in germ cells of Turtles, including observations on the “manchette in spermiogenesis. *Z. wiss. Zool. Leipzig* **148** 1936 pp. 133–158 text-figs.

438.—**Romano, M.** Le modificazioni dell' occhio degli Anuri durante la metamorfosi. *Arch. ital. Anar.* **36** 1936 pp. 433–465 text-figs.

439.—**Roofe, P. G.** The histology of the paraphysis of *Amblystoma*. *J. Morph. Philadelphia* **59** 1936 pp. 1–10 text-figs.

440.—**Rosenberg, H.** *Oxyrhopus trigeminus* D. & B. *Blätt. Aquar. Terr.* Stuttgart **47** 1936 pp. 110–113 photo.

441.—**Rosenberger, R. C.** Notes on some habits of *Terrapene carolina* (Linné). *Copeia Ann Arbor* 1936 p. 177.

442.—**Rosenfeld & Lenke.** Tiger-Snake venom in the treatment of accessible haemorrhage. *Amer. J. Med. Sc.* **190** 1935 pp. 779–791.

443.—**Rouel, M.** Sur une série de Couleuvres (*Natrix viperina* Latr.) capturées au Viaduc des Fades. Variations dans leur écaillure cephalique. *Bull. Soc. Hist. nat. Auvergne* **22** 1934 pp. 34–37 text-fig.

444.—**Roux, J.** Sur un nouveau Batracien de Madagascar (*Mantella loppei*) n. sp. *Bull. Soc. Zool. Fr.* **60** 1935 pp. 441–443.

445.—**Roux, J.** Note sur deux geckos non encore signalés à Sumatra. *Verh. naturf. Ges. Basel* **46** 1935 pp. 56–58.

446.—**Roux, J.** Mission Scientifique de l'Omo. *Reptilia et Amphibia*. *Mém. Mus. Hist. nat. Paris* **4** 1936 pp. 157–190 text-figs.

447.—**Roxo, M. G. de O.** A new species of fossil Crocodilia from Brazil, *Goniopholis paulistanus*, sp. nov. *Ann. Acad. Bras. Sci. Rio.* **8** 1 1936 pp. 33–34 pls.

448.—**Royo y Gomez, J.** Los Vertebrados del Cretácico Español de Facies Wealdica. *Bol. Inst. geol. Esp.* **47** 2 1926 pp. 171–176.

449.—**Russell, L. S.** Musculature and function in Ceratopsia. *Bull. nat. Mus. Ottawa* **77** 1935 pp. 39–48 text-figs.

450.—**Rust, H. T.** Die Strahlen-Flachpanzerschildkröte *Platemys radiolata*. *Blätt. Aquar. Terr. Stuttgart* **47** 1936 pp. 133–134 photo.

451.—**Rust, H. T.** Interessante Schildkröten. II. *Wochenschrift f. Aquar.-u. Terr. Braunschweig Heft* **34** & **35** 1936 pp. 1–3 text-figs.

452.—**Ruthven, A. G.** *Leptodeira bakeri*, new species. *Occ. Pap. Mus. Zool. Mich. No.* **330** 1936 pp. 1–2.

453.—**Rysselberge, L. van.** Le télencéphale de la Grenouille. Contribution à l'étude de l'évolution du prosencéphale des Vertébrés. *C.R. Congr. Sci. Bruxelles* **1930** pp. 841–844.

454.—**Sanderson, I. T.** The Giant Frog Problem. *Nigerian Fld.* **5** 4 1936 pp. 161–170 text-figs.

455.—**Sanderson, I. T.** The Amphibians of the Mamfe Division, Cameroons —(2) Ecology of the Frogs. *Proc. Zool. Soc. London* 1936 pp. 165–208 maps & col. pl.

456.—**Sato, I.** Notes on the chromosomes of *Cacopoides tornieri* (Vogt) and *Bufo raddei* Strauch. *Zool. Mag. Tokyo* **48** 1936 pp. 958–960 text-figs.

457.—**Sato, I.** On the *Hynobius* of the *naevius* group with special reference to the morphology of the skull. [In Japanese.] *Botany & Zoology Tokyo* **2** 1934 pp. 1843–1852 text-figs.

458.—**Sato, I.** Studies on the Salamanders from Shikoku, Japan. I. [In Japanese.] *Zool. Mag. Tokyo* **46** 1934 pp. 464–472 text-figs.

459.—**Sato, I.** Taxonomical study of the salamanders of the *nebulosus* group, with special reference to the morphology of the skull. [In Japanese.] *Zool. Mag. Tokyo* **46** 1934 pp. 214–224 text-figs.

- 460.—Sato, I. On the Testis-ovum found in the Japanese Lungless Salamander, *Onychodactylus japonicus*, with some consideration of its nature and formation. [In Japanese; summary in English.] Zool. Mag. Tokyo **48** 1936 pp. 645–650 pl.
- 461.—Sato, I. On the chromosomes in some Hynobiid Salamanders from Southern Japan. J. Sci. Hiroshima Univ. Zool. **4** 1936 pp. 143–154 text-figs.
- 462.—Sato, M. & Hirano, T. On the proteolytic Enzymes in the venom of *Trimeresurus mucrosquamatus* Cantor. Mem. Fac. Sci. Taihoku Imp. Univ. Formosa **9** 3 1935 pp. 83–103.
- 463.—Sato, M. & Hirano, T. On the activation of Trypsin by Snake Venoms. Mem. Fac. Sci. Taihoku Imp. Univ. Formosa **9** 4 1935 p. 105.
- 464.—Schaefer, H. Über die Froschnarung der Eulen. Orn. Monatschr. **43** 1935 pp. 107–110.
- 465.—Schartau, O. Beiträge zur Innervation der Reptilien. I. Allgemeiner morphologische Verhältnisse des Rückenmarks; Innervation der Haut, der Unterhaut und des in der Verknöcherung befindlichen Wirbelkörpers der Blind-Schleiche. Z. mikr. anat. Forsch. Leipzig **39** 1936 pp. 172–214 text-figs.
- Schaumann, O. see Bieling, R.
- Schloszberger, H. see Bieling, R.
- 466.—Schmidt, G. The determination of axial organs in the Anura. [In Russ., summary in Engl.] Zool. J. Moscow **15** 1936 pp. 259–276.
- 467.—Schmidt, G. A. Über die Unterschiede in den Induktionsfähigkeiten des Organisationszentrums der Urodelen und Anuren. Zool. Anz. Leipzig **116** 1936 pp. 323–330 text-figs.
- 468.—Schmidt, K. P. Preliminary account of Coral Snakes of South America. Zool. Series Field Mus. Nat. Hist. **20** 1936 pp. 189–203.
- 469.—Schmidt, K. P. Notes on Central American and Mexican Coral Snakes. Zool. Series Field Mus. Nat. Hist. **20** 1936 pp. 205–216 text-figs.
- 470.—Schmidt, K. P. Guatemalan Salamanders of the genus *Oedipus*. Zool. Series Field Mus. Nat. Hist. **20** 1936 pp. 135–166 text-figs.
- 471.—Schmidt, K. P. Notes on Bahaman Reptiles and Amphibians. Zool. Series Field Mus. Nat. Hist. **20** 1936 pp. 127–133.
- 472.—Schmidt, K. P. New Amphibians and Reptiles from Honduras in the Museum of Comparative Zoology. Proc. biol. Soc. Washington **49** 1936 pp. 43–50.
- 473.—Schmidt, K. P. The Amphibians of the Pulitzer Angola expedition. Ann. Carnegie Mus. **25** 1936 pp. 127–133.
- 474.—Schmidt, K. P. Notes on Brazilian Amphisbaenians. Herpetologica **1** 1936 pp. 28–32 pl.
- 475.—Schmidt, K. P. & Andrews, E. W. Notes on Snakes from Yucatan. Zool. Series Field Mus. Nat. Hist. **20** 1936 pp. 167–187.
- 476.—Schmidt, K. P. & Necker, W. L. The scientific name of the American Smooth Green Snake. [*Opheodrys vernalis*.] Herpetologica Chicago **1** 1936 pp. 63–64.
- 477.—Schreitmüller, W. Pityusen-Echsen und andere. Aquar. Berlin **10** 1936 pp. 146–149 photos.
- 478.—Schröder, G. Das Sammeln Konservieren und Ausstellen von Wirbeltieren. Berlin 1936. Reptilien und Amphibien, pp. 64–66.
- Schröder, J. see Broili, F.
- Schuckmann, W. v. see Bieling, R.
- Schwarz, E. see Bieling, R.
- 479.—Scortecci, G. Gli Anfibi della Tripolitania. Atti della Soc. Ital. di Sci. Nat. **75** 1936 pp. 129–226 pls.
- 480.—Scortecci, G. L'Ofidismo nell' Impero Italiano d'Etiopia. La Ricerca scientifica **1** 1936 pp. 1–3.
- 481.—Sebesta, Fr. Hält die knoblauchskröte *Pelobates fuscus* Laur. bei Trockenzeit Sommerruhe. Blätt. Aquar. Terr. Stuttgart **47** 1936 p. 44.
- 482.—Seifert, A. Das Linck'sche oder Waldenburger Exemplar der Erstechse (*Protorosaurus speneri* H. v. Meyer) aus dem Kupferschiefer von Suhl im Fürstlichen Museum zu Waldenburgh (Sa). Mitt. Fürstl. Schön.-Wald. Fam. vereins Schloss Wald. **1** 1934 pp. 1–27 pl. [Non vidi.] Review in N. Jahrb. Geol. Paläont. Stuttgart Ref. III 1935 **2** p. 343.

483.—Selevin, V. A. Results of the Betpak-Dala Desert Expedition of the Middle Asiatic State University. Faunistical Data. Acta Univ. Asiae Med. Tashkent. Zool. Fasc. 21 1935 pp. 3–23.

484.—Seliskar, A. & Pehani, H. Limnologische Beiträge zum Problem der Amphibienneotenie. Beobachtungen an Tritonen der Triglavseen. Verh. int. Vereinig. Limnol. Beograd 7 1 1935 pp. 263–271 text-figs.

485.—Sembrat, K. Badania doświadczalne nad metamorfozami jeliczników płazów bezogonowych (*Pelobates fuscus* Laur., *Rana temporaria* L.). Arch. Tow. nauk. Lwow (3) 3 12 1925 pp. 1–38 pls.

486.—Senft, W. Das Brutgeschäft des Baumsteigerfrosches (*Dendrobates auratus* Girard) in Gefangenschaft. Zool. Garten Leipzig 8 1936 pp. 122–131 text-figs.

487.—Seo, A. On the disappearance of the so-called “Wimperkleid” from the larva of Japanese Toad. Annot. zool. jap. 15 1935 pp. 224–226 text-fig.

488.—Serié, P. Nueva enumeración sistemática y distribución geográfica de los ofidios Argentinos. Inst. Mus. Univ. Nac La Plata 1936 pp. 33–61.

489.—Shapiro, H. A. The biological basis of sexual behaviour in Amphibia. I. The experimental induction of the mating reflex (coupling) in *Xenopus laevis* (the South African Clawed Toad), by means of pregnancy urine and of anterior pituitary extracts, with the production of fertilized ova. II. The independence of ovulation and coupling (the mating reflex) in *Xenopus laevis*. J. Exp. Biol. Cambridge 13 1936 pp. 48–56 pls.

490.—Shapiro, H. A. The influence of the pituitary-like substance in human pregnancy urine on the motor components of sexual behaviour in the South African Clawed Toad (*Xenopus laevis*). S. Afr. J. med. Sci. 1 1936 pp. 107–113.

Shapiro, H. A. see Berk, L.

491.—Shattuck, G. The Peninsula of Yucatan. Medical, Biological, Meteorological and Sociological Studies Appendix A. [Non vidi.] Carnegie Inst. Wash. Pub. No. 42 1933 pp. 575–576.

492.—Shreve, B. A new *Anolis* and new Amphibia from Haiti. Proc. New England Zool. Club 15 1936 pp. 93–99.

493.—Shreve, B. A new *Atelopus* from Panama and a new *Hemidactylus* from Colombia. Occ. Pap. Bost. Soc. Nat. Hist. 8 1936 pp. 269–272.

Shreve, B. see Barbour, T.

494.—Slater, J. R. Notes on *Ambystoma gracile* Baird and *Ambystoma macrodactylum* Baird. Copeia Ann Arbor 1936 pp. 234–236 photo.

495.—Slevin, J. R. A new Central American Snake. Proc. Calif. Ac. Sci. 23 1936 pp. 79–81.

496.—Slonimski, P. Über Blutelemente bei dem Aalmolch (*Amphiuma means* Gard.). Bull. int. Acad. Cracovie 1936 (BII) 1–2 pp. 113–121 text-figs.

497.—Smith, H. C. A Hamadryad's (*Naja bungarus*) nest and eggs. J. Bombay N.H. Soc. 39 1936 p. 186 pl.

498.—Smith, H. M. Description of a new *Sceloporus* from Southern Mexico. Herpetologica 1 1936 pp. 6–8.

499.—Smith, H. M. Descriptions of new species of Lizards of the genus *Sceloporus* from Mexico. Proc. biol. Soc. Washington 49 1936 pp. 87–96 pls.

500.—Smith, H. M. A new lizard of the genus *Sceloporus* from Southern Mexico. Amer. Mus. Nov. N.Y. No. 892 1936 pp. 1–4.

501.—Smith, H. M. A preoccupied generic name of a South African ophidian. Copeia Ann Arbor 1936 p. 70.

502.—Smith, H. M. Two new subspecies of Mexican Lizards of the genus *Sceloporus*. Copeia Ann Arbor 1936 pp. 223–230.

503.—Smith, H. M. A new *Anolis* from Mexico. Copeia Ann Arbor 1936 p. 9.

Smith, H. M. see Youngstrom, K. A.

504.—Stadtmüller, F. Krania und Visceralskelett der Stegocephalen, Amphibien und Sauropsiden. in Bolk's Handb. Vergl. Anat. Wirbeltiere 4 pp. 501–687. Wien 1936.

505.—Stadtmüller, F. Das os parahyoideum (Fuchs) bei *Liopelma hochstetteri* und *Rhinophrynus dorsalis*. Gegenbaurs morph. Jahrb. Leipzig 73 1936 pp. 1–35 text-figs.

506.—Stein, G. H. W. Mitteilungen zur Wirbelfauna der östlichen Mark. Mark. Tierw. Berlin 1 1936 pp. 234-238.

507.—Stejneger, L. The generic name of a South African Ophidian. Copeia Ann Arbor 1936 p. 114.

508.—Stejneger, L. The correct name for the Northern Diamond-Back Terrapin. Copeia Ann Arbor 1936 p. 115.

509.—Stejneger, L. Types of the Amphibian and Reptilian Genera proposed by Laurenti in 1768. Copeia Ann Arbor 1936 pp. 133-141.

509A.—Štěpánek, O. Kréta a nástin její obrat lovi fauny. [In Czech.] Veda Prirodin 18 2/3 1936 pp. 53-58.

510.—Sternberg, C. M. Hooded Hadrosaurs of the Belly River series of the Upper Cretaceous; a comparison with descriptions of new species. Bull. nat. Mus. Ottawa 77 1935 pp. 1-23 text-figs. & pls.

511.—Sternberg, C. M. The Systematic Position of *Trachodon*. J. Paleont. Menasha Wis. 10 7 1936 pp. 652-655 text-figs.

512.—Stokes, E. A pet snake [*Natrix*]. Field Sept. 1936 p. 629.

513.—Stolte, H. A. Das Werden der Tierformen. Eine Einführung in die Grundfragen der Entwicklungsphysiologie. Stuttgart 1936 112 pp. text-figs.

514.—Storer, T. I. Frogs and their commercial uses. Calif. Fish and Game Sacramento 19 1933 pp. 203-213.

515.—Stovall, J. W. The Jurassic in Oklahoma. Science N.Y. 76 (1962) 1932 pp. 122-123. [Non vidi.]

516.—Stovall, J. W. & Wharton, J. B. A new species of Phytosaur from Big Spring, Texas. J. Geol. Chicago 44 2 i 1936 p. 183.

517.—Stromer, E. Ergebnisse der Forschungsreisen Prof. E. Stromers in den Wüsten Ägyptens. VII. Baharije-Kessel und-Stufe mit deren Fauna und Flora. Eine ergänzende Zusammenfassung. Abh. bayer. Akad. Wiss. N.F. 33 1936 Reptilia pp. 25-27.

518.—Stuart, L. C. The King Snake of the Tres Marias Islands. Occ. Pap. Mus. Zool. Univ. Mich. 323 1935 pp. 1-3.

519.—Stultz, W. A. Relations of symmetry in the hind limb of *Amblystoma punctatum*. J. exp. Zool. Philadelphia 72 1936 pp. 317-365 text-figs.

520.—Suchov, G. Eine neue Unterart der Eidechse aus dem persischen Kurdistan. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 303-308.

521.—Susebach, E. Schwarze Feuersalamander. Blätt. Aquar. Terr. Stuttgart 47 1936 pp. 108-110.

522.—Süssbier, W. Anlage und Metamorphose der Drüsen der Darmwandung bei den Anuren. Z. wiss. Zool. Leipzig 148 1936 pp. 309-349.

523.—Svihla, A. An abnormally colored Garter Snake. Copeia Ann Arbor 1936 pp. 111-112.

524.—Swinton, W. E. Note on Amphian Remains (in Geology of Inchkeith). Trans. roy. Soc. Edinb. 58 1936 p. 780.

526.—Swinton, W. E. A new exhibit of *Hypsilophodon*. Nat. Hist. Mag. London 5 39 1936 pp. 331-336 text-figs.

527.—Swinton, W. E. The Dinosaurs of the Isle of Wight. Proc. Geol. Ass. London 47 3 1936 p. 204.

528.—Swinton, W. E. Notes on the osteology of *Hypsilophodon*, and on the Family Hypsilophodontidae. Proc. Zool. Soc. London 1936 pp. 555-578 text-figs.

529.—Syngajewskaja, K. Die Wachstumsgeschwindigkeit bei der Regeneration der Extremitäten bei *Siredon pisciformis*. Zool. Jahrb. Jena (Allg. Zool.) 56 1936 pp. 487-499 text-figs.

530.—Szalai, T. *Testudo strandi* nov. sp. eine Riesenschildkröte aus dem Miozän von Szurdokpüspöki (Ungarn). Bemerkungen zur Frage der Insulation. Festschrift f. Embrik Strand 1 p. 78. Riga 1936.

531.—Szalai, T. Der Einfluss der Gebirgsbildung auf die Evolution des Lebens. Palaeont. Z. Berlin 18 1-2 1936 pp. 113-122.

Szalai, T. see Kolosvary, G. v.

532.—Tago, K. The Salamanders of Japan. [In Japanese]. [Tokyo] Jan. 1931 222 pp. text-figs. pls. & col. pls.

533.—Takasima, R. & Terato, K. Eine kurze Mitteilung über die Entwicklung des Nowenlappens von Hypophysis cerebri bei einigen japanischen Anurenarten. *Folia anat. japon.* **14** 1936 pp. 421–433 text-figs.

Talbot, J. H. *see* Dill, D. B.

534.—Tanner, V. M. Western Worm-Snake *Siagonodon humilis* (Baird & Girard) found in Utah, [Non vidi.] *Proc. Utah Acad. Sci. Arts & Letters* **12** 1935 pp. 267–270.

535.—Taylor, E. H. A taxonomic study of the cosmopolitan Scincoid Lizards of the genus *Eumeces*, with an account of the distribution and relationships of its species. *Bull. Univ. Kansas* **23** 1935 pp. 1–643 text-figs. & pls.

536.—Taylor, E. H. Proposed changes in the nomenclature of the Scincoid Lizard genus *Eumeces*. *Trans. Kans. Acad. Sci.* **38** 1935 pp. 345–347.

537.—Taylor, E. H. Description of a new Sonoran snake of the genus *Ficimia*, with notes on other Mexican species. *Proc. biol. Soc. Washington* **49** 1936 pp. 51–54.

538.—Taylor, E. H. Notes on a small herpetological collection from Western Australia. *Trans. Kans. Acad. Sci.* **38** 1935 pp. 341–344.

539.—Taylor, E. H. The rediscovery of the lizard *Eumeces altamirani* (Dugès) with notes on two other Mexican species of the genus. *Proc. biol. Soc. Washington* **49** 1936 pp. 55–58.

540.—Taylor, J. & Mallick, S. M. K. The action of Rattlesnake and Mocassin venoms as compared with Indian Viper venoms. *Ind. J. Med. Res.* **24** 1936 pp. 273–279.

541.—Tchang, T. L. Notes on some Reptiles from South China and Kirin. *Bull. Fan Memorial Inst. Biol. Peiping* **6** 5 1936 pp. 223–231.

542.—Tchang, T. L. & Liao, K. M. Notes on some Amphibians and Reptiles from Kwangsi. *Bull. Fan Memorial Inst. Biol. Peiping* **6** 5 1936 pp. 233–238.

Terato, K. *see* Takasima, R.

543.—Terentiev, P. V. & Cernov, S. A. Key to the Amphibia and Reptiles of the U.S.S.R. [In Russian.] *Mockba* 1936 95 pp. text-figs.

Thomas, W. L. *see* Knowlton, G. F.

544.—Thompson, J. D. Peripheral distribution of fore-limb nerves in *Amblystoma*. *Science N.Y. N.S.* **84** 2179 1936 p. 310.

545.—Toner, G. C. Notes on the Turtles of Leeds and Frontenac Counties, Ontario. *Copeia Ann Arbor* **1936** pp. 236–237.

546.—Trahms, O. K. Das Geruchsorgan von *Pipa americana*. *Z. Anat. EntwMech.* **105** 1936 pp. 678–693 text-figs.

547.—Tsai, B. & Chiang, T.-H. The changes of Bidder's organ of Toad after Ovariectomy. *Sci. Rep. Univ. Chekiang* **2** 1 1936 p. 77.

548.—Tsuchiya, Y. Enzyme chemical investigation of Formosan Snake Venoms. *Mem. Fac. Sci. Taihoku Imp. Univ. Formosa* **9** 5 1936 pp. 137–195 & **9** 7 pp. 278–331.

549.—Twitty, V. C. Correlated genetic and embryological experiments on *Triturus*. *J. Exp. Zool. Philadelphia* **74** 1936 pp. 239–302 text-figs.

550.—Uchida, T. & Horié, H. Hermaphroditism in an adult Japanese Toad. *Annot. zool. jap.* **15** 1936 pp. 572–576 text-figs.

551.—Verberne, —. *Lacerta sicula* Raf. (= *serpa*) frisst Grieszbrei. *Blätt. Aquar. Terr. Stuttgart* **47** 1936 p. 44.

552.—Verrier, M. L. Les paupières des Reptiles et leur signification. *Bull. Soc. zool. Fr.* **60** 1936 pp. 443–446.

553.—Versluys, J. Kraniaum und Visceralskelett der Sauropsiden. In *Bolk's Handb. Vergl. Anat. Wirbeltiere* **4** pp. 699–805 Wien 1936.

554.—Vialli, M. Recherche preliminari sul veleno secco di *Bufo vulgaris* in toto. *Arch. Fisiol.* **35** 1936 pp. 351–361.

555.—Villiers, C. G. S. de. Some aspects of the amphibian suspensorium, with special reference to the paracaudate and quadratomaxillary. *Anat. Anz.* **81** 1936 pp. 225–247.

556.—Voigt, E. Die Erhaltung von Epithelzellen mit Zellkernen, von chromatophoren und Corium in fossiler Froschhaut aus der mittelezänen Braunkohle des Geiseltales. *Nova Acta Leop. Carol. Halle N.F.* **3** 14 1935 pp. 339–360 pls.

557.—Vos, C. M. de. Bidder's organ in the South African species of *Bufo*. S. Afr. J. Sci. Cape Town **32** 1935 pp. 396–403 text-figs.

558.—Vos, H. J. Über die Atembewegungen und den Schnüffelmechanismus (Kehloszillationen) bei Reptilien und Amphibien. Zool. Anz. Leipzig **115** 5/6 1936 pp. 142–144.

559.—Vos, H. J. Over ademhaling en reukzin bij Reptilien en Amphibien. Groningen **75** pp. text-figs.

560.—Waddington, C. H. Studies on the nature of the Amphibian Organization Centre. Proc. roy. Soc. London (B) **120** 817 1936 pp. 173–207 text-figs.

561.—Wagstaffe, R. & Clegg, J. A preliminary list of the non-marine vertebrate fauna (excluding birds) of Southport and district. Rep. Southport Sci. Soc. **30** 1936 pp. 139–143 1 pl.

562.—Wallace, F. G. A general study of the breeding habits and life histories of the Amphibia of Canton. Lingnan Sci. Journ. Canton **15** 4 1936 pp. 569–581 text-figs.

563.—Wallace, H. K. Some observations on the pelvic musculature of *Necturus maculosus*. Proc. Penn. Acad. Sci. **6** 1932 pp. 98–103.

564.—Warfel, H. E. Notes on the occurrence of *Necturus maculosus* (Rafinesque) in Massachusetts. Copeia Ann Arbor 1936 p. 237.

565.—Watanabe, M. Über die Entwicklung des Geruchsorgans von *Rhacophorus schlegelii*. Z. Anat. Entw. Mech. **105** 1936 pp. 519–561 text-figs.

566.—Watanabe, M. Über die Entwicklung des Tränenanganges in Japan einheimischer Amphibien. Anat. Anz. Jena **82** 1936 pp. 203–230 text-figs.

567.—Wellborn, V. Beschreibung eines neuen Molches der Gattung *Cryptobranchus*. Zool. Anz., Leipzig **114** 1936 pp. 63–64.

568.—Werner, F. Noch etwas über den madagassischen Hundskopfschlinger. Blätt. Aquar. Terr. Stuttgart **47** 1936 pp. 102–103.

569.—Werner, F. Nova species boidarum. Ann. Mus. Nat. Hungar. Zool. **30** 1936 p. 105.

570.—Werner, F. Reptiles from Mount Troodos, Cyprus. Proc. Zool. Soc. London 1936 pp. 655–658 pl.

571.—Werner, F. Reptilien und Gliedertiere aus Persien. Festschrift f. Embrik Strand **2** Riga 1936 pp. 193–204.

Wharton, J. B. see Stovall, J. W.

572.—Wieland, H. & Konz, W. Einige Beobachtungen am Gift der Brillenschlange (*Naja tripudians*). SitzBer. bayer. Akad. wiss. 1936 **2** pp. 177–186.

Willard, B. see Hickok, W. O.

573.—Willem, V. Observations sur les manœuvres respiratoires chez les Anoures aglosses. Mem. mus. Hist. nat. Belg. (2) **3** 1936 pp. 375–385 text-figs.

574.—Willem, V. Observations sur *Pipa americana* (Communication préliminaire avec démonstration). C.R. 2me Congr. Sci. Bruxelles **2** 1935 pp. 1084–1085.

575.—Willem, V. & Bertrand, M. Le triphasisme respiratoire chez les Lézards. Bull. Acad. Belg. Cl. Sci. (5) **22** 2 1936 pp. 134–155.

576.—Williams, T. W. The injection of the lymphatic system of *Triturus v. viridescens*. Proc. Penn. Acad. Sci. **9** 1935 pp. 45–47.

577.—Wills, I. A. The respiratory rate of developing Amphibia with special reference to sex differentiation. J. exp. Zool. Philadelphia **73** 1936 pp. 481–510 text-figs.

578.—Winter, F. Über das Vorkommen von *Triton montandoni* Blgr. im Odergebirge. Blätt. Aquar. Terr. Stuttgart **47** 1936 pp. 60–62.

579.—Wintrebert, P. Le déterminisme de la gastrulation chez les Amphibiens. C.R. Soc. Biol. Paris **119** 27 1935 pp. 1386–1391.

580.—Wintrebert, P. Les deux centres initiateurs, somatique et germinale, ordonnateurs du développement chez les Amphibiens. C.R. Soc. Biol. Paris **122** 16 1936 pp. 54–57.

581.—Witte, G. F. de. Description d'une espèce nouvelle du genre *Ablepharus* provenant du Congo belge. Rev. Zool. Bot. Afr. **4** **29** 1936 pp. 29–33.

582.—Witschi, E. Studies on sex differentiation and sex determination in Amphibians. *Anat. Rec. Philadelphia* **66** 1936 pp. 483–496 pls.

583.—Woitkewitsch, A. A. Über die biologische Aktivität der Schilddrüse der Kaulquappen. *Zool. Anz. Leipzig* **115** 1936 pp. 202–208.

584.—Wolf, B. *Animalium Cavernarum Catalogus*. **3** 1936 *Amphibia et Reptilia* pp. 700–704, 705–707.

585.—Wolf, L. N. Color pattern regulation in the Urodele *Triturus pyrrhogaster*. *Proc. Penn. Acad. Sci.* **9** 1935 pp. 53–57.

586.—Wolf, S. Revision der Unter-gattung *Rhacophorus*. *Bull. Raffles Mus.* **12** 1936 pp. 137–217 text-figs.

587.—Wolterstorff, W. Weiteres von *Triturus alpestris veluchiensis*. *Blätt. Aquar. Terr. Stuttgart* **47** 1936 pp. 182–184 text-fig.

587A.—Wolterstorff, W. Nachtrag zu Wolterstorff, Eine neue Unterart des Bergmolches, *Triturus alpestris graeca*, aus Griechenland. [in *Bl. Aqu. Terr.* 1935 p. 127.] *Bl. Aqu. Terr. Stuttgart* 1935 p. 164.

588.—Wolterstorff, W. Neotonische larve von *Triton vulgaris*. *Blätt. Aquar. Terr. Stuttgart* **47** 1936 p. 19.

589.—Wolterstorff, W. Bemerkungen zu Freytag. Die systematische Stellung des *Tylotriton kweichowensis*. [Reply to FREYTAG.] *Blätt. Aquar. Terr. Stuttgart* **47** 1936 p. 32.

590.—Wolterstorff, W. Unwandlung des Farbenleides bei *Cynops ensicauda* Hallowell. *Blätt. Aquar. Terr. Stuttgart* **47** 1936 pp. 105–108 photos.

591.—Wolterstorff, W., Lantz, L. A., & Herre, W. Beiträge zur Kenntnis des Kaukasussalamanders (*Mertensiella caucasica* Waga). *Zool. Anz. Leipzig* **116** 1936 pp. 1–13 text-figs.

592.—Wood, S. F. Oviposition and embryos of some western Lizards. *Copeia Ann Arbor* 1936 pp. 69–70.

593.—Wood, S. F. Courting behaviour of some Western Lizards. *Copeia Ann Arbor* 1936 p. 177.

594.—Wood, W. F. *Aneides flavipunctatus* in burnt-over areas. *Copeia Ann Arbor* 1936 p. 171.

595.—Woronzowa, M. A., & Liosner, L. D. Untersuchung über die Mechanik der Hautmetamorphose des Axolotl. *Zool. Jahrb. Jena Allg. Zool.* **56** 1936 pp. 107–128.

596.—Wright, H. W. Death of Survey Khalassi due to poisoning by a Common Krait (*Bungarus caeruleus*). *J. Bombay Nat. Hist. Soc.* **38** 1936 p. 832.

597.—Young, C. C. On a new *Chasmatosaurus* from Sinkiang. *Bull. Geol. Soc. China Peking* **15** 3 1936 p. 291–311 text-figs.

598.—Young, C. C. A Miocene Fossil Frog from Shantung. *Bull. Geol. Soc. China Peking* **15** 2 1936 p. 189–193 text-figs.

599.—Young, C. C. On a new *Nodosaurid* from Ninghsia. *Paleont. sinica c xi* 1 1935 pp. 1–28 text-figs. & pls.

600.—Youngstram, K. A. & Smith, H. M. Description of the larvae of *Pseudacris triseriata* and *Bufo woodhousii woodhousii* (Anura). *Amer. Midl. Nat. Notre Dame* **17** 3 1936 pp. 629–632 pl.

601.—Zangerl, R. B. Peyer, Die Triasfauna der Tessiner Kalkalpen, IX. *Pachypleurosaurus edwardi*, *Cornalia* sp. *Abh. Schweiz. paläont. Ges.* **56** 1935 No. 2 pp. 1–80 text-figs. & pls.

602.—Zieliński, M. A. Phosphorus in the early development of the frog. *Bull. Internat. Acad. Polonaise Sci. Lett. B II* No. 8–10 1935 pp. 293–304.

Zoutendyk, A. *see* Grasset.

II.—SUBJECT INDEX.

COMPREHENSIVE AND GENERAL.

General Works, Text Books.—BOULENGER, **67**; DITMARS, **147**; REMANE, **433**; LULL, **323**.—Respiration in Amphibia and Reptilia, Vos, **558**, **559**.

Myths, Folk-lore.—Snake Worship in India, ANON, 17.—Snake mythology, CYREN, 127; FERREIRA 173.—Krait, WRIGHT, 596.—*Python*, PITMAN, 416.—Geckos, MAHENDRA, 327.—Adders swallowing their young, CHOPE, 107.

History.—Antivenine treatments, SCHLOSSBERGER in BIELING & OTHERS, 49A.

Bibliography.—Fossil Chelonians, BERGOUNIOUX, 42.—Bibliography of the Crocodilia, KUHN, 295.—N. China, Amphibia, BORING, 64.—Mississippian and Pennsylvanian Footprints of North America, ALDRICH & JONES, 8.

Obituary.—Fernand Lataste, BOULENGER, 66.

Nomenclature.—The Types of Laurenti, 1768, STEJNEGER, 509.—Unrecorded generic names of Reptiles and Amphibia, MERTENS, 345.

Economics.—Effects of deforestation on amphibian population, SANDERSON, 455.—Frogs in U.S.A., STORER, 514.

Technique.—Museum preparations of Amphibia and Reptilia, SCHRÖDER, 478.—Terraria, KLINGELHÖFFER, 284.—Injection of lymphatic system, WILLIAMS, 576.—Catching snakes by line and hook, BRAYNE, 73.

Disease and Parasites.—List of Helminths found in amphibians and reptiles as intermediate hosts to man and animals, NEVEU-LEMAIRE, 379.

Enemies.—Owls eating Frogs, SCHAEFER, 464.

Teratology.—Two-headed *Natrix*, LADEIRO, 298.—*Triturus*, H. H. COLLINS, 113.—*Rana*, MAHENDRA, 326.—*Testudo tabulata*, GRANT, 211.—Vertebral column of *Varanus*, LEHMENSICK, 309.

Reproduction.—Oviparity and ovoviviparity in Lizards, JACOBI, 262.

Variation.—HELLMICH, 233.—*Natrix viperina*, ROUEL 443.—*Testudo*, MERTENS, 350.—Colour variation in W. African Anura, SANDERSON, 455.—Sex, seasonal and ontogenetic variation in *Petropedetes*, PARKER, 399.—Sex variation in Chinese Anura, LIU, 314.—

Sex dimorphism in *Sternotherus odoratus*, GRANT, 207.—Dimorphism in *Lampropeltis*, KLAUBER, 281.

Sex Ratio.—In Rattlesnakes, KLAUBER, 279.—In hybrid *Triturus*, PARISER, 394.

Hybridization.—*Triturus*, LIPSETT & PIATT, 313; TWITTY, 549.

Hermaphroditism.—*Bufo*, UCHIDA & HORIE, 550.

Melanism.—Reptiles, PUSCHNIG, 428.

Age and Longevity.—Age of Chelonians correlated with bone markings, MATTOX, 341.—Age of Amphibia, FLOWER, 177.

Hibernation.—*Rana*, MARIANI, 337; PORSCH, 426.

Aestivation.—*Pelobates*, SEBESTA, 481.

Growth.—*Python*, LEIGH, 310.—*Dermochelys*, DERANIYAGALA, 139.—Gigantism in *Chinemys*, MERTENS, 349.

Regeneration.—Factors controlling growth, NOBLE & CLAUSEN, 382.—Anura, MANUILOWA, 335.—*Salamandra*, POLITZER, 422.—*Amblystoma*, STULTZ, 519.—*Siredon pisciformis*, SYNGAJEWSKAJA, 529.—Tadpoles, IDE-ROZAS, 260.

Neoteny.—*Triturus*, PESSON, 410; WOLTERSTORFF, 588.—*T. alpestris*, SEL. & PEHANI, 484.

Adaptation.—To desert life in reptiles, MOSAUER, 361.

Naturalization.—*Hemidactylus turcicus* and *Leiocephalus* sp. in Florida-BARBOUR, 27.

Psychology.—Herding instinct in snakes, NOBLE & CLAUSEN, 381.—Herding instinct of Rattlesnakes, KLAUBER, 279.—Mating behaviour of snakes, D. D. DAVIS, 132.—Social behaviour of *Anolis*, EVANS, 168.—Sexual behaviour in Amphibia, BERK & OTHERS, 43.—Mating reflex induced by pregnancy urine extract, SHAPIRO, 490.—Artificial stimulation of mating reflex, SHAPIRO, 464; BERK & OTHERS, 43.

Hearing power.—Of snakes, STOKES, 512.—Of *Trionyx*, BOAST, 56.—Of Crocodile, BELLUIGI, 37.

Voice.—Geographical variation in voice of *Hyla versicolor*, NOBLE & HASSLER, 383.

MORPHOLOGY.

General.—REMANE, 433; STADTMÜLLER, 504; VERSLUYS, 553.—Anatomy of Tetrapod rib, EMELIANOV, 163.—Evolution of shoulder-girdle, HOWELL, 246.—Oviparity and viviparity in lizards, JACOBI, 262.—Salamanders, CHANG, 102.—*Uraeotyphlus*, CHATTERJEE, 104.

Osteology.—*Typhlops*, MAHENDRA, 328.—*Mertensiella caucasica*, WOLTERSTORFF & OTHERS, 591.—Vertebral column of amphibia and reptilia, MOOKERJEE, 353.—Vertebral column of Anura, MAHENDRA, 331.—Ribs of *Draco*, HENNIG, 238.—Skull of *Crotalus*, KLAUBER, 278.—Cranial skeleton of *Chalcides*, HAAS, 220.—Cranial anatomy of *Kaloula*, *Phrynella*, *Bufo*, RAMASWAMI, 429, 430.—Skull of *Hynobius*, SATO, 457, 459.—Skull of *Pachypalaminus*, SATO, 458.—Skull of *Ablepharus*, HAAS, 221.

Teeth.—Variation in larval and adult teeth of *Geotrypetes*, PARKER, 399.

Muscles.—Myology of Reptiles, D. D. DAVIS, 131.—Shoulder girdle of reptiles, HOWELL, 246.—Snakes, MOSAUER, 358.—*Necturus*, H. K. WALLACE, 563.—*Dicamptodon*, EATON, 156.—*Xenopus*, GROBELAAR, 218.—Jaw muscles of *Sphenodon*, *Alligator*, ANDERSON, 10.

Circulation and Blood.—Heart of Batrachians and Reptiles, ACOLAT, 4.—Venous system of *Ptyas*, RAY, 431.—Blood of *Amphiuma*, SŁONIMSKI, 496.

Nervous System.—Reptiles, SCHARTAU, 465.—Amphibia, VAN RYSELBERGE, 453.—Brain of reptiles, CRAIGIE, 122.—*Triturus*, MATHER & HINES, 338.—*Amblystoma*, HERRICK, 240.—Paraphysis of *Ambystoma*, ROOFE, 439.—Fore-limb of *Ambystoma*, THOMPSON, 544.—*Liopelma*, *Rhinophrynus*, STADTMÜLLER, 505.—Golgi apparatus in *Rana*, DORN. & BUSNITZA, 149.

Respiration.—Respiratory system in *Pipa*, WILLEM, 573.

Urogenital System.—Excretory system, BROEK, 75.—Kidneys of Anura, KUNST, 296.—Urogenital system of

Triturus, ABBAYES, 2.—Genito-urinary system of *Icthyophis*, DITUS, 148.—Hemipenis of snakes, BEUCHELT, 48.—Testis-ovum in Amphibia, SATO, 460.—Bidder's Organ in the Bufonidae, D. D. DAVIS, 130.—Bidder's Organ in hermaphrodite *Bufo*, UCHIDA & HORIÉ, 550.—Bidder's Organ in S. African *Bufo*, DE VOS, 557.—Ovariectomy and Bidder's Organ in Toad, TSAI & CHIANG, 547.

Glands.—Chinese Anura, LIU, 314.—Skin glands of *Lacerta*, EGGEERT, 159, 160.—Glands of *Crocodilus* and *Alligator*, BIGNARDI, 50.—Ultimobranchial bodies of Lizards, EGGEERT, 158.

Alimentary Canal.—Buccal cavity of Chelonians, BIGNARDI, 51.—Cellule, enterocromaffini in *Alligator*, CITTERIO 109.

Abdominal Cavity.—OHUYE, 386.—Mesentery of *Triturus*, GUIHER, 219.

Special Senses.—Eye covering of reptiles, VERRIER, 552.—Ear of *Podocnemis*, FUCHS, 185.—Olfactory organ of *Crocodilus*, BERTA, 46; *Pipa*, TRAHMS, 546.—Function of Jacobson's Organ in lizards, NOBLE & KUMPF, 384.

Cytology.—CLARK & OTHERS, 110.—Regeneration in tadpoles, IDE-ROZAS, 280.—Nuclear division in myogenesis in Salamander, KATZNELSON, 271.—Muscles of Frog, LANGELAAN, 301.—Chelonian nervous system, MALECI, 333.—Germ cells of Chelonians, RISLEY, 437.

DEVELOPMENT.

General.—KORSCHETT, 291.—STOLTE, 513.—Vertebral column of amphibia and reptilia, MOOKERJEE, 353.

AMPHIBIA.

EKMAN, 162.—BRINK, 74.—ETKIN, 165.—IRICHIMOWITSCH, 261.—G. A. SCHMIDT, 467.—WINTREBERT, 580.—WADDINGTON, 530.—F. G. WALLACE, 562.—Anura, ROMANO, 438.—Axial organs in Anura, G. SCHMIDT, 466.—Amphibian skull, DE VILLIERS, 555.—Skull of Salamander, OKUTOMI, 390.—Respiratory system of *Hypogeophis*, MARCUS & ALBRECHT, 336.—Digestive

system of Anuran larvae, KAYWIN, 274.—Gut of Anura, SÜSSBIER, 522.—Reproductive organs of *Rana*, CHIANG, 105.—Uro-genital system in *Rana*, GRAY, 213.—Nervous system of Anura, TAKA. & TERATO, 533.—Muscles of Urodela, KATZNELSON, 269, 270, 272.—Muscular system of *Dicamptodon*, EATON, 156.—Olfactory organs of *Rhacophorus*, WATANABE, 565.—Tear ducts of Amphibia, WATANABE, 566.—Skin gland hormones in Salamanders, KUHN, 294.—Thyroid of *Eleuthero-dactylus* in relation to metamorphosis, LYNN, 325.—Gastrulation in Amphibia, WINTREBERT, 579.—Temperature and development of *Rana*, ATLAS, 19.—A hatching secretion in egg of *Rana*, COOPER, 118.—Phosphorus in development of Frogs, ZIELIŃSKI, 602.—Ciliated cells of skin of *Bufo* larva, SEO, 487.—Development of *Rana* tadpoles by carbohydrates dissolved in water, PODHRADSKY, 421.—Salamanders, EGGERT, 161.—*Triturus*, BESSIGER, 47; BASSINA, 36; LIPSETT & PLATT, 313; HAR. & FRANK, 231.—*Hybrid triturus*, PARISER, 394.—*Pachypalaminus*, SATO, 458.—*Axolotl*, WORONZOWA & LIOSNER, 595.—*Disco-glossus*, PASTEELS, 405.—*Pelobates fuscus*, *Rana temporaria*, SEMBRAT, 485.—*Bufo*, MATSUKURA, 340.—*Rana*, KNOUFF, 286; ALESCHIN, 9.

REPTILIA.

Notochord of *Alligator*, REESE, 432.—*Crocodilus porosus*, DERANIYAGALA, 142.—Olfactory organs of Crocodilians, BERTAU, 46.—*Clemmys*, PASTEELS, 404.—Alimentary system of Gecko, EVANS, 166.—Ear of *Gecko*, EVANS, 169.—*Gymnodactylus*, EVANS, 167.—*Hemidactylus*, MAHENDRA, 330.—Chameleon, PETER, 411.—Hemipenis of Snakes, BEUCHELT, 48.

PHYSIOLOGY.

Sex and Heredity.—Sex differentiation and determination in salamanders, WITSCHI, 582.—Gonads of *Triturus*, HILSMAN, 243.—Development of *Triturus* hybrids, HAMBURGER, 225.—Sex reversal in *Amblystoma*, HUMPHREY, 259.—Specificity of hormones, CREAS. & GORBMAN, 123.

Chromosomes.—Japanese salamanders, SATO, 461.—*Cacopoides*, *Bufo*, SATO, 456.

Reproduction.—Spermatogenesis, GALGANO, 188.

Respiration.—*Pipa*, WILLEM, 573, 574.—Oxygen consumption in Snakes, CLAUSEN, 112.—Respiration of Lizards, WIL. & BETRAND, 575.—Respiratory mechanism of frog, GNANAMUTHU, 234.—Respiration in *Uromastix*, BOELAERT, 57.—*Emys orbicularis*, LÜDICKE, 322.—“Hairs” of *Trichobatrachus* as accessory mechanism for respiration, PARKER, 399.—Respiratory rate in developing Amphibia, WILLS, 577.

Urogenital System.—Urinary secretion in the Urodela, LAMBERT, 300; in *Salamandra*, GICKLHORN, 193.

Digestion.—Lizards, KNOWLTON, 287; *Seps*, CANELLA, 95.

Muscles.—Muscular reaction in Frog, LANGELAAN, 302.

Skin.—Skin glands of *Rana*, MEISENHEIMER, 343; of *Lacerta*, EGGERT, 159, 160.—Skin glands of tadpoles, WOITKEWITSCH, 583.

Temperature.—Toleration of solar heat in lizards, MOSAUER, 362.—Resistance of *Bufo* to cold, NISHIMURA, 380.

Biochemistry.—Water content of tissues of Amphibia, KUSUKI, 297.—Water absorption by reptile eggs during incubation, CUNN. & HURWITZ, 126.—Reptilian blood, EDWARDS & DILL, 157.—Properties of reptilian blood, DILL & OTHERS, 145.

Special Senses.—Sense organs in snakes, NOBLE & CLAUSEN, 381.—Change in the lateral-line organs in *Triturus*, DAWSON, 133.

Colour and Colour Changes.—Chemistry of colour, FOX, 179.—*Cynops*, WOLTERSTORFF, 590.—*Triturus* L. N. WOLF, 585.—*Hyla arborea*, NAKAMURA, 370.—*Xantusia*, FISHER, 174.—Mechanism of colour change in *Anolis*, KLEINHOLZ, 283.—Nuptial coloration of *Triturus*, HANAOKA, 226.—Colour inheritance in *Salamandra*, SUSEBACH, 521.

VENOM.

SNAKES.

General.—Venom apparatus of *Crotalus*, KLAUBER, 278.—Snake venoms

having coagulant action, ROSEN & LENKE, 442.—European and Mediterranean Vipers, BIELING & OTHERS, 49A.

(PROTEROGLYPHA.)

Effects, Properties, etc.—BARN. & MACFAR, 32.—BARRATT, 33.—CAMBROOK, 91.—FRANZI, 180.—GANGULY, 189.—GAN. & MALAKANA, 190, 191.—DENISONIA, KELL. & LE MESS., 275.—*Vipera berus*, HABERNOLL, 222.—Pit-Vipers, GITHENS, 200.—*Bothrops*, HANUT, 230.—NAIA, MULVANY, 367.—*Bothrops*, PICADO, 415.

Experimental. — *Naja*, CÉSARI & BOQUET, 99, 100.—CHOPRA, R. N. & OTHERS, 108.—GAUTRELET & OTHERS, 192.—GRASS. & ZOUTEN., 212.—HANUT, 227, 228, 229.—HOLDEN, 244.—FULCHIGNONI, 186.—MALLICK, 334.—PHISALIX & PASTEUR, 414.—SATO & HIRANO, 462, 463.—TAYLOR & MALLICK, 540.—TSUCHIYA, 548.—KLOB. & KÖNIG, 285.—WIELAND & KONZ, 572.

(AGLYPHA.)

Natrix, CHIOSSI, 106.

AMPHIBIA.

Bufo, VIALLI, 554.

ETHOLOGY.

HABITS, BREEDING, FIELD NOTES.

Amphibians and Reptiles.—BOULENGER, 67.—African spp., LOVERIDGE, 318.—Natal spp., COWLES, 120.—Tunisian spp., MOSAUER, 360.—Oregon spp., FITCH, 175.—Jehol spp., OKADA, 388.—Desert reptiles, MOSAUER, 361.—Alabama reptiles, HALTOM, 224.

Amphibians. — Chinese amphibia, BORING, 64, 65; CHANG & BORING, 103; F. G. WALLACE, 562.—Chinese Salamanders, CHANG, 102.—Cameroons spp., PARKER, 399.—W. African Anura, SANDERSON, 454, 455.—Carolina spp., BRANDT, 72.—Breeding songs of Florida Frogs, CARR, 96.—Italian spp., POMINI, 424.—*Hemidactylum*, BLANCHARD, 54.—*Triturus*, H. H. COLLINS, 114.—*Plethodon*, NETTING, 371.—*Mertensiella caucasica*, WOLTERSTORFF & OTHERS, 591.—*Pachypalaminus*, SATO, 458.—*Aneides*, W. F. WOOD, 594.—*Desmognathus*, BLUME, 55.—*Ambystoma*,

SLATER, 494.—*Pelobates*, BOMBINA GISELÉN, 199.—Mating habits in *Xenopus*, BERK & OTHERS, 43.—Feeding and respiratory habits in *Pipa*, WILLEM, 573.—*Bufo*, ANON, 16; MILLER, 351; BRAGG, 70; KRASSAUZEFF, 292.—Hibernation of *Bufo* in Manchuria, NISHIMURA, 380.—*Bufo calamita*, PAYNE, 407.—*Scaphiopus*, BALL, 25.—*Dendrobates*, SENEFF, 486.—*Rhinoderma*, PFLAUMER, 413.—*Limnodynastes*, BRANDIS, 71.—*Gopherus*, GRANT, 210.—*Pseudacris*, BURT, 89.—*Hyla*, *Rana* spp., LARSEN, 304.—Frogs, PORSCH, 426.—*Rana tigrina* eating a Sparrow, DESHPANDE, 144.—*Rana tigrina* larva, BHATTACHARYA, 49.—*Microhyla olivacea* associating with *Tarantula*, BLAIR, 53.

Crocodilians. — Nesting habits of *Crocodilus porosus*, DERANIYAGALA, 142.

Chelonians. — KANBERG, 268; MERTENS, 347; DREHOBEL, 150.—*Dermochelys*, DERANIYAGALA, 138.—*Pseudemys elegans*, GRANT, 208.—Box turtle, FROTHINGHAM, 183.—*Emys orbicularis*, EMMEL, 164.—Seasonal migration of *Clemmys guttata*, NETTING, 375.—*Geoemyda*, RUST, 451.—*Terrapene*, ROSENBERGER, 441.

Lizards.—NOBLE & KUMPF, 384.—Utah Lizards, KNOWL. & THOMAS, 288.—*Hemidactylus*, MAHENDRA, 330.—*Uromastix*, POPP, 425.—*Physignathus lesueurii*, MITSCH, 352.—*Anolis*, EVANS, 168.—*Sceloporus*, *Phrynosoma*, S. F. WOOD, 592, 593.—*Eumeces*, TAYLOR, 535.—*Lacerta*, VERBERNE, 551.—*Varanus*, BERNEY, 44.

Snakes.—CYREN, 127.—Mating habits of snakes, D. D. DAVIS, 132.—Uganda snakes, PITMAN, 416.—Indian snakes, FRASER, 181.—*Constrictor constrictor*, HOOVER, 245.—Pythons, LEIGH, 310.—Breeding age of pythons, LEIGH, 311.—*Corallus*, JÜRGENS, 267; WERNER, 568.—*Dasypeltis scabra*, LEDERER, 306.—*Storeria dekayi*, CLAUSEN, 111.—*Storeria*, *Thamnophis*, NOBLE & CLAUSEN, 381.—*Oxyrhopus*, ROSENBERG, 440.—*Heterodon*, GREENHALL, 214.—*Lampropeltis*, NETTING, 377.—*Natrix natrix*, LLOYD, 315.—*Coronella*, *Natrix*, *Vipera*, LEESE & RAWLINS, 308.—*Coronella austriaca*, HULL, 257; HALL, 223.—Nesting habits of *Naja*, JONES, 266;

H. C. SMITH, 497; MUSTILL, 368.—*Pseudechis*, GILBERT, 195.—*Vipera berus*, HABERNOLL, 222.—Adders swallowing their young, CHOPE, 107.—*Trimeresurus*, KRULL, 293.—Rattlesnakes and altitude, HUMPHREY, 258.—*Crotalus*, LEDERER, 307; KLAUBER, 278, 279.

Japan.—TAGO, 532; SATO, 457, 458, 459; OKADA, 387; MAKI, 332.

North Africa.—Tripoli, SCORTECCI, 479.—Tunisia, MOSAUER, 360.—Morocco, LAURENT, 305.—Sahara, ANGEL, 15; PELLEGRIN, 408.

ETHIOPIAN REGION.

Africa.—LOVERIDGE, 316.—W. Africa, SANDERSON, 454.—Cameroons, SANDERSON, 455; PARKER, 399.—Gold Coast, PARKER, 402.—Sierra Leone, AHL, 7.—Congo, DE WITTE, 581.—Ethiopia, SCORTECCI, 480.—Abysinia, ROUX, 446.—Soudan, ANGEL, 13; CORKILL, 119.—E. Africa, BELL-UIGI, 37; KANBERG, 268; ROUX, 446; PARKER, 395; LOVERIDGE, 318, 319, 320, 321.—Uganda, PITMAN, 416.—Zanzibar, LOVERIDGE, 317.—Nyassa, CUNHA, 125.—Rhodesia, MERTENS, 346.—Angola, SCHMIDT, 473; PARKER, 398.—S.W. Africa, PARKER, 398.—Natal, COWLES, 120.

Madagascar.—WERNER, 563; ROUX, 444; JURGENS, 267; ANGEL, 12.

Seychelles Is.—PARKER, 400.

ORIENTAL REGION.

Indian Peninsula.—WRIGHT, 596; HENNIG, 238; FRASER, 181; S. WOLF, 586; ACHAR. & RAY, 3; LEIGH, 311; MAHENDRA, 330; BOAST, 56; BHATTACHARYA, 49; KANBERG, 268.

Ceylon.—DERANIYAGALA, 136, 137, 138, 139, 141, 142; S. WOLF, 586.

Indo - Chinese Sub - region.—MAHENDRA, 329; FREYTAG, 182; S. WOLF, 586; JONES, 266; H. C. SMITH, 497; MUSTILL, 368.—Assam, BARKER, 30, 31.—Tongking, ANGEL, 14.—Hainan, GRESSITT, 216.

Malaysia and East Indies.—HENNIG, 237, 238; S. WOLF, 586.—Malaysia, KRULL, 293.—Sumatra, ROUX, 445.—Java, KOPSTEIN, 290; BRONGERSMA, 79.—Bali, MERTENS, 348.—Celebes, KOPSTEIN, 290.

AUSTRALIAN REGION AND POLYNESIA.

N. Guinea Archipelago.—PARKER, 396.—? New Guinea, WERNER, 569.

ZOOGEOGRAPHY.

Zoological Distribution.—Distinctness of Eremian Faunal Region, BRAESTRUP, 68.—Of Amphians and reptiles in S.W. Africa, PARKER, 398.—Amphibia of Palearctic Region, BARTENEFF, 34; Amphibia of Tripolitania, SCORTECCI, 479.—North American Anura, BRAGG, 69.—European Vipers, SCHWARZ in BIELING & OTHERS 49A.

PALAEARCTIC REGION.

Europe.—REUSS, 434.—England, ANON, 16; HULL, 257; LEESE & RAWLINS, 308; CHOPE, 107; LLOYD, 315; PAYNE, 407; HALL, 223; WAGSTAFFE & CLEGG, 561.—France, ABBAYES, 1; DENIS, 135; PESSON, 409; ROUEL, 443.—Germany, MERTENS, 347; WINTER, 578; STEIN, 506.—Denmark, LARSEN, 304.—Spain, HELLMICH, 234, 235.—Portugal, NOBRE, 385.—Italy, G. MÜLLER, 363; POMINI, 424.—Rumania, BOGOESCU, 58.—Yugo-Slavia, PUSCHNIG, 428.—Greece, WOLTERSTORFF 587A.—Russia, WOLTERSTORFF & OTHERS, 591; LANTZ & CYREN, 303; TERENT. & CERNOV, 543.

Mediterranean Islands.—Cyprus, WERNER, 570.—Crete, STÉPÁNEK, 509A.

Asia.—CHANG, 101; TERENT. & CERNOV, 543.—Asia Minor, BIRD, 52; BARTENEFF, 35.—Syria, ANGEL, 11.—Palestine, AHARONI, 5.—Transjordan, AHARONI, 5.—Mesopotamia, ANGEL, 11.—Persia, WERNER, 571; FEJÉRVÁRY, 171.—Kurdistan, SUCHOV, 520.—China, BORING, 64; CHANG, 102; CHANG & BORING, 103; FREYTAG, 182; FU, 184; KANBERG, 268; LIU, 314; OKADA, 388; TCHANG, 541; TCHANG & LIAO, 542; F. G. WALLACE, 562; WOLTERSTORFF, 589.—Hong Kong, HERKLOTS, 239; BORING, 65.

Formosa, Loo Choo Is.—GRESSITT, 216; OKADA, 389; MAKI, 332.

Australia.—GILBERT, 195; TAYLOR, 538; L. MÜLLER, 364.—Queensland, BERNEY, 44; KINGHORN, 277.

NEARCTIC REGION.

(Including Mexico.)

Canada.—BURT, 87.—Ontario, TONER, 545.

United States.—BRAGG, 70; DUNN, 151; FROTHINGHAM, 183; DITMARS, 147; YOUNG & SMITH, 600; CLAUSEN, 111; BURT, 87.

North-Eastern States.—SCHMIDT & NECKER, 476.—Vermont, BABBITT, 23.—Massachusetts, BARBOUR, 26; WARFEL, 564; BALL, 25.—New Jersey, CONANT & BAILEY, 117.—Maryland, NOBLE & HASSLER, 383.—New York, NETTING, 375; KAUFFELD, 273.—Pennsylvania, H. H. COLLINS, 114; NETTING, 371, 372, 373, 377; CONANT, 116; ROSENBERGER, 441.—Michigan, BLANCHARD, 54.—Indiana, REY. & BLACK, 435; GRANT, 206, 207.

South-Eastern States.—Virginia, LYNN, 324; NETTING, 377.—Carolina, BRANDT, 72.—Georgia, LANTZ & CYRÉN, 303.—Florida, BARBOUR, 27; CARR, 98; GOFF, 205.—Kentucky, GIOVANNOLI, 197.—Tennessee, BAILEY, 24; KING, 276.—Alabama, HALTOM, 224.—Louisiana, GOFF, 205.

Middle and Western States.—Kansas, HIBB. & LEONARD, 241.—Texas, BURT, 89, 90; NETTING, 374.—Utah, KNOWL. & THOMAS, 288; COWLES & BOGERT, 121; TANNER, 534.—Arizona, COWLES & BOGERT, 121; HUMPHREY, 258.—Oregon, FITCH, 175; JEWETT, 265.—Nevada, COWLES & BOGERT, 121.

Pacific Coast.—FITCH, 176.—Washington, SVIHLA, 523.—California, KLAUBER, 279, 280, 281, 282; LINSDALE; 312; MILLER, 351; MOSAUER, 361; FISHER, 174; BORELL, 63; GRANT, 210; W. F. WOOD, 594.

Mexico.—H. M. SMITH, 498, 499; 500, 502, 503; TAYLOR, 537, 539; SCHMIDT, 469; GLOYD, 202, 203; GAIGE, 187; DUNN, 152, 153; MOSAUER, 356, 357, 359; CAMPO, 93, 94; BURT, 86; STUART, 518.

NEOTROPICAL REGION AND SOUTH AMERICA.

Central America.—SCHMIDT, 469; PARKER, 400; DUNN, 152; BURT, 86.—Yucatan, GAIGE, 187; SCHMIDT & ANDREWS, 475; SHATTUCK, 491.—Guatemala, SLEVIN, 495; SCHMIDT, 470.—Honduras, K. P. SCHMIDT, 472.—Ecuador, BURT, 86.—Costa Rica, PICADO, 415.—Panama, SHREVE, 493; NETTING, 376, 378.

West Indies.—GLOYD, 201; PARKER, 397; DUNN, 152.—Antilles, GRANT, 209.—Cuba, BARBOUR & SHREVE, 28.—Haiti, SHREVE, 492.—Bahamas, BARB. & SHREVE, 29; SCHMIDT, 471.

South America.—SCHMIDT, 468; ROSENBERG, 440; DUNN, 152; GRIJS, 217; L. MÜLLER, 365.—Venezuela, PARKER, 401; RUTHVEN, 452.—Brazil, AHL, 6; DUNN & CONANT, 154; DUNN & PIATT, 155; SCHMIDT, 474.—Chile, GIGOUX, 194.—Argentine, MÜLL. & HELL, 366; SERIÉ, 488.

PALAEONTOLOGY.

Jaw muscles of Phytosaurs, ANDERSON, 10.—Mountain building and evolution, SZALAI, 531.—Evolution of vertebrates, VON HUENE, 255.—Evolution of amphibia, PIVETEAU, 417, 419.—Evolution of reptiles, KOLOS. & SZALAI, 289.—Evolution of shoulder girdle, HOWELL, 246.—Evolution of axial musculature in primitive Tetrapods, OLSON, 393.—Evolution of *Trionyx*, BERGOUNIOUX, 41.—Chelonians, BERGOUNIOUX, 42.—Fossil Chelonians of Aquitaine, BERGOUNIOUX, 42.—Review of recent work on fossil S. African reptiles, BROOM, 81.—South African Procolophonia, BROOM, 82.—Fossil Reptiles of the Kairou, BROOM, 84.—Brain of *Eryops*, DEMPSTER, 134.—Veins of the Brains of Dinosaurs, JANENSCH, 263.—Dinosaur eggs, DÉROGNAT, 143.—Origin of the Pelobatidae, GISLÉN, 198.—Evolution and relationships of the Thecodontia, VON HUENE, 250.—Relationships of the Phytosauria, STOVALL & WHARTON, 516.—Review of the Metriorhynchidae, MERCIER, 344.—Reptiles from South American Gondwanaland, VON HUENE, 254.—Comparative study of the cranial structure of Mesosuchia and Eusuchia,

PIVETEAU, 420.—Skull of Therocephalia, BROOM, 85.—Age of Gobi Desert Dinosaurs, MORRIS, 355.—Dinosaurs of the Isle of Wight, SWINTON, 527.—Muscles, pose and habits of Ceratopsia, RUSSELL, 449.—Amphibian remains in Madagascar, PIVETEAU, 418.—Labyrinthodont remains at Inchkeith, SWINTON, 524.—Tooth replacement in Theriodont Reptiles, PARRINGTON, 403.—Summary of South American Cenozoic Crocodilia, PATTERSON, 406.—Skin structure of fossil Frogs, VOIGT, 556.—Cynodonts and Ictidosaurids of South Africa, Russia, South America, North America, England, and Germany listed, VON HUENE, 254.—Families, genera, genotypes and spp. of Loricata listed, KUHN, 295.—Collecting fossils for study, BOONSTRA, 59.

Carboniferous. — SWINTON, 524. — ALDRICH & JONES, 8.

Permo-Carboniferous.—CASE, 97.

Permian.—AUGUSTA, 20, 21, 22; BOONSTRA, 61; BROILI & SCHRÖDER, 77; BROOM, 84, 85; CAMP, 92; DEMPSTER, 134; MATHEWS, 339; OLSON, 391, 392; PARRINGTON, 403; SEIFFERT, 482.

Permo-Triassic. — BROILI & SCHRÖDER, 78.

Triassic.—BROOM, 82, 84; CASE, 98; CROOKSHANK, 124; VON HUENE, 247, 249, 250, 252, 254, 256; PEYER, 412; PIVETEAU, 418; YOUNG, 597; ZANGERL, 601; STOVALL & WHARTON, 516.

Jurassic. — BERGOUNIOUX, 42; BROILI, 76; GREGORIO, 215; VON HUENE, 248, 253; HENNIG, 236; LAFÉTEUR, 299; MERCIER, 344; RIABININ, 436; STOVALL, 515; SWINTON, 527.

Cretaceous.—ARAMBOURG, 18; BERGOUNIOUX, 42; JANENSCH, 263, 264; MEHL, 342; MORET, 354; MORRIS, 355; NAGAO, 369; RIABININ, 436A, 436B, 436C; ROXO, 447; ROYO Y GOMEZ, 448; STERNBERG, 510, 511; STROMER, 517; SWINTON, 527, 528; YOUNG, 599.

Eocene.—ARAMBOURG, 18; BERGOUNIOUX, 40, 42; A. G. DAVIS, 129.

Oligocene.—BERGOUNIOUX, 39, 40, 42.

Miocene.—BERGOUNIOUX, 40, 42; BERRY & LYNN, 45; COLL. & LYNN, 115; SZALAI, 530; YOUNG, 598.

Pliocene.—BERGOUNIOUX, 40, 42; HELLER, 232.

Tertiary.—BENHAM, 38; DAVIES, 128; STROMER, 517.

Pleistocene. — PATTERSON, 406; PRASHAD, 427.

IV.—SYSTEMATIC INDEX.

General.—List of amphibians and reptiles of Palestine and Transjordan, AHARONI 5.—Alabama reptiles, listed, keyed and figd., HALTOM 224.—Amphibia and Reptilia of Johol, all spp. figd. and desc., OKADA, 388.—Amphibia and Reptilia of Seychelles, PARKER 400.—Amphibia and Reptiles of U.S.S.R., TERENT. & CERNOV 543.—List of Persian Amphibia and reptilia, WERNER, 571.—List of Cave dwelling Amphibia and Reptiles, B. WOLF 584.—Secondary sex characters of Chinese Anura, 63 sp. examin., LIU 314.—Variation in time of metamorphosis of *Rana* tadpole, FLOWER 177.—The Salamanders of Japan, TAGO 532.—Monograph of the Chinese Salamanders, CHANG 102.—Classification of the Asiatic Salamanders, CHANG 101.

AMPHIBIA.

†ORDER STEGOCEPHALI.

Amphibian femur described, allied to *Pholidogaster*, L. Carboniferous of Inchkeith, SWINTON 524.

Discosaurus, as described from the Permian is *Melanerpeton*, Moravian, AUGUSTA 22.

Eryops, Ilio-sacral attachment descr. and figd., OLSON 391.

Mastodonsaurus in the Demva group (Trias) of the Mahadevas, India, CROOKSHANK 124.

Melanerpeton, ventral armour, AUGUSTA 21.

Trimerorhachis, permo-carboniferous of Texas, bones describ., CASE 97.

ORDER APODA.

COECILIIDAE.

Bdellophis unicolor Boettger = *Dermophilis gregorii* Blgr., LOVERIDGE 319.

Boulengerula denhardti Nieden = *Dermophilis gregorii* Boulenger, LOVE-RIDGE 319.

Cryptopsophis multiplicatus Blgr. = *Gymnopsis m. multiplicata* Peters, PARKER 400.

Geotrypetes seraphini occidentalis, ssp. nov., French Guinea—Gold Coast region, p. 99, *G. angeli*, sp. nov., Labé French Guinea, PARKER 402.—*G. seraphini*, larval teeth, PARKER 399.

Idiocranium, gen. nov. type *russeli*, sp. nov., Makumunu, Cameroons, near *Herpele*, p. 160, PARKER 399.

ORDER CAUDATA.

PROTEIDAE.

Proteus Laurenti, type *anguinus*, STEJNEGER 509.

HYNOBIIDAE.

Hynobius tokyoensis, sp. nov., Nishitama, Tokyo, p. 114; *H. dunni*, sp. nov., Shiroyama Saheki-machi, Oita-Ken, Kyushu, p. 219; *H. unanngso*, sp. nov., (err. typ. for *unnangso*) Iwano Mura, Adachi County, Fukushima, p. 121, TAGO 532.—*H. ikishimae* = *H. nebulosus*, *H. vanderburghi* = *H. nebulosus*, *H. tagoi* = *H. tsuensis*, SATO 459.—*H. hirosei* is a local variation of *Pachypalaminus boulengeri*, SATO 458.

AMBYSTOMIDAE.

Batrachuperus thibetina Schmidt = *B. pinchoni*, CHANG 102.

SALAMANDRIDAE.

Paramesotriton, nom. nov., for *Mesotriton* Bourret preocc., CHANG 101.

Pingia, gen. nov., monotype *Pachytriton granulatus* Chang 1933, CHANG 101.

Salamandra Laurenti, type *maculosa* = *Lacerta salamandra* Linn., STEJNEGER 509.—*Salamandra s. almanzoris*, variation, HELLMICH 234.

Triton alpestris lacustris, neoteny, SEL. & PEHANI 484.—*Triton* Laurenti (not of Linn.) = *Triturus* Rafinesque, type *cristatus* Laurenti, STEJNEGER 509.

Trituroides, gen. nov., monotype *Triturus chinensis*, p. 426, CHANG 101.

Triturus blasii discussed, ABBAYES 1, PESSON 409.—*Triturus* restricted to the European newts, CHANG 101.—*T. viridescens*, photos of nuptial pads, POMERAT 423.—*T. alpestris veluchiensis*, nom. nov. for *T. a. graecus* preocc., WOLTERSTORFF 587A.—*T. alpestris veluchiensis*, colour, WOLTERSTORFF 587.

Tylototriton, genus discussed, FREYTAG 182.—*Tylototriton* [answer to Freytag], WOLTERSTORFF 589.

Salamandrella keyserlingi kalimowskiana = *Hynobius keyserlingi*, CHANG 102.

PLETHODONTIDAE.

Desmognathus wrighti, sp. nov., Mt. le Conte, Sevier county, Tennessee, p. 57, nr. *fuscus carolinensis*, KING 276.

Hemidactylium scutatum, at Cape Cod, BARBOUR 26.

Hydromantes ferrugineus Lazg., re-described, POMINI 424

Oedipus flaviventris, sp. nov., Chicharras Chiapas, p. 148, nr. *salvinii*; *O. helmrichi*, sp. nov., Alta Verapaz, Guatemala, p. 152, nr. *rufescens*; *O. engelhardti*, sp. nov., Volcan Atitlan, Guatemala, p. 156, nr. *rostratus*; *O. flavimembris*, sp. nov., Volcan Tajumulco, Guatemala, p. 158, nr. *bellii*; *O. franklini*, sp. nov., Guatemala, p. 159; *O. bromeliacia*, sp. nov., Volcan Tajumulco, Guatemala, p. 161, nr. *nasalis*; *O. goebeli*, sp. nov., Volcan Tajumulco, Guatemala, p. 163, nr. *cephalicus*; *O. elongatus*, sp. nov., Esobas, Guatemala, p. 165, SCHMIDT 470.—*Oedipus barbouri*, sp. nov., Yoro, Honduras, near *chiropterus*, p. 43, SCHMIDT 472.

Spelerpes bocourti = *Oedipus morio*, SCHMIDT 470.—*S. attitlanensis* and *S. variegatus* = *Oedipus salvini*, SCHMIDT 470.

CRYPTOBRANCHIDAE.

Cryptobranchus terrassodactylus, sp. nov., North America, p. 63, nr. *alleganiensis*, WELLBORN 567.

Megalobatrachus maximus, growth, age, FLOWER 177.

ORDER SALIENTIA.

PIPIDAE.

Pipa Laurenti, type *americana* = *Rana pipa* Linn., STEJNEGER 509.

Xenopus laevis, variation in prehallux; *X. laevis borealis*, ssp. nov., Kenya Colony, p. 596, PARKER 395.—*X. fraseri* Blgr., revived, PARKER 399.

DISCOGLOSSIDAE.

Bombina bombina distrb. in Sweden, GISLÉN 199.

PELOBATIDAE.

Pelobatidae, distribution and origin, GISLÉN 198.—*Pelobates fuscus*, recent and fossil, distrib. in Sweden, GISLÉN 199.—†*Pelobates* sp. aff. *fuscus*, from the upper Pliocene of Rheinhessen, HELLER 232.

BUFONIDAE.

Distribution of Bidder's organ in the Family, D. D. DAVIS 130.

Bufo Laurenti, type *vulgaris* = *Rana bufo* Linn., STEJNEGER 509.—*Bufo bufo*, late spawning of, ANON 16.—*B. cognatus*, larva describ. and figd., BRAGG 70.—*B. punctatus* in Kansas, HIBB. & LEONARD 241.—*B. paracnemis* Lutz is a race of *B. marinus*, MÜLL. & HELL. 366.—*B. granulosus major* ssp. nov., Chiquitos, Gran Chaco, Argentine, p. 12, MÜLL. & HELLMICH 366.—*B. jordani*, sp. nov., Satansplatz, S.W. Africa, near anotis, p. 145, PARKER 398.—*B. camerunensis*, sp. nov., Oban, Calabar, near *latifrons*, p. 153, *B. c. poensis*, ssp. nov., Fernando Po, p. 155, PARKER 399.—*B. granulosus* has priority over *B. globulosus*, PARKER 401.—*B. latifrons* revived, PARKER

399.—*B. polycercus* Werner = *B. tuberosus* Günth., PARKER 399.—*B. regularis marakwetensis*, ssp. nov., Marakwet, E. Africa, p. 180, *Bufo ghappuisi*, sp. nov., Delta de l'Omo, Abyssinia, p. 182, nr. *loennbergi*, ROUX 446.—*B. regularis*, *B. viridis*, larvae describ. and figd., SCORTECCI 479.—*B. woodhousii*, larva descr. and figd., YOUNG & SMITH 600.—†*Bufo* sp. aff. *vulgaris* and *Bufo* sp. from Pliocene of Rheinhessen, HELLER 232.

HYLIDAE.

Hyla Laurenti, type *viridis* = *Rana arborea* Linn., STEJNEGER 509.—*H. lindneri*, sp. nov., Junca Viejo, Argentine, p. 63, nr. *parkeri*, MÜLL. & HELL. 366.—*H. trachythorax*, sp. nov., Apabergland, San Luis, Argentine, p. 77, nr. *nasica*, MÜLL. & HELLMICH 366.—*H. wavrini*, sp. nov., Upper Orinoco, Venezuela, near *faber*, p. 2, PARKER 401.—*H. stadelmani*, sp. nov., Subirana Valley, Yoro, Honduras, near *gabbi*, p. 45, *H. spinipollex*, sp. nov., Atlantida, Honduras, near *euthysanota*, p. 45, SCHMIDT 472.

Nyctimystes Stejneger has 5 spp., *N. gularis*, sp. nov., Mondo, Papua, *N. montana*, sp. nov., Mondo, Papua, *N. semi-palmata*, sp. nov., Kokoda, PARKER 396.

Pseudacris triseriata, larva descr. and figd., YOUNG & SMITH 600.

LEPTODACTYLIDAE.

Calamobates = *Crossodactylus*, *Cal. Boulengeri* = *Cross. fuscigula*, LUTZ, Z.R. 1931, 251. [Omitted.]

Eleutherodactylus stadelmani, sp. nov., Yoro, Honduras, near *milesi*, p. 44, SCHMIDT 472.—*E. semipalmatus*, sp. nov., Massif de la Hotte, Haiti, p. 94, nr. *montanus*; *E. brevirostris*, sp. nov., Massif de la Hotte, Haiti, p. 95, nr. *schmidti*; *E. glanduliferoides*, sp. nov., Haiti, nr. *glandulifer*, SHREVE 492.

Elosia massarti = *megalelosia goeldii*, LUTZ, Z. R. 1931, 251. [Omitted.]

Leptodactylus plaumanni, sp. nov., Brasil, p. 389, nr. *mystaceus*, *L. nova-teutoniae*, sp. nov., Brasil, p. 391, nr. *kreffti*, AHL 6.—*L. rugosus* in Orinoco Prov., PARKER 401.—*L. ventrilineatus*, sp. nov., Mt. La Hotte, Haiti, p. 98, nr. *darlingtoni*, SHREVE 492.

Phyllobates brasiliensis = *Crosso-*
dactylus gaudichaudi, LUTZ, **Z. R.**, 1931
251. [Omitted.]

BRACHYCEPHALIDAE.

Atelopus chiriquiensis, ssp. nov., Rio
Chiriqui, Panama, p. 269, nr. *laevis*,
SHREVE 493.

RANIDAE.

Arthroleptis cornutus is a valid sp.,
PARKER 399.—*A. stenodactylus uluguru-*
ensis Loveridge = *A. s. lönnbergi* Nieden,
LOVERIDGE 319.—*A. agadezi*, sp. nov.,
Agadez, Sahara, p. 276, ANGEL 15.

Astylosternus oxyrhynchus Nieden =
Scotobleps gabonicus Boulenger, LOVE-
RIDGE 316.

Gampsosteonyx Blgr. = *Astylosternus*
Werner, *G. batesi* = *A. diadematus*,
PARKER 399.—*Gampsosteonyx batesii*
Blgr. = *Astylosternus diadematus* Wer-
ner, LOVERIDGE 316.

Gigantorana Noble = *Conraua Nie-*
den, PARKER 399.

Leptodactylodon ovatus ventrimar-
moratus revived, PARKER 399.

†*Palaeorana* Scott. = *Conraua Nie-*
den, PARKER 399.

Phrynobatrachus hailsiensis = *Rana*
oxyrhynchus Smith; *P. versicolor*
Ahl = *P. dendrobates* (Boulenger), *P.*
petropedetoides Ahl = *P. dendrobates*
(Boulenger), LOVERIDGE 316.—*P.*
brongersmai, sp. nov., Grand Cape
Mount, Gold Coast, *ogoensis* group,
p. 90, *P. allenii*, sp. nov., Du River,
Liberia, near *giorgii*, p. 91, PARKER
402.

Phrynopsis boulengeri Pfeffer and
P. usambarae Ahl = *Rana edulis*
(Peters), LOVERIDGE 319.

Pseudozenopus Barb. & Lov. =
Conraua Nieden, PARKER 399.

Pyxicephalus flavigula Calabresi =
Rana edulis (Peters), LOVERIDGE 319.

Rana esculenta bilmaensis, ssp. nov.,
Oasis of Bilma, Sahara, p. 277, ANGEL
15.—*R. (Tomopterna) signata* Ahl =
R. delalandii cryptotis Boulenger; *R.*
(*Tomopterna*) *cacondana* Ahl = *R.*
delalandii cryptotis Boulenger; *R.*
unagratti and *R. somalica* and *R.*
fiechteri all of Scortecchi = *R. galamensis*
bruwana (Peters); *R. aberdariensis*

Angel = *R. wittei* (Angel); *R. erlangeri*
Ahl = *R. floweri* Blgr., LOVERIDGE
319.—*R. papua* and *R. grisea* larvae,
PARKER 396.—*R. albolabris acutirostris*,
ssp. nov., Congulu, Angola, p. 141,
PARKER 398.—*R. perpalmata* de Witte
= *R. crassipes* Buch. & Peters; *R.*
zenkeri Nieden, *R. christyi* Blgr.,
revived, PARKER 399.—*R. zavattari*,
sp. nov., S. of Gat, Tripoli, near
ridibunda, p. 135; *R. occipitalis*,
larva descr. and figd., SCORTECCI
479.—†*Rana basaltica*, sp. nov., near
†*R. asiatica*, Miocene of Shantung, p.
189, YOUNG 598.

Scotobleps camerunensis Ahl = *S.*
gabonicus Blgr., PARKER 399.

Trichobatrachus revived; *Tricho-*
batrachus robustus, function of "hairs,"
and sexual variation in habitat,
PARKER 399.

POLYPEDATIDAE.

Cassina angeli Witte = *Kassina sene-*
galensis, Dum. & Bibr., LOVERIDGE
319.

Hyperolius aylmeri, larva descr.,
AHL 7.—*H. brevipalmatus* Ahl = *Mega-*
lixalus fulvovittatus (Cope), *H. pygmaeus*
Ahl = *M. brachynemis* Blgr., *H. phryno-*
derma Ahl, *H. mohasicus* Ahl, *H. oculatus*
Ahl, and ? *H. irregularis* Ahl = *H.*
rossii Calabresi, *H. asper* Ahl and *H.*
nyassae Ahl = *H. undulatus* Blgr.,
? *H. pulchromarmoratus* Ahl and *H.*
schefferi Ahl = *H. striolatus* Peters,
H. melanophthalmus Ahl and *H.*
renschii Ahl = *H. mariae* Barbour &
Loveridge, *H. rubripes* Ahl = *H. sansi-*
baricus (Pfeffer), *H. noblei* Ahl = *H.*
puncticulatus (Pfeffer), *H. callichromus*
Ahl (part) = *H. argentovittis* Ahl, *H.*
flavoviridis Peters and *H. tettensis*
Peters = *H. argus* Peters, *H. microps*
Günther, *H. usaramoae* Loveridge &
H. translucens Power = *H. pusillus*
(Cope), LOVERIDGE 319.

Leptopelis millsoni Blgr., revived; *L.*
rufus (Reich.) = *L. palmatus* (Peters),
PARKER 399.—*L. jordani*, sp. nov.,
Congulu, Angola, near *aubryi*, p. 144,
PARKER 398.—*L. rugegensis* Ahl =
L. karissimbensis Ahl, LOVERIDGE 316.

Mantella loppei, sp. nov., Morou-
lambo, Vatomandry Prov., Madagascar,
near *pulchra*, p. 441, ROUX 444.

Rappia symmetrica Mocquard and *R. platyrhinus* Proctor = *Hyperolius undulatus* Blgr., *R. platycephala* Pfeffer = *Hyperolius argus* Peters, *R. granulata* Blgr. = *Hyperolius nasutus* Günther, LOVERIDGE 319.

Rhacophorus, Asiatic spp. revised, genus reduced to 18 spp., *R. leprosus* has 5 races viz., *corticalis*, *spinosa*, *aspera* and *molech*, *Rh. verrucosus* is a race of *Rh. appendiculatus*, *Rh. buergeri* has 12 races, viz., *japonicus*, *oxycephalus*, *tonkinensis*, *surdus*, *everetti*, *hosii*, *depressus*, *modestus*, *jerdoni*, *pleurostictus*, and *microtympaanum*, *Rh. leucomystax* has 4 races, viz., *linki*, *maculatus* and *cruciger*, *Rh. schlegeli* has 15 races, viz., *margaritifera*, *poecilonotus*, *angulirostris*, *monticola*, *viridis*, *owstoni*, *moltrechti*, *exiguus*, *microglossus*, *omeimontis*, *davidi*, *batangensis*, *tuberculatus* and *calcaneus*, *Rh. nigropalmatus* has 5 races, viz., *georgii*, *dennysi*, *feae* and *maximus*, *Rh. pardalis* has 5 races, viz., *pulchellus*, *robinsoni*, *annamensis* and *rhysocephalus*, ssp. nov., Sangir, p. 206, *Rh. reinwardti* has 4 races, viz., *bipunctatus*, *malabaricus* and ? *lateralis*, S. WOLF 586.

Rothschilda kounihensis Mocq. = *Mocquardia obscura* (Blgr.), LOVERIDGE 316.

MICROHYLIDAE.

Barygenys cheesmanae, gen. & sp. nov., near *Metopostira*, to include also *M. atra*, PARKER 396.

Hoplophryne marmorata Ahl = *Phrynomerus annectens* (Werner), LOVERIDGE 316.

Microhyla carolinensis in Tennessee, BAILEY 24.

Oxyrhynchus bicolor is a race of *Elachistocleis ovalis* MÜLL. & HELL. 366.

Phrynomantis nasuta Meth. & Hewett = *Phrynomerus annectens* (Wernér), LOVERIDGE 316.

Plethodontohyla laevis tsianovohensis, ssp. nov., Tsianovoha, Madagascar, p. 129, ANGEL 12.

Ramanella = *Kaloula* RAMASWAMI 429.

REPTILIA.

†ORDER COTYLOSAURIA.

Microtheledon parvus, gen. nov., for *Thelegnathus parvus*, near *Procolophon*, p. 391, BROOM 82.

Myocephalus crassidens, gen. & sp. nov., Cynognathus zone near Aliwal North, S. Africa, near *Procolophon*, p. 391, BROOM 82.

Nanoparia luckhoffi, gen. & sp. nov., Middle Cistecephalus zone of Wellwood, S. Africa, near *Anthodon*, p. 349, BROOM 84.

Procolophon trigoniceps & *P. baini* redescribed, skulls figd., p. 387, BROOM 82.—*Procolophon trigoniceps*, bones descr. & figd., BROILI & SCHRÖD. 78.

Thelegnathus browni, allied to *Procolophon*, skull figd., p. 390, BROOM 82.

†ORDER THEROMORPHA.

Aulacocephalodon nesemanni, sp. nov., Cistecephalus-zone, New Bethesda, S. Africa, near *peavoti*, p. 381, BROOM 84.

Belesodon magnificus gen. et sp. nov., new Cynodont from Brazil, VON HUENE 254.

Cerdorhinus parvidens, gen. et sp. nov., horizon and loc. uncertain, BROOM 84.

Cerdosuchoides brevidens, gen. & sp. nov., Lystrosaurus-zone of Wapadberg, S. Africa, near *Cerdosuchus*, p. 361, BROOM 84.

Cerdosuchus aulodon, gen. & sp. nov., Cistecephalus-zone near Bethesda Rd., S. Africa, near *Moschorhinus*, p. 359, BROOM 84.

Chiniquodon thetonicus, gen. et sp. nov., new Cynodont from Brazil, VON HUENE 254.

Cynariognathus gallowayi, sp. nov., Tapinocephalus Zone of Luttig, Great Karroo, S. Africa, near *Platyrhinus*, p. 356, BROOM 84.—*C. seeleyi*, bones descr., and figd., BROILI & SCHRÖDER 77.

Dicynodon microdon, sp. nov., Cistecephalus-Lystrosaurus zone, Bethesda dist., S. Africa, p. 376, *D. wellwoodensis*, sp. nov., Graaff. Reinet, S. Africa, p. 378, *D. nanus*, sp. nov., Cistecephalus zone, Graaff-Reinet, p. 379, BROOM 84.

Dinogorgon rubidgei, gen. & sp. nov., Cistecephalus-zone, Graaff-Reinet, S. Africa, near *Aelurognathus*, p. 373, BROOM 84.

Dinophoneus Broom = *Jonkeria*, BOONSTRA 62.—*D. ingens* is a *Jonkeria*, BOONSTRA 60.

Dinopolus atrox, gen. & sp. nov., Tapinocephalus zone of Prince Albert dist., S. Africa, near *Scapanodon*, p. 354, BROOM 84.

Dinosuchus vorsteri, gen. & sp. nov., Stinkfontein, S. Africa, near *Scullya*, p. 351, BROOM 84.

Emydopsis microdon, sp. nov., Endothiodon-zone, Nieuwveld, S. Africa, near *longus*, p. 382, BROOM 84.

Galerhinus rubidgei, sp. nov., Graaff-Reinet dist., S. Africa, p. 374, BROOM 84.

Gomphodontosuchus brasiliensis, skull descr. & figd., pp. 122–131, VON HUENE 254.

Jonkeria spp., skulls describ. & figd., *J. pugnax* = *J. ingens*, BOONSTRA 62.

Moschorhinus minor, sp. nov., Bethesda Rd., S. Africa, near *kitchingi*, p. 362, BROOM 84.

Moschorhynchus latirostris, gen. & sp. nov., New Bethesda-zone, S. Africa, near *Notosollasia*, p. 365, BROOM 84.

Nanictosaurus kitchingi, gen. & sp. nov., Lystrosaurus-zone, Bethesda, S. Africa, p. 385, BROOM 84.

Nanictosuchus kitchingi, gen. & sp. nov., Lystrosaurus-Cistecephalus zone of Wapadsberg, S. Africa, p. 358, BROOM 84.

Notaelurodon kitchingi, gen. & sp. nov., New Bethesda, S. Africa, near *Hofmeyria*, p. 357, BROOM 84.

Notaelurops paucidens, gen. & sp. nov., Cistecephalus-zone, Graaff-Reinet, S. Africa, near *Alopecopsis*, p. 367, BROOM 84.

Notictosaurus luckhoffi, gen. & sp. nov., Lystrosaurus zone, Bethesda dist., S. Africa, near *Galesaurus*, p. 382, BROOM 84.

Notosollasia luckhoffi, sp. nov., Cistecephalus zone, Graaff-Reinet District, South Africa, Palate figured, p. 364, BROOM 84.

Parathrinaxodon proops, gen. & sp. nov., Permian of Tanganyika, p. 132, PARRINGTON 403.

Stahleckeria, skull descr. and figd., near *Kannemeyeria*, VON HUENE 247.

Tapinocephalia divided into Moschosauridae, Moschopidae, Tapinocephalidae, Mormosauridae, skulls figd. and describ., BOONSTRA 61.

Traversodon stahleckeri gen. et sp. nov., *T. major*, sp. nov., new Cynodonts, allied to *Diademodon*, from Trias of Brazil, VON HUENE 254.

Trochorhinus vanhoepeni gen. et sp. nov., Lower Tapinocephalus zone, Prince Albert District, South Africa, near *Trochosaurus major*, p. 354, BROOM 84.

†ORDER ARAEOSCELIDIA.

Protosaurus speneri, note, SEIFERT 482.

†ORDER ICHTHYOSAURIA.

Corosaurus alcovensis gen. et sp. nov., Triassic of Natrona County, Wyoming, CASE 98.

Mixosaurus cornalianus, Trias of Besano, redescrib. and figd., VON HUENE 256.

Peloneustes cf. *philarchus*, vertebra, RIABININ 436.

Tangaroasaurus kakanuiensis, gen. & sp. nov., ? Ichthyosauria, p. 238, BENHAM 38.

†ORDER PLACODONTIA.

Henodus chelyops, gen. et sp. nov., Gipskeuper, from near Tübingen, Germany, VON HUENE 249.

†ORDER SAUROPTERYGIA.

Pliosaurus ferox, bones descr. and figd., VON HUENE 248.

Pachypleurosaurus edwardsi, described & figd., ZANGERL 601.

†ORDER THECODONTIA.

Thecodontia has 2 suborders, viz. Phytosauria and Pseudosuchia, families and genera listed, VON HUENE 251.

Angistorhinus alticephalus sp. nov., descr., relationships with Phytosaurs discussed, STOV. & WHARTON 516.

Chasmatosaurus yuani, sp. nov., Trias of China, p. 291, YOUNG 597.

Youngina capensis, skull descr. and figd., genus discussed, OLSON 392.

†ORDER DINOSAURIA.

Dinosaurs of Isle of Wight, SWINTON 527.

Albertosaurus periculosus, sp. nov., Upper Cretaceous of Bielyie Kruchi (White Cliffs), Amur R., China, RIABININ 436B.

Apatosaurus, osteology, restoration, GILMORE 196.

Barosaurus, brain case descr. and figd., JANENSCH 263.

Brachiosaurus, brain case descr. and figd., JANENSCH 263.

Ceratopsia, muscles, habits, etc., RUSSELL 449.

Cionodon (?) *kysylkumense*, sp. nov., Lower Turomian of Kysyl-Kum desert, China, p. 116, RIABININ 436C.

Corythosaurus spp. described and figd., STERNBERG 510.

Dicraeosaurus hansemanni discussed, skeleton reconstructed and figd., JANENSCH 264.

Embasaurs minax, gen. et sp. nov., near to *Megalosaurus*, Lower Cretaceous Uralsk U.S.S.R., RIABININ 436A.

Hierosaurus colei, sp. nov., Niobrara Cretaceous of Kansas, p. 2, MEHL 342.

Hypsilophodontidae, family redefined, *Hypsilophodon foxi*, osteology, SWINTON 528.—*Hypsilophodon*, structure, restoration, SWINTON 526.

Kentrurosaurus aethiopicus, lower jaw descr. and figd., HENNIG 236.

Lambeosaurus clavinitialis, sp. nov., Belly River Beds of Alberta, p. 15, *L. magnicristatus*, sp. nov., same horizon, p. 20, STERNBERG 509.

Nipponosaurus sachalinensis, gen. et sp. nov., a Trachodont from Upper Cretaceous, Japanese Saghalien, NAGAO 369.

Pinacosaurus ninghsiensis, sp. nov., Upper Cretaceous of N. Alashan, China, p. 5, YOUNG 599.

Saurolophus kryshstofovici, sp. nov., Upper Cretaceous of Bielyie Kruchi (White Cliffs), Amur R., China, RIABININ 436B.

Tetragonosaurus cranibrevis, sp. nov., Belly River Beds of Alberta, p. 13, STERNBERG 509.

Trachodon a member of the Lambeosaurinae, not Hadrosaurinae, STERNBERG 509.

†ORDER PTEROSAURIA.

†*Ctenochasma gracile*, skeleton descr. and figd., BROILI 76.

ORDER LORICATA.

†*Baharijodon carnosauroides*, gen. et sp. nov., p. 86, KÜHN 295.

†*Caiman latirostris*, Pleistocene, Argentina, descrd. & figd., PATTERSON 406.

Crocodylus Laurenti, type *niloticus* = *Lacerta crocodilus* Linn., STEJNEGER 509.—*C. palustris kimbula*, ssp. nov., Ceylon, DERANIYAGALA 141.—†*Crocodylus* sp., from Lower Eocene of Morocco, ARAMBOURG 18.—†*C. spenceri* reported in London clay at Sheppey, A. G. DAVIS 129.—†*C. longirostris*, bones, LAFÉTEUR 299.

†*Dyrosaurus phosphaticus*, Paleocene of Morocco, ARAMBOURG 18.—†*Dyrosaurus* discussed, cranial structure of Mesosuchia and Eusuchia compared, PIVETEAU 420.

†*Enaliosuchus schröderi*, sp. nov., Lower Cretaceous of Germany, p. 76, KUHN 295.

†*Erythrochampsia longipes*, bones descr. & figd., BROILI & SCHRÖD. 78.

†*Gavialis gangeticus*, scute from Harappa, PRASHAD 427.

†*Goniopholis paulistanus*, sp. nov., Cretaceous of Sao Paulo, ROXO 447.

†Metriorhynchidae reviewed, *Metriorhynchus bathonicus* sp. nov., Bathonian of Calvados, MERCIER 344.

†*Stromerosuchus aegyptiacus*, **gen. et sp. nov.**, p. 91, KUHN 295.

†*Teleosaurus* sp. ?, recorded from Lias, Monte San Giuliano, GREGORIO 215.

ORDER RHYNCHOCEPHALIA.

†*Clarazia schinzi* **gen. et sp. nov.**, a new Thalattosaur from the Trias of Switzerland, PEYER 412.

ORDER TESTUDINES.

†AMPHICHELYDIA.

PLEUROSTERNIDAE.

Platychelys courantii, **sp. nov.**, Upper Jurassic of St. Jean de Barrou, p. 39, near *P. oberndorferi*, BERGOUNIOUX 42.

Rhinochelys amaberti, **sp. nov.**, skull descr. & figd. Vraconnian of Isère, p. 605, MORET 354.

PLEURODIRA.

PELOMEDUSIDAE.

†*Paralichelys carinata*, **gen. & sp. nov.**, Pliocene of Rousillon, near *Poly-sternum*, p. 165, BERGOUNIOUX 42.

Pelusios sinuatus zuluensis Hewitt and *P. s. leptus* Hewitt = *P. sinuatus* (Smith), LOVERIDGE 318.

†Polysternidae, **fam. nov.** to include *Polysternum* and *Paralichelys*, between Pelomedusidae and Chelydidae p. 51; *Polysternum*, genus redefined, *P. cassani*, **sp. nov.** Eocene of Aquitaine, p. 43, *P. mengaudi*, **sp. nov.** Eocene of Castrias, BERGOUNIOUX 42.

†BOTHREMYDIDAE.

Taphrosphys miocenica, **sp. nov.**, Calvert Formation, Maryland, p. 155, COLL. & LYNN 115.

CHELYIDAE.

Chelodina sulcifera and *C. longicollis* Gray are distinct, redescri. & figd., L. MÜLLER 364.

Platemys, genus discussed, RUST 450.

CRYPTODIRA.

CHELONIIDAE.

Caretta, genus and spp. redefined, DERANIYAGALA 140.

†*Chelonia marylandica*, **sp. nov.**, Calvert formation, Maryland, p. 162, COLL. & LYNN 115.

†*Peritresius virginianus*, **sp. nov.**, Miocene of Westmoreland Co., Virginia, p. 176, BERRY & LYNN 45.

CINOSTERNIDAE.

Kinosternon scorpioides pachyurum proposed for the Villa Montes form, p. 100, MÜLL. & HELLMICH 366.

Sternotherus odoratus, variation, GRANT 207.

EMYDIDAE.

†*Ptychogaster daguini*, **sp. nov.**, Eocene of Blayais, p. 72, BERGOUNIOUX 42.

†*Broilia manuscens* **sp. nov.** Oligocene of Manosque, BERGOUNIOUX 39.—†*B. massiliensis* **sp. nov.**, p. 13, BERGOUNIOUX 40.

†*Chrysemys astrei*, **sp. nov.**, Oligocene of Armissan, p. 138, BERGOUNIOUX 42.

Cistudo yucata Blgr. = *Cistudo mexicana* Gray, L. MÜLLER 365.

†*Clemmys aliberti*, **sp. nov.**, Oligocene of Toulouse, p. 101, †*C. subpyrenaica*, **sp. nov.**, Oligocene of Toulouse, p. 107, †*C. chainei*, **sp. nov.**, Oligocene of the Gironde, p. 143; †*C. rotundiformis*, **sp. nov.**, Miocene of Sansan, p. 154; †*C. romani*, **sp. nov.**, Pliocene of Roussillon, BERGOUNIOUX 42.—*C. caspica* and *C. rivulata* are distinct species, BIRD 52.

†*Emys gripiacensis*, **sp. nov.**, Oligocene of Toulouse, p. 97; †*E. aquitanensis*, **sp. nov.**, Miocene of Sansan, BERGOUNIOUX 42.—†? *Emys orbicularis* = *E. europaea*, Upper Pliocene of Rheinhessen, HELLER 232.

†*Geoclemys hamiltoni*, remains at Harappa, PRASHAD 427.

†*Kachuga tectum* remains at Harappa, PRASHAD 427.

Malaclemys centrata concentrica is correct, not *M. t. terrapin*, STEJNEGER 508.

Terrapene goldmani Stej. and *T. nelsoni* Stej. = *Cistudo mexicana* Gray, L. MÜLLER 365.

TESTUDINIDAE.

†*Cheirogaster maurini*, **gen. et sp. nov.**, Eocene of the Gironde, near *Testudo*, p. 78, BERGOUNIOUX 42.

†*Cinixys couzieri*, sp. nov., Oligocene of Toulouse, p. 114, BERGOUNIOUX 42.—*Kinixys jordani* Hewitt = *K. spekii* Gray, LOVERIDGE 318.

†*Testudo pusilla*, sp. nov., Argiles Stampiennes of Marseilles p. 21, near *nanus*, BERGOUNIOUX 40.—†*T. castrensis*, sp. nov., Eocene of Aquitaine, p. 53, †*T. phosphoritarum* sp. nov., Eocene of Quercy, p. 85, †*T. denizoti*, sp. nov., Oligocene of Toulouse, p. 87, †*T. chailloti*, sp. nov., Oligocene of Toulouse, p. 93, BERGOUNIOUX 42.—†*T. ducatei*, sp. nov., Calvert formation, Maryland, p. 169, COLL. & LYNN 115.—†*Testudo strandi*, sp. nov., Miocene of Szurdokpuspöki (Hungary), SZALAI 530.

DERMOCHELYIDAE.

Dermochelys in the Mediterranean, FAOUZI 170.

TRIONYCHOIDEA.

CARETTOCHELYIDAE.

†*Akrochelys neuvillei*, gen. et sp. nov., Eocene of Blayais, near *Carettochelys*, p. 71, BERGOUNIOUX 42.

TRIONYCHIDAE.

†Trionychidae, family reviewed, BERGOUNIOUX 42.

†*Aspideretes planicostatus*, sp. nov., Up. Cret. Amur R., China, p. 47, RIABININ 436B.

†*Chitra indica* remains at Harappa, PRASHAD 427.

†*Lissemys punctata* remains at Harappa, PRASHAD 427.

†*Trionyx (Amyda) dieupentalensis*, sp. nov., Oligocene of Toulouse, p. 119, †*T. (A.) burdigalensis*, sp. nov., Oligocene of Bordelaise, p. 126, †*T. (A.) ciryi*, p. 128, and *T. (A.) acutiformis*, p. 131, spp. nov., Oligocene of Armissan, BERGOUNIOUX 42.—†*Trionyx (Axestus) sansaniensis*, sp. nov., Miocene of Sansaon, p. 151, BERGOUNIOUX 42.—†*Trionyx mourieri*, sp. nov., p. 133, and †*T. chaubeti*, sp. nov., p. 136, Oligocene of Armissan, BERGOUNIOUX 42.—†*T. gangetica* remains at Harappa, PRASHAD 427.

ORDER SQUAMATA.

SAURIA.

Key to the Lizards of the United States and Canada, all spp. figd.,

BURT 87.—*Stellio* Laurenti, type by designation *saxatilis*, STEJNEGER 509.

†MOSASAURIDAE.

Leiodon anceps, recorded from Morocco, ARAMBOURG 18.

GECKONIDAE.

Review of the Geckonidae of Japan, OKADA 387.

Aeluroscalabotes felinus, new for Sumatra, ROUX 445.

Caudiverbera Laurenti, type *peruviana* = *Lacerta caudiverbera* Linn., STEJNEGER 509.

Cosymbotus craspedotus, new for Sumatra, ROUX 445.

Gekko Laurenti type *verticillatus* = *Lacerta gekko* Linn., STEJNEGER 509.

Gymnodactylus yamashinae, sp. nov., Kumejima I., Okinawa group, near *sermowaiensis*, p. 53, OKADA 389.—*G. kotschy wettsteini*, ssp. nov., Micronisi I., off St. Nicolai, Crete, p. 58, *G. bartoni* figd., ŠTĚPÁNEK 509A.—*G. gabrielis*, sp. nov., Leb-ekal and Halwan, Persia, p. 195, nr. *heterocercus*, WERNER 571.

Hemidactylus parkeri, sp. nov., Zanzibar, p. 59, nr. *citernii*, *H. mandanus*, sp. nov., Manda Island, p. 60, nr. *puccionii*, LOVERIDGE 317.—*H. okinawensis*, sp. nov., Okinawajima, near *bowringi*, p. 271, figs., OKADA 387.

Lygodactylus scheffleri Sternfeld revived as a race of *L. fischeri*, LOVERIDGE 318.—*L. picturatus keniensis*, ssp. nov., Lodwar, L. Rudolf, p. 602, *L. picturatus mombasicus* Lov., status, PARKER 395.

Pachydactylus bibroni, key to the races, PARKER 398.

Phyllodactylus delcampi, sp. nov., Tierra Colorada, Guerrero, Mexico, p. 141, nr. *mentalis* and *tuberculosus*, *P. lanei* H. M. Smith = *P. tuberculosus*, MOSAUER 357.

Pseudothecadactylus, nom. nov., for *Torresia*, preoc., type *Thecadactylus australis*, BRONGERSMA 80.

Rhopropus, key to the spp., PARKER 398.

Sphaerodactylus dunni, sp. nov., Naco R., Honduras, near *difficilis*, p. 46, SCHMIDT 472.

AGAMIDAE.

Agama a. turuensis Loveridge = *A. a. elgonis* Lönnberg, *A. a. kaimosae* Loveridge = *A. planiceps caudospinosa* Meek, LOVERIDGE 318.

Draco, geographical variation, HENNIG 237.—*Draco*, genus revised, *D. reticulatus* and *D. timoriensis* are races of *D. volans*, *D. volans boschmaai*, ssp. nov. Flores, p. 180, *D. cornutus* is a race of *D. spilopterus*, *D. cryptotis* Despax revived as a race of *D. maximus*, *D. quinquefasciatus longibarba*, ssp. nov. Borneo, p. 194, *D. modigliani* Vinciguier. and *D. bimaculatus* Günth. and *D. beccarii* Pet. & Doria and *D. spilonotus* Günth. and *D. amboinensis* Less. and *D. bourouniensis* Less. and *D. ochropterus* Werner are races of *D. lineatus*, *D. mindanensis* Stej. is a race of *fimbriatus*, *D. microlepis* Blgr. is a race of *haematopogon*, *D. indochinensis* Smith is a race of *D. taeniopterus*, *D. formosus laetipictus*, ssp. nov. Mentawai Is. p. 217, *D. obscurus* Blgr. is a race of *D. formosus*, *D. cyanolaemus* Blgr. = *D. blanfordi*, *D. toxopei* and *D. buruensis* both of De Jong = *D. lineatus bourouniensis*, *D. intermedius* Werner = *D. maximus maximus*, *D. quadrasi* Boettg. = *D. s. spilopterus*, *D. gracilis* Barb. = *D. spilopterus cornutus*, *D. rizali* Taylor and *D. everetti* Blgr. = *D. volans reticulatus*, HENNIG 238.

Japalura brevipes, sp. nov., Bukai, near Horisha, C. Formosa, near *splendida*, p. 117, GRESSITT 216.

IGUANIDAE.

Anolis equestris noblei, ssp. nov. Sierra de Nipe, Oriente Prov., p. 250, *A. e. hassleri*, ssp. nov., Los Indios, I. of Pines, p. 251, *A. clivicolus*, sp. nov. Turquino Peak, Cuba, near *alutaceus*, p. 251, BARBOUR & SCHREVE 28.—*A. loveridgei*, sp. nov., Portillo Grande, Yoro, Honduras, near *copei*, p. 47, SCHMIDT 472.—*A. monticola*, sp. nov., Massif de la Hotte, Haiti, p. 93, nr. *sagrei*, SHREVE 492.—*A. dunni*, sp. nov., Mts. of Guerrero, Mexico, p. 9, nr. *gadovii*, H. M. SMITH 503.

Basiliscus Laurenti, type *americanus* = *Lacerta basiliscus* Linn., STEJNEGER 509,

Iguana Laurenti type *tuberculata* = *Lacerta iguana* Linn., STEJNEGER 509.

Leiocephalus carinatus coryi, ssp. nov., Bemini Is., Bahamas, p. 129, nr. *L. carinatus hodsdoni*, ssp. nov., Long Is., Bahamas, p. 130, SCHMIDT 471.

Phrynosoma, Pacific coast spp., KLAUBER 282.

Sceloporus boulengeri Stej. is a race of *clarki*, BURT 86.—*S. pilsbryi*, sp. nov., Alvarez, San Luis Potosi, Mexico, p. 473, nr. *dugesi*, *S. binocularis*, sp. nov., Alamar, Nuevo Leon, Mexico, p. 474, nr. *viviparus*, DUNN 153.—*S. edward-taylori*, sp. nov., Ixtepec, Oaxaca, Mexico, p. 6, nr. *melanorhinus*, H. M. SMITH 498.—*S. cochranae*, sp. nov., Mt. Zempoaltepec, Oaxaca, Mexico, *chrysostictus-siniferous* group, p. 87; *S. carinatus*, sp. nov., Chiapas, Mexico, near *squamosus*, p. 89; *S. lineolateralis*, sp. nov., near Pedricena, Durango, Mexico, *torquatus* group, p. 92, H. M. SMITH 499.—*S. pictus*, sp. nov., Santa Catarina, Puebla, S. Mexico, near *megalepidurus*, p. 1, H. M. SMITH 500.—*S. jarrovi* *immucronatus*, ssp. nov., El Pinalito, Hidalgo, Mexico, p. 223, nr. *cyanogenys*, *S. ornatus caeruleus*, ssp. nov., San Pedro, Coahuila, Mexico, p. 227, H. M. SMITH 502.

CHAMAELEONIDAE.

Chamaeleo Laurenti, type *parisianum* = *Lacerta chamaeleon* Linn., STEJNEGER 509.—*Chamaeleon jacksoni* var. *vauresceae* Tornier = *C. jacksoni* Blgr., LOVERIDGE 316.

SCINCIDAE.

Ablepharus carsonii Blgr. = *A. wahlbergii* (Smith), LOVERIDGE 318.—*A. cabindae* referred to *Panaspis* Cope, PARKER 398.—*A. smithi*, sp. nov. Nyonga, Belgian Congo, near *cabindae*, p. 29, DE WITTE 581.

Chalcides Laurenti, type *Lacerta chalcides* Linn., STEJNEGER 509.—*C. pulchellus* Mocquard = *C. b. bottegii* Blgr., LOVERIDGE 316.—*C. ocellatus tassiliensis*, ssp. nov., Tassili des Azdjers, Sahara, p. 274, ANGEL 15.

Eumeces, revision of genus, *E. gilberti rubricaudatus*, ssp. nov., Fresno Co., California, p. 446, TAYLOR 535.—

Eumeces egregius onocrepis, *E. inexpectatus*, *E. g. gilberti*, *E. laguensis*, *E. laticutatus okadae*, *E. zaroudnyi*, *E. algeriensis meridionalis* are distinct forms, TAYLOR 536.—*E. obtusirostris* Bocourt antedates *E. pachyurus* Cope, *E. rovarosae* Dujes is a young *E. sumichrasti* Cope, *E. schmidtii* Dunn = *E. sumichrasti* (Cope), *E. furcirostris* is a subsp. of *E. lynce*, *E. belli* Gray = *E. lynce* Wiegmann, *E. c. formosensis* Van Denb. = *E. chinensis*, *E. marginatus amamiensis* and *E. m. kikaigensis* = *E. oshimensis* Thompson, *E. stimsoni* Thompson antedates *E. ishigakiensis* Van Denb., *E. pekinensis* Stej. = *E. xanthi* Günth., TAYLOR 536.—*Eumeces*, note on Mexican spp., TAYLOR 539.

Euprepes raddoni Gray = *Mabuya blandingii* (Hallowell), LOVERIDGE 316.—*E. (Euprepis) taitanus* Peters = *Mabuya planifrons* (Peters), LOVERIDGE 318.

Leiopisma morokanum, sp. nov. Moroka, Brit. N. Guinea, near *L. miotis*, PARKER 396.

Lygosoma (Sphenomorphus) flavipes, sp. nov., Mondo, Papua, near PARKER 396.

Mabuya, American spp. reviewed, *M. guaporicola*, sp. nov., Rio Guapore, Matto Grosso, Bolivia, near *lineolata*, p. 549, *M. frenata cochabambae*, ssp. nov., Pocona, Bolivia, p. 553, *M. deserticola*, sp. nov., Mollendo, Peru, near *frenata*, p. 554, DUNN 152.—*M. varia* var. *longiloba* Meth. & Hew. = *M. varia damaranus* (Peters), LOVERIDGE 316.—*M. obsti* Werner revived as a race of *M. inquietaniata*, LOVERIDGE 318.—*M. sulcata sextriata* Werner = *M. sulcata*, *M. varia longiloba* Meth. & Hew. = *M. damarana* (Peters), PARKER 398.

Scincus Laurenti, type *Lacerta scincus* Linn., STEJNEGER 509.

DIBAMIDAE.

Dibamus bourreti, sp. nov., Tam Dao, Tongking, p. 354, ANGEL 14.

XANTUSIDAE.

Lepidophyma gaigeae, sp. nov., Durango, Mexico, p. 3, nr. *flavomaculatum*, MOSAUER 359.

TEIIDAE.

Ameiva maynardii parvinaguae ssp. nov., Little Inagua Island, Bahamas. p. 3, BARB. & SHREVE 29.

Prionodactylus rahmi, sp. nov., Andes p. 27, nr. *spinalis*, GRJES 217.

AMPHISBAENIDAE.

Amphisbaena neglecta, sp. nov., Matto Grosso, Brazil, p. 527, nr. *silvestrii*, DUNN & PIATT 155.—*A. heathi*, sp. nov., Baixa Verde, Brazil, p. 29, nr. *vermicularis* and *darwini*, *A. spixii*, sp. nov., Ceara Mirim, Brazil, p. 30, nr. *steindachneri*, *A. slevini*, sp. nov., Manaos, Brazil, p. 31, nr. *slateri*, SCHMIDT 474.

Leposternon polystegoides, sp. nov., L. Paparay, Brazil, p. 31, nr. *polystegum*, SCHMIDT 474.

LACERTIDAE.

Acanthodactylus tristrami orientalis var. nov., Syria, ANGEL 11.

Apathya cappadocica wolteri, ssp. nov., Mardin, Asiatic Turkey, p. 266, pl. vii, BIRD 52.

Bedriagaia moreaui, sp. nov., Amani, Tanganyika, p. 68, nr. *tropidopholis*, LOVERIDGE 320.

Eremias brevirostris microlepis, var. nov., Haouarine, Syria, ANGEL 11.

Philochortus, key to the spp., *P. lhotzi*, sp. nov., near In Abezon, Soudan, ANGEL 13.

Lacerta princeps Blanf., redescrip. and figd., FEJÉVÁRY 171.—*L. saxicola* has 13 races, *L. s. mehelyi*, ssp. nov., Taurus de Cilicie, p. 165, *L. s. tristis*, ssp. nov., Adapazar, p. 165, *L. s. obscura*, ssp. nov., Borjom, p. 165, LANTZ & CYRÉN 303.—*L. doderleinii* (Betta) = *L. wagleriana* (Gistel), MERTENS 345.—*L. lifordi* subspecies, photos, SCHREITMÜLLER 477.—*L. princeps kurdistanica*, ssp. nov., Kurdistan, p. 304, SUCHOV 520.—*L. laevis troodica*, ssp. nov., Troodos Range, Cyprus, p. 655, figs., WERNER 570.

Nucras intertexta damara, ssp. nov., Sissekab, S.W. Africa, p. 135, PARKER 398.

Seps Laurenti type by designation *caerulescens* = *Lacerta agilis* Linn., STEJNEGER 509.

Zootoca chalybdea Eichw. = *Lacerta saxicola*, LANTZ & CYRÉN 303.

ANGUIDAE.

Gerrhonotus species, status, habits, photos, FITCH 176.

ZONURIDAE.

Cordylus Laurenti, type *Lacerta cordylus* Linn., STEJNEGER 509.

Zonurus parkeri Cott. = *Z. tropidosternum* Cope, LOVERIDGE 318.—*Z. jordani*, sp. nov., Hoffnung, near Windhoek, S.W. Africa, near *polyzonus*, p. 133, PARKER 398.

VARANIDAE.

Placovaranus, gen. nov. type *Varanus komodoensis*, p. 285, FEJÉVÁRY 172.

†*Varanus* sp., from Harappa, India, PRASHAD 427.

SERPENTES.

Poisonous snakes of Mexico, 44 forms listed, CAMPO 94.—Sudan snakes, 39 spp. listed, CORKILL 119.—Snakes of Japan, MAKI 332.—Snakes of Uganda, PITMAN 416.—Yucatan snakes, 38 spp. keyed, SCHMIDT & ANDREWS 475.—List of Argentine Snakes, SERIÉ 488.—Aglyphous and opisthophyphous forms of *Leptodeira*, DUNN 151.—Sex variation in snakes, FORCE 178.—Venous system of Rat Snake, RAY 431.—Review of mating habits of snakes, D. D. DAVIS 132.

†PALAEOPHIDAE.

Palaeophis toliapicus vertebrae recorded from London Clay at Sheppey, A. G. DAVIS 129.

LEPTOTYPHLOPIDAE.

Gluconia braueri Sternfeld = *Typhlops braminus* (Daudin), LOVERIDGE 318.—*G. okahandjana* Ahl = *Leptotyphlops distanti*, PARKER 398.

Leptotyphlops macrorhynchus bilmaensis, ssp. nov., Oasis of Bilma, Sahara, p. 274, ANGEL 15.—*L. distanti* status discussed, *L. latifrons* = *L. distanti*, PARKER 398.

ILYSIIDAE.

Cylindrophis spp. discussed, MAHENDRA 329.

BOIDAE.

Constrictor Laurenti, type *Boa constrictor* Linn., STEJNEGER 509.

Eunectes barbouri, sp. nov., Marajo, Brazil, p. 504, nr. *notaea*, *E. deschauensei*, sp. nov., Marajo, Brazil, p. 505, DUNN & CONANT 154.

Gongylophis conicus, new for Ceylon, DERANIYAGALA 137.

Liasis maximus, sp. nov., ? New Guinea, near *papuanus*, WERNER 569.

Tropidophis pardalis greenwayi, ssp. nov., Caicos Islands, Bahamas, p. 2, BARB. & SHREVE 29.

TYPHLOPIDAE.

Typhlops batesii Boulenger = *T. steinhausi* Werner, LOVERIDGE 316; *T. boulengeri* Bocage = *T. p. punctatus* (Leach), LOVERIDGE 318.—*T. stadelmani*, sp. nov., Subirana Valley, Yoro, Honduras, near *tenuis*, p. 48, SCHMIDT 472.

COLUBRIDAE.

(AGLYPHA.)

Achalinus niger, sp. nov., Mt. Arisan, C. Formosa, nr. *formosanus* p. 60, MAKI 332.

Calamaria pavimentata formosana ssp. nov., Mt. Arisan, C. Formosa, p. 136, MAKI 332.

Coluber najadum Eichw. (*Zamenis dahli* Fitz.), new for Italy, G. MÜLLER 362.—*C. aestivus* Linn. is type of *Cyclophis*, SCHMIDT & NECKER 476.—*C. nummifer pallaryi*, ssp. nov., Hama, Syria, ANGEL 11.—*C. ornatus* Merrem is type of *Chrysopelea*, PARKER 397.

Coronella Laurenti type *austriaca*, STEJNEGER 509.—*C. austriaca* in Wiltshire, HULL 257.—*C. regularis praenata* Angel = *C. coronata* (Schlegel), *C. semiornata mossambicae* Cott. = *C. s. semiornata* Peters, LOVERIDGE 318.

Cyclophis Günth. = *Opheodrys* Fitz., SCHMIDT & NECKER 476.

Dinodon septentrionale multifasciatum,
ssp. nov., Ishigaki-Oshima, MAKI 332.

Eurypholis mayae, sp. nov., Dzitas,
Yucatan, near *vernalis*, GAIGE, 187.

Elaphe japonica, sp. nov., nr. Nikko,
Japan, nr. *conspicillata*, p. 91, MAKI
332.

Ficimia, Mexico spp., *F. desertorum*,
sp. nov., Guaymas, Sonora, Mexico,
near *cana*, p. 51, TAYLOR 537.

Helicops bangweolicus, sp. nov.,
Nsombo, N. Rhodesia, MERTENS 346.

Lampropeltis californiae is a race of
L. getulus, KLAUBER 281.—*L. triangulum schmidtii* ssp. nov., Tres Marias Is.,
Mexico, STUART 518.—*L. zonata*, status
of name, BURT 88.

Leimadophis boulengeri Barbour =
Dromicus ornatus Garman, PARKER 397.

Liopeltis majorbicaninata, ssp. nov.,
Daibuzan, Formosa, p. 110, MAKI 332.

Lycophidion ornatum, sp. nov., Con-
gulu, Angola, near *capense*, p. 122,
PARKER 398.

Mehelya somaliensis Lönn. &
Anderss. = *M. chanleri* (Stejneger),
LOVERIDGE 316.

Meizodon regularis Fischer = *Coronella coronata* (Schlegel), LOVERIDGE 318.
—*M. variegatus* Peters = *Natrix fuliginoides* (Günther), LOVERIDGE 316.

Natrix Laurenti, type *vulgaris* =
Coluber natrix Linn., STEJNEGER, 509.
—*N. cyclopion floridana*, ssp. nov.,
Florida, p. 1, GOFF 205.—†*N. natrix*
from Upper Pliocene of Rheinhessen,
HELLER 232.—*N. tigrina formosana*,
ssp. nov., Taichu Prov., Formosa p. 44;
N. suriki, sp. nov., Makazayazaya, S.
Formosa, nr. *annularis*, p. 38; *N. miyujimae*, sp. nov., Taihoku, Formosa,
nr. *stolata*, p. 49, MAKI 332.

Ninia sebae morleyi, ssp. nov., Chichen
Itza, Yucatan, p. 169, SCHMIDT &
ANDREWS 475.

Oligodon arnensis albiventer revived as
a race, DERANIYAGALA 136.—*O. kheri-*
ensis, sp. nov., North Kheri Div., U.P.,
India, near *purpurascens*, ACHAR. &
RAY 4.

Oophilositum parkeri and *O. fasciatum*,
dentition, PARKER 398.

Opheodrys Fitz. revived with 7 spp.,
SCHMIDT & NECKER 476.

Prosymna ambigua stuhlmanni
(Pfeffer) revived as a race of *P. ambigua*, LOVERIDGE 318.

Pseudoxenodon popei, sp. nov., Loi
Mother Mt., Hainan, near *karlschmidtii*,
p. 119, GRESSITT 216.

Rhadinaea flavilata in Texas, NET-
TING 374.

Scaphiophis calciatii Calabresi = *S. raffreyi* Bocourt, LOVERIDGE 318.

Sibynophis annulatus hondurensis,
ssp. nov., Yoro, Honduras, p. 48,
SCHMIDT 472.—*S. collaris formosensis*,
ssp. nov., Taihoku, Formosa, p. 25,
MAKI 332.

Simocephalus butleri Blgr. = *Mehelya chanleri* (Stejneger), *S. unicolor* Boulenger = *M. chanleri* (Stejneger), LOVERIDGE 316.

Tachyophis, type *Coluber pictus* Gmelin, nom. nov. for *Dendrophis*, as a subgenus of *Dendrelaphis*, [omitted from MERTENS Z.R. 1934 318].

Thamnophis ordinoides, abnormal coloration, SVIHLA 523.—*T. ordinoides hydrophila*, ssp. nov., Jackson Co., Oregon, FITCH 175.

Thrasops jacksoni schmidtii, ssp. nov., Meru Forest, Kenya, p. 63, LOVERIDGE 321.

Trimetopon posadasi, sp. nov., Volcan Zunil, Guatemala, p. 79, SLEVIN 495.

†*Zamenis jugularis* var. *caspia* and *Z. viridiflavus* var. *carbonaria* from Upper Pliocene of Rheinhessen, HELLER 232.

(OPISTHOGLYPHA.)

Aparallactus concolor boulengeri Scor-
tecci = *A. uluguruensis* Barb. & Love-
ridge, LOVERIDGE 318.—*A. concolor boulengeri* = *A. concolor* Fischer, PARKER, 395.

Boiga dendrophila atra, ssp. nov., Makala, Celebes, p. 257, KOPSTEIN 290.

Chlorophis schubotzi Sternfeld = *C. emini* (Günther) & *C. heterodermus pobeguini* Chab. = *C. heterodermus* Hallowell, *C. cyaneus* Hecht = *C. heterodermus* Hallowell, LOVERIDGE 316.

Dromicus juliae copeae, subsp. nov. Guadeloupe, PARKER 397.

Erythrolamprus aesculapii impar, ssp. nov., Yoro, Honduras, p. 49, SCHMIDT 472.

Geodipsas heimi, sp. nov., Sahandrato R., Tsianovaha, Madagascar, near *boulengeri*, p. 127, ANGEL 12.

Hemachatus is correct, not *Sepedonophis*, STEJNEGER 507.

Leptodeira, genus discussed, N. American spp. keyed, DUNN 151.—*L. bakeri*, sp. nov., Aruba I., Venezuela, RUTHVEN 452.

Oxybelis acuminatus, photo, NETTING 376.

Oxyrhopus trigeminus, colour in life, ROSENBERG 440.

Rhinocalamus meleagris Sternfeld = *Micrelaps bicoloratus* Sternfeld, LOVERIDGE 318.

Sepedonophis nom. nov. for *Sepedon* preocc., H. M. SMITH 501: see also STEJNEGER 507.

Tantilla gracilis, 2 races in Texas, *T. g. gracilis* and *T. g. nigriceps*, BURT 90.

DIPSADIDAE.

Amblycephalus komaii, sp. nov., Mt. Arisan, C. Formosa, nr. *formosensis*, p. 149, MAKI 332.

Dipsas Laurenti monotype *indica*, STEJNEGER 509.

(PROTEROGLYPHA.)

ELAPIDAE.

Bungarus lividus and *niger*, note, BARKER 31.—*B. javanicus*, redescribed, KOPSTEIN 290.

Cobra Laurenti, type *Coluber atropos* Linn. (= *Bitis*), STEJNEGER 509.

Dendraspis sjostedtii Lönnberg = *D. angusticeps* (Smith), LOVERIDGE 318.—*D. jamesoni kaimosae*, ssp. nov., Nyanza Prov., Kenya, p. 64, LOVERIDGE 321.

Dendroaspis Schlegel 1848 or 1849, type *Elaps jamesoni* Traill, for *Dendraspis* auct. preocc., BRONGERSMA 80.

Micrurus, 33 S. American forms listed with synonyms, *M. mertensi*, sp. nov., Pacasmayo, Peru, near *corallinus*, p. 192, *M. peruvianus*, sp. nov., Perico, Peru, near *mertensi*, p. 193, *M. carinicauda*, sp. nov., Orope, Venezuela, near *dumerili*, p. 194, *M. transandinus*, Andagoya, Colombia, near *nigrocinctus*, p. 195, *M. antioquiensis*, Santa Rita, Colombia, near *transandinus*, p. 195, *M. ecuadorianus*, Rio Daule, Ecuador, near *clarki*, p. 196, *M. ancoralis jani*, ssp. nov., Andagoya, Colombia, p. 197, SCHMIDT 468.—*Micrurus nigrocinctus coibensis*, Coiba I., ssp. nov., Panama, p. 208; *M. nigrocinctus alleni*, ssp. nov., Siquia Dist., Nicaragua, p. 209, *M. clarki*, sp. nov., Yavisa, Panama, p. 211, nr. *mertensi*, SCHMIDT 469.

Naja Laurenti, type *Coluber naja* Linn., STEJNEGER 509.

HYDROPHIIDAE.

Laticauda Laurenti, type *Coluber laticaudatus* Linn., STEJNEGER 509.

VIPERIDAE.

Revision of European and Mediterranean Vipers, SCHWARZ in Bieling & others 49A.—*Vipera* spp. found at 2,430 metres altitude in Pyrenees, DENIS 135.

Aspis Laurenti type *cleopatrae*, STEJNEGER 509.

Bitis, the proper name for this genus is *Cobra*, STEJNEGER 509.

Bothrops godmanni is a distinct sp., PICADO 415.

Caudisona Laurenti, type *durissus* = *horridus*, STEJNEGER 509.

Cerastes Laurenti, type by designation *candidus* = *Coluber naja* Linn., STEJNEGER 509.

Crotalus spp. descr., keyed and figd., KLAUBER 278.—*C. lepidus klauberi*, ssp. nov., Huachuca Mts., Arizona, p. 2, GLOYD 202.—*C. molossus nigrescens*, ssp. nov., La Colorada, Mexico, p. 2, GLOYD 203.—*C. unicolor* Lidth de J., is a distinct sp., GLOYD 201.—*C. mitchellii* has 3 subspp., viz., *mitchelli*, *pyrrhus* and *stephensi*, KLAUBER 280.

Mesocoronis coronis, photo, REUSS, 434.

Pelias marchici, *P. rudolphi*, photos, REUSS 434.

Trimeresurus lansbergi annectens, ssp. nov., Yoro, Honduras, p. 50, SCHMIDT 472. *T. gramineus formosensis* & *T. g. kodairai*, ssp. nov., Tainan & Taihoku, Formosa p. 214 & 216, MAKI, 332.

Vipera Laurenti, type *redii* = *Coluber aspis* Linn., STEJNEGER 509.—*V. russelli* is a race of *V. lebetina*, SCHWARZ in Bieling & others 49A.—*V. r. sublimitis*, ssp. nov., Java, p. 261, KOPSTEIN 290.—*V. r. formosensis*, ssp. nov., Takas Prov., Formosa, p. 197, MAKI 332.—*V. xanthina* and *bornmeulleri* are valid species, WERNER 570.

†ICHNITES.

Footprints from the Trias of Stuttgart and Besano, VON HUENE 252.—Dinosaur tracks in Pennsylvania,

HICK. & WILLARD 242.—Tracks of a supposed flying reptile from Permian of Texas, MATHEW 339.

Attenosaurus gen. nov. *A. indistinctus* sp. nov., *A. subulensis* sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Bipedes gen. nov. *B. aspodon* sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Cincosaurus gen. nov. *C. cobbi* sp. nov. *C. fisheri* sp. nov. *C. jaggerensis*, sp. nov., *C. jonesii* sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Otnerpeton primum gen. et sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Hydromeda fimbriata gen. et sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Limnosaurus alabamaensis gen. et sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Quadropedia prima gen. et sp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

Trisaurus lachrymus and *T. secundus* gen. et spp. nov. Carboniferous of Alabama, ALDRICH & JONES 8.

XV. AVES

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS.

| | PAGE |
|-------------------|------|
| I.—TITLES | 1 |
| II.—SUBJECT INDEX | 61 |
| III.—SYSTEMATIC | 74 |

I.—TITLES.

Abdulali, H. *vide* Ali.

1.—Ábrahám, A. Beiträge zur Kenntniss der Innervation des Vogeldarmes. Z. Zellforsch. mikr. Anat. Berlin 23 1936 pp. 737-745 6 figs.

2.—Ábrahám, A. Ueber die Nerven der Vogelkloake. Arb. Ung. Biol. Forsch. Inst. 8 1936 pp. 1-8 6 figs. [German, with Magyar rés.]

3.—Acharya, H. N. Migration of Flamingo (*Phoenicopterus ruber antiquorum* Temm.) from North Gujerat. J. Bombay nat. Hist. Soc. 39 1936 p. 182.

4.—Adam, N. K. The pollution of the sea and shore by oil. A report submitted to the Council of the Royal Society. London (Printed by Harrison & Sons) 1936 8vo. [Privately printed.]

5.—Adlersparre, A. Zum Thema "Vögel und Ameisen." Orn. Monatsb. 44 1936 pp. 129-135.

6.—Afonin, A. B. Contribution to the chromosome map of *Gellus domesticus*. Biol. Zh. Moscow 5 1936 pp. 885-886. [Russian, with English rés.]

7.—Agostini, A. Analisi sperimentale del dimorfismo sessuale del piu-

maggio della Quaglia (*Coturnix coturnix* (L.)). Arch. zool. Torino 22 1936 pp. 123-133.

Albert, W. E. *vide* Errington.

8.—Aldeghi, G. Il Canarino. Riv. ital. Orn. 6 1936 pp. 45-52 col. pl.

9.—Aldrich, J. W. Additions to the list of Ohio Birds. Auk 53 1936 pp. 98-99.

10.—Alexander, G. Eastern Summer Tanager in Colorado. Auk 53 1936 p. 452.

11.—Alexander, W. B. Birds in: Regan's Natural History pp. 393-604 many illustr. London (Ward, Lock) 1936 8vo.

12.—Ali, H. A. The distribution of the Kashmir Roller (*Coracias garrula semenovi* Loudon & Tschusi). J. Bombay nat. Hist. Soc. 38 1936 p. 622.

13.—Ali, S. Economic ornithology in India. Curr. Sci. Bangalore 4 1936 pp. 472-478.

14.—Ali, S., with notes by H. Whistler. The ornithology of Travancore and Cochin. Parts iv v. J. Bombay nat. Hist. Soc. 38 1936 pp. 484-514, 759-790 39 1936 pp. 3-35.

- 15.—Ali, S. Do birds employ ants to rid themselves of ectoparasites? *J. Bombay nat. Hist. Soc.* 38 1936 pp. 628-631.
- 16.—Ali, S. and Abdulali H. The Birds of Bombay and Salsette. Part i. *J. Bombay nat. Hist. Soc.* 39 1936 pp. 83-103 map photos.
- 17.—Alikhanian S. The Karotype *Anas boscas*. *Zool. J. Moscow* 15 1936 pp. 74-81 17 figs.
- 18.—Allee, W. C. Analytical studies of group behavior in Birds. *Wilson Bull.* 48 1936 pp. 145-151.
- 19.—Allen, E. G. Some sixteenth century paintings of American Birds. *Auk* 53 1936 pp. 17-21 1 pl.
- 20.—Allen, F. H. Injury-feigning instinct among birds. *Auk* 53 1936 pp. 125-127 see also P. A. Taverner & others pp. 366-367 and S. A. Grimes & others p. 478-482.
- 21.—Allen, R. P. and Peterson, R. T. The Hawk migrations at Cape May Point, New Jersey. *Auk* 53 1936 pp. 393-404 2 maps.
- 22.—Allender, C. Seasonal gonadal cycle of the English Sparrow, *Passer domesticus* (L.). *Ecology Brooklyn* 17 pp. 258-262 1 fig.
- 23.—Allender, C. The seasonal gonadal activity of the English Sparrow (*Passer domesticus*). *Proc. Okla. Acad. Sci.* 14 1934 pp. 19-20.
- 24.—Allender, C. Microscopical observations on the gonadal cycle of the English Sparrow. *Trans. Amer. micr. Soc. Menasha* 55 1936 pp. 243-249 1 pl.
- 25.—Anker, J. Kjaerbøllings Fugle-vaerk. Dansk orn. Foren. Tidsskr. 30 1936 p. 5-16 2 figs.
- 26.—Anon. Lista sistematica de las aves argentinas. *Hornero B. Aires* 6 1936 pp. 343-364.
- 27.—Aranjo, F. S. Sur la sort de l'ectoderme de la membrane chorio-allantoide de l'embryon du poulet au cours du développement de l'œuf. *C.R. Soc. Biol. Paris* 123 1936 pp. 634-636.
- 28.—Ardley, R. A. B. The Birds of the South Orkney Islands. *Discovery Rpts. Cambridge* 12 1936 pp. 349-376 3 pls. map.
- 29.—Arhimo, A. A. and Tammilehto, R. P. On bird life in the archipelago of Espoo and Kirkkonummi. *Ornis fenn.* 13 1936 pp. 124-134 map 2 figs. [Finnish, with English rés.]
- 30.—Asmundson, V. S. and Burmester, B. R. The secretory activity of the parts of the Hen's oviduct. *J. exp. Zool. Philadelphia* 72 1936 pp. 225-246 2 figs.
- 31.—Astley-Maberley, C. T. Glimpses of Nyasaland Bird-life. *Ostrich Pretoria* 7 1936 pp. 83-89 photo.
- Austin, M. F. *vide* Windle.
- 32.—Aymar, G. C. Bird flight written and designed by G. C. A. A collection of 200 action photographs. Pp. xii + 234 London (Lane) 1936 8vo. [Notice, *Ibis* 138 p. 1037.]
- 33.—Bachofen-Echt, A. Das Vorkommen von Federn in der Braunkohle des Geiseltales, pp. 335-340 4 pls. Das Vorkommen von Federn im Bernstein pp. 341-348 8 pls. *Nova Acta Leop. Carol. Halle* 4 1936.
- 34.—Bährmann, V. Ein neuer Nachweis über das Vorkommen von *Buteo vulpinus intermedius* Menzb. in der Prov. Brandenburg. *Orn. Monatsb.* 44 1936 p. 22; also Schüz, pp. 22-23.
- 35.—Baillie, J. L. and Harrington, P. The distribution of breeding Birds in Ontario. *Trans. Canad. Inst. Toronto* 21 1936 pp. 1-50 map.
- Bailey, J. *vide* Remlinger.
- 36.—Baker, E. C. S. Remarks on a series of European and Indian Cuckoo's eggs. *Bull. Brit. ðol. Assoc.* 5 1936 pp. 7-17.
- Baker, E. C. S. *vide* Livesey.
- 37.—Balmer, A. Audubon's Caracara taken in Grays Harbor County Wash. A new State Record. *Murrelet Seattle* 17 1936 p. 54 photo.
- 38.—Banks, E. Notes on Birds in Sarawak, with a list of native names. *Sarawak Mus. J.* 4 1935 pp. 267-325 6 photos.
- 39.—Banks, E. A collection of montane Mammals and Birds from Mulu in Sarawak. *Sarawak Mus. J.* 4 1935 pp. 327-341.

40.—**Bannerman, D. A.** The Birds of Tropical West Africa. Vol. 4 pp. xl + 459 14 pls. map 117 text-figs. London (Crown Agents for the Colonies) 1936 8vo.

41.—**Bannerman, D. A.** Notes on Birds from Sierra Leone and Nigeria. Bull. Bt. Orn. Cl. 56 1936 pp. 62-63.

42.—**Bannerman, D. A.** Notes on birds observed in Morocco. Bull. Bt. Orn. Cl. 57 1936 pp. 5-7.

43.—**Bannerman, D. A.** Description of a new subspecies of *Acrocephalus*. Bull. Bt. Orn. Cl. 57 1936 pp. 9-10.

44.—**Bannerman, D. A.** On a new race of Swamp-Warbler from Lake Chad. Bull. Bt. Orn. Cl. 57 1936 p. 43.

45.—**Bannerman, D. A.** On *Alethe moori* Alex. Ibis 1936 pp. 380-381.

46.—**Banzhaf, W.** Der Flamingo (*Phoenicopterus ruber antiquorum* Brehm) in Pommern. Orn. Monatsb. 44 1936 pp. 80-82.

Barbour, T. vide Huntington.

47.—**Barford, K.** Nogle undersøgelser angaaende sonderjydske Fugle. Dansk. orn. Foren. Tidsskr. 30 1936 pp. 1-4.

48.—**Barnes, M. D.** The death-roll of Birds on our roads. Naturalist London 1936 pp. 85-86.

49.—**Barrett, C.** Glossy Ibis nesting in Victoria. Vict. Nat. Melbourne 52 1936 pp. 169-171 photo.

50.—**Bartsch, P.** A new family (Anhingidae) of birds from the Fauna Columbiana. Auk 53 1936 p. 438.

51.—**Bates, G. L.** A new race of Lark from Arabia pp. 130-131. *Accipiter brevipes* in Arabia p. 131. Bull. Bt. Orn. Cl. 56 1936.

52.—**Bates, G. L.** Four notes on Arabian and other Birds with description of new races of *Pica*, *Saxicola* and *Scotocerca*. Bull. Bt. Orn. Cl. 57 1936 pp. 14-21.

53.—**Bates, G. L.** The races of *Ammomanes deserti* found in Arabia and near its borders. Ibis 1936 pp. 331-334 map.

54.—**Bates, G. L.** Birds of Jidda and Central Arabia collected in 1934 and early in 1935 chiefly by Mr. Philby. With notes by H. St. J. B. Philby. Ibis 1936 pp. 531-556 map 6 photos.

55.—**Bates, R. S. P.** On the Birds of the Kishenganga valley, Kashmir. J. Bombay nat. Hist. Soc. 38 1936 pp. 520-539 4 photos.

Bates, R. W. vide Burrows.

56.—**Battye, R. K. M.** Notes on Elwes' Eared Pheasant (*Crossoptilon harmani*). J. Darjeeling Nat. Hist. Soc. 10 1936 p. 91; also J. Bombay N.H. Soc. 38 p. 626.

57.—**Baudouin, M.** Sur l'ostéologie élémentaire du Grand Cormoran *Phalacrocorax carbo subcormoranus* et sur son curieux crâne. Alauda 8 1936 pp. 149-168 11 figs.

58.—**Baudouin, M.** L'apophyse sus-condylienne de l'humerus chez les oiseaux. C.R. Acad. Sci. Paris 202 1936 pp. 85-87.

59.—**Baumgartner, F. M.** New birds for Churchill, Manitoba. Auk 53 1936 p. 224.

60.—**Bayne, C. S.** and others. Birds of the London area 1935. London Nat. 1935 1936 pp. 98-122.

61.—**Baxter, E. V.** and **Rintoul, L. J.** Notes on the status of birds in Scotland in 1935. Scot. Nat. 1936 pp. 115-119.

62.—**Beams, H. W.** and **King, R. L.** The effects of ultra-centrifuging upon chick embryonic cells with special reference to the "resting" nucleus and the mitotic spindle. Biol. Bull. Woods Hole 71 1936 pp. 188-198 1 pl.

63.—**Beatty, H. A.** New bird record for St. Croix W.I. Auk 53 1936 p. 456.

64.—**B[eaufort], L. F. de.** Mr. R. C. E. G. J. Baron Snouckaert van Schauburg. Ardea Leiden 25 1936 pp. 227-228.

65.—**Behle, W. H.** Status of the Cormorants of Great Salt Lake. Condor 38 1936 pp. 76-79 2 photos.

66.—**Belcher, Sir C. F.** Nota sobre la agachona, *Thinocorys rumicivorus*. Hornero B. Aires 6 1936 pp. 313-314 photo.

67.—**B[elcher], Sir C. F.** In north-west Patagonia. Ool. Rec. London 16 1936 pp. 49-53.

68.—**Belcher, Sir C.** and **Smooker, G. D.** Birds of the Colony of Trinidad and Tobago—Part iii [Columbidae-Trochilidae]. Ibis 1936 pp. 1-35.

- 69.—Belsky, N. W. Die Analyse der Hypertrophieerscheinung der Gonaden bei emsigtiger Kastration der Vögel. Z. vergl. Physiol. **23** 1936 pp. 578–591 1 fig.
- 70.—Benazzi, M. Ulteriori osservazioni sulla evoluzione strutturale della tiroide di Uccelli. Arch. zool. Torino **22** 1936 pp. 309–320 4 figs.
- 71.—Beneden, A. van. *Certhia familiaris macrodactyla* en Belgique. Gerfaut Bruxelles **26** 1936 pp. 188–201 map.
- 72.—Bennett, L. J. The Ring-necked Pheasant as a nesting parasite of other Game Birds. Iowa Sta. Coll. J. Sci. **10** 1936 pp. 373–375.
- 73.—Benoit, J. Stimulation par la lumière de l'activité sexuelle chez le Canard et la Cane domestique. Bull. biol. France-Belg. **70** 1936 pp. 487–533 6 pls. 9 text-figs.
- 74.—Benoit, J. Sur le caractère quantitatif de la réponse à l'excitation par la lumière artificielle du mécanisme gonado-stimulant chez le canard domestique, pp. 241–243, Rôle de la thyroïde dans la gonado-stimulation par la lumière artificielle chez le Canard domestique, pp. 243–246 photo. C.R. Soc. Biol. Paris **123** 1936.
- 75.—Benson, C. W. A new race of Wren-Warbler, *Calamonastes*. Bull. Bt. Orn. Cl. **56** 1936 pp. 71–72.
- 76.—Benson, C. W. Description of a new race of *Alethe* and notes on *Cryptospiza* and *Apalis* in Nyasaland. Bull. Bt. Orn. Cl. **56** 1936 pp. 100–103.
- 77.—Benson, C. W. The Waders found at Beira. Ostrich **7** 1936 pp. 116–118.
- 78.—Berdnikoff, A. Reaction de la folliculine dans les déjections de poules aux diverses saisons. C.R. Soc. Biol. **122** 1936 pp. 164–165.
- 79.—Bergman, G. och Fabricius, E. Dunungarna av fisktärna och silvertärna jämförda med varandra. Orn. fenn. **13** 1936 pp. 34–36 2 figs.
- 80.—Bergman, S. Vid en Koreansk fågelsjö. Fauna och Flora Uppsala **1936** pp. 82–86 photo.
- 81.—Bergman, S. Utdrag ur ett brev från Korea. Fauna och Flora Uppsala **1936** pp. 133–135.
- 82.—Berlioz, J. Étude d'une collection d'Oiseaux de l'Afrique équatoriale française. Bull. Mus. Hist. nat. Paris **7** 1935 pp. 349–353.
- 83.—Berlioz, J. Note sur l'identité probable du type d'*Heliotrypha simoni* Boucard (Trochilidés). Bull. Mus. Hist. nat. Paris **8** 1936 pp. 233–236.
- 84.—Berlioz, J. Étude d'une collection d'oiseaux du Congo Belge. Bull. Mus. Paris **8** 1936 pp. 327–333.
- 85.—Berlioz, J. Étude critique des Capitonidés de la Région Orientale. Oiseau Paris **6** 1936 pp. 28–56.
- 86.—Berlioz, J. Étude comparative des Trochilidés du groupe *Helianthea*. Oiseau Paris **6** 1936 pp. 198–212.
- 87.—Berlioz, J. Notes ornithologiques au cours d'un deuxième voyage en Malaisie. Oiseau Paris **6** 1936 pp. 380–411, 604–621.
- Bernard, R. vide Brassard.
- 88.—Bernath, E. L. Notes sur l'avifaune des Iles Baléares et Pityuses. Oiseau Paris **6** 1936 pp. 117–131, 327–331, 494–510.
- 89.—Berndt, R. Zur Nistweise unserer Meisen. Beitr. Fortpfl.-biol. Vög. Berlin **12** 1936 pp. 21–24.
- 90.—Berney, F. L. The Bustard in Queensland. Emu **36** 1936 pp. 4–9.
- 91.—Bernström, J. Korta anteckningar om Erholmenes vertebratfauna. Fauna och Flora Uppsala **1936** pp. 164–174.
- 92.—Berry, J. An identification key to British Grey Geese. London Nat. **1935** 1936 pp. 90–96.
- 93.—Berthet, G. Notes sur quelques oiseaux du Chablais. Alauda **8** 1936 pp. 228–257.
- 94.—Besserer, Frh. von. Materialien zur Avifauna Bayerns. Gelegenheitsbeobachtungen aus dem Gebiet der Osterseen. Anz. orn. Ges. Bay. **2** 1936 pp. 377–380.
- 95.—Betts, E. St. G. Vertebrate contents of pellets cast by Barn-Owls. (*Tyto alba alba*) in N.E. Worcestershire. Ibis **1936** pp. 598–600.
- 96.—Biddulph, C. H. The Small Green-billed Malkoha (*Rhopodytes viridirostris* (Jerdon)). J. Bombay nat. Hist. Soc. **39** 1936 p. 178.

- 97.—Biely, J. and Chalmers, W. Vitamin requirements of growing Chicks. 1. Preliminary studies with reference Cod liver oil. Canad. J. Res. 14D 1936 pp. 21-24 1 fig.
- 98.—Bigalke, R. Note on the longevity of the Vulturine Sea-Eagle, *Gypohierax angolensis* (Gm.). Ostrich 5 1934 pp. 66-67.
- 99.—Bird, C. G. and E. G. The forms of the Brent Goose (*Branta bernicla* L.). Ibis 1936 pp. 605-608.
- 100.—Bird, E. G. Two new subspecies from the Hebrides [*Emberiza, Anthus*] and note on the Crested Larks of the Near East. Bull. Bt. Orn. Cl. 56 1936 pp. 54-58.
- 101.—Bird, E. G. Further note on Redpolls in Iceland. Ibis 1936 p. 381.
- 102.—Bisacco-Palazzi, G. Contributo all' avifauna Veneta. Boll. Soc. venez. Stor. nat. 1 1935 pp. 157-166.
- 103.—Bissonnette, T. H. Sexual photoperiodicity. Quart. Rev. Biol. 11 1936 pp. 371-386.
- 104.—Bissonnette, T. H. Eggs by Pheasants and Quail induced by night lighting. Science 83 1936 p. 392.
- 105.—Bissonnette, T. H. and Csech, A. G. Fertile eggs from Pheasants in January by "night-lighting." Bird-banding Boston 7 1936 pp. 108-111.
- 106.—Bissonnette, T. H. and Csech, A. G. Night lighting with Bob-White. Bird-banding Boston 7 1936 pp. 168-170.
- 107.—Bissonnette, T. H. and Zujko, A. J. Normal progressive changes in the ovary of the Starling (*Sturnus vulgaris*) from December to April. Auk 53 1936 pp. 31-50 2 pls. 3 text-figs.
- 108.—Björnsson, M. Fuglamerkingar IV ár (The Bird-ringing scheme's 4th year) pp. 1-24 Reykjavik (Museum of Nat. Hist.) 1926 8vo.
- 109.—Blair, H. M. S. On the Birds of East Finmark. Ibis 1936 Part i pp. 280-308 map Part ii pp. 429-459.
- 110.—Blake, E. R. Additional records of *Neomorphus radiolosus*. Auk 53 1936 p. 447.
- 111.—Blanchard, B. D. Continuity of behavior in the Nuttall White-crowned Sparrow. Condor 38 1936 pp. 145-150 1 chart.
- 112.—Blanchet, M. Sur une nichée de Pies-grièches à poitrine rose, *Lanius minor* Gmelin 1788. Alauda Paris 7 1935 pp. 493-497 3 photos.
- 113.—Blancou, L. Contribution à l'étude de la faune sauvage de l'Oubangui-Chari. Mammifères et Oiseaux des bassins supérieurs de l'Ouham, de la Nana Barya et de la Pendé. Bull. Soc. Rec. congol. 1936 pp. 1-36 [sep. pag.].
- 114.—Bland, H. M. Birds in an Eton Garden. Pp. xii + 127 6 pls. 2 diagrams London (Dent) 1935 8vo.
- 115.—Blathwayt, F. L. Notes on Birds. Proc. Dorset nat. Hist. F. Cl. 57 1936 pp. 94-100.
- 116.—Bloesch, M. Die Störche im Kanton St. Gallen. Statistische Erhebungen 1935. Pp. 308-312; Kanton Thurgau 312-314; Kanton Aargau pp. 314-322; Kanton Basel pp. 322-325. Arch. suisse d'Orn. 1 1936.
- 117.—Bloomhill, C. A few bird notes from Southern Rhodesia. Ostrich Pretoria 7 1936 pp. 99-102.
- 118.—Boetticher, H. von. Gedanken über zwei Eulen "Mohren" im Coburger naturwissenschaftlichen Museum. Anz. orn. Ges. Bay. 2 1935 pp. 356-360.
- 119.—Boetticher, H. v. Der innerbulgarische Star, *Sturnus vulgaris ferdinandi* subsp. nova. Bull. Inst. Roy. Hist. Nat. Sophia 9 1936 pp. 49-52.
- 120.—Boetticher, H. v. Ueber einige Fälle von Heterochrosis bei Vögeln. Festschrift E. Strand Riga 1 1936 pp. 58-77.
- 121.—Boetticher, H. v. Die doppelte Schnabelspitze einiger Faulvogel (Bucconidae). Festschrift Embrik Strand Riga 1 1936 pp. 74-77.
- 122.—Boetticher, H. von. Kurze phylo-genetisch-systematische Uebersichts der Regenpfeiferartigen Vögel (Charadriiformes) und ihrer nächsten natürlichen Verwandten nach dem heutigen Stand unserer Kenntnisse Kocsag 7 1934 pp. 1-25 4 figs [sep. pag.].
- 123.—Boetticher, H. v. Das natürliche System der Vögel und seine zweckmässige Wiedergabe in einer reihenweise (linear) angeordneten Folge. Kócsag Budapest 8 1935 pp. 1-7 5 figs. [In German.]

124.—Boetticher, H. von. Zur Systematik der Spinte oder Bienenfresser (Meropidae). Kócsag Budapest 8 1935 pp. 33-44 2 figs. [In German.]

125.—Boetticher, H. von. L'Etourneau à tête blanche de Somalie. Oiseau Paris 6 1936 p. 347.

126.—Boetticher, H. von. Rolliers et Eurystomes. Oiseau Paris 6 1936 pp. 422-434 3 maps.

127.—Boetticher, H. von. Die geographische Verbreitung der Kormorane. Orn. Monatsschr. Gera 61 1936 pp. 101-115 5 maps.

128.—Bollvik, R. Ornitologiska anteckningar från en Ölandsresa. Fauna och Flora Uppsala 1936 pp. 219-235 4 photos.

129.—Bond, J. Birds of the West Indies. An account with full descriptions of all the Birds known to occur or have occurred on the West India Islands. Pp. xxiv + 456 1 pl. 158 figs. Philadelphia (Acad. Sciences) 1936.

130.—Bond, J. The name of the Antiguan Bullfinch [*Loxigilla*]. Auk 53 1936 p. 221.

131.—Bond, J. *Vireo nelsoni* Bond. Auk 53 1936 p. 458.

132.—Bond, J. Resident Birds of the Bay Islands of Spanish Honduras. Proc. Acad. nat. Sci. Philad. 88 1936 pp. 353-364.

133.—Bond, R. M. Eating habits of Falcons with special reference to pellet analysis. Condor 38 1936 pp. 72-76.

134.—Bond, R. M. Speed and eyesight of a Pigeon Hawk. Condor 38 1936 p. 85.

135.—Bond, R. M. Some observations on the food of the Prairie Falcon. Condor 38 1936 pp. 169-170.

136.—Bonnell, C. The occurrence of the American Eagle along the Ohio river in Illinois. Trans. Illinois Acad. Sci. 28 1936 pp. 249-250.

137.—Bonnet de Pailletets, Comte C. de. Additions et corrections à la récent bibliographie des faunes ornithologiques des régions française de M. Marcel Legendre. Alauda Paris 8 1936 pp. 101-115.

138.—Booth, H. B. [and others]. Ornithological report for Yorkshire for 1935. Naturalist London 1936 pp. 15-22.

139.—Booth, H. B. Fulmar Petrels nesting on the Farne Islands. Naturalist London 1936 p. 199.

140.—Borell, A. E. A modern La Brea tar pit. Auk 53 1936 pp. 298-300.

141.—Borg, K. Från en småfågel-lokal vid Göksholm i Hjälmaren. Fauna och Flora Uppsala 1936 pp. 24-28.

Borghese, E. *vide* Rossi.

142.—Bouet, G. Nouvelles recherches sur les Cigognes blanches d'Algérie. Densité du peuplement des Cigognes nichant en Algérie. Une campagne de baguage en 1935. Oiseau Paris 6 1936 pp. 281-301 map.

143.—Boulton, R. and Vincent, J. Description of a new race of *Prinia*. Bull. Bt. Orn. Cl. 57 1936 pp. 7-8.

144.—Bouma, P. J. Broedtijden in de houtvesterij Tjiledoek (Java). Ardea Leiden 25 1936 pp. 100-107. See also H. J. V. Sody pp. 200-205.

145.—Bouma, J. P. en Koch, J. C. Verdere gegevens van geringde spreuwen, *Sturnus vulgaris* subsp. Orgaan Cl. ned. Vogelk. 8 1936 pp. 110-130 3 maps.

146.—Boyd, A. W. [and others]. Notes from reservoirs and sewage farms, Cheshire, Staffs., Worc., Somerset. Brit. Bds. 29 1936 pp. 349-355.

147.—Boyd, A. W. Report on the Swallow enquiry 1935. Brit. Bds. 30 1936 pp. 98-116.

148.—Boyer, J. Les nids de Salanganes [*Collocalia*]. Nature Paris 1936 no. 2979 pp. 555-557 4 photos.

149.—Brand, A. R. More songs of wild birds. Pp. 1-116 3 phonogr. discs. New York (T. Nelson) 1936 8vo. [N.V.]

150.—Brand, A. R. Bird-song study problems. Bird-lore 38 1936 pp. 187-194.

151.—Brandon, T. The Birds of the Wilmington district. S. Austr. Orn. 13 1936 pp. 228-230.

152.—Brandt, A. E. A note on dominant white and crest in Poultry. J. Hered. Wash. 27 1936 pp. 79-82 2 figs.

153.—Brandt, H. W. Mexican Turkey Vulture (*Cathartes a. aura*) at Brownsville, Texas. Auk 53 1936 p. 325.

154.—Brassard, J. A. et Bernard, R. De l'aspergillose, *A. fumigatus* et *A. flavus* chez les oiseaux. Nat. canad. Québec 63 1936 pp. 187-193 4 figs.

Breckenridge, W. J. *vide* Errington.

155.—Brenckle, J. F. The migration of the Western Burrowing Owl (*Speotyto cunicularia hypogaea*). Bird-banding Boston 7 1936 pp. 166-168.

156.—Breneman, W. R. The effect on the chick of some gonadotropic hormones. Anat. Rec. Philadelphia 64 1936 pp. 211-220.

157.—B[rindley], M. D. and others. Birds in Cambridgeshire 1935. Rep. Cambridge Bd. Cl. for 1935 1936 pp. 6-9.

158.—Brink, J. N. van den en Tekke, M. J. Twee nieuwe vondsten van den steppenkuikendief, *Circus macrourus* (Gm.) in Nederland. Orgaan Cl. ned. Vogelk. 8 1936 pp. 107-110 2 figs.

159.—Brodkorb, P. Recent records of some uncommon Michigan Birds. Auk 53 1936 p. 455.

160.—Brodkorb, P. A new genus for *Empidonax atriceps* Salvin. Occ. Pap. Mus. Zool. Univ. Mich. no. 331 1936 pp. 1-2.

161.—Brodkorb, P. Geographical variation in the Piñon Jay. Occ. Pap. Mus. Zool. Univ. Mich. no. 332 1936 pp. 1-3.

162.—Brodkorb, P. A new subspecies of Bittern from western North America. Occ. Pap. Mus. Zool. Univ. Mich. no. 333 1936 pp. 1-4.

163.—Brodkorb, P. Ein neuer Name für *Larus canus major* Middendorff. Orn. Monatsb. 44 1936 p. 122.

Bron, A. *vide* Szepsenwol.

164.—Brooks, A. The migration of North American Shore birds to New Zealand. Auk 53 1936 pp. 80-81.

165.—Brooks, E. A. Observation on some Newfoundland birds. Auk 53 1935 pp. 342-345.

166.—Broussy, J. Sur la nature et l'origine des cristalloïdes intracellulaires de la région ampullaire terminale des glandes du vestibule pylorique des Rapaces. Bull. Soc. zool. Fr. 61 1936 pp. 238-239.

167.—Broussy, J. Sur un point particulier de l'histophysiologie de la muqueuse du gésier des Granivores. C.R. Soc. Biol. Paris 121 1936 pp. 1298-1300.

168.—Brouwer, G. A. De invasie van den Stelkluut (*Himantopus himantopus* (L.)) in 1935. Ardea Leiden 25 1936 pp. 64-74 2 photos. map.

169.—Brouwer, G. A. *Emberiza icterica* Eversm. thans in Nederland een vrij algemeene kooivogel. Ardea Leiden 25 1936 p. 176.

170.—B[rrouwer], G. A. Frans Ernst Blaauw. Ardea 25 1936 pp. 177-178.

171.—[Brouwer], G. A. Max Bartels. Ardea Leiden 25 1936 p. 227.

172.—Brouwer, G. A. en Dobben, W. H. van. Waarnemingen van broedvogels en trekvogels in 1935. I. Broedvogels pp. 75-91; Trekvogels 1935 pp. 91-100. Ardea Leiden 25 1936.

173.—Brown, R. F. [and others]. Bird notes. S. Austr. Orn. 13 1936 pp. 170-180, 236-245.

174.—Brown, R. F. [and others]. Cuckoos [observation in S. Austr.]. S. Austr. Orn. 13 1936 pp. 233-235.

175.—Brown, R. L. The egg-breaking habit of the Kingfisher. Scot. Nat. Edinb. 1936 pp. 135-138.

176.—Brunner, G. Zur Diluvialfauna des Büttnerloches bei Thuisbrunnen (Oberfranken). Cbl. Min. Geol. Paläont. Stuttgart 1936B pp. 242-255. [Aves, pp. 250-251.]

177.—Bryan, B. Aves in: Reports of Section. Zoology. Trans. N. Staffs. F. Cl. 70 1936 pp. 36-43.

178.—Bryan, E. H. Jr. Hawaiian Birds. [Address.] Spec. Pub. Bishop Mus. Honolulu 26 1935 pp. 5-6.

179.—Bryant, C. E. The excursion to Marlo. [Victoria.] Emu 35 1936 219-229 7 photos. map.

Buchan, J. N. S. *vide* Harrison.

180.—Bullock, D. S. The Snowy Plover (*Charadrius alexandrinus occidentalis*) nesting in Chile. Auk 53 1936 pp. 170-172.

181.—Bunyard, P. F. On some eggs from Ashford, Kent. Bull. Bt. Orn. Cl. 56 1936 pp. 68-70.

182.—Bunyard, P. F. Roosting of Pied Wagtails (*Motacilla alba lugubris*) in commercial glass-houses. Bull. Bt. Orn. Cl. 56 1936 pp. 108–109.

183.—Bunyard, P. F. Notes on Alberta eggs. Bull. Brit. Orn. Cl. 57 1936 pp. 38–41.

184.—Burgard, L. A. Untersuchungen über Vitalfärbung an jungen Hühnern. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 609–630.

185.—Burkitt, J. P. Young Rooks' their survival and habits. Brit. Bds. 29 1936 pp. 334–338.

186.—Burleigh, T. D. Egg laying by the Cowbird during migration. Wilson Bull. 48 1936 pp. 13–16 1 photo.

Burmester, R. R. *vide* Asmundson.

187.—Burnier, J. et Sauser-Hall, P. Recherches sur l'action du rouge écarlate R. sur le développement de l'embryon de poulet. Arch. Anat. Hist. Embryol. 20 1935 pp. 341–347.

188.—Burr, F. Ueber die jahreszeitliche Verbreitung des Mäusebussards (*Buteo b. buteo* L.) mit besonderem Vergleich einzelner Populationen. Vogelzug Berlin 7 1936 pp. 17–34 3 maps.

Burrows, W. H. *vide* Quinn.

189.—Burrows, W. H. and Byerly, T. C. Studies of prolactin in Fowl pituitary i pp. 841–844 1 fig. ii pp. 844–846 also R. W. Bates and O. Riddle pp. 847–849.

190.—Burt, W. H. The resident Birds of southern Michigan. Bull. Cranbrook Inst. Sci. no. 7 1936 pp. 1–43 22 illustr.

191.—Butler, A. W. Vultures in Indiana. Proc. Indiana Acad. Sci. 45 1936 pp. 269–272 1 fig.

192.—Butters, F. C. Seventh report of the Devon bird-watching and preservation Society. Rep. Devons. Ass. Adv. Sci. 67 1935 pp. 231–251.

193.—Buturlin, S. A. et Dementiev, G. P. [Shearwaters, etc., Diurnal Birds of Prey, Owls and Woodpeckers, etc.] Polnyi opredelitel' ptits S.S.S.R. Vol. iii pp. 1–256 2 col plates 15 illustr. Moscow-Leningrad (Koiz) 1936. [Title and contents, Russian only. N.V.]

Byerley, T. C. *vide* Burrows.

194.—Cain, C. Notes on the Wedge-tailed Eagle, *Uroaëtus audax*, in the Farine district, S.A. during 1934–1935 S. Austr. Orn. 13 1936 pp. 169–170.

195.—Caldwell, H. R. Nesting haunts of the Bridled Tern. Hong Kong Nat. 7 1936 p. 87.

196.—Calinescu, R. I. *Turtur risorius* in România. Bul. Soc. Nat. România București no. 4 1933 pp. 4–6. [Roumanian, with German rés.]

197.—Callow, R. K. and Parkes, A. S. Production of oestrogenic substance by the Bird testis. J. exp. Biol. Cambridge 13 1936 pp. 7–9.

198.—Campbell, A. G. Distribution maps of Thornbills [*Geobasilus*, *Acanthiza*]. Emu 35 1936 pp. 324–330 4 maps.

199.—Campbell, J. W. Habits of the Rook. Some notes on an Essex rookery. Brit. Bds. 29 1936 pp. 306–309.

200.—Campbell, J. W. On the food of some British Birds. Brit. Bds. 30 1936 pp. 209–218.

201.—Campbell, J. W. Decoys on the Blackwater estuary. Essex Nat. 25 1936 pp. 107–109 photo.

202.—Campbell, J. W. Notes on the birds of the Outer Hebrides. Scot. Nat. Edinb. 1936 pp. 79–80.

203.—Campbell, L. W. An unusual colony of Alder Flycatchers. Wilson Bull. 48 1936 pp. 164–168 3 photos.

204.—Campo, R. M. del. Contribuciones al conocimiento de la fauna de Actopan H.G.O. iv. Vertebrados observados en la época de las secas. An. Inst. Biol. Mexico 7 1936 pp. 271–286. [Aves 277–282 3 photos.]

205.—Canella, M. F. Osservazione di un passero pigomele e considerazioni sulla morfogenesi degli arti sopranumerarii. Boll. Zool. Torino 7 1936 pp. 33–45 3 figs.

206.—Carey, E. J. Studies in the wave-mechanics of muscular motion. vii. The experimental biophysical basis of the transitional muscle in the gizzards of birds. Amer. J. Anat. 59 1936 pp. 365–407 16 pls.

207.—Carpenter, G. D. H. Birds do attack butterflies. Sci. Prog. London 30 1936 pp. 628–634.

208.—Carriker, M. A. A new Ant-bird from Venezuela. *Auk* 53 1936 pp. 316-317.

209.—Carriker, M. A. Southern winter range of *Ixobrychus exilis hesperus*. *Auk* 53 1936 p. 323.

210.—Cate, J. ten. Uni- und plurisegmentale Reflexe bei Tauben. *Arch. neerl. Sci. La Haye* 21 1936 pp. 162-167.

211.—Cate, J. ten. Physiologie des Zentralnervensystems der Vögel. *Ergebn. Biol. Berlin* 13 1936 pp. 93-173 9 figs.

212.—Cathelin, F. L'énigme du Coucou. *Oiseau Paris* 6 1936 pp. 71-76.

213.—Cătuneanu, I. Note asupra faunei ornitologice a Bucegilor. *Bul. Soc. Nat. România București* no. 3 1933 pp. 8-11 also no. 6 1934 pp. 10-11; no. 9 1936 pp. 8-9. [Roumanian, with French rés.]

214.—Caum, E. L. List of Birds in: Notes on the flora and fauna of Lehua and Kaula Islands. *Occ. Pap. Bishop Mus. Honolulu* 11 no. 21 1936 pp. 12-14.

215.—Černý, W. Contribution à la connaissance de la distribution d'Erythrosterne rougeâtre (*Muscicapa p. parva* Becht.) dans les Carpathes. *Sylvia Praha* 1 1936 pp. 59-62. [Czech, with French rés.]

Černý, W. *vide* Musilek.

216.—Chaffer, N. The courting of Bosun-birds. *Emu* 36 1936 pp. 38-39 2 photos.

217.—Chaloux, J. A propos de la dernière invasion de *Loxia curvirostra* L. dans l'Ouest de la France. Quelques observations biologiques et anatomiques sur les Becs-croisés. *Bull. Soc. sci. Bretagne* 8 1931 pp. 7-22 map. 1 pl. 7 text-figs.

218.—Chaloux, J. A propos de la capture d'un merle bagué et de l'importance du baguage des oiseaux. *Bull. Soc. sci. Bretagne* 9 1932 pp. 32-36 map.

Chalmers, W. *vide* Biely.

219.—Chambers, W. L. The hunter in southern California versus wild animal life. *Condor* 38 1936 pp. 199-202.

220.—Champy, C. Analyse du mécanisme de développement de quelques caractères sexuels des tritons et des faisans. *C.R. Soc. Biol.* 122 1936 pp. 550-552.

221.—Chandler, L. G. Notes on the Little Crow. *Emu* 36 1936 p. 51 photo.

222.—Chapin, J. P. Islands west of South America. *Nat. Hist. New York* 38 1936 pp. 31-55 many photos.

223.—Chapin, J. P. A new Peacock-like Bird from the Belgian Congo. *Rev. Zool. Bot. afr. Tervueren* 29 1936 pp. 1-6 3 figs.

224.—Chapman, F. M. Further remarks on *Quiscalus* with a report on additional specimens from Louisiana. *Auk* 53 1936 pp. 405-417 2 maps.

225.—Chapman, F. M. The Composer [*Pheugopedius fasciventris albigularis*]. *Bird-lore* 38 1936 pp. 267-272 photo.

226.—Chappellier, A. La dénudation de la face chez le Freux et ses modifications jusqu'à l'âge de cinq ans. *Oiseau Paris* 6 1936 pp. 132-137 7 figs.

227.—Chappellier, A. Répertoire des Stations Ornithologiques. *Oiseau Paris* 6 1936 pp. 622-678.

228.—Chappellier, A. et Raucourt, M. Les oiseaux contre le Doryphore. *Ann. Epiphyt. Paris* 2 1936 pp. 241-252.

229.—Charlemagne, N. W. Zoogeographische Skizzen. *Trav. Mus. Zool. Kiev* 15 1935 pp. 27-28 map. [Russian, with German rés.]

230.—Charlemagne, N. [Zoogeography of the Ukraine S.S.R.]. *Kiev (Ukr. Acad. Sci.)*, 1936 pp. 1-234 32 photos. (List of Birds pp. 178-198). [In Ukrainian with English rés. N.V.]

231.—Charlemagne, N. Materialien zur Fauna der Säugetiere u. Vögel des Tschernigower Gebiets. *Kiev (Acad. Sci. Ukraine)* 1936 pp. 1-112 5 figs. Birds pp. 49-112. [In Ukrainian, with German rés. N.V.]

232.—Charteris, G. Proportion of sexes in roosting Chaffinches. *Brit. Bds.* 30 1936 pp. 117-119.

233.—Chasen, F. H. New name for *Stachyris nigriceps dilutus*. *Bull. Bt. Orn. Cl.* 56 1936 p. 115.

Chasen, F. N. *vide* Robinson.

- 234.—C[hawner], E. F. The Star Finch *Bathilda ruficauda* pp. 257-258 col. pl.; The Long-Tailed Grassfinch, *Poëphila acuticauda* pp. 281-282 col. pl.; The Australian Waxbill *Aegintha temporalis*, p. 309 col. pl. Avicult. Mag. (5) 1 1936.
- 235.—Cheesman, R. E. and Selater, W. L. On a collection of birds from north-western Abyssinia. Part IV [Hirundinidae-Fringillidae]. Ibis 1936 pp. 163-197.
- 236.—Chiang, T. H. On a partial duplicate embryo in Chick. Sci. Rep. Univ. Chekiang 2 1936 pp. 105-108 2 figs.
- 237.—Chisholm, A. H. Injury feigning in Birds. Auk 53 1936 pp. 251-253; also T. Pearse p. 253.
- 238.—Chisholm, A. H. Whistlers in the Mallee. Emu 35 1936 pp. 321-323 2 photos.
- Chisholm, A. H. vide Littlejohns.
- 239.—Chisholm, E. C. Birds of the Pillaga Scrub [N.S. Wales]. Emu 36 1936 pp. 32-38.
- 240.—Chislett, R. Grey Phalarope [*Phalaropus fulicarius* (L.)] in Yorkshire. Naturalist London 1936 p. 7.
- 241.—Christiansen, A. Knorte gaessene, *Branta b. bernicla* og Sygdommen i Baendeltangen. Dansk orn. Foren. Tidsskr. 30 1936 pp. 41-46 2 photos.
- 242.—Christiansen, A. Egholms Fugleliv. Dansk. orn. Foren. Tidsskr. 30 1936 pp. 46-65 7 photos.
- Christiansen, A. vide Helms.
- 243.—Christoleit, E. Zur Balz der Zwergstrandläufers (*Calidris minuta*). Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 177-187, 239-251.
- 244.—Clancey, P. A. On the colour of bills of Kingfishers. Brit. Bds. 30 1936 pp. 180-182 6 figs.
- 245.—Clancey, P. A. A contribution to the ornithology of West Lanarkshire and East Renfrewshire. Scot. Nat. Edinb. 1936 pp. 87-91, 123-124. See also N. Hopkins pp. 139-140.
- 246.—Clancey, P. A. Hebridean Stonechat breeding in northern Ayrshire. Scot. Nat. Edinb. 1936 p. 150.
- 247.—Clark, L. B. [and others]. Light and reproduction in Game Birds. Science 83 1936 p. 268.
- 248.—Clarke, C. H. D. Fluctuations in the numbers of Ruffed Grouse *Bonasa umbellus* (Linné) with special reference to Ontario. Univ. Toronto Stud. Biol. no. 41 1936 pp. 1-118 maps.
- 249.—Clarke, J. D. The Brown-chested Wattled Plover, *Anomalophrys superciliosus*. Nigerian Field 5 1936 pp. 72-73.
- 250.—Clarke, J. D. The Long-crested Helmet-Shrike, *Prionops plumata plumata*. Nigerian Field 5 1936 pp. 129-130.
- 251.—Clarke, L. F. Regional differences in eye-forming capacity of the early Chick blastoderm as studied in chorioallantoic grafts. Physiol. Zool. Chicago 9 1936 pp. 102-128 1 pl. 4 figs.
- 252.—Claudon, A. La Bondrée Apivore, *Pernis apivorus* dans le département des Vosges. Alauda Paris 7 1935 pp. 541-545.
- 253.—Claudon, A. Le Grand Têtras, *Tetrao urogallus urogallus* Linné dans le département des Vosges. Oiseau Paris 6 1936 pp. 514-518.
- 254.—Cleland, J. B. Notes on the Birds in Central Australia between Alice Springs and Ayers Rock. S. Austr. Orn. 13 1936 pp. 191-196.
- Clemens, W. A. vide Munro.
- 255.—Club van Nederl. Vogelkundigen. De Nederlandsche Vogels. Determineerlijst, etc. Pp. 1-96 many figs. Wageningen [1936] 8vo. [N.V.]
- 256.—Cobianchi M. Ricerche di ornitologia nei papiri dell'Egitto greco-romano. Aegyptus Milano 16 1936 pp. 91-147.
- 257.—Cockerell, T. D. A. The Road Runner in North America. Nature London 138 1936 p. 166 photo.
- Cohen, A. vide Waddington.
- 258.—Collinge, W. E. The food and feeding-habits of the Coot (*Fulica atra* Linn.). Ibis 1936 pp. 35-39.
- 259.—Compton, L. V. The cranium of the Miocene Gannet, *Moris vagabundus* Wetmore. Proc. Calif. Acad. Sci. (4) 23 1936 pp. 83-84 1 fig.

260.—Condon, H. T. Notes on the Albatrosses occurring in South Australian waters. *S. Austr. Orn.* 13 1936 pp. 141–161 3 pls. map and 1 text-fig.

261.—Condon, H. T. and Rix, C. E. The Birds of Buckland Park [S. Austr.]. *S. Austr. Orn.* 13 1936 pp. 203–219 map photo.

262.—Congreve, W. M. The breeding of the Lesser White-fronted Goose. *Ool. Rec.* 16 1936 pp. 10–15 photo.

263.—Congreve, W. M. The Red-throated Pipit. *Ool. Rec.* London 16 1936 pp. 73–78.

264.—Cook, F. C. Recent birds round Lowestoft. *Trans. Suffolk Nat. Soc.* 3 1936 pp. 118–121 photo.

265.—Cook, S. F. and Fredrickson, H. C. An objective method for measuring irritability in Birds. *Condor* 38 1936 pp. 28–29.

266.—Coomans de Ruiter, L. Oölogische en biologische aantekeningen van eenige roofvogels in de westerafdeling van Borneo. *Orgaan Cl. ned. Vogelk.* 9 1936 pp. 34–52 1 pl. 5 text-photos.

267.—Cordier, C. La capture des oiseaux-mouches et les soins à leur donner. *Oiseau Paris* 6 1936 pp. 144–151.

268.—Corti, U. A. Bergvögel: Eine Einführung in die Vogelwelt der Schweizerischen Gebirge. Pp. 481 36 pls. Bern (Schweiz. Ges. f. Vögelk.) 1935. [N.V.]

269.—Cottam, C. Notes on the Birds of Nevada. *Condor* 38 1936 pp. 122–123.

270.—Cottam, C. Food of Arctic Birds and Mammals collected by the Bartlett expeditions of 1931, 1932 and 1933. *J. Wash. Acad. Sci.* 26 1936 pp. 165–177.

271.—Cottam, C. Food of the Limpkin. *Wilson Bull.* 48 1936 pp. 11–13.

272.—Court, E. J. Four rare nesting records for Maryland. *Auk* 53 1936 pp. 95–96.

273.—Courtenay, G. F. Some desultory notes on the Birds of Riding Mill and neighbourhood. *Vasculum Newcastle* 22 1936 pp. 20–23.

274.—Cowin, W. S. The Barn Owl in the Isle of Man. *Naturalist London* 1936 pp. 87–88.

275.—Cowles, R. B. Observations on the Amethyst Sunbird, *Chalcomitra amethystina amethystina* (Shaw). *Auk* 53 1936 pp. 28–30.

276.—Cowles, R. B. Observations on the Spot-backed Weaver (*Ploceus spilonotus* Vig.). *Auk* 53 1936 pp. 295–297.

277.—Cox, S. A. and May, R. Bird notes from the Brocklesby and Grimsby districts 1935. *Trans. Lincoln Nat. Union Louth for* 1935 1936 pp. 66–84.

278.—Craigie, E. H. The cerebral cortex of the Ostrich (*Struthio*). *J. comp. Neurol. Philad.* 64 1936 pp. 389–411 4 pls. 1 text-fig.

279.—Craigie, E. H. Notes on cyto-architectural features of the lateral cortex and related parts of the cerebral hemisphere in a series of Reptiles and Birds. *Trans. roy. Soc. Can.* (3) 30 sect. v 1936 pp. 87–113 6 pls.

280.—Cruickshank, A. D. Some observations on the European Teal [in U.S.A.]. *Auk* 53 1936 pp. 321–322.

Csech, A. G. *vide* Bissonnette.

281.—Cubbon, W. Pilcher George Ralfe (1861–1936). *North Western Nat. Arbroath* 11 1936 pp. 279–281 portr.

282.—Cunningham, B. The incubation of Hen eggs under increased atmospheric pressure. *J. Elisha Mitchell sci. Soc. Chapel Hill* 52 1936 pp. 269–273.

283.—Daanje, A. Haben die Vögel einen Sinn für den Erdmagnetismus, wie Deklination, Inklination und Intensität? *Ardea Leiden* 25 1936 pp. 107–111.

284.—Daguerre, J. B. Sobre nidificación de aves de la Prov. de Buenos Aires. *Hornero B. Aires* 6 1936 pp. 280–288 4 photos.

285.—Dahl, S. K. Variations de la Pie de Bactriane. *Alanda Paris* 8 1936 pp. 25–35.

286.—Dahl, S. K. Faits nouveaux concernant les limites de dispersion de quelques oiseaux de l'Asie centrale. *Alanda* 8 1936 pp. 326–331 4 photos.

287.—Dahl, S. K. [On the study of the Vertebrate Fauna of the Zerafschan system and of the Turkestan chain.] Trav. Sci. Univ. Usbekistan Samarkand 7 1936 pp. 85-133 (List of Birds pp. 111-126). [Title and Contents, Russian only. N.V.]

288.—Dahl, S. K. [Vertebrates of the Lower Zerafschan.] Trav. Sci. Univ. Usbekistan, Samarkand 7 1936 pp. 135-161 (List of Birds pp. 142-149 and pp. 157-160). [Title and Contents, Russian only. N.V.]

289.—Dahl, S. K. [New data on the geographical distribution of the Tengmalm's Owl.] Trav. Sci. Univ. Usbekistan Samarkand 7 1936 pp. 163, 164. [Title and Contents, Russian only. N.V.]

290.—Dale, F. H. Eagle control in northern California. Condor 38 1936 pp. 208-210.

291.—Dalgetty, C. T. Notes on Birds observed in Greenland and Baffin Land June-September 1934. Ibis 1936 pp. 580-591 3 photos.

Dambach, C. A. *vide* Hicks.

292.—Danforth, S. T. Los pájaros de Puerto Rico. New York (Rand McNally) [1936]. [N.V.]

293.—Danforth, S. T. A bird new to the West Indian avifauna [*Rynchops*]. Auk 53 1936 p. 82.

294.—Danforth, S. T. A West Indian record for the Bay-breasted Warbler. Auk 53 1936 pp. 89-90.

295.—Danforth, S. T. Scarlet Tanager in St. Lucia. Auk 53 1936 p. 90.

296.—Danforth, S. T. New records for Mona Island, West Indies. Auk 53 1936 p. 100.

297.—Danforth, S. T. West Indian Birds [Cuba, Virgin Is., Barbuda, St. Kitts]. J. Agr. Univ. Puerto Rico 19 1935. [N.V. see Auk 53 p. 241.]

298.—Danforth, S. T. The Birds of St. Kitts and Nevis. Trop. Agric. Trinidad 13 1936 pp. 213-217.

299.—Danilowitsch, A. P. Ueber westrussische Haselhühner. Orn. Monatsb. 44 1936 pp. 27-28.

300.—Dantchakoff, V. Réalisation du sexe à volonté par inductions hormonales. i.—Inversion du sexe

dans un embryon génétiquement mâle. Bull. biol. France-Belg. 70 1936 pp. 241-306 5 figs.

301.—Dantchakoff, V. Sur la capacité d'un ovaire induit d'oiseau à conditionner des caractères sexuels secondaires. C.R. Acad. Sci. Paris 202 1936 pp. 879-881.

302.—Dantchakoff, V. Sur le sort définitif d'une femelle par induction hormonale. C.R. Acad. Sci. Paris 202 1936 pp. 1112-1114.

303.—Dantchakoff, V. Sur les effets d'un traitement permanent de folliculine sur l'organisme mâle. C.R. Acad. Sci. Paris 203 1936 pp. 1393-1396 1 fig.

304.—Dantchakoff, V. La crise méiotique dans un ovaire induit, chez le mâle, est elle l'effet d'une déficience hormonique ou génétique? C.R. Soc. Biol. 122 1936 pp. 166-168.

305.—Dantchakoff, V. Sur la capacité de la folliculine à transformer chez la poule, le rudiment gonadique droit (testicule potentiel) en ovaire. C.R. Soc. Biol. 122 1936 pp. 168-169.

306.—Dantchakoff, V. Sur les réactions sexuelles à la folliculine chez le Leghorn doré mâle. C.R. Soc. Biol. Paris 122 1936 pp. 854-856 3 figs.

307.—Dantschakoff, W. Keimzelle und Gonade. VII. Gefässmechanismus als Faktor der Gonadenlokalisation und der primären Asymmetrie beim Hühnschen. Z. Zellf. mikr. Anat. 24 1936 pp. 64-84 4 figs.

308.—Dathe, H. Ueber Zug und Oekologie von *Calidris temminckii* (Leisl.) in Sachsen. J. Orn. Berlin 84 1936 pp. 363-377.

309.—Dathe, H. und Profft, J. Studien an Stockentenbruten. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 50-54.

310.—David, P. R. Studies on the Creeper Fowl X. A study of the mode of action of a lethal factor by explantation methods. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 521-551 6 figs.

311.—Davidson, M. E. A note on the collecting of W. W. Brown Jr. in Chiriqui. Auk 53 1936 pp. 232-233.

312.—Davidson, M. E. McL. Eggs of *Megapodius pritchardi* from Ninafou Island, Tongan Group. *Auk* 53 1936 pp. 77-78.

313.—Davis, D. H. S. A reconnaissance of the fauna of Akpatok Island, Ungava Bay. *J. Animal Ecol.* London 5 1936 pp. 319-332 2 photos.

314.—Davis, E. M. and W. M. Banding Barn Swallows (*Hirundo erythrogaster*). A report of operations at Shirley, Massachusetts 1932-36. *Bird-banding Boston* 7 1936 pp. 149 156 1 fig. 1 map.

315.—Davis, H. H. Waders of the Bristol District. *Proc. Bristol Nat. Soc.* (4) 8 1936 pp. 106-113.

316.—Davis, M. and Friedmann, H. The courtship display of the Flightless Cormorant. *Scientific Monthly New York* 42 1936 pp. 560-563 5 figs.

317.—Dawson, A. B. Some observations on the primitive and definitive erythrocytes of the developing Chick. *Z. Zellf. mikr. Anat.* 24 1936 pp. 256-268 3 pls.

318.—Deakin, A. Natural hybridization and genetics of Flickers (*Colaptes*) *Amer. Nat.* 70 1936 pp. 585-590.

Deautier, E. A. *vide* Steullet.

319.—Dechambre, E. Le Baleiniceps. *Terre et la Vie*, Paris 6 1936 pp. 45-48 2 photos.

320.—De Garis, C. F. Notes on six nests of the Kentucky Warbler (*Oporornis formosus*). *Auk* 53 1936 pp. 418-428.

321.—Deignan, H. G. Notes on a small collection of birds from the Republic of Honduras. *Auk* 53 1936 pp. 186-193.

322.—Deignan, H. G. A revised hand-list of the Birds of the Chiangmai region [Siam]. *J. Siam Soc. Nat. Hist. Suppl.* 10 1936 pp. 71-129.

323.—Deignan, H. G. Some observations on Bird-life of the Middle Me Ping. *J. Siam Soc. Nat. Hist. Suppl.* 10 1936 pp. 131-135.

324.—Deignan, H. G. Some rare Birds of the Northern Provinces [Siam]. *J. Siam Soc.* 10 1936 pp. 169-170.

325.—Delacour, J. The Tahiti Blue Lory (*Coriphilus peruvianus*) pp. 65-66 col. pl. The Ruby Lory (*Vini kuhli*) pp. 127-128 col. pl. The Glittering

Copper Pheasant (*Symaticus soemmeringi scintillans*) pp. 151-152 col. pl. *Avicult. Mag.* (5) 1 1936.

326.—Delacour, J. Rheas. *Avicult. Mag.* (5) 1 1936 pp. 134-140 3 photos.

327.—Delacour, J. The Rheinart's Pheasant or Crested Argus. *Avicult. Mag.* (5) 1 1936 pp. 176-180 photo.

328.—D[elacour], J. Louis Lavauden. *Ibis* 1936 pp. 384-385.

329.—Delacour, J. Révision du genre *Mixonis* Blyth 1842. *Oiseau Paris* 6 1936 pp. 1-27 col. pl. 2 maps.

330.—Delacour, J. Note sur la classification des Anatidés. *Oiseau Paris* 6 1936 pp. 366-379.

331.—Delacour, J. Le Faisan scintillant *Grapphasianus scintillans* (Gould). *Oiseau Paris* 6 1936 pp. 565-566 col. pl.

332.—Delacour, J. *Alcippe nipalensis grotei* nom. nov. *Orn. Monatsb.* 44 1936 p. 24.

333.—Delacour, J. Les Canards plongeurs. *Terre et la Vie Paris* 6 1936 pp. 148-155 4 photos.

334.—Delafosse, W. Le baguage de la Cigogne blanche (*Ciconia ciconia* L., *Ciconia alba* Briss.) en Moselle pendant l'été 1935. *Bull. Soc. Hist. nat. Metz* (3) 34 1935 pp. 337-340 map also M. Evan pp. 341-343 photo., R. Lienhart, pp. 345-348 photo.

335.—Delamain, J. et Jouard, H. Notes sur la migration et la nidification du printemps 1936. *Alauda* 8 1936 pp. 472-476.

336.—Delapchier, L. Capture d'un Becasseau tacheté, *Erolia melanotos* (Vieill.) a Sallenelles (Calvados). *Oiseau Paris* 6 1936 pp. 335-337 2 figs.

337.—Delaplane, J. P. [and others]. Preliminary studies of a cerebral disorder of young Chickens. *Science* 84 1936 pp. 396-397.

338.—Dementier, G. P. Systema Avium Rossicarum (Catalogue critique des oiseaux de l'U.R.S.S.) vol. i Accipitres, Striges, Passeres. Pp. vi + 288 map col. pl. Paris (L'Oiseau) 1935 8vo.

339.—Démentieff, G. P. Les variations géographiques et individuelles des Hirondelles de Chiminée, *Hirundo rustica* L. dans Asie orientale. *Alauda Paris* 8 1936 pp. 49-53.

340.—Démentieff, G. Capture en Russie d'un Faucon sacré évadé d'Allemagne. *Alauda* Paris **8** 1936 pp. 120-122.

341.—Démentieff, G. P. M. A. Menzbier (in memoriam). *Alauda* **8** 1936 pp. 127-129.

342.—Démentieff, G. Essai de revision des formes de l'oie des moissons *Anser fabalis* Latham. *Alauda* **8** 1936 pp. 169-193.

343.—Démentieff, G. P. Sur des cas d'asymétrie de coloration chez les Gerfauts, *Falco gyrfalco* L. *Alauda* Paris **7** 1935 pp. 480-485.

344.—Démentieff, G. P. Contribution à l'avifaune de l'extrême nord de la Sibérie (Presqu'île de Taïmyr). *Alauda* Paris **7** 1935 pp. 485-493.

345.—Dementiev, G. Le vol à l'Aigle au Turkestan. *Oiseau* Paris **6** 1936 pp. 361-365 12 photos.

346.—Dementieff, G. Zur Frage der Grenzen der systematischen kategorien, Art und Unterart. *Zool. J. Moscow* **15** 1936 pp. 82-93. [Russian, with German rés.]

Dementiev, G. P. *vide* Buturlin.

347.—Demeritt, W. W. *Agelaius humeralis* a new bird for North America. *Auk* **53** 1936 p. 453.

348.—Denig, J. L. A Marine among the Birds [on Midway I., Pacific]. *Bird-lore* **38** 1936 pp. 5-11 photos.

349.—Dennis, E. A. Gonad differentiation in the Chick embryo as studied in heterosexual graft and host graft combinations. *Physiol. Zool.* **9** 1936 pp. 204-230 2 pls.

350.—Dewar, J. M. Ménage à trois in the Mute Swan. *Brit. Bds.* **30** 1936 pp. 178-179 see also J. C. S. Ellis p. 232.

351.—Dickison, D. The Southern Scrub Robin. *Vict. Nat. Melbourne* **52** 1936 pp. 176-177 2 photos.

352.—Dietz, J. Der Weisse Storch als Brutvogel im rechtsrheinischen Bayern in der Jahre 1933 und 1934. *Verh. orn. Ges. Bayern* **20** 1935 pp. 538-562.

353.—Dixon, J. B. Nesting of the Sierra Nevada Rosy Finch. *Condor Berkeley Cal.* **38** 1936 pp. 1-8 3 photos.

354.—Dobay, L. v. Die Steindrossel in Siebenbürgen. *Kócsag Budapest* **8** 1935 pp. 17-24. [Magyar, with German rés.]

355.—Dobben, W. H. van. Zangvogeltrek op Rottum 20-30 Aug. 1935 en 5-18 Mei 1936. *Ardea Leiden* **25** 1936 pp. 181-195 1 fig.

356.—Dobben, H. van. De wegen der trekvogels. A Critiek op 't werk der Phaenologische Vereniging. *Natura Breda* **35** 1936 pp. 1-9.

357.—Dobben, W. H. van. Vogel-trek over Nederland, iii. *Orgaan Cl. ned. Vogelk.* **8** 1936 pp. 91-107 12 maps 2 text-figs.

Dobben, W. H. van *vide* Brouwer.

358.—Dobbrick, W. Ein neuer Brutvogel an der Danziger Kuste—*Sterna s. sandvicensis* Lath. Brandseeschwalbe. *Orn. Monatsb.* **44** 1936 pp. 184-186.

Dobie, W. H. *vide* Moreton.

359.—Domaniewsik, J. und Kreczmer, B. Compte rendu de l'activité de la Station pour l'étude des migrations des oiseaux pour l'année 1934. *Acta orn. Mus. Zool. Polon.* **1** 1936 pp. 467-510. [Polish, with French rés.]

360.—D'Ombraïn, E. A. William Rae McLennan. *Emu* **35** 1936 pp. 291-293 portr.

361.—D'Ombraïn, A. F. Notes on Sea Birds seen off Cape Brett, Bay of Islands, N.Z. *Emu* **36** 1936 pp. 16-20 2 photos. See also R. A. Falla pp. 137-138.

362.—Dotterweich, H. Die Atmung der Vögel. *Z. vergl. Physiol.* **23** 1936 pp. 744-770 13 figs.

Drabble, L. *vide* Harper.

363.—Drost, R. Zum Zugweg des Norwegischen Rotsternblaukehlchens (*Luscinia svecica gaetkei* [Kleinschmidt]). *Anz. orn. Ges. Bay.* **2** 1935 pp. 353-354.

364.—Drost, R. XIV. Bericht der Vogelwarte der Staatlichen Biologischen Anstalt Helgoland. *Vogelzug Berlin* **7** 1936 pp. 34-51 1 photo.

365.—Drost, R. Ueber das Brutkleid männlicher Trauerfliegenfänger, *Muscicapa hypoleuca*. *Vogelzug Berlin* **7** 1936 pp. 179-186 2 figs.

366.—DuBois, A. D. Habits and nestlife of the Desert Horned Lark. *Condor* 38 1936 pp. 49–56 5 photos.

367.—Duff, P. [and others]. Committee on Bird sanctuaries in Royal Parks (England). Report for 1935. London (Stationery Office) 1936 8vo.

Duffau, R. *vide* Lecoq.

368.—Dunajewski, A. Materialien zur Verbreitung des Fischreiher (Ardea cinerea cinerea Linn.) in Polen. *Acta orn. Mus. zool. polon.* 1 1936 pp. 429–466 map. [Polish, with German rés.]

369.—Dunajewski, A. Materialien zum Vorkomen des Schwarzstorch (Ciconia nigra Linn.) in Polen. *Acta orn. Mus. zool. Polon.* 2 1936 pp. 1–26 map.

370.—Dunine, A. Le Cormoran (*Phalacrocorax carbo* L.) sur le territoire de delta du Volga. Astrakhanskii Goszapovednik—Nauchnye Trudy Goszapovednikov Moscow (1) no. 1 1936 pp. 67–95 4 photos. [In Russian, with French rés. N.V.]

371.—Dunn, L. C. and Landauer, W. Further data on genetic modification of rumplessness in the Fowl. *J. Genet.* London 33 1936 pp. 401–405.

372.—Dupond, C. Les phases belges et les oiseaux migrateurs. Gerfaut Bruxelles 26 1936 pp. 1–24 2 figs.

373.—Dupond, C. Oiseaux bagués. Gerfaut Bruxelles 26 1936 pp. 52–60, 69–125, 212–216.

374.—Dupond, C. Observations ornithologiques faites en Belgique de Mai 1935 à Mai 1936. Gerfaut Bruxelles 26 1936 pp. 149–188.

375.—Dupont, P. Moeurs de petits Coqs de Bruyère. Gerfaut Bruxelles 26 1936 pp. 139–142.

376.—Durango, S. Något om fältpiplårkan (*Anthus campestris* Lin.). Fauna och Flora Uppsala 1936 pp. 274–278 photos.

377.—Duse, A. [and others]. Ricerche sulla migrazione della Quaglia (*Coturnix c. coturnix* L.) in Italia. *Ricerche Zool. appl. Caccia* no. 9 1935 pp. 1–125 map photo tables.

378.—Dyer, E. I. Observations upon the night-roosting of an Anna Hummingbird. *Condor* 38 1936 p. 44; also R. S. Woods p. 119.

379.—Dzirne, R. Ueber die Hautzeichnungen des grossen Buntspechtes (*Dendrocopos major* L.). *Latv. biol. Biedr. Raksti* 5 1935 pp. 1–60 11 figs. [German, with Latvian rés.]

380.—Eaton, W. F. A list of the Birds of Essex Co. and of Hudson Co., N.J., with special reference to city growth and bird population. *Proc. Linn. Soc. N.Y.* 47 1936 pp. 1–76.

381.—Eberle, G. Schwarzstorch-Erlebnisse. *Nat. u. Volk* 66 1936 pp. 538–543 4 figs.

382.—Ecke, H. Geheimnisse um die Eiderente. Pp. 1–48 many photos. Berlin (Heidecker) 1935 8vo.

383.—Ecke, H. Die Ringfunde deutscher Rotrückenvürger (*Lanius c. collurio* L.). *Vogelzug Berlin* 7 1936 pp. 123–135 map.

384.—Edwards, G. R. Autumn migration on the Yorkshire reservoirs. *Naturalist London* 1936 pp. 25–30.

385.—Edwards, G. R. and others. Bird-watching on Spurn Head, October 10th to 11th, 1936. *Naturalist London* 1936 pp. 265–269.

386.—Edwards, V. C. W. [and others]. The distribution and numbers of breeding Gannets (*Sula bassana* L.). *Brit. Bds.* 29 1936 pp. 262–276 2 maps.

387.—Ehlers, J. [and others]. Beringung von Grünfinker (*Chloris c. chloris*). *Vogelzug Berlin* 7 1936 pp. 197–200.

388.—Eichler, W. Fernfunde in Bayern beringter Singdrosseln. *Anz. orn. Ges. Bay.* 2 1936 pp. 365–366.

389.—Eldern, G. von der. Ueber die Zeichnung der Vogelfedern (auf Grund von Melaninfärbung) und die Phylogenie der Federmuster. *Jena Z. Naturw.* 70 1936 pp. 399–428 1 pl. 18 text-figs.

390.—Elliott, A. J. The Welcome Swallow. *Emu* 35 1936 p. 323 photo.

391.—Ellis, J. C. S. The Swallow in the Huddersfield district. *North Western Nat. Arbroath* 11 1936 pp. 21–23 figs.

392.—Eltringham, W. Bird notes from Crawcrook. *Vasculum Newcastle* 22 1936 pp. 128–131.

393.—Emsie, W. Die Vogelwelt der Flensburger Förde. Schr. naturw. Ver. Schl.-Holst. 21 1936 pp. 365-396 11 photos.

394.—Emilio, S. G. Annotated list of birds observed in 1935. Bull. Essex Co. Orn. Cl. 17 1935 pp. 32-46.

395.—Emlen, J. T. Age determination in the American Crow. Condor 38 1936 pp. 99-102 1 fig.

396.—Errington, P. L. The winter of 1934-35 and Iowa Bob-Whites. Amer. Midl. Nat. Notre Dame 17 1936 pp. 554-568.

397.—Errington, P. L. Sex and resistance of Bob-Whites and Ring-necked Pheasants to starvation. Auk 53 1936 pp. 78-79.

398.—Errington, P. L. Bone healing in young Marsh Hawks. Auk 53 1936 pp. 226-227.

399.—Errington, P. L. and Albert, W. E. Banding studies of semidomesticated Mallard Ducks. Bird-banding Boston 7 1936 pp. 69-73.

400.—Errington, P. L. and Breckenridge, W. J. Food habits of Marsh Hawks in the glaciated prairie region of north-central United States. Amer. Midl. Nat. Notre Dame 17 1936 pp. 831-848.

401.—Errington, P. L. and Hamerstrom, F. N. The Northern Bob-White's winter territory. Res. Bull. Agr. Exp. Sta. Ames Iowa no. 201 1936 pp. 301-443 25 photos.

402. — Escher-Desrivieres, J. et Verrier, M. L. Étude spectrophotométrique des boules colorées de la rétine de quelques oiseaux. C.R. Soc. Biol. Paris 121 1936 pp. 705-708 1 fig.

403.—Espinasse, P. G. Bilateral gyandromorphism in feathers. Nature London 138 1936 pp. 645-646.

404.—Essenberg, J. M. The effect of X-rays on the incubation period, sexual development, egg-laying capacity and brooding tendencies in White and Brown Leghorn chicks. Trans. Illinois Acad. Sci. 28 1936 pp. 251-252.

Even, M. *vide* Delafosse.

405.—Ewan, J. Summer notes from Plumas County, California. Condor 38 1936 pp. 82-85.

406.—Eyerdam, W. J. Notes on Birds collected or observed during the summer of 1932 in the eastern Aleutian Islands, Alaska. Murrelet Seattle 17 1936 pp. 48-52.

407.—Ezra, A. Les élevages de Fox-warren en 1934-1935. Oiseau Paris 6 1936 pp. 272-280.

408.—Ezra, A. The Lidth's Jay (*Lalocitta lidthi*). Avicult. Mag. (5) 1 1936 pp. 225-227 col. pl.

Fabricius, E. *vide* Bergman.

409.—Fairbairn, W. A. Forbes' Banded Plover. *Afrorecheus forbesi*, pp. 74-76 col. pl. The African Pied Wagtail, *Motacilla aguimp vidua* pp. 148-149 fig. Nigerian Field 5 1936.

410.—Falla, R. A. Arctic Birds as migrants in N.Z. Rec. Auckland Inst. Mus. 2 1936 pp. 3-14 1 pl.

Falla, R. A. *vide* D'Ombrain.

411.—Falter, A. Brutvorkommen der Weissflügel-Seeschwalbe (*Chlidonias leucoptera*) in Nordwestdeutschland. Orn. Monatsb. 44 1936 pp. 175-176.

412.—Feltz, C. H. Trapping Cedar Waxwings in the San Joaquin Valley, California. Condor 38 1936 pp. 18-23 1 photo.

413.—Feltgen, E. Observations et réflexions. Le Vanneau. Le Lorient. La Huppe, etc. Bull. Soc. Nat. Luxembourg 29 1935 pp. 66-72, 102-108.

414.—Ferguson, M. S. Notes on the relation of the European Starling to other species of Birds. Auk 53 1936 pp. 87-88.

415.—Ferrier, J. M. Sixteen days in Cyprus. Ool. Rec. London 16 1936 pp. 53-59.

416.—Festa, E. Note ornitologica per il Piemonte. Riv. ital. Orn. 6 1936 pp. 206-210.

417.—Fenillée-Billot, A. Les oiseaux qui nichent dans le réserve des Sept-Iles. Nature Paris 1936 no. 2978 pp. 498-500 5 photos.

418.—Finckenstein, Graf H. Zur Fortpflanzungsbiologie des Kuckucks. Orn. Monatsb. 44 1936 pp. 1-3 1 photo.

Fisher, J. *vide* Hartley.

Fisher, J. *vide* Stott.

Fisher, J. *vide* Vevers.

Fishman, D. *vide* Nice.

419.—Fleay, D. Nesting of the Emu. *Emu* 35 1936 pp. 202-210 7 photos.

420.—Fleay, D. Nesting of the Tawny Frogmouths. *Vict. Nat. Melbourne* 52 1936 pp. 191-193 2 photos.

421.—Fok Yen Lang. Birds seen in my garden. *Hong Kong Nat.* 7 1936 pp. 102-109.

422.—Fossati, L. Circa l' uccello indicatore del miele in eritrea e dell' associazione tra animali diversi. *Natura Milano* 27 1936 pp. 22-28 1 fig.

423.—Fossler, M. L. The death of hundreds of Cedar-Waxwings. *Science* 83 1936 pp. 185-186.

424.—Franke, K. W. [and others]. Monstrosities produced by the injection of selenium salts into Hens' eggs. *Anat. Rec. Philadelphia* 65 1936 pp. 15-22 2 figs.

Fraps, R. M. *vide* Juhn.

Fredrickson, H. C. *vide* Cook.

425.—Friedmann, H. Notes on Alaskan Birds. *Condor* 38 1936 p. 173.

Friedmann, H. *vide* Davis.

426.—Frieling, H. Exkursionsbuch zum Bestimmen der Vögel in freier Natur nach ihrem Lebensraum geordnet. 2^{te} Aufl. Pp. xi + 283 18 illustr. Berlin (Springer) 1936. [N.V.].

427.—Frieling, H. Gesangsentartung bei Stadtvögeln. *Beitr. Fortpfl.-biol. Vög.* Berlin 12 1936 pp. 12-14.

428.—Frieling, H. Funktion-anatomische Untersuchungen am Scherenschnabel (*Rynchops nigra inter-sedens* Saunders). *J. Orn. Berlin* 84 1936 pp. 434-441 5 figs.

429.—Frieling, H. Die Feder. *Kleintier u. Pelztier. Leipzig* 12 Hft. 2 1936 pp. 1-60 43 figs.

430.—Frieling, H. Das Federkleid. *Kleintier u. Pelztier Leipzig* 12 Heft 4 1936 pp. 1-74 28 figs.

431.—Frieling, H. *Cariama cristata* L. als Anpassungsform an das Savannenleben. *Z. Morph. Ökol. Tiere* Berlin 30 1936 pp. 673-730 5 pls. 28 text-figs.

432.—Fritz, J. C. [and others]. The influence of previous feeding on the nitrogen excretion of fasting birds. *Amer. J. Physiol.* 115 1936 pp. 281-286.

433.—Fröhlich, K. Experimentelle Erzeugung von Sirenen beim Hühnschen und Bemerkungen zur sekundären Körperentwicklung. *Arch. Entw. Mech. Org. Berlin* 134 1936 pp. 348-356 13 figs.

434.—Fuggles-Couchman, N. R. Some observations on Birds raiding rice fields in Kilosa district, Tanganyika Territory. *East African Agric. J.* 2 1936 pp. 54-59.

435.—Fuggles-Couchman, N. R. Notes on the nesting habits of some Tanganyika birds. *Tanganyika Notes & Rec.* 1 1936 pp. 61-76.

436.—Gabrielson, I. N. Bird notes from the Lake Francis region of southern Minnesota. *Wilson Bull.* 48 1936 pp. 305-309.

437.—Gaillard, C. Un oiseau géant dans les dépôts éocènes du Mont-d'Or lyonnais. *C.R. Acad. Sci. Paris* 202 1936 pp. 965-967.

438.—Gallera, J. Études sur la sténocéphalie. *Zool. Polon. Lwów* 1 1935 pp. 13-29 1 pl.

439.—Gannon, G. R. Plants spread by the Silvereye [*Zosterops*]. *Emu* 35 1936 pp. 314-316.

440.—Gannon, G. R. Bird observations on a southern trip from Sydney. *Emu* 36 1936 pp. 106-109 2 photos.

441.—Garnett, R. M. Unusual "hold-up" of spring migrants on the Norfolk coast. *Brit. Birds* 30 1936 pp. 58-59.

442.—Gaupp, W. Der Bestand des Weissen Storches in Ostpreussen 1934. *Beitr. Fortpfl.-biol. Vög.* Berlin 12 1936 pp. 41-43.

443.—Gent, C. J. Notes on the movements and roosting habits of Rooks in south Northumberland. *Vasculum Newcastle* 22 1936 pp. 26-29.

444.—Gernaa, I. Fuglelivet in Utterslev Mose in 1932-1935. *Dansk Orn. Foren. Tidsskr.* 30 1936 pp. 23-34.

445.—Geyr von Schweppenburg, H. Freih. Storchzug und Mittelmeer. *J. Orn. Berlin* 84 1936 pp. 339-351.

446.—Geyr von Schweppenburg, H. Baron. Al. Stimmelmayers "Leitlinien." *Vogelzug Berlin* 7 1936 pp. 65-67.

447.—Geyr v. Schweppenbourg, H. Freih. Wie ziehen die holländischen Jungstörche? Vogelzug 7 1936 pp. 187–190.

448.—Ghigi, A. Esperienze ibridologiche fra i generi *Acomus*, *Lophura*, *Hierophasis* e *Gennaeus*. Rend. Acc. Bologna 1934–35 pp. 1–9. [Sep. pag.]

449.—Ghigi, A. Affinità gametica e affinità sistematica alla luce dell'esperienza. Riv. Biol. Firenze 20 1936 pp. 1–12. [sep. pag.]

450.—Gibbard, S. D. Estuary Birds by night. Proc. Coll. Field Cl. Exeter 10 1935 pp. 21–27.

451.—Gigoux, E. E. Aves en : Zoologia del Aysen. Bol. Mus. nac. Chile 14 1935 pp. 59–62.

Gilbert, H. A. vide Mackworth-Praed.

452.—Gilbert, P. A. The Topknot Pigeon [*Lopholaimus antarcticus*]. Emu 35 1936 pp. 301–312 col. pl. 3 photos.

453.—Gilbert, P. A. Some notes on *Hypotaenidia philippensis*. Emu 36 1936 pp. 10–13 3 photos.

454.—Gilbert, P. A. Field notes on *Rallus pectoralis*. Emu 36 1936 pp. 72–73 photo.

455.—Giles, F. H. A description of the Swifts (*Collocalia francica* and *Collocalia innominata*), the Birds which build edible nests. J. Siam Soc. Nat. Hist. Suppl. 10 1936 pp. 137–170 7 pls.

456.—Gill, E. L. A first guide to South African Birds. Pp. xv + 223 20 pls. Cape Town. (M. Miller) 1936 8vo.

457.—Gill, G. The concentration of Catbirds at the close of the breeding season. Wilson Bull. 48 1936 pp. 38–40.

458.—Gill, G. Further notes on the constancy of Catbirds to mates and localities. Wilson Bull. 48 1936 pp. 303–305.

Ginglinger, A. vide Wolff.

Girerd, H. vide Magnan.

459.—Gladkoff, N. A. On certain aerodynamic properties of Birds. Bull. Soc. Nat. Moscou Sect. Biol. 45 1936 pp. 36–41 1 fig. [Russian, with English rés.]

460.—Gladkow, N. A. Ueber den Zusammenhang zwischen Körpergrösse und Flugart bei Vögeln. Zool. J. Moscow 15 1936 pp. 452–471 5 figs. [Russian, with German rés.]

461.—Gladstone, H. S. Goosander nesting in Dumfriesshire. Brit. Bds. 30 1936 pp. 87–90 photo.

462.—Gladstone, H. Archibald Thorburn. Scot. Nat. Edinb. 1936 pp. 1–7 portr.

463.—Glasewald, K. Die Brutvögel der Mark Brandenburg in : Märkisches Heimatbuch pp. 91–116 figs. 3rd ed. Neudam (Neumann) 1935 8vo.

464.—Glegg, W. E. The spring habits of the Red-legged Partridge. Brit. Bds. 30 1936 pp. 38–40.

465.—Glegg, W. E. Essex Bird migration. Essex Nat. 25 1936 pp. 123–157.

466.—Glegg, W. E. Field observations on the Birds of the lagoon-area between the Petite Camargne and the Spanish Frontier. Ibis 1936 pp. 125–163.

467.—Goethe, F. Tangfliegen-Larven als Nahrung der bei Helgoland durchziehenden Limikolen. Vogelzug Berlin 7 1936 pp. 135–137.

468.—Goodfellow, W. A collector on Melville Island. Avicult. Mag. (5) 1 1936 pp. 16–27.

469.—Gordon, S. Thirty years of nature photography : A personal record of two observers. Pp. xi + 100 108 pls. London etc. (Cassell) 1936 4to.

470.—Gordon, S. The Fulmar Petrel. Nature London 137 1936 pp. 173–176 2 photos.

471.—Gower, C. The cause of blue color as found in the Blue-bird (*Sialia sialis*) and the Blue Jay (*Cyanocitta cristata*). Auk 53 1936 pp. 178–185.

472.—Graham, R. Ornithological notes from the Solway, Pennines and Lakeland, 1935. North-Western Nat. Arbroath 11 1936 pp. 133–143, 247–252.

473.—Grange, W. Some observations on the Ruffed Grouse in Wisconsin. Wilson Bull. 48 1936 pp. 104–110.

474.—Grant, C. H. B. and Mackworth-Praed, C. W. On the type locality of *Sarothrura lineata*. Bull. Bt. Orn. Cl. 56 1936 pp. 58–59.

475.—Grant, C. H. B. and Mackworth-Praed, C. W. Type localities of African Birds. [*Cursorius*, *Rhinoptilus*]. Bull. Bt. Orn. Cl. **56** 1936 pp. 72–73.

476.—Grant, C. H. B. and Mackworth-Praed, C. W. On the type locality of *Hemiparra crassirostris*. Bull. Bt. Orn. Cl. **56** 1936 pp. 92–93.

477.—Grant, C. H. B. and Mackworth-Praed, C. W. Notes on *Numenius*, *Rhinoptilus*, *Streptopelia* and *Tympanistria*. Bull. Brit. Orn. Cl. **56** 1936 pp. 103–105.

478.—Grant, C. H. B. and Mackworth-Praed, C. W. Type-localities of some South African Birds. Bull. Bt. Orn. Cl. **56** 1936 pp. 115–117.

479.—Grant, C. H. B. and Mackworth-Praed, C. W. Notes on African birds [*Cuculus*, *Coccytes*]. Bull. Bt. Orn. Cl. **56** 1936 pp. 123–126.

480.—Grant, C. H. B. and Mackworth-Praed, C. W. Notes on African Birds [*Cuculus*, *Corythaesola*, *Corythaixoides*]. Bull. Bt. Orn. Cl. **56** 1936 pp. 131–134.

481.—Grant, C. H. B. and Mackworth-Praed, C. W. The type locality of *Columba guinea* Lin. Bull. Brit. Orn. Cl. **57** 1936 pp. 22–23.

482.—Grant, C. H. B. and Mackworth-Praed, C. W. Notes on African Birds [*Pternistis*, *Charadrius*, *Pocephalus*]. Bull. Brit. Orn. Cl. **57** 1936 pp. 43–47.

Grant, C. H. B. *vide* Mackworth-Praed.

483.—Gray, H. The diseases of Cage and Aviary Birds. London (Author) 1936. [N.V.]

Gray, J. T. *vide* Lea.

484.—Greaves, R. H. Notes on Egyptian Hoopoes and their nests. Oolog. Rec. London **16** 1936 pp. 37–40 photo; see also pp. 59–62.

485.—Greaves, R. H. Breeding-biology of the Olivaceous Warbler, *Hippolais p. pallida*. Ool. Rec. **16** 1936 pp. 87–88.

486.—Greaves, R. H. and M. Sixty common Birds of the Nile Delta. An introduction for beginners. Pp. 1–50 61 figs. in colour. Cairo (Amalgamated Press) 1936 8vo.

487.—Greenway, J. C. A name for the Hummingbird of the Caicos Islands. Proc. New Engl. Zool. Cl. **15** 1936 pp. 105–106.

488.—Gregory, P. W. [and others]. Glutathione concentration and hereditary size. J. exp. Zool. Philadelphia **73** 1936 pp. 263–283 6 figs.

489.—Grenquist, P. Some diving notes on young Tufted Ducks, young Velvet Scoters and young Eider Ducks. Ornis fenn. Helsingfors **13** 1936 pp. 6–23 3 figs.

490.—Greschik, E. Die Zunge von *Anser albifrons* (Scop.) und *Anser erythropus* (L.). Kócsag Budapest **8** 1935 pp. 7–17 2 figs. [In German.]

491.—Grimes, M. Phenological report for 1935. Irish Nat. Journ. Belfast **6** 1936 pp. 50–52, 77–78.

Grimes, S. A. *vide* Allen, F. H.

492.—Grinnell, J. Up-hill planters [*Aphelocoma californica*]. Condor **38** 1936 pp. 80–82.

493.—Grinnell, J. A Pacific Golden Plover reaches California. Condor **38** 1936 pp. 210–211.

494.—Grinnell, J. and Linsdale, J. M. Vertebrate animals of Point Lobos Reserve 1934–35. Pub. Carnegie Instn. Washington no. 481 1936 pp. vi + 159 39 figs. map. [Birds pp. 38–133.]

495.—Griscom, L. Modern problems in field identification. Bird-lore **38** 1936 pp. 12–18.

496.—Griscom, L. Notes on New England Hairy Woodpeckers. Bull. Essex Co. Orn. Cl. **17** 1935 pp. 4–6.

497.—Griscom, L. Birds in: Observations on the behavior of animals during the total solar eclipse of August 31, 1932. Proc. Amer. Acad. Philad. **70** 1935 pp. 51–61.

498.—Griscom, L. The Birds of Dutchess County, New York, from records compiled by M. S. Crosby. Trans. Linn. Soc. New York **3** 1933 pp. 1–184 portr. and 2 photos.

499.—Griswold, J. A. Two new records for Panama. Auk **53** 1936 pp. 457–458.

500.—Griswold, J. A. A new subspecies of *Lurocalis* from Panama. Proc. New Engl. Zool. Cl. **15** 1936 pp. 101–103.

501.—Grodziński, Z. Die Entwicklung der Venen in der Keimscheibe des Hühnchens. Bull. int. Acad. Cracovie (B II) 1935 pp. 305–322 5 figs.

502.—Grodziński, Z. et Marchlewski, J. Studies on the motility of the spermatozoa of the Domestic Cock outside the organism. Bull. int. Acad. Cracovie (B II) 1935 pp. 347–361.

503.—Groebels, F. Ueber Farbvarietäten und Farbaberrationen der Vögel und ihre Vererbungsweise. Anz. orn. Ges. Bay. 2 1936 pp. 368–373.

504.—Grote, H. Die Gliederung des Formenkreises *Arizelocichla tephrolaema*. Anz. orn. Ges. Bay. 2 1935 pp. 355–356.

505.—Grote, H. Nomenklatorische Bemerkungen über einige afrikanische Vögel. Anz. orn. Ges. Bay. 2 1936 pp. 373–375.

506.—Grote, H. Das Nebeneinanderbrüten von *Pyrrhula p. pyrrhula* L. and *P. p. cineracea* Cab. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 p. 27.

507.—Grote, H. Beiträge zur Biologie südostrussischer Steppenvögel. Beitr. Fortpfl.-biol. Berlin 12 1936 pp. 133–139, 195–206, 234–238.

508.—Grote, H. Dem Andenken Michael Menzbiers. J. Orn. Berlin 84 1936 pp. 173–179 portr.

509.—Grote, H. Zur systematischen Stellung von *Cossypha poensis* (Alex.). Orn. Monatsb. 44 1936 p. 24.

510.—Grote, H. Die Winterquartiere von Nachtigall und Sprosser. Orn. Monatsb. 44 1936 pp. 97–100 map.

511.—Grote, H. Das Perlhuhn von Nordostkamerun. Orn. Monatsb. 44 1936 pp. 156–158.

Grote, H. *vide* Horst.

Grote, H. *vide* Stegmann.

Grotepass, W. *vide* Hijmaus v. d. B.

Grover, H. J. *vide* Romanoff.

512.—Grünwald, P. Experimentelle Untersuchungen über die Beziehungen der Medullaranlage zur Entwicklung der Urwirbel beim Huhn. Arch. Entw. Mech. Org. Berlin 135 1936 pp. 389–407 13 figs.

513.—Gudmundsson, B. Fra mit aegvaer. Flora og Fauna, Kjöbenh. 1935 pp. 153–165.

Gudmundsson, F. *vide* Timmermann.

514.—Guérin, G. Contribution à l'étude du régime de quelques oiseaux vendéens. Oiseau 6 1936 pp. 455–465, 679–689.

515.—Guimarães, R. A. [and others]. Notas sobre a evolução e a biologie do Mutum (*Crax fasciolata* Spix). Bol. biol. S. Paulo 2 1935 pp. 76–81 7 figs.

516.—Guirchitch, G. de. Chronique ornithologique tunisienne pour l'année 1935. Oiseau Paris 6 1936 pp. 480–493.

517.—Hachisuka, Marquess. On the Guillemard zoogeographical line. Bull. Biogeogr. Soc. Japan 6 no. 18 1936 pp. 183–192.

518.—Hachisuka, Marquess. On genus *Borisia* from the Philippine Islands. Bull. Inst. Roy. Hist. nat. Sophia 9 1936 pp. 53–56 col. pl.

519.—Hachisuka, Marquis. Oiseaux rares ou remarquables des îles Philippines. Oiseau Paris 6 1936 pp. 185–197 2 col. pls. pp. 418–421 1 col. pl.

520.—Hachler, E. Contribution à la connaissance de la distribution géographique du genre Roitelet (*Regulus* Cuv.) dans la Moravie méridionale (Morava Č.S.R.). Sylvia Praha 1 1936 pp. 53–55. [Czech and French rés.]

521.—Hagen, W. Die Eismöwe (*Larus glaucus* Br.) in Schleswig-Holstein. Anz. orn. Ges. Bay. 2 1935 pp. 360–361.

522.—Hähnle, H. Das Schutzgebiet Behr-Steckby (Anhalt) des Reichsbundes für Vogelschutz. Veröff. Württ. Landesstelle Natursch. Stuttgart 12 1936 pp. 167–183 1 fig.

523.—Haigh, G. H. C. Notes on the migration of Birds in North Lincolnshire during the autumn and winter of 1935–36. Trans. Lincoln. Nat. Union Louth for 1935 1936 pp. 52–55; also B. A. Pyc pp. 56–66.

524.—Haig-Thomas, D. Ornithology in: N. Humphreys Oxford University Ellesmere Land Expedition. Geogr. J. London 87 1936 p. 432.

Hale, H. P. *vide* Moran.

525.—Hale, R. W. Bird ringing 1935. London Nat. 1935 1936 pp. 96–97.

526.—Hall, C. A. A pocket-book of British Birds. Pp. viii + 125 63 pls. London (Black) 1936 16mo.

- 527.—Hall, H. H. The Birds of southeastern Kansas, with migration dates. Trans. Kans. Acad. Sci. **38** 1935 pp. 311-315.
- 528.—Halladin, R. Ein Beitrag zur Bauanalyse der Vogelnester. Prace Kom. mat.-przr. pozn. Tow. Przyj. Nank. (B) **7** no. 5 1935 pp. 1-108 30 figs. [Polish with German rés.]
- 529.—Haller, W. Ein Beitrag zur Kenntnis der Verbreitung und Nistweise von Haus- und Feldsperling im schweizerischen Hügelland. Arch. suisse d'Orn. **1** 1936 pp. 350-357.
- 530.—Hamerstrom, F. N. A study of the nesting habits of the Ring-necked Pheasant in northwest Iowa. Iowa St. Coll. J. Sci. **10** 1936 pp. 173-199 4 figs.
- Hamerstrom, F. N. *vide* Errington.
- 531.—Hamerton, A. E. Report on the deaths occurring in the Society's Gardens during the year 1935. Proc. zool. Soc. London **1936** pp. 659-686 3 pls.
- 532.—Hanaoka, T. On Limicolae found in the vicinity of Sumiyoshi-Ura, the coast of Osaka Bay, Japan. Zool. Mag. Tokyo **48** 1936 pp. 245-257 map. [Japanese with English rés.]
- 533.—Hance, R. T. Some characteristics of Pigeon chromosomes. Proc. Penn. Acad. Sci. **6** 1932 pp. 134-135 5 figs.
- 534.—Hanks, E. S. Some notes on Bird-life at Cairns. N. Queensl. Nat. Cairns **4** no. 40 1936 pp. 13-14.
- 535.—Hardy, E. Bird life on the farm. Discovery **1936** pp. 290-291.
- 536.—Hardy, E. Ornithology of the Liverpool area 1935. Naturalist London **1936** pp. 49-52.
- 537.—Hargrave, L. L. Three broods of Red-backed Juncos in one season. Condor **38** 1936 pp. 57-59.
- 538.—Hargrave, L. L. Seven Birds new to Arizona. Condor **38** 1936 pp. 190-191; also pp. 171-172.
- 539.—Härms, M. [List of the Birds of the island Oesel.] Eesti Kirjanduse Selto Kodu-uurimise Toimkonna toimetused ilmunud Koguteos "Eesti," "Saaremaa" Kõitest. Tartu, 1932, pp. 77-96 9 photos. [Title and Contents in Estonian only. N.V.]
- 540.—Harper, E. C. y Drabble, L. Sobre la nidificación de los flamencos (*Phoenicopterus ruber chilensis* Mol.). Hornero B Aires **6** 1936 pp. 249-253 7 photos.
- 541.—Harper, F. The *Vultur sacra* of William Bartram. Auk **53** 1936 pp. 381-392.
- 542.—Harper, F. The distribution of the Limpkin [*Aramus*] and its staple food, *Pomacea*. Nautilus Philad. **60** 1936 pp. 37-40 map and 1 fig., also "Oriole" **1** 1936 pp. 21-22 2 figs.
- Harrington, P. *vide* Baillie.
- 543.—Harrison, B. G. Note on *Molothrus bonariensis*, its eggs and its fosterers. Bull. Bt. Orn. Cl. **56** 1936 pp. 88-90.
- 544.—Harrison, B. G. Notes on some of the breeding birds of southern Uruguay. Ool. Rec. **16** 1936 pp. 15-24, 40-41.
- 545.—Harrison, J. M. Audubon's Little Shearwater in Sussex. A new British Bird. Brit. Bds. **30** 1936 pp. 48-49.
- 546.—Harrisson, T. H. and Buchan, J. N. S. Further notes on a field study of the St. Kilda Wren (*Troglodytes troglodytes hirtensis* Seeb.) with special reference to its nest habits and song. Scot. Nat. Edinb. **1936** pp. 9-21.
- 547.—Harrowes, D. E. Nesting of *Oncostoma* in the Canal Zone. Auk **53** 1936 pp. 336-337.
- 548.—Hartert, E. Die Vögel der palaarktischen Fauna. Ergänzungsband in Gemeinschaft mit Dr. F. Steinbacher bearbeitet. Hft. 5 pp. 385-480 Berlin (Friedländer) 1936 8vo. [Strigidae-Charadriidae.]
- 549.—Hartert, E., Paludan, K. and others. IV. Die Vögel des Weyland-Gebirges und seines Vorlandes. Mitt. zool. Mus. Berlin **21** 1936 pp. 165-240 map 18 text-figs.
- Hartley, C. H. *vide* Stott.
- 550.—Hartley, C. H. and Fisher, J. The marine foods of birds in an inland fjord region in West Spitsbergen. Part 2. Birds. J. Anim. Ecol. Cambridge **5** 1936 pp. 370-389 map 1 fig.
- 551.—Hassfurth, A. Zur Balz des Rackelhahnes [*Tetrao urogallus* × *Lyrurus tetrix*]. Orn. Monatsb. **44** 1936 pp. 169-170.

552.—Haupt, O. Andere Wirbeltiere des Neozoikums. Oberrheinischer Fossilkatalog Berlin Lief. 4 1935 pp. 1-103. [*Aves* pp. 31-33, 67-68.]

553.—Haverschmidt, F. Terugmeldingen van in Nederland geringde Ooievars (*Ciconia c. ciconia* (L.)). *Ardea* Leiden 25 pp. 112-127 map.

554.—Hays, F. A. Studies on the inheritance of persistency [late laying in Fowls]. *Genetics* Menasha 21 1936 pp. 519-524 5 figs.

555.—Heidemann, J. Wiederfunde in Bayern beringter Turmfalken. *Anz. orn. Ges. Bayern* 2 1936 pp. 366-367.

556.—Heikertinger, F. Werden die Tagfalter von Vögeln gejagt. *Biol. Zbl.* Leipzig 56 1936 pp. 463-494.

557.—Heilfurth, F. Beitrag zur Fortpflanzungsökologie der Hochgebirgsvögel. *Beitr. Fortpfl.-biol. Vög.* Berlin 12 1936 pp. 98-103.

558.—Heim de Balsac, H. La notion d'espèce et de sous-espèce dans ses rapports avec la biogéographie. *Alauda* Paris 7 1935 pp. 457-467.

559.—Heim de Balsac, H. Un point du régime alimentaire et de l'éthologie du Pic épeiche. *Alauda* 8 1936 pp. 263-264.

560.—Heim de Balsac, H. Biogéographie des Mammifères et des Oiseaux de l'Afrique du Nord. *Bull. biol. France-Belg. Suppl.* 21 1936 pp. 1-447 16 maps 12 photos 16 text-figs.

561.—Heim de Balsac, H. Les éléments tropicaux (mammifères et oiseaux) de la faune de Syrie et de Palestine. *C.R. Soc. Biogéographie* Paris 13 no. 109-110 1936 pp. 34-36.

562.—Heim de Balsac, H. Note sur l'*Oenanthe leucopyga aegra* Hartert. *Mém. Acad. Sci. Paris* 62 1936 pp. 47-50.

Heim de Balsac, H. *vide* Mayaud.

563.—Heine, F. Phagozytoseversuche am Hühnerembryo. *Arch. Entw. Mech. Org.* Berlin 134 1936 pp. 283-293 8 figs.

564.—Heinroth, O. F. E. Blaauw zum Gedächtnis. *Orn. Monatsb.* 44 1936 pp. 127-128.

565.—Hellmayr, C. E. Catalogue of the Birds of the Americas. Part IX.

Tersinidae-Thraupidae. Field Mus. Pub. Zool. Chicago 13 1936 pp. 1-458.

566.—H[ellmayr], C. E. Otmar Reiser. *Ibis* 1936 pp. 612-614.

567.—Helms, O. Thomas Neergaard Krabbe 2 Aug. 1861-9 Jan. 1936. *Dansk Orn. Foren. Tidsskr.* 30 1936 pp. 69-73 portr.

568.—Helms, O. Ornithologen Johann Dieterich Petersen (1717-1786), hans Liv og Arbejder. *Dansk. orn. Foren. Tidsskr.* 30 1936 pp. 83-149 5 photos.

569.—Helms, O. og Christiansen, A. Nogle iagttagelser fra Christiansø in 1935. *Dansk Orn. Foren. Tidsskr.* 30 1936 pp. 149-154.

570.—Hendrickson, G. O. Observations on nests and young of the Coot. *Wilson Bull.* 48 1936 pp. 216-218.

571.—Henneberg, B. Beginn der Morgangesangs der Schwarzdrossel (*Turdus merula*) in Giessen. *Ber. oberhess. Ges. Giessen* 17 1936 pp. 145-146 2 tables.

572.—Hennings, H. Beobachtungen am Horst der Kornweihe (*Circus c. cyaneus* L.). *Beitr. Fortpfl.-biol. Vög.* Berlin 12 1936 pp. 105-113 photo, pp. 150-160.

573.—Henry, G. M. Coloured plates of the Birds of Ceylon with a short description of each bird by W. E. Wait. Pt. IV. 16 pls. with text 1935 4to. [Notice *Nature* 137 p. 91.]

574.—Herklots, G. A. C. The Birds of Hong Kong. Parts XX, XXI. Fams. Zosteropidae and Ploceidae. *Hong Kong Nat.* 6 1935 pp. 159-162, 163-166 2 col. pls.

575.—Herklots, G. A. C. The Birds of Hong Kong. Part XXII. Family Scolopacidae. XXIII. Family Oriolidae. *Hong-Kong Nat.* 7 1936 pp. 1-4, 99-101 2 col. pls.

576.—Herklots, G. A. C. Ornithology. Notes and comments. *Hong Kong Nat.* 6 1935 pp. 294-295.

577.—[Herklots, G. A. C.] Ornithology. New records for Hong Kong. *Hong-Kong Nat.* 7 1936 pp. 81-86.

578.—Herman, C. M. Ectoparasites and Bird diseases. Bird-banding Boston 7 1936 pp. 163-166.

579.—L'Hermitte, J. Complément à la "Contribution à l'étude ornithologique de la Provence." *Alauda* 3 1936 pp. 316-325.

580.—Hesse, E. Ueber eine Brut vom Raubwürger (*Lanius e. excubitor* L.). *Märk. Tierw. Berlin* 1 1936 pp. 222-224.

581.—Hesse, E. Zur Häufigkeit der Grosstrappen (*Otis t. tarda* L.) in der Mark. *Märk. Tierw. Berlin* 2 1936 pp. 23-24.

582.—Heydweiller, A. M. Sex, age and individual variation of winter Tree Sparrows. *Bird-banding Boston* 7 1936 pp. 61-68 2 figs.

583.—Hibbert-Ware, A. Report of an investigation of the food of captive Little Owls. *Brit. Bds.* 29 1936 pp. 302-305.

584.—Hickey, J. J. The ornithological year 1934 in the New York City region. *Proc. Linn. Soc. N.Y.* 47 1936 pp. 100-131.

585.—Hicks, L. E. Distribution of breeding birds of Ohio. *Bull. Ohio Biol. Surv.* no. 32 1935 pp. 125-190 map photo.

586.—Hicks, L. E. and Dambach, C. A. A statistical survey of the winter bird life of southeastern Ohio. *Muskingum County. Wilson Bull.* 43 1936 pp. 273-275.

587.—Hijmans v. d. Bergh, A. A. et Grotepass, W. A propos de porphyries dans l'oeuf d'oiseau incubé. *C.R. Soc. Biol.* 121 1936 pp. 1253-1258.

588.—Hildebrandt, H. [and others]. Alfred Edmund Brehm. *Mitt. Osterlande Altenburg* 20 1929 pp. 13-67 portr. bibliogr.

589.—Hill, R. H. Notes on Owls in north-east Yorkshire. *North Western Nat. Arbroath* 10 1935 pp. 315-316.

Hill, R. T. *vide* Irwin.

590.—Hirtz, M. Kritische Beiträge zur Kenntnis der Vogelwelt Jugoslawiens. *Glasnik hrv. prirodose Dr. Zagreb* 41-48 1936 pp. 161-230.

591.—Hoesch, W. Nester und Gelege aus dem Damaraland II. *J. Orn. Berlin* 84 1936 pp. 3-20 8 photos.

592.—Hoesch, W. Beobachtungen am Horst von *Aquila verreauxi*. *Orn. Monatsb.* 44 1936 pp. 165-169 4 photos.

593.—Hoffmann, B. Von den Felsenschwalben an der Luegsteinwand. *Verh. orn. Ges. Bayern* 21 1936 pp. 65-70 4 figs.

594.—Hoffmann, B. Neues von den djordsui-Buchfinken. *Anz. orn. Ges. Bay.* 2 1936 pp. 375-376.

595.—Hoffmann, G. Rund um den Kranich. Pp. 146 146 figs. Oehringen (Hohenlohe) 1936 8vo. [N.V.]

596.—Höhr, H. *Parus capitulo fusconigricanti* Höhr. Die mattglanz köpfige Nonnenmeise. Ein Beitrag zur Orn. Mittelsibiriens. *Verh. Siebenbürg. Ver. Nat. Hermannstadt* 83-84 1935 pp. 42-58.

597.—Hollom, P. A. D. Report on the Great Crested Grebe sample count, 1935. *Brit. Bds.* 30 1936 pp. 138-158 2 maps.

598.—Hollom, P. A. D. Great Crested Grebe report. *London Nat.* 1935 1936 pp. 87-89.

599.—Holmes, P. F. and Keith, D. B. Observations on the Birds of Grimsey and North Iceland. *Ibis* 1936 pp. 322-330.

600.—Holstein, V. To Redefund af Mudderkliire, *Tringa hypoleucos* L. *Dansk Orn. Foren. Tidsskr.* 30 1936 pp. 34-40.

601.—Homonnay, F. v. Ueber "Brachydaktylie" bei Rebhühnern. *Kőcsag Budapest* 8 1935 pp. 45-52 2 figs. [German, with Magyar rés.]

602.—Hoogerwerf, A. Voorkomen van *Nycticorax caledonicus* (Gm.), *Plegadis falcinellus* subspec. en *Phalarocrax ater territorii* (Mathews), also broedvogels in Oost-Java, pp. 170-171. Waarneming van *Pelecanus philippensis* Gm. aan de Kust bij Batavia, pp. 171-172. *Ardea Leiden* 25 1936.

603.—Hoogerwerf, A. On nidification of some Javan Birds. *Bull. Raffles Mus. Singapore* 12 1936 pp. 118-124 12 photos.

604.—Hoogerwerf, A. Neues von Java. *Orn. Monatsb.* 44 1936 pp. 25-26.

605.—Hoover, E. Twinning in a chick embryo. *Proc. Penn. Acad. Sci.* 6 1932 pp. 57-60 9 figs.

606.—Hopkins, Sir F. G. The Naturalist in the laboratory. London Nat. 1935 1936 pp. 40-51.

Hopkins, N. *vide* Clancey.

607.—Hopkinson, E. Honey-Eaters. Avicult. Mag. (5) 1 1936 pp. 313-316.

608.—Hořice, A. Der weisskehlige Stieglitz (*Carduelis albigularis* [Madarász]). Sylvia Praha 1 1936 pp. 57-59. [Czech, with German rés.]

Hořice, A. *vide* Muselek.

609.—Hornberger, F. Der Weisse Storch im Forschungskreis Insterburg (Ostp.). Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 44-49.

610.—Hørring, R. Ornithologiske iagttagelser paa Anholt. Dansk orn. Foren. Tidsskr. 30 1396 pp. 214-220.

611.—Horst, F. Die Dohle als Felsbrüter. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 29-30; see also H. Grote and others pp. 118-120.

612.—Hosker, A. Regeneration of feathers after thyroid feeding. J. Exp. Biol. Cambridge 13 1936 pp. 344-351 5 figs.

613.—Hosker, A. Studies in the epidermal structures of Birds. Philos. Trans. London 226B 1936 pp. 143-188 13 pls. 59 text-figs.

614.—Housse, P. R. El Gavilán o Halcón Peregrino. Riv. Univ. Santiago 21 1936 pp. 69-76.

615.—Howard, H. Further studies upon the Birds of the Pleistocene of Rancho La Brea. Condor 38 1936 pp. 32-36.

616.—Howard, H. A new fossil bird locality near Playa del Rey, California, with description of a new species of Sulid. Condor 38 1936 pp. 211-214 1 fig.

617.—Howard, H. A new record for *Parapavo californicus* (Miller). Condor 38 1936 pp. 249-250.

618.—Hsu, W. S. Further cytological observations on the uropygial glands of Birds. Z. Zellf. mikr. Anat. 24 1936 pp. 248-255 28 figs.

619.—Huber, J. F. Nerve roots and nuclear groups in the spinal cord of the Pigeon. J. comp. Neurol. Philad. 65 1936 pp. 44-91 27 figs.

Huber, J. *vide* Meylan.

620.—Hudson, G. E. and Sherman, F. Some miscellaneous notes on South Carolina Birds. Auk 53 1936 pp. 311-315.

621.—Huey, L. M. Noteworthy records from San Diego County, California. Condor 38 1936 p. 191.

622.—Huey, L. M. Notes on the summer and fall birds of the White Mountains, Arizona. Wilson Bull. 48 1936 pp. 119-130 4 photos.

623.—Hugues, A. Des questions sur les Cailles. Alauda Paris 7 1935 pp. 516-521.

624.—Hugues, A. Simples notes sur a Pie Bavarde, *Pica pica* L. Alauda Paris 7 1935 pp. 535-540.

625.—Humphreys, G. R. [and others]. Notes on Irish birds. Irish Nat. Journ. Belfast 6 1936 pp. 49, 73-76.

626.—Huntington, J. L. and Barbour, T. The birds at Soledad, Cuba, after a hurricane. Auk 53 1936 pp. 436-437.

627.—Hutchinson, M. M. The Birds of Costa Brava, Spain. School Nature Study 31 no. 124. [N.V.]

628.—Hutt, F. B. Genetics of the Fowl. V. The modified Frizzle. J. Genet. Cambridge 32 1936 pp. 277-285 1 pl.

Hutt, F. B. *vide* Warren.

629.—Huxley, J. S. Nests and broods in 1936 in Whipsnade Bird Sanctuary, Bedfordshire. Brit. Bds. 30 1936 pp. 224-225.

630.—Hyem, E. L. Notes on the Birds of Mernot, Barrington, N.S.W. Emu 36 1936 pp. 109-127 6 photos.

631.—Ihering, R. von. El Tangara o "Bailarin" *Chiroxiphia caudata*. Hornero B. Aires 6 1936 pp. 311-313.

Ikeda, Baron S. *vide* Taka-Tsukasa.

632.—Inglis, C. M. Kingfishers of our area. J. Darjeeling nat. Hist. Soc. 10 1936 pp. 73-84 3 pls., 11 pp. 1-8 col. pl.

633.—Inglis, C. M. The Sun-birds and Spider-hunters of our area. J. Darjeeling Nat. Hist. Soc. 10 1936 pp. 85-90.

634.—[Inglis, C. M.] The Bengal Jungle Babbler or "Seven Sisters" *Turdoides terricolor terricolor* (Hodgs.). J. Darjeeling nat. Hist. Soc. 10 1936 pp. 117-123 col. pl.

635.—Inglis, C. M. The Great Blue Kingfisher (*Alcedo hercules* Laubmann). J. Darjeeling Nat. Hist. Soc. 11 1936 pp. 41-45 col. pl.

636.—Ingram, G. C. S. and Salmon, H. M. Ornithological notes 1932-33 and 1933-34. Trans. Cardiff Nat. Soc. 66 1935 pp. 110-115, and 67 1936 pp. 111-118.

Inoue, M. *vide* Yamashina.

637.—Insfran, F. R. Aportes a la ornitologia nacional. Sobre biologia de las *Leptotila* o Yeruti. Rev. Soc. cient. Paraguay 3 no. 6 1936 pp. 193-194.

638.—Inukai, T. A peculiar poison used by the Ainu for bird-hunting. Trans. Sapporo nat. Hist. Soc. 14 1935 pp. 136-137.

639.—Iohansen, H. Die Brutvogel des Salairgebirge. Trav. Inst. Scient. Biol. Toms 1 1935 pp. 12-65 map 2 figs. (German summ. p. 63.)

640.—Iredale, C. M. C. M. N. White on Australian Birds. Emu 36 1936 pp. 136-137.

641.—Irwin, M. R. and Hill, R. T. Parabiotic twins as a means of determining cellular individuality. Proc. Soc. exp. Biol. 33 1936 pp. 566-568.

642.—Irwin, M. R. [and others]. Immuno-genetic studies of species and of species hybrids in Doves, and the separation of species-specific substances in the backcross, pp. 85-108 1 fig.; Immunogenetic studies of species and of species hybrids in Pigeons and the separation of species-specific characters in backcross generations, pp. 285-308; also Immunogenetic studies of species and of species hybrids from the cross of *Columba livia* and *Streptopelia risoria*, pp. 309-318. J. exp. Zool. Philadelphia 73 1936.

643.—Ivanov, A. I. Bemerkungen über einige Vögel Tadzhikistans. C.R. Acad. Sci. Moscou 1935 vol. 4 pp. 299-302. [German.]

Ivy, A. C. *vide* Sprague.

644.—Iwanowa, S. Untersuchung des Wirkungsmechanismus des Lichtes auf die Hoden von *Passer domesticus*. J. Biol. Moscou 4 1935 pp. 833-842 9 figs. [Russian, with German rés.]

645.—Jabouille, P. Le Cygne de David (*Cygnus davidi* Swinh.) en Sibirie. Oiseau Paris 6 1936 pp. 152-155 fig.

646.—Jack. N. Rose Robin [*Petroica rosea*]. Queensl. Nat. Brisbane 10 1936 pp. 14-16.

647.—Jackson, C. F. *Sporophila lineola* taken in New Hampshire. Auk 53 1936 p. 221.

Jacoby, F. *vide* Willmer.

648.—Jaeger, E. C. Birds in: The California Deserts pp. 91-102. Stanford (University Press) 1933 8vo.

649.—Jansson, S. Om den svarta storkens, *Ciconia nigra*, förekomst in Kalmar län. Fauna och Flora Uppsala 1936 pp. 20-23 3 photos.

Jecklin, L. *vide* Portmann.

650.—Jenkins, C. F. H. Useful Birds of Western Australia. The Straw-necked Ibis, *Threskiornis spinicollis*. J. Agric. W. Australia 13 1936 pp. 360-362 fig.

651.—Jenks, R. A new race of Golden-crowned Kinglet from Arizona. Condor 38 1936 pp. 239-244 2 figs.

652.—Jennings, O. E. Some interrelations of plants and birds on Presque Isle, Erie, Pennsylvania. Proc. Penn. Acad. Sci. 7 1933 pp. 192-195.

653.—Jespersen, P. The distribution and occurrence of the different species of Owls in Denmark. Forh. skand. naturf. Møte 19 1936 pp. 487-489.

654.—Jewett, S. G. Bird notes from Harney County, Oregon, during May 1934. Murrelet Seattle 17 1936 pp. 41-47.

655.—Jirsik, J. Kropfinhalte der flugunfähigen Jungen von Lachmöwen (*Larus rid. ridibundus* L.). Sylvia 1 1936 pp. 9-12. [Czech and German.]

656.—Johansson, N. G. Råkorna i Skaraborgs län. Fauna och Flora Uppsala 1936 pp. 127-129 map.

657.—Johnson, K. C. Notes on nesting birds of the Orange Free State. Ostrich Pretoria 5 1934 pp. 49-56 2 photos.

658.—Johnson, K. C. Notes on Osprey, Egyptian Goose and Speckled Pigeon. Ostrich Pretoria 6 1935 pp. 95-97.

659.—Johnston, T. L. Nesting habits of the Willow-Tit in Cumberland. Brit. Bds. 29 1936 pp. 378-380.

Joly, J. M. *vide* Lecoq.

660.—Jones, F. W. The wanderings of Albatrosses. *Emu* 36 1936 pp. 103–105 2 figs.

661.—Jones, F. W. The breeding of the Sooty Shearwater (*Puffinus griseus*) on Tasman Island. *S. Austr. Orn.* 13 1936 pp. 197–200 photo.

662.—Jones, F. W. Notes on the breeding of the Short-tailed Shearwater *Puffinus tenuirostris* in 1936. *S. Austr. Orn.* 13 1936 pp. 223–228 2 photos.

663.—Jones, H. A Cuckoo (*C. canorus* Linn.) incident. *J. Bombay nat. Hist. Soc.* 39 1936 pp. 175–177.

664.—Jordan, H. E. The relation of lymphoid tissue to the process of blood production in Avian bone marrow. *Amer. J. Anat.* 59 1936 pp. 249–297 7 pls.

665.—Jordan, K. Variability in the eggs of *Manucodia*. *Bull. Bt. Orn. Cl.* 56 p. 115.

666.—Jouard, H. Louis Lavauden. *Alauda Paris* 7 1935 pp. 448–456 portr.

667.—Jouard, H. Une petite question de nomenclature : à quelles espèces du genre *Parus* doit être réservé le nom subgénérique *Penthestes*? *Alauda Paris* 8 1936 pp. 122–124.

668.—Jouard, H. Note rapide sur les Mésanges à longue queue de l'est de la France. *Alauda* 8 1936 pp. 124–125, also pp. 264–265.

669.—Jouard, H. Qu'en est-il des "Aigles criards" de France? *Alauda* 8 1936 pp. 198–219.

670.—Jouard, H. Révision systématique des formes eurasiatiques et spécialement alpestres de *Parus atricapillus* avec un aperçu de ses formes "chinoises" japonaises et américaines. *Alauda* 8 1936 pp. 342–471.

671.—Jouard, H. A propos de la récente "invasion" de Bec-croisés, *Loxia curvirostra*. *Alauda* 8 1936 pp. 481–485 1 fig.

672.—Jouard, H. Snouckaert van Schauburg. *Alauda* 8 1936 pp. 498–502 portr.

Jouard, H. *vide* Delamain.

Jouard, H. *vide* Heim de Balsac.

673.—Jouard, H. [and others]. Sur l'invasion de Bec-croisés in 1935. Nouveaux renseignements. *Alauda Paris* 7 1935 pp. 571–575, also 8 pp. 126–127.

674.—Jouard, H. et Vogué, G. de. Un cas de nidification curieusement anormal de la Mésange charbonnière [*Parus major*]. *Alauda* 8 1936 pp. 265–267.

675.—Jourdain, F. C. R. Critical note on Swinhoe's account of the breeding of the Oyster-catcher in N. China. *Bull. Bt. Orn. Cl.* 56 1936 pp. 86–88.

676.—Jourdain, F. C. R. On an example of *Cuncuma leucogaster* from the Solomon Is. *Bull. Bt. Orn. Cl.* 56 1936 p. 68; also p. 92.

677.—Jourdain, F. R. C. On the Spitsbergen Phalarope. The forms of Brent Goose, *Branta bernicla* (L.). *Ibis* 1936 pp. 202–203.

678.—Jourdain, F. C. R. Ornithological record for Derbyshire, 1934–35. *J. Derbysh. archaeol. nat. Hist. Soc.* 56 1935 pp. 92–99.

679.—Jourdain, F. C. R. The so-called "injury-feigning" in birds. *Ool. Rec. London* 16 1936 pp. 25–37, 62–70.

680.—Jourdain, F. C. R. On the eggs of the Stone-Curlew *Burhinus oedicnemus* (L.). *Ool. Rec., London* 16 1936 pp. 85–87 1 pl.

681.—Jourdain, F. C. R. Notes on the life-history of the Raven, *Corax c. corax* L. *Orgaan Cl. ned. Vogelk.* 9 1936 pp. 21–24.

682.—Jourdain, F. C. R. Ornithological observations Oct. 1934–Oct. 1935, also Oct. 1935 to Oct. 1936. *Proc. Bournemouth nat. Sci. Soc.* 27 1935 pp. 31–34; 28 1936 pp. 31–38.

683.—Jourdain, F. C. R. On the winter habits of the Green Woodpecker (*Picus viridis virescens*). *Proc. zool. Soc. London* 1936 pp. 251–256.

684.—Jourdain, F. C. R. and Lynes, H. Notes on Egyptian Birds. *Ibis* 1936 pp. 39–47.

685.—Joy, N. H. How to know British Birds. Pp. 1–136 20 pls. London (Witherby) 1936 8vo.

686. — Juhn, M. and Fraps, R. M. Developmental analysis on plumage. I. The individual feather, pp. 293-318, 3 pls. 6 figs. II. Plumage configurations and the mechanism of feather development, pp. 319-377 5 pls. 19 figs. III. Field functions in the breast tracts, pp. 378-407 1 pl. 8 figs. *Physiol. Zool.* 9 1936.

687. — Junge, G. C. A. *Phylloscopus borealis borealis* (Blas.) voor de eerste maal in Nederland aangetroffen. *Ardea Leiden* 25 1936 pp. 63-64.

688. — Junge, G. C. A. Resultaten van het ringonderzoek betreffende den vogeltrek, ingesteld door het Rijksmuseum van Natuurlijke Historie te Leiden. *Ardea Leiden* 25 1936 pp. 127-163.

689. — Junge, G. C. A. Fauna Simalurensis — Aves. Temminckia Leiden 1 1936 pp. 1-74 3 pls.

Junge, G. C. A. *vide v. Oordt.*

690. — Kaden, L. Ueber Epithel und Drüsen des Vogelschlundes. *Zool. Jahrb. Jena (Anat.)* 61 1936 pp. 421-466 16 figs.

691. — Kalmbach, E. R. Additional note on the presence of the European Starling at Camrose, Alberta. *Canad. Field Nat.* 50 1936 pp. 102-103.

692. — Kamner, A. Beobachtungen und Mitteilungen aus der Tierwelt. Verh. Siebenbürg. Ver. Nat. Hermannstat 83-84 1935 pp. 92-106 1 fig.

693. — Kate, C. G. B. ten. Terugvondsten van het buitenland geringde vogels. 5. Orgaan Cl. ned. Vogelk. 8 1936 pp. 130-134.

694. — Kate, C. G. B. ten. De purperreigers, *Ardea p. purpurea* L. in Ambt-Vollenhove. Ringresultaten, ze mededeling. Orgaan Cl. ned. Vogelk. 9 1936 pp. 68-75 map.

695. — Kattinger, E. Beiträge zur Vogelkunde Nordgreichenlands. [Fortz. u. Schluss]. Verhandl. orn. Ges. Bayern 20 1935 pp. 483-537.

Keith, D. B. *vide Holmes.*

Keith, E. C. *vide Seigne.*

696. — Kelm, K. Invasionen des Birkenzeizigs (*Carduelis flammea*). *Vogelzug Berlin* 7 1936 pp. 67-68.

697. — Kelso, E. H. A new Striped Owl from Tobago. *Auk* 53 1936 p. 82.

698. — Kelso, L. and E. H. The relation of feathering of feet of American Owls to humidity of environment and to life zones. *Auk* 53 1936 pp. 51-56.

699. — Kelso, L. and E. H. A new *Ciccaba* from southeastern Mexico and northern Guatemala. *Auk* 53 1936 pp. 215-216.

700. — Kelso, L. and E. H. A new Screech Owl from Colombia. *Auk* 53 1936 p. 448.

701. — Kelso, L. and E. H. The value and identification of Owls in the Rocky Mountain region. *Biol. Leaf.* [Issued July 24, 1936, no place of publ.]

702. — Kennard, F. H. A legend corrected [*Haliaeetus*]. *Bull. Boston Soc. nat. Hist.* no. 79 1936 pp. 18-20.

703. — Kennedy, P. G. Roosting habits of the Tree-Creeper. *Brit. Bds.* 30 1936 pp. 2-13 1 pl. 3 other photos.

704. — Kennedy, P. G. Bird Life on the North Bull. [Co. Dublin.] *Irish Nat. Journ. Belfast* 6 1936 pp. 12-16, 46-48, 68-72, 88-92, 120-125, 141.

705. — Khakhloff, V. A. Les oiseaux de la steppe de Kouznetz et du Salair. *Gerfaut Bruxelles* 26 1936 pp. 126-137 4 pls., pp. 201-211.

King, R. L. *vide Beams.*

706. — Kinghorn, J. R. Nest and eggs of the Blue-browed Lorileet (*Opopsitta coxeni* Gould). *Emu* 36 1936 p. 31 2 photos.

707. — Kinnear, N. B. Description of a new race of Nuthatch. *Bull. Bt. Orn. Cl.* 56 1936 pp. 70-71.

708. — Kinnear, N. B. Description of a new race of *Apalis*. *Bull. Bt. Orn. Cl.* 57 1936 p. 8.

Kinnear, N. B. *vide Whistler.*

709. — Kirchner, H. Der Vogel im Fluge. I. Wasser- und Strandläufer. Beitr. Naturdenkmalpflege Berlin 15 1936 pp. 307-346 11 col. pls. 5 maps 19 figs.

710. — Kirkman, F. B. Bird behaviour. A contribution based chiefly on a study of the Black-headed Gull. Pp. 1-232 30 pls. 6 text-figs. London (Nelson) 1937 8vo.

711.—Kirschbaum, A. and Ringoen, A. R. Seasonal sexual activity and its experimental modification in the male Sparrow *Passer domesticus* Linnaeus. *Anat. Rec. Philadelphia* **64** 1936 pp. 453-473 2 pls. 3 text-figs.

712.—Kjoer, T. Bjergvipstjerten in Aarhusegnen. (*Motacilla c. cinerea*). *Flora og Fauna Kjøbenh.* **42** 1936 pp. 132-134 2 photos.

713.—Kleiner, A. Mitteilungen über die Schafstelzen (*Motacilla*, Aves) Bulgariens und seiner angrenzenden Gebiete. *Bull. Inst. Roy. Hist. nat. Sophia* **9** 1936 pp. 69-79 4 figs.

714.—Kleiner, A. La consommation des mollusques par les oiseaux. *Oiseau* **1** Paris **6** 1936 pp. 233-251.

715.—Kleiner, A. Prof. Dr. Kalman Lambrecht (1889-1936). *Verh. orn. Ges. Bayern* **21** 1936 pp. 72-74.

716.—Kleinschmidt, O. Nachruf an Otmar Reiser. *J. Orn. Berlin* **84** 1936 pp. 506-510 portr.

717.—Kleinschmidt, O. Das Naturgesetz des Parallelismus der Formenbildung. *Orgaan Cl. ned. Vogelk.* **9** 1936 pp. 24-27.

718.—Klockars, B. Försök till kvantitativ undersökning av vinterfågelbeståndet. *Ornis fenn.* **13** 1936 pp. 139-147. [Swedish with German rés.]

719.—Knabe, G. Ostpreussischer Reiher (*Ardea cinerea*) jenseits der Sahara. *Vogelzug Berlin* **7** 1936 p. 79.

720.—Knudsen, V. S. Fugellivet i Brabrand Sø og dens nærmeste Omgivelser. *Flora og Fauna Kjøbenh.* **42** 1936 pp. 97-120 25 figs.

721.—Knudsen, S. Meddelelser om sjældne Fugle. *Flora og Fauna Kjøbenh.* **42** 1936 pp. 129-131.

722.—Koch, J. C. Eenige biologische gegevens van den boomleeuwerik, *Lullula a. arborea* L. *Orgaan Cl. ned. Vogelk.* **9** 1936 pp. 76-79.

Koch, J. C. *vide* Bouma.

723.—Koefoed, A. Nogle iagttagelser vedrørende Rødsjertens yngleforhold. *Dansk Orn. Foren. Tidsskr.* **29** 1935 pp. 107-108.

724.—Koehler, O. und Wachholtz, R. Weitere Versuche an der Taube

“Nichtweiss” zur Frage des Zählvermögens. *Verh. Deutsch. zool. Ges. Leipzig* **38** 1936 pp. 211-236 10 figs.

Koelz, W. *vide* Van Tyne.

725.—Koenig, A. Die Vögel am Nil. Zweiter Band. Die Raubvögel. Pp. 1-188 55 pls. Bernburg (Privately printed for author) 1936 4to.

726.—Kolesnikov, I. I. Adaptive characters in the anatomy of the Cormorant in: *Problems of Ecol. & Biocenol.* Moscow 1934 pp. 138-169 26 figs. [Russian, with English rés.]

727.—Kolthoff, K. Några ord om fågellivet på Holmö Gadd. *Fauna och Flora Uppsala* 1936 pp. 255-262.

728.—Korschelt, E. Ueber eine Bruchheilung des Brustbeinkammes der Haustaube. *Anat. Anz. Jena* **83** 1936 pp. 229-231 2 figs.

729.—Koslowa, E. Ueber das Vorkommen des Garten-Baumläufers (*Certhia brachydactyla*) im Kaukasus. *Orn. Monatsb.* **44** 1936 pp. 24-25.

Koslowa-Pushkareva, E. *vide* Tugarinov.

730.—Kostinowitsch, L. I. Ueber Truncus collateralis thoracis bei Tauben. *Anat. Anz. Jena* **82** 1936 pp. 191-199 1 fig.

Kowalski, M. J. *vide* Marchand.

731.—Krämer, H. Ueberwinternde Vögel, Durchzügler und Wintergäste in der Oberlausitz. *Abh. naturf. Ges. Görlitz* **32** Hft. 3 1936 pp. 81-109.

732.—Krassowsky, S. K. Zur Morphologie der Spechtschädel. *Anat. Anz. Jena* **82** 1936 pp. 112-128 4 figs.

733.—Krassovsky, S. Kraniologische Besonderheiten der europäischen Arten der Gattung *Uria*. *Bull. Inst. Sci. Lesshaft Leningrad* **19** no. 2 1936 pp. 51-60 4 figs. [Russian, with German rés.]

734.—Krassovsky, S. Ueber die Morphologie des Spechtschädels mit Berücksichtigung deren Entstehung und Evolution. *Bull. Inst. sci. Lesshaft Leningrad* **19** no. 2 1936 pp. 61-148 39 figs. [Russian, with German rés.]

735.—Krätzig, H. Der Frühsommerzug des Stars auf der Windenburger Ecke. *Vogelzug Berlin* **7** 1936 pp. 1-16 6 figs.

736.—**Krätzig, H.** Beiträge zum Zug der ostbaltischen Stare. Vogelzug Berlin **7** 1936 pp. 112–122 5 maps and figs.

737.—**Krätzig, H. und Schüz, E.** Ergebnis der Versetzung östbaltischer Stare ins Binnenland. Vogelzug Berlin **7** 1936 pp. 163–175 3 maps.

Kreczmer, B. *vide* Domaniewski.

738.—**Krenn, E.** Geflügeltyphus (Pulloruminfektion) bei einem Ohrfasan. Zool. Garten Leipzig **8** 1936 pp. 223–224.

739.—**Kreig, H.** Vogelwelt auf einer argentinischen Estancia. Pp. 71 Illustrations Buenos Aires (Deutsch. Wiss. Ver.) 1935. [N.V.]

740.—**Krieg, H.** Ludwig Döderlein zum Gedächtnis. Verh. orn. Ges. Bayern **21** 1936 pp. 70–72.

741.—**Krieg, H. und Schuhmacher, E.** Beobachtungen an südamerikanischen Wildhühnern. Verh. orn. Ges. Bayern **21** 1936 pp. 1–18 10 text-figs. map.

742.—**Krösche, O.** Zur Brutbiologie des Flussregenpfeifers (*Charadrius dubius curonicus*). Beitr. Fortpfl.-biol. Vög. Berlin **12** 1936 pp. 145–150.

743.—**Kstiakovsky, A.** Economic importance of avian fauna of forest areas and experimental attempts to utilize some species. Summary Sci. Res. Work Inst. Plant Protect. Leningrad for 1935 1936 pp. 215–216. [Russian only.]

744.—**Küchler, W.** Anatomische Untersuchungen an *Phytotoma rara* Mol. J. Orn. Berlin **84** 1936 pp. 352–362 6 figs.

745.—**Kuhlenbeck, H.** Ueber die Grundbestandteile des Zwischenhirnbauplans der Vögel. Gegenbaurs morph. Jahrb. Leipzig **77** 1936 pp. 61–109 55 figs.

746.—**Kuhlmann, H.** Die Vogelwelt des Ravensberger Landes und der Senne. Abh. westfäl. Provinzial-mus. Münster i W. **6** 1935 pp. 1–64.

747.—**Kumagai, S.** On the breeding of *Oceanodroma castro* in Hondo. Tori Tokyo **9** 1936 pp. 142–154 8 figs. [Japanese only.]

748.—**Kume, M.** Studies on liver-forming potencies around the anterior

intestinal portal of the Chick embryo. Zool. Mag. Tokyo **48** 1936 pp. 679–683 1 fig. [Japanese, with English rés.]

749.—**Kuroda, N.** A glimpse of bird life in the Dutch East Indies. Tori Tokyo **9** no. 42 1936 pp. 155–180 26 photos. [In Japanese.]

750.—**Kuroda, N.** On a collection of Birds from Pref. Nagasaki, Kiusiu. Tori Tokyo **9** no. 42 1936 pp. 186–189. [In Japanese.]

751.—**Kuroda, N.** Two new additions to the lists of Formosan Birds and Mammals. Zool. Mag. Tokyo **48** 1936 pp. 465–468 2 fig. [Japanese, with English rés.]

752.—**L**—, C. J. L. Nesting and other notes. Hong Kong Nat. **7** 1936 pp. 203–206.

753.—**Labitte, A.** Capture d'un Bécasseau platyrhynque, *Limicola falcinellus falcinellus* (Pont.) 1763 en baie de Somme. Oiseau Paris **6** 1936 pp. 164–166.

754.—**Labitte, A.** Première capture en France d'un Bécasseau minuscule, *Erolia minutilla* (Vieillot). Oiseau Paris **6** 1936 pp. 332–334 1 pl.

755.—**Labitte, A.** L'influence des traumatismes sur le plumage. Oiseau **6** 1936 pp. 511–513 1 pl.

Lack, D. *vide* Venables.

756.—**La Cour, T.** Om Jens Lauritzsen Wolf's "Evgivtvarende Calender" 1648. Dansk. Orn. Foren. Tidsskr. **30** 1936 pp. 66–69.

757.—**Lambrecht, K.** Drei neue Vogelformen aus dem Lutétian des Geiseltales. Nova Acta Leop. Halle **3** 1935 pp. 361–367 2 pls.

758.—**Lancum, F. H.** British Owls. J. Minist. Agric. London **42** 1936 pp. 1119–1122 4 pls.

759.—**Landauer, W.** Micromelia of chicken embryos and newly hatched chicks caused by a nutritional deficiency. Anat. Rec. Philadelphia **64** 1936 pp. 267–276 5 figs.

Landauer, W. *vide* Dunn.

760.—**Laude, P. et Sigalas, R.** Note d'ornithologie. Bull. Sta. biol. Arcachon **32** 1935 pp. 105–110.

- 761.—Lane, A. A. Further notes on Birds of Rietfontein Farm, Potchefstroom. Ostrich Pretoria 7 1936 pp. 39-44.
- 762.—Lange, H. Ueber das Brutgeschäft der Störche in Dänemark (Südwestjütland) im Jahre 1935. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 76-78.
- 763.—Larionov, W. T. Zur Frage der Bedeutung des Schilddrüsenhormons beim Federwechselprozess. Biol. Generalis Wien 12 1936 pp. 153-188 2 text-figs.
- 764.—Lashmar, A. F. C. Birds noted in the eastern portion of Kangaroo Island. S. Austr. Orn. 13 1936 pp. 200-203.
- 765.—Laskey, A. B. Fall and winter behavior of Mockingbirds. Wilson Bull. 48 1936 pp. 241-255.
- 766.—Lasnier. Capture d'un grand Corbeau mâle (*Corvus corax* L.). Bull. Soc. géol. Normandie 38 1936 pp. 80-82.
- 767.—Last, C. S. On our Crossbills. Trans. Suffolk Nats. Soc. 3 1936 pp. 163-164.
- 768.—Laubmann, A. Ueber Vögel aus Matto Grosso, Brasilien. Verh. orn. Ges. Bayern 20 1935 pp. 589-609.
- 769.—Laubmann, A. Beiträge zur Avifauna von Santa Catherina, Süd-Brasilien. Verh. orn. Ges. Bayern 21 1936 pp. 19-46 map.
- 770.—Lavanden, L. Les Francolins. Alauda 8 1936 pp. 301-315.
- 771.—Lavanden, L. Essai sur la Perdrix Bartarelle. Arch. suisses d'Orn. 1 1936 pp. 329-349 map.
- 772.—Law, S. C. Extension of range of the White-browed Bulbul (*Pycnonotus luteolus* Less.). J. Bombay nat. Hist. Soc. 38 1936 pp. 620-621.
- 773.—Law, S. C. A note on the distribution of *Chloropsis jerdoni* (Blyth) and *Chloropsis a. aurifrons* (Temm.) in central and western Bengal. J. Bombay nat. Hist. Soc. 38 1936 p. 825.
- 774.—Lawson, R. An immature Ivory Gull in Essex County, Massachusetts. Bull. Essex Co. Orn. Cl. 17 1935 pp. 11-12.
- 775.—Lea, A. H. and Gray, J. T. The food of Australian Birds. An analysis of the stomach contents. Pt. IV, pp. 251-280. Pt. V, pp. 335-347 Emu 35 1936.
- 776.—Lebeurier, E. et Rapine, J. Ornithologie de la Basse-Bretagne. Oiseau Paris 6 1936 pp. 86-103, 252-271, 466-479 2 figs.
- 777.—Lecoq, R. et Duffan, R. Sur la composition du muscle de pigeon normal adulte au repos. C.R. Soc. Biol. 122 1936 pp. 180-182.
- 778.—Lecoq, R. et Joly, J. M. La détermination du métabolisme de base chez le pigeon adulte, au cours des études de la nutrition. C.R. Soc. Biol. 122 1936 pp. 193-197.
- 779.—Lees, R. H. Observations on the breeding habits of some Accipitres in Northern Rhodesia. Ostrich Pretoria 6 1935 pp. 89-94 4 photos.
- 780.—Legende, M. Bibliographie des Faunas ornithologiques des régions françaises. Mém. Soc. Orn. Man. Fr. no. 4 1936 pp. 1-127 map.
- 781.—Legendre, M. Les variations de plumage et de forme chez les oiseaux. II. L'hybridation. Pp. 104-116, 313-320. III. Polymorphisme et dimorphisme pp. 567-575. Oiseau Paris 6 1936.
- 782.—Leopold, A. Franklin J. W. Schmidt. Wilson Bull. 48 1936 pp. 181-186 portr.
- 783.—Lerner, I. M. Heterogony in the axial skeleton of the Creeper Fowl. Amer. Nat. 70 1936 pp. 595-598.
- 784.—Levett, M. J. Notes on Fulmar Petrel colonies in Northumberland 1935. Brit. Bds. 29 1936 pp. 236-237.
- 785.—Levett, M. J. Fulmar Petrels on the Northumberland coast. Vasculum Newcastle 22 1936 pp. 69-72.
- 786.—Levi, G. Sul ciclo testicolare di Passeracei a dimorfismo stagionale del piumaggio. Riv. Biol. Firenze 21 1936 pp. 176-182 1 pl.
- Levi, G. vide Taibel.
- Lewis, F. vide Littlejohns.
- 787.—Lewis, S. Birds of the island of Steep Holm. Brit. Bds. 30 1936 pp. 219-223 photo.
- 788.—Libbert, W. Der Zug des Kranichs (*Grus grus grus*). J. Orn. Berlin 84 1936 pp. 297-337 3 maps.

789.—Liebermann, J. Monografía de les Tinamiformes argentinas y el problema de su domesticación. Pp. 1-103 1 pl. 7 maps. Buenos Aires (Cultura) 1936 8vo.

790.—Liénhart, R. Sur un trait de mœurs peu connu de certains Pies. *Alauda* Paris 7 1935 pp. 498-502; also *P. Paris* pp. 502-505 4 photos.

791.—Liénhart, R. Présence en Lorraine de *Netta rufina* Pallas. *Alauda* Paris 7 1935 pp. 569-571.

792.—Liénhart, R. Caractère temporaire de certains retours ataviques. Conclusions biologiques que l'on peut en tirer. *C.R. Soc. Biol. Paris* 121 1936 pp. 86-89.

793.—Liénhart, R. La couleur des yeux des Pigeons domestiques. Les yeux orange et dérivé. *C.R. Soc. Biol. Paris* 121 1936 pp. 1415-1417.

Liénhart, R. *vide* Delafosse.

794.—Lincoln, F. C. The Red-throated Loon in Montana—A correction. *Auk* 53 1936 p. 320.

795.—Lincoln, F. C. Trans-Atlantic flight of Gull-billed Tern. *Auk* 53 1936 p. 331.

796.—Lincoln, F. C. Recoveries of banded Birds of Prey. *Bird-banding* 7 1936 pp. 38-45.

797.—Lincoln, F. C. Returns of banded birds. *Bird banding Boston* 7 1936 pp. 121-128, 139-148, 170.

798.—Lincoln, F. C. The Waterfowl situation. *Bull. New York zool. Soc.* 39 1936 pp. 184-193 maps photos.

799.—Lincoln, F. C. The migration of North American Birds. *Circ. U.S. Dept. Agr. Washington* no. 363 1935 pp. 1-72 28 maps and figs.

800.—Linsdale, J. M. Coloration of downy young birds and nest linings. *Condor* 38 1936 pp. 111-117.

801.—Linsdale, J. M. Harry Schelwald Swarth. *Condor* 38 1936 pp. 155-168 3 portr. and bibliogr.

802.—Linsdale, J. M. Habits of Lewis Woodpeckers in winter. *Condor* 38 1936 pp. 245-246 photo.

803.—Linsdale, J. M. The Birds of Nevada. Pacific Coast Avifauna. No. 23 pp. 1-145. Berkeley Cal. (Cooper Orn. Club) 1936 8vo.

804.—Linsdale, J. M. Frequency of occurrence of summer birds in northern Michigan. *Wilson Bull.* 48 1936 pp. 153-163.

Linsdale, J. M. *vide* Grinnell.

805.—Littlejohns, R. T. The Lyre-bird display for the screen. *Aust. Mus. Mag. Sydney* 6 1936 pp. 16-21 6 photos. See also F. Lewis, pp. 12-13 and A. H. Chisholm, pp. 14-16 photo.

806.—Littlejohns, R. T. Some random notes on the Little Grebe. *Emu* 35 1936 pp. 350-354 2 photos.

807.—Littlejohns, R. T. Some notes on the Lyrebird—principally the male. *Vict. Nat. Melbourne* 53 1936 pp. 3-9 4 photos.

808.—Livesey, T. R. Cuckoo problems (with a comment by E. C. Stuart Baker). *J. Bombay nat. Hist. Soc.* 33 1936 pp. 734-758 4 photos; see also F. C. R. Jourdain pp. 820-821 and T. B. Livesey pp. 821-824.

809.—Livesey, T. R. The Burmese Plaintive Cuckoo (*Cacomantis merulinus querulus* Heine). *J. Bombay nat. Hist. Soc.* 39 1936 pp. 177-178.

810.—Lloyd, B. The diving of the Shoveller, pp. 25-27. A Garganey Duck at Elstree pp. 27-28. Notes on the behaviour of the Great Crested Grebe, pp. 29-30. *Trans. Herts. nat. Hist Soc.* 20 pt. 2 1936.

811.—Lloyd, H. The Birds of Ottawa. Addenda to February 28, 1935. *Canad. Field Nat.* 50 1936 pp. 143-144.

812.—Lobatschow, S. W. and Stscherbakow, F. A. Die natürliche Nahrung des Auerhahns in Zusammenhang mit den Aufgaben der Jagdwirtschaft. *Zool. J. Moscow* 15 1936 pp. 307-320. [Russian, with German rés.]

813.—Lockley, R. M. Birds of the Green Belt and the country around London. Pp. xx + 236 4 pls. and many other illustr. London (Witherby) 1936 8vo.

814.—Lockley, R. M. Skokholm bird observatory. *Brit. Bds.* 29 1936 pp. 222-235 photo.

815.—Lockley, R. M. Lapland and Ortolan Buntings in Pembrokeshire. *Brit. Bds.* 30 1936 p. 190.

816.—L[odge], G. E. Archibald Thornburn. *Ibis* 1926 pp. 205-207.

817.—Loebenstein, H. Vergleichende Untersuchungen über die Warmestarre des Vogelmuskels. *Pflüger Arch.* Berlin 238 1936 pp. 114–123 3 figs.

818.—Loewthal, N. Étude comparée des glandes de l'orbite des amphibiens reptiles et oiseaux. Pp. 37 *Genève (Georg)* 1935. [N.V.]

819.—Löhr, H. Vogelbeobachtungen in württembergischen Naturschutzgebieten. Veröff. St. Natursch. Stuttgart 11 1935 pp. 84–102 20 photos.

820.—Long, S. H. The Norfolk Bird sanctuaries, pp. 71–78. Wild Bird protection in Norfolk in 1935 pp. 86–105 5 photos. *Trans. Norfolk Norw. Nat. Soc.* 14 1936.

821.—Longstreet, R. J. Notes from the Dry Tortugas. *Auk* 53 1936 pp. 99–100.

822.—Lönnberg, E. Svenska fåglars flyttning. Pp. 231 36 maps Stockholm (Gerber) 1935. [N.V.]

823.—Lönnberg, E. Några intressanta fågelfynd sammanställda. Fauna och Flora Uppsala 1936 pp. 14–19 2 photos.

824.—Lönnberg, E. Några ord om gråhakedoppingen, *Podiceps griseigena* och dess variation. Fauna och Flora Uppsala 1936 pp. 29–37, 73–78.

825.—Lönnberg, E. Återfunna ringmärkta fåglar. Fauna och Flora Uppsala 1936 pp. 57–64, 118–126, 171–175, 210–218, 263–269.

826.—Lönnberg, E. Ugglevandring. Fauna och Flora Uppsala 1936 pp. 130–132.

827.—Lönnberg, E. En lustig variation av Kråka, *Corvus cornix*. Fauna och Flora Uppsala 1936 pp. 283–285 photo.

828.—Lönnberg, E. Some examples of anomalous behaviour of Woodpeckers. *Orgaan Cl. ned. Vogelk.* 9 1936 pp. 27–31.

829.—Loppenthin, B. Ertholmenes Fuglefauna, med Bemaerkninger om visse Arters Forekomst in Nabolandene. *Dansk orn. Foren. Tidsskr.* 30 1936 pp. 155–213 map 28 photos.

830.—Lord, E. A. R. Notes on the Dusky Moorhen [*Gallinula tenebrosa*]. *Emu* 36 1936 pp. 128–129.

831.—Lorenz, K. Ueber eine eigentümliche Verbindung branchialer Hirnnerven bei *Cypselus apus*. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 305–325 5 figs.

832.—Loukachkine, W. F. Essai de calcul des couples d'oiseaux nidificateurs et de la distribution du territoire entre eux. *Bull. Soc. Nat. Moscou Sect. Biol.* 45 1936 pp. 51–56. [Russian, with French rés.]

Loveridge, A. *vide* Peters.

833.—Lowe, F. A. Days with rarer Birds. Pp. 1–148 26 photos. London (Trefoil Publ. Co.) [1936] 8vo.

834.—Lowe, P. R. The Finches of the Galapagos in relation to Darwin's conception of species. *Ibis* 1936 pp. 310–321 2 pls. 2 text-figs.

835.—L[owe], P. R. Kálmán Lam-brecht. *Ibis* 1936 pp. 609–610.

Lowe, P. R. *vide* Meinertzhagen.

836.—Lowe, W. P. Franklin's Gull *Larus pipixcan* (olim *franklini*) in Devon. *Ibis* 1936 pp. 378–379.

837.—Lowery, G. H. The Ivory-billed Woodpecker in Louisiana. *Proc. Louisiana Acad. Sci.* 2 1935 pp. 84–86.

838.—Lowther, E. H. N. Notes on some Indian Birds. I. The Indian Crested Swift [*Hemiprocne*]. *J. Bombay nat. Hist. Soc.* 39 1936 pp. 116–124 6 pls.

839.—Lühmann, M. Beobachtungen über die Drehflügelmissbildung bei Hausgänzen. *Zool. Anz. Leipzig* 115 1936 pp. 58–60.

839A.—Luke, H. Birds in: Handbook of Palestine and Trans-Jordan 3rd ed. pp. xvi + 549 maps and illustr. [Birds pp. 404–419] London (Macmillan) 1934 8vo.

840.—Lundbergh, A. Ett besök vid Signilskärs ornitologiska station på Åland den 10–18 Sept. 1936. Fauna och Flora Uppsala 1936 pp. 200–205 2 photos.

Lurat, G. H. *vide* Poisson.

841.—Lüscher, W. Beiträge zur Fortpflanzungsbiologie von *Phylloscopus b. bonelli* (Vieill.) in der Schweiz. *Arch. suisse d'Orn.* 1 1936 pp. 299–305 photo.

842.—Lüttschwager, H. Die Verbreitung des weissen Storches im Gebiet der Freien Stadt Danzig nach der Zählung von 1934 und in der früheren Provinz Westpreussen nach der Zählung von 1909. Ber. Westpreuss. bot. zool. Ver. **58** 1936 pp. 71–89 2 maps.

843.—Lüttschwager, H. Von der Vogelwelt des Drausensees bei Elbing. Ber. Westpreuss. bot.-zool. Ver. **58** 1936 pp. 131–132.

844.—Lynes, H. Some alterations in the classification of the Cisticolas and description of new races. Bull. Bt. Orn. Cl. **56** 1936 pp. 109–115.

845.—Lynes, H. *Cisticola subruficapilla* and *lais* in southernmost Cape Province. Ostrich Pretoria **6** 1935 pp. 73–88 2 figs.

Lynes, H. *vide* Jourdain.

846.—Maberley, C. T. A. Notes on *Sarothrura elegans*. Ostrich Pretoria **6** 1935 pp. 39–42; also pp. 101–104; also R. C. Wood pp. 105–106.

847.—McCabe, T. T. Endemism and the American northwest. Wilson Bull. **48** 1936 pp. 289–302 map.

848.—Macdonald, J. D. Size of the webs on the feet of Redshanks. Bull. Bt. Orn. Cl. **56** 1936 pp. 120–122.

849.—Macdonald, J. D. Arrival of summer birds in Great Britain. Nat. Hist. Mag. London **5** 1936 pp. 328–331 map.

850.—McGilp, J. N. Wedge-tailed Eagles. Emu **36** 1936 pp. 99–102.

851.—McGowan, J. P. Suprarenal "virilism" in a domestic Hen, its possible significance. J. exp. Biol. London **13** 1936 pp. 377–382.

852.—McGregor, R. C. and Manuel, C. G. Birds new and rare in the Philippines. Philipp. J. Sci. Manila **59** 1936 pp. 317–326.

853.—McIlhenny, E. A. Purple Gallinules (*Lonornis martinica*) are predatory. Auk **53** 1936 pp. 327–328.

854.—Mack, G. A systematic revision of the Australian Thornbills [*Acanthiza*]. Mem. Nat. Mus. Melbourne no. 10 1936 pp. 86–118 4 maps.

855.—McKeown, K. C. The food of Australian Birds with reference to protective adaptations in Insects. Emu **36** 1936 pp. 21–30.

856.—McKittrick, T. Spring migrants at entrance to New York Harbour. Bull. Essex Co. orn. Cl. no. **17** 1935 pp. 47–48.

857.—Mackworth-Praed, C. W. and Gilbert, H. A. Further notes on Oriolton decoy 1935–36. Brit. Bds. **30** 1936 pp. 159–161 map.

858.—Mackworth-Praed, C. W. and Grant, C. H. B. Systematic notes on East African Birds. Part IX [*Francolinus*, *Burhinus*]. Ibis **1936** pp. 198–200.

859.—Mackworth-Praed, C. W. and Grant, C. H. B. Systematic notes on East African Birds. Part X [*Numida*, *Francolinus*]. Ibis **1936** pp. 369–376.

860.—Mackworth-Praed, C. W. and Grant, C. H. B. Systematic notes on East African Birds. Part XI [*Streptopelia*]. Ibis **1936** pp. 602–604.

Mackworth-Praed, C. W. *vide* Grant.

861.—Maclatchy, A. R. Contribution à l'étude des oiseaux du Gabon méridional. Oiseau Paris **6** 1936 pp. 576–593.

862.—McLean, D. D. Some notable records of Birds in California. Condor Berkeley Cal. **38** 1936 pp. 16–17.

863.—Macpherson, A. H. Birds of Inner London. Additional species, etc. Brit. Bds. **29** 1936 pp. 345–348.

864.—McRury, J. [and others]. The Birds of the Island of Barra, Outer Hebrides in: J. L. Campbell, The Book of Barra pp. 303–308 London (Routledge) 1936 8vo.

865.—McWilliam, J. M. The Birds of the Firth of Clyde including Ayrshire, Renfrewshire, Buteshire, Dumbartonshire and South Argyllshire. Pp. 1–164 10 pls. map London (Witherby) 1936 8vo.

866.—Madoc, G. C. On the nidification of some Malayan Birds. Bull. Raffles Mus. Singapore **12** 1936 pp. 124–133.

867.—Madon, P. Contribution à l'étude du régime des oiseaux aquatiques. V. Anseriformes. Alauda Paris **7** 1935 pp. 546–568.

868.—Madon, P. De l'appauvrissement des faunes. Alauda **8** 1936 pp. 194–197.

869.—Magee, M. J. The wing molt in Purple Finches. Bird-banding Boston 7 1936 pp. 73-76.

870.—Magee, M. J. The average age of the Eastern Purple Finch. An estimate based on returns and recoveries. Bird-banding Boston 7 1936 pp. 161-162.

871.—Magnan, A. et Girerd, H. Essais d'enregistrements des attitudes successives des ailes d'un pigeon et des variations de pression correspondantes. C.R. Acad. Sci. Paris 202 1936 pp. 1109-1111 1 fig.

872.—Magne de la Croix, P. Evolution locomotrice conduisant aux oiseaux. Oiseau Paris 6 1936 pp. 594-603 5 figs.

873.—Magnusson, M. Utdrag ur anteckningar vid ringmärkningsarbetet vid Hasselfors sommaren 1935. Fauna och Flora Uppsala 1936 pp. 49-56.

874.—Makink, G. F. An attempt at an ethogram of the European Avocet (*Recurvirostra avosetta* L.). Ardea Leiden 25 1936 pp. 1-62 16 figs.

875.—Malcomson, H. T. On a series of Irish eggs including a series of four erythristic eggs of the Rook. Bull. Brit. ool. Assoc. 5 no. 3 1936 pp. 41-43.

876.—Mangels, R. und Schüz, E. Seltene Vögel in Gebiet des Kurischen Hafes 1935. Orn. Monatsb. 44 1936 pp. 74-76.

877.—Mannering, G. On the birds of Kent. Bull. Brit. ool. Assoc. 5 1936 pp. 53-58.

878.—Mannering, R. Parrots, Parakeets and Budgerigars. Pp. viii + 112 London (Cassell) 1936 8vo.

879.—Manson-Bahr, P. H. On some tempera-paintings of Birds of Paradise and remarks on display of some of the species. Bull. Brit. Orn. Cl. 56 1936 pp. 63-68.

880.—Manuel, C. G. Review of the Philippine Pigeons. I. The genus *Phapitreron*. Philipp. J. Sci. Manila 59 1936 pp. 289-305 2 maps.

881.—Manuel, C. G. New Philippine Fruit Pigeons. Philipp. J. Sci. Manila 59 1936 pp. 307-308 col. pl.

882.—Manuel, C. G. A review of the Philippine Pigeons. II. Subfamily Ptilinopodinae. Philipp. J. Sci. Manila 59 1936 pp. 327-336.

Manuel, C. G. vide McGregor.

883.—Marchand, M. E. et Kowalski, M. J. Inventaire détaillé et annoté de la collection ornithologique régionale (Bretagne et Vendée) du Museum d'Histoire naturelle de Nantes. Bull. Soc. Sci. nat. Ouest Nantes (5) 4 1935 pp. 3-97.

Marchlewski, J. vide Grodzinski.

884.—Marelli, C. El amparo de las aves silvestres. Las aves utiles y las aves perjudiciales de la Provincia de Buenos Aires. Pp. 1-20 13 figs. Buenos Aires (El Campo) 1934 8vo.

885.—Marelli, C. A. Etapas ornitológicas de un viaje alrededor de America. Hornero B. Aires 6 1936 pp. 293-305 8 photos.

886.—Margary, I. D. Report on the phenological observations in the British Isles from December 1934 to November 1936. Quart. J. R. Meteorol. Soc. London 62 no. 265 1936 pp. 299-358. [Birds, pp. 313-334 etc.]

887.—Marinelli, W. Kraniaum und Visceralskelett der Vogel in: Handb. vergl. Anat. Wirbelt. iv. pp. 809-838 13 figs. Berlin u. Wien (Urban) 1936.

888.—Marples, G. Starlings fighting for nesting sites. Brit. Bds. 29 1936 pp. 321-323.

889.—Marples, G. Behaviour of Starlings at nesting site. Brit. Bds. 30 1936 pp. 14-21, 41-42.

890.—Marples, G. Woodpecker nesting holes and the compass. Brit. Bds. 30 1936 pp. 84-86 fig.

891.—Marsh, V. L. Nesting of the Prairie Falcon in Montana. Wilson Bull. 48 1936 pp. 33-37 4 photos.

Marsh, V. L. vide Weydemeyer.

892.—Marshall, H. F. The West African Fiscal. *Lanius collaris smithii*. Nigerian Field 5 1936 pp. 39-40 photo.

893.—März, R. Der Uhu auf Åland. Beitrag zur Ernährungsbiologie. Orn. fenn. 13 1936 pp. 23-34.

894.—Masarey, A. Geschlechtunter-scheidung des Alpenleinfinks *Carduelis flammeus cabaret* (P.L.S. Müll.) in frier Natur. Arch. suisse d'Orn. 1 1936 pp. 326-327.

895.—Mason, E. A. Parasitism of Bird's nest by *Protocalliphora* at Groton Massachusetts. Bird-banding 7 1936 pp. 112-121.

896.—Mason, G. E. On a hitherto unrecorded egg of the Lesser Emu of Kangaroo Island—with a brief description thereof. Emu 35 1936 pp. 331-332.

897.—Mathews, G. M. A supplement to the Birds of Norfolk and Lord Howe Islands to which is added those Birds of New Zealand not figured by Buller [also Additions to "The Birds of Australia" pp. 13-70 with 20 pls.]. Pp. xiv + 177 57 pls. London (Witherby) 1936 4to.

898.—Mathews, G. M. The ossification of certain tendons in the patagial fan of Tubinares. Bull. Bt. Orn. Cl. 56 1936 pp. 45-50.

899.—Mathews, G. M. On a new subspecies of Kermadec Petrel. Bull. Bt. Orn. Cl. 56 1936 p. 59.

900.—Mathews, G. M. On the name of the Buff-sided Fly-Robin. Bull. Brit. Orn. Cl. 56 1936 p. 106.

901.—Mathews, G. M. Remarks on the Fork-tailed Petrels [*Cymochorea*]. Bull. Bt. Orn. Cl. 56 1936 p. 134.

902.—Mathews, G. M. On a new Little-blue Petrel and on the Kermadec Petrel. Bull. Bt. Orn. Cl. 57 1936 pp. 24-25.

903.—Mathews, G. M. Key to the Order Procellariiformes pp. 40-48. Remarks on Procellarian and Puffinine Petrels pp. 91-98 Emu 36 1936; see also p. 127 (correction).

904.—Mathews, G. M. The correct name for the Andalusian Quail. Ibis 1936 pp. 201-202.

905.—Mathews, G. M. A note on the Black Fiji Petrel. Ibis 1936 p. 309 1 pl.

906.—Mathews, G. M. Dove-like Petrels of the genus *Pterodroma*. Ibis 1936 pp. 376-377.

907.—Mathews, G. M. Harry Schelwald Swarth. Ibis 1936 p. 386.

908.—Mathews, G. M. Introduced names. Ibis 1936 p. 418; also C. B. Ticehurst p. 419.

909.—Mathis, J. Chromatophoren im Hoden von Waldhühnern. Z. mikr.

ant. Forsch. Leipzig 39 1936 pp. 243-249 2 figs.

May, R. vide Cox.

910.—Mayaud, N. Le Bruant des Neiges, *Plectrophenax nivalis* (L.) en France. Alauda 8 1936 pp. 9-24 5 figs.; also p. 269; also Comte de B. de Paillerets pp. 489-490.

911.—Mayaud, N. Quelques observations d'été dans les Pyrénées-Orientales et dans Andorre. Alauda Paris 8 1936 pp. 91-100.

912.—Mayaud, N. Considérations sur l'avifaune de l'île de Noirmoutier. Oiseau Paris 6 1936 pp. 57-70.

913.—Mayaud, N., Heim de Balsac, H. et Jouard, H. Inventaire des Oiseaux de France. Pp. xiii + 211. Paris (Soc. d'Études Orn.) 1936 8vo.

914.—Mayberry, M. W. Origin and development of the crop in the Chick. Trans. Kans. Acad. Sci. 38 1935 pp. 325-335 4 pls.

915.—Mayer, F. S. Pesquet's Parrot (*Dasypeltus pesqueti*). Avicult. Mag. (5) 1 1936 pp. 175-176 col. pl.

916.—Maynard, V. The Bird population of an area in Sussex. J. Animal Ecol. London 5 1936 pp. 312-318 1 map.

917.—Mayr, E. Birds collected during the Whitney South Sea Expedition. XXXI. Descriptions of twenty-five species and subspecies. Amer. Mus. Nov. no. 828 1936 p. 1-19.

918.—Mayr, E. New subspecies of birds from the New Guinea region. [*Lalage*, *Eupetes*, *Pachycephala*, *Manucodia*, *Astrapia*, *Ailuroedus*, *Climacteris*, *Cinnyris*, *Dicaeum*, *Melidectes*.] Amer. Mus. Nov. 869 1936 pp. 1-7.

919.—Mayr, E. A new Honey-eater from the Snow Mountains of New Guinea. Bull. Bt. Orn. Cl. 57 1936 pp. 42-43.

920.—Mayr, E. and Rand, A. L. Results of the Archbold Expeditions. No. 10. Two new subspecies of Birds from New Guinea. [*Excalfactoria*, *Microdynamis*.] Amer. Mus. Nov. no. 868 1936 pp. 1-3.

921.—Mayr, E. und Rand, A. L. Neue Unterarten von Vögeln aus Neu-Guinea. Mitt. zool. Mus. Berlin 21 1936 pp. 241-248.

922.—Mayr, E. und Rand, A. F. Vorläufiges über die Ergebnisse der Archbold-Rand Neu-Guinea-Expedition von 1933. Orn. Monatsb. **44** 1936 pp. 41–44.

923.—Meiklejohn, R. F. Nesting notes on Rüppell's Warbler and Black-headed Bunting. Ibis **1936** pp. 377–378.

924.—Meiklejohn, R. F. Oological notes 1933 to 1935. Ool. Rec. London **16** 1936 pp. 5–10.

925.—Meinertzhagen, R. Discussion of taxonomy and races of *Larus fuscus*. Bull. Brit. Orn. Cl. **56** 1936 pp. 50–51 also P. R. Lowe pp. 51–53.

926.—Meise, W. Ueber Artenstehung durch Kreuzung in der Vogelwelt. Biol. Zbl. Leipzig **56** 1936 pp. 590–604 1 fig.

927.—Meise, W. Zur Systematik und Verbreitungsgeschichte der Haus- und Weidensperlinge, *Passer domesticus* (L.) und *hispaniolensis* (T.). J. Orn. **84** 1936 pp. 631–672 2 maps.

928.—Meise, W. Neue Ergebnisse der Revierforschung. Mitt. Ver. sächs. Orn. **5** 1936 pp. 1–23.

929.—Meise, W. Kleine Sumpfschnepfe, *Limnocyptes minimus* (Brünn.) um Weihnachten in Sachsen, pp. 45–46. Blässgans, *Anser a. albifrons* (Scop.) bei Meissen an der Elbe, p. 46. Mitt. Ver. sächs. Orn. **5** 1936.

930.—Meise, W. *Prinia mystacea mutatrix* nova subsp. Orn. Monatsb. **44** 1936 pp. 23–24.

931.—Meise, W. und Zimmermann, R. Ueber vom Uhu geschlagene Rehe. Orn. Monatsb. **44** 1936 pp. 55–58.

932.—Meklenburtsev, R. N. Biology, distribution and economics of the Rose-coloured Starling (*Pastor roseus* L.) in middle Asia. Acta Univ. Asiae Med. Tashkent (Zool.) no. **16** 1935 pp. 3–22 map.

933.—Mendall, H. L. Nest-building instinct in an immature Double-crested Cormorant (*Phalacrocorax auritus auritus*). Auk **53** 1936 pp. 202–203.

934.—Merkel, K. Arbeitserfolge der Zweigeringungsstelle "Schlesien" der Vogelwarte Rossitten. Jber. schles. Ges. vaterl. Kult. **107** 1935 pp. 71–76.

935.—Meyer, H. Züchtung der Retina des Huhnes in vitro. J. mikr. anat. Forsch. Leipzig **39** 1936 pp. 151–160 9 figs.

936.—Meyer, H. Kulturen von Ciliar- und Irismuskeln bei Hühnerembryonen. Z. mikr. anat. Forsch. Leipzig **39** 1936 pp. 161–171 9 figs.

937.—Meylan, O. Maurice Boubier. Alauda Paris **7** 1935 pp. 576–579 portr.

938.—Maylan, O. Réflexions sur la systématique du Cinclé plongeur *Cinclus cinclus*. Arch. suisse d'Orn. **1** 1936 pp. 287–297.

939.—Meylan, O. et Huber, J. Buse féroce, *Buteo r. rufinus* Cretzschmar (Adlerbussard) *Buteo ferox* auct. Troisième capture en Suisse. Arch. suisses d'Orn. **1** 1936 p. 298.

940.—Michael, C. W. Feeding habits of the Snowy Egret. Condor **38** 1936 p. 168.

941.—Michener, H. and J. R. Abnormalities in Birds. Condor **38** 1936 pp. 102–109 4 figs.

942.—Miczynski, K. Beobachtungen über Ankunft und Abzug der Vögel in Dublany und Umgebung. Zool. Polon. Lwów **1** 1936 pp. 181–197.

943.—Middleton, A. D. The population of Partridges (*Perdix perdix*) in Great Britain during 1935. J. Animal Ecol. London **5** 1936 pp. 252–261 4 figs.

944.—Middleton, A. D. Factors controlling the population of the Partridge (*Perdix perdix*) in Great Britain. Proc. zool. Soc. London for **1935** 1936 pp. 795–815 4 photos 1 text-fig.

945.—Midlothian Orn. Club. A census of rookeries in Greater Edinburgh. Scot. Nat. Edinb. **1936** pp. 53–56.

946.—Midlothian Ornithological Club. Isle of May Bird Observatory. Autumn report 1935. Scot. Nat. Edinb. **1936** pp. 127–130 Spring Report **1936** pp. 159–163.

947.—Mikhel, N. M. Data on birds of the Indighir area. Trans. Arctic Inst. Leningrad **31** 1935 pp. 1–101 map 10 figs. [Russian, with English rés.]

948.—Miller, A. H. The identification of Juncos banded in the Rocky Mountain States. Bird-lore **38** 1936 pp. 429–433 3 figs.

949.—Miller, D. S. Modifications induced in the plumage of *Passer domesticus* (Linnaeus) by experimental hyperthyroidism. Trans. Illinois Acad. Sci. **28** 1936 pp. 257-258.

950.—Miller, L. Some maritime Birds observed off San Diego, California. Condor **38** 1936 pp. 9-16 map.

951.—Miller, L. The Flammulated Screech Owl on Mount Pinos. Condor **38** 1936 pp. 228-229.

952.—Milne, H. V. Overlapping of certain Victorian Birds. Emu **36** 1936 pp. 130-132.

953.—Milner, C. E. Occurrence of Schrenk's Bittern (*Ixobrychus eurhythmus* Swinhoe) in Amherst District Tenasserim. J. Bombay Nat. Hist. Soc. **38** 1936 p. 834.

954.—Miranda-Ribeiro, A. de. On some foetal and post-foetal characters of Mammals and Birds: concerning scales, hairs and feathers. Proc. zool. Soc. London for 1935 1936 pp. 741-772 5 pls.

955.—Mizelle, J. D. The destruction of Bird Life by hail. Trans. Illinois Acad. Sci. **28** 1936 p. 266.

956.—Moffat, C. B. The movements of young Nightjars. A comparison of records. Irish Nat. Journ. Belfast **6** 1936 pp. 18-20.

957.—Moltoni, E. Uccelli Spedizione zoologia del Marchese Saverio Patrizi nel Basso Giuba e nell' Oltragiuba. Ann. Mus. Stor. nat. Genova **58** 1936 pp. 85-101.

958.—Moltoni, E. Contributo alla conoscenza degli uccelli della Somalia Italiana. Atti Soc. ital. Milano **74** 1935 pp. 333-371 1 pl. 2 text-figs.

959.—Moltoni, E. Gli uccelli fino ad oggi notificati per la Somalia italiana. Atti Soc. ital. Sci. Nat. **75** 1936 pp. 307-389 map.

960.—Moltoni, E. L'Uccello martello o Umbretta. Natura Milano **26** 1935 pp. 135-139 2 photos.

961.—Moltoni, E. Il Melopsittaco. Riv. ital. Orn. **6** 1936 pp. 23-33 col. pl. and 6 photos.

962.—Moltoni, E. Sull' invasione del Crociere (*Loxia curvirostra curvirostra* Linn.) avvenuta in Italia nel 1935. Riv. ital. Orn. **6** 1936 pp. 53-60; see also pp. 95-97.

963.—Moltoni, E. Catture di uccelli inanellati. Riv. ital. Orn. **6** 1936 pp. 97-99.

964.—Moltoni, E. Incursione di Beccofrusione nell' Italia settentrionale [*Bombycilla*]. Riv. ital. Orn. **6** 1936 p. 100.

965.—Moltoni, E. La Cereba azzurra o Sai (*Cyanerpes cyaneus* (Linn.)). Riv. ital. Orn. **6** 1936 pp. 105-108.

966.—Moltoni, E. Le Garzaie in Italia con osservazioni particolareggiate su alcune di esse e sugli Aironi ivi nidificanti. Riv. ital. Orn. **6** 1936 pp. 109-148, 211-269 8 pls. 49 figs. map.

967.—Moltoni, E. Esemplare di Merlo Dial delle Indie (*Copsychus saularis saularis* (Linn.)) albino. Riv. ital. Orn. **6** 1936 pp. 163-166 1 fig.

968.—Moltoni, E. Casi di nidificazione del Falco pecchiaiolo (*Pernis apivorus apivorus* (L.)) nell' Italia sett. e probabile nidificazione dell' Albanella minore (*Circus pygargus* (L.)) nella Provincia di Novara. Riv. ital. Orn. **6** 1936 pp. 281-283 photo.

969.—Moltoni, E. Eratismo nel Picchio rosso maggiore [*Dryobates major*]. Riv. ital. Orn. **6** 1936 p. 42.

970.—Monro, R. The Boobook Owl and its brood. Vict. Nat. Melbourne **52** 1936 p. 191 photo.

971.—Monteiro, P. de B. Aves pernaltas do Egito e sua relação com a religião. Bol. biol. S. Paulo **2** 1935 pp. 97-103.

972.—Montgomery, L. W. Interbreeding of Carrion-Crow and Hooded Crow in Ireland. Brit. Bds. **39** 1936 p. 238.

973.—Moore, R. T. Description of a new race of *Carpodacus mexicanus*. Condor **38** 1936 pp. 203-208.

974.—Moran, T. Physics of the Hen's egg. II. The bursting strength of the vitelline membrane. J. exp. Biol. Cambridge **13** 1936 pp. 41-47 3 figs.

975.—Moran, T. and Hale, H. P. Physics of the Hen's egg. I. Membranes in the egg. J. exp. Biol. Cambridge **13** 1936 pp. 35-47 1 pl.

976.—Morbach, J. *Certhia familiaris* Brehm dans le Luxembourg. *Alauda* 8 1936 pp. 116–118.

977.—Moreau, R. E. Notes on *Thripias*, *Arizelocichla*, *Chloropetella* and *Mesopicos*. *Bull. Bt. Orn. Cl.* 57 1936 pp. 10–14.

978.—Moreau, R. E. Bird-Insect nesting associations. *Ibis* 1936 pp. 460–471.

979.—Moreau, R. E. The breeding biology of certain East African Hornbills (*Bucerotidae*). *J. E. Afr. Ug. nat. Hist. Soc.* 13 1936 pp. 1–28 3 pls.

980.—Moreau, R. E. Breeding seasons of Birds in East African evergreen forest. *Proc. zool. Soc. London* 1936 pp. 631–652 6 figs.

981.—Moreau, R. E. A contribution to the ornithology of Kilimanjaro and Mount Meru. With the assistance in taxonomy by W. L. Sclater. *Proc. zool. Soc. London* for 1935 1936 pp. 843–891 map 6 photos.

982.—Moreton, B. D. Crossbills' method of feeding on larch cones. *Brit. Bds.* 30 1936 pp. 27–28; also W. H. Dobie pp. 43–44.

983.—Morita, J. On the emigration of the nervous elements and of their protoplasmic processes in the culture of the nervous tissue. *Zool. Mag. Tokyo* 48 1936 pp. 821–834 21 figs. [Japanese with English rés.]

984.—Morita, S. Die künstliche Erzeugung von Einzelmissbildungen, von Zwillingen Drillingen und Mehrlingen im Hühnerei. *Anat. Anz. Jena* 82 1936 pp. 81–102 19 figs.

985.—Morley, A. The winter behaviour of Moorhens. *Brit. Bds.* 30 1936 pp. 120–124 1 chart.

986.—Morley, C. [and others]. Notes on Suffolk Birds. *Trans. Suffolk Nat. Soc.* 3 1935 pp. 103–113.

987.—Morley, L. C. and Wetmore, P. W. The etiology of ulcerative enteritis in Upland Game Birds. *Science* 84 1936 pp. 272–273.

988.—Morrison-Scott, T. C. S. A note on the nesting of the Sociable Vultures in the Society's Gardens. *Proc. zool. Soc. London* 1936 pp. 689–690 1 pl.

989.—Moseley, E. L. Blue Heron colonies in northern Ohio. *Wilson Bull.* 48 1936 pp. 1–11 2 photos.

990.—Motohashi, H. Orientation of the Duck's egg at the moment of laying. *Trans. Tottori Soc. Agri. Sci.* 5 1935 pp. 203–121 14 figs. [Japanese, with English rés.]

991.—Mouillard, B. Une famille de Hiboux des Marais, *Asio flammeus*, en Auvergne. Notes et observations biologiques. *Alauda Paris* 7 1935 pp. 510–515.

992.—Mouillard, B. Notes sur le biologie du Faucon Crécerelle *Falco tinnunculus* L. 1758. *Alauda Paris* 7 1935 pp. 522–534.

993.—Mountfort, G. R. Quelques notes prises en Camargue. *Oiseau Paris* 6 1936 pp. 138–143.

994.—Mountfort, G. R. Comment fonctionne une petite station de baguage. *Oiseau Paris* 6 1936 pp. 321–326.

995.—Mousley, H. Birth of a Black Duck family (*Anas rubripes tristis*). *Auk* 53 1936 pp. 377–380 4 photos.

996.—Müller, A. K. V. Nachtrag zum "Maisinger See." *Verh. orn. Ges. Bayern* 20 1935 pp. 610–619. VI. Nachtrag *ibid.* 21 1936 pp. 58–65.

997.—Munn, P. W. Further notes on the Birds of the Balearic Isles. *Ibis* 1936 pp. 591–594.

998.—Muñoz del Campo, E. Observaciones sobre rapaces nocturnas en cautividad. *Hornero B. Aires* 6 1936 pp. 306–310 2 photos.

999.—Munro, J. A. Nesting of the Bonaparte Gull in British Columbia. *Condor* 38 1936 pp. 60–61 photo.

1000.—Munro, J. A. Food of the Common Mallard in the Lower Fraser Valley, British Columbia. *Condor* 38 1936 pp. 109–111.

1001.—Munro, J. A. A Wader migration at Tlell, Queen Charlotte Islands, British Columbia. *Condor* 38 1936 pp. 230–234 3 photos.

1002.—Munro, J. A. A study of the Ring-billed Gull in Alberta. *Wilson Bull.* 48 1936 pp. 169–180 6 photos.

1003.—Munro, J. A. and Clemens, W. A. Food for the American Merganser (*Mergus merganser americanus*) in British Columbia. No. 3. Canad. Field Nat. 50 1936 pp. 34-36.

1004.—Munro, S. S. The relation of production to mortality in the Domestic Fowl. J. Agric. Sci. Cambridge 26 1936 pp. 101-113.

1005.—Munro, S. S. Preparation of avian sperm smears for microscopy. Science 83 1936 p. 532.

1006.—Murphy, R. C. Oceanic Birds of South America. A study of the related coasts and seas including the American Quadrant of Antarctica based upon the Brewster-Sanford collection in the American Museum of Natural History. Vol. 1 pp. xxiv + 640. Vol. ii pp. 641-1245, 16 col. + 72 uncol. pls. 80 text-figs. and maps. New York (Amer. Mus. N.H.) 1936 4to.

1007.—Musilek, J. Das Nisten des Waldwasserläufers (*Tringa ochropus* [L.]) in Böhmen. Sylvia Praha 1 1936 pp. 2-5. [Czech and German.]

1008.—Musilek, J. Observations ornithologiques de la région de l'Oussouri et des environs de Vladivostok. Sylvia Praha 1 1936 pp. 49-53. [Czech and French.]

1009.—Musilek, J. The first observation of the Shearwater *Puffinus kuhlii* (Boie) in the Czechoslovak Republic. Sylvia Praha 1 1936 pp. 55-57 1 fig. [Czech, with English rés.]

1010.—Musilek, J. u. Černý, W. Invasion des nordischen Buntspechtes (*Dryobates major major* (L.)) 1935 in der Tschechoslowakischen Republik. Sylvia Praha 1 1936 pp. 5-8. [Czech and German.]

1011.—Musilek, J. [The White-billed Diver (*Colymbus adamsii* Gray) in our republic.] Věda Přírodní Prague 16 1935 pp. 227-233. [Title and contents Czech only. N.V.]

1012.—Musilek, J. and Hořice, A. Bemerkenswerte Exemplare der Schafstelze (*Motacilla flava* L.). Sylvia Praha 1 1936 pp. 33-35. [Czech, with German rés.]

1013.—Nečas, J. Bemerkungen zur letzten Invasion der Fichtenkreuzschnabels (*Loxia c. curvirostra* L.) und

des nordischen Buntspechtes (*Dryobates m. major* (L.)) bei Brünn. Sylvia Praha 1 1936 pp. 40-42.

1014.—Needham, J. [and others]. Mechanism of carbohydrate breakdown in early embryonic development. Nature London 138 1936 pp. 462-463.

Neugebauer, H. vide Walde.

1015.—Newton, E. M. S. Indus Sand-lark (*Alaudula raytal adamsi* Hume) and Crested Lark (*Galerida cristata* Linn.) laying in the same nest. J. Bombay nat. Hist. Soc. 38 1936 p. 826.

1016.—Nice, L. B. and Fishman, D. The specific gravity of the blood of Pigeons in the quiet state and during emotional excitement. Amer. J. Physiol. 117 1936 pp. 111-112.

1017.—Nichol, J. T. European Goldfinch near New York City 1915-1935. Auk. 23 1936 pp. 429-431.

1018.—Nicholson, D. J. Observations on the Florida Blue Jay. Wilson Bull. 48 1936 pp. 26-33.

1019.—Nicholson, E. M. The index of Heron population, 1936. Brit. Bds. 30 1936 pp. 202-205.

1020.—Nicholson, W. H. Notes on the habits of the Florida Grasshopper Sparrow. Auk 53 1936 pp. 318-319 2 photos.

1021.—Niethammer, G. Zur Mauser der ♂♂ von *Loxia pytyopsittacus*. Orn. Monatsb. 44 1936 pp. 26-27.

1022.—Niethammer, G. Was ist *Picus viridis virescens* Brehm? Orn. Monatsb. 44 1936 pp. 45-52.

1023.—Niethammer, G. Berichtigung zum Vorkommen von *Larus philadelphia* und *Chlidonias leucoptera* in Deutschland. Orn. Monatsb. 44 1936 p. 58; also pp. 118-119.

1024.—Niezabitowski, E. L. The Raven in the environs of Stryj. Ochr. Przyr. Krakow 15 1935 pp. 319-320 photo. [Polish, with English rés.]

1025.—Nishida, S. Experimental studies on the sex-reversal in the Domestic Fowl. I. The compensatory hypertrophied gonad following ovariectomy and its endocrine functions on the sexual characters. Zool. Mag. Tokyo 48 1936 pp. 109-132 3 pls. 8 text-figs. [Japanese, with English rés.]

1026.—Nishida S. Experimental studies on sex-reversal in the Domestic Fowl. II. Effects on the secondary sexual characters of the transplantation of the testis-like gonad of ovariectomized Fowl into the young Capon and of hetero-sexual gonad transplantation. Zool. Mag. Tokyo 48 1936 pp. 974-980 1 pl. [Japanese. with English rés.]

1027.—Nissen, C. Schöne Vogelbücher. Ein Ueberblick der ornithologischen Illustration. Nebst Bibliographie. Pp. 1-95 many reproductions of plates. Wien (H. Reichner) 1936 8vo.

1028.—Nissen, C. Die ornithologische Illustration. Ein Ueberblick nebst einer Bibliographie schöner Vogelbücher. Philobiblion 8 1935 pp. 23-89 etc.

1029.—Noble, G. K. Courtship and sexual selection of the Flicker (*Colaptes auratus luteus*). Auk 53 1936 pp. 269-282 7 photos.

Nobrega, P. *vide* Reis.

1030.—Nolf, P. Influence de l'anoxémie sur les effets de la stimulation des nerfs extrinsèques de l'estomac de l'oiseau. Arch. intern. Physiol. Liège 41 1935 pp. 340-375 10 figs.

1031.—Nolf, P. Influence de l'ischémie sur la motricité de l'estomac chez l'oiseau. Arch. intern. Physiol. Liège 41 1935 pp. 376-428 15 figs.

1032.—Nolf, P. Les nerf moteurs de l'intestin de l'oiseau. Ann. Physiol. Physchem. biol. Paris 9 1933 pp. 831-836.

1033.—Norlind, W. Ornithologiska notiser från Barsebäck. Skånes Nat. 23 1936 pp. 50-55.

1034.—Nordström, J. E. Översikt över fågellivet på Stora Karlsö under år 1936. Fauna och Flora Uppsala 1936 pp. 241-248.

1035.—Noréhn, N. Iakttagelser över fågellivet på Eskilstorpsholmarna utanför Vellinge. Skånes Natur 22 1935 pp. 148-155 photo.

1036.—Nowikow, B. G. Die Analyse des Geschlechtsdimorphismus bei den Sperlingsvögeln (Passeres). II. Biol. Zbl. Leipzig 58 1936 pp. 415-428 5 figs.

1037.—Nowikow, B. G. Hauttransplantationen bei Plymouth-Rock-Küchen verschiedenen Alters. Zool. Anz. Leipzig 114 1936 pp. 40-44 6 figs.

1038.—Nowikow, B. G. Die Analyse des Geschlechtsdimorphismus bei den Sperlingsvögeln (Passeres). III. Zool. Anz. Leipzig 115 1936 pp. 193-199 1 fig.

Nowikow, B. G. *vide* Woitkewitsch.

1039.—O'Donel, H. V. The Indian Cuckoo (*Cuculus m. micropterus* Gould). J. Bombay nat. Hist. Soc. 39 1936 p. 175.

1040.—Ökland, F. Gelingt beim Huhn eine willkürliche Geschlechtsbestimmung durch Sexualhormone? Biol. Zbl. Leipzig 56 1936 pp. 147-150.

1041.—Olderz, C. Nordlig häckning av grå häger, *Ardea cinerea*. Fauna och Flora Uppsala 1936 pp. 270-273 2 photos.

1042.—Oldham, C. Redshank nesting at Tring reservoirs. An effect of the drought. Brit. Bds. 29 1936 pp. 381-383.

1043.—Oldham, C. Report on Birds observed in Hertfordshire in 1933. Trans. Herts. nat. Hist. Soc. 20 Pt. 2 1936 pp. 1-24.

1044.—Oliver, W. R. B. The Paradise Duck [*Casarca variegata*]. Emu 36 1936 pp. 69-72 col. pl.

1045.—Olrog, C. C. Några rön och iakttagelser om Jämtlands fågelfauna. Fauna och Flora Uppsala 1936 pp. 79-81.

1046.—Olsson, A. Om fågellivet vid sjön Östen in Västergötland. Fauna och Flora Uppsala 1936 pp. 67-72.

1047.—Oordt, G. J. van und Junge, G. C. A. Die hormonale Wirkung der Gonaden auf Sommer- und Prachtkleid. III. Der Einfluss der Kastration auf männlicher Kampfläufer (*Philomachus pugnax*). Arch. Entw. Mech. Org. Berlin 134 1936 pp. 112-121 5 figs.

1048.—Oort, E. D. van. De vogels van Nederland. Vols. I-V 1922-1935 [now complete] 's Gravenhage (Nijhoff) 4to.

1049.—Oo-U-Kijo. *Riparia pabulicola brevicaudata* in Taiwan, Formosa. Botany & Zool. Tokyo 4 1936 pp. 2065-2075 7 figs. [Japanese only.]

1050.—Orfila, R. N. Los Psittaciformes argentinos. Hornero Buenos Aires 6 1936 pp. 197-225 col. pl. 11 text-figs.

1051.—Orlando, C. Specie nidificanti nella zona litoranea tra i Golfi di Palermo e di Castellammare. Riv. ital. Orn. 6 1936 pp. 61–72 map.

1052.—Orlando, C. Note sull' avifauna siciliana. Riv. ital. Orn. 6 1936 p. 83–92, 201–205, 5 photos.

1053.—Orrù, A. Sulla velocità di accrescimento dell' uovo di gallina. Rend. Acc. Lincei (6) 23 1936 pp. 954–958 1 fig.

1054.—Owen, J. H. Further notes on the Sparrow-Hawk. Brit. Bds. 30 1936 pp. 22–26.

1055.—Packard, F. M. An analysis of some banding records of the eastern Redwing. Bird-banding Boston 7 1936 pp. 23–37 2 figs.

1056.—Packard, F. M. Notes on the plumages of the eastern Redwing. Bird-banding Boston 7 1936 pp. 77–80.

1057.—Padoa, E. I caratteri sessuali secondari e la gonadectomia nei tacchini. Monit. zool. ital. Firenze 47 1936 pp. 160–174.

1058.—Paechnitz, H. Aus dem Tageslauf überwinternder Schwanzmeisen (*Aegithalus c. caudatus*). Vogelzug 7 1936 pp. 175–179 map.

Paillerets Comte de B. de vide Mayaud.

1059.—Pakenham, R. H. W. Field notes on the Birds of Zanzibar and Pemba. Ibis 1936 pp. 249–272.

1060.—Pallister, G. and Williams, E. J. The Farne Islands. School Sci. Rev. London 13 1936 pp. 161–170 maps and photos.

1061.—Palmer, T. D. John David Dignes La Touche. Auk 53 1936 pp. 370–371.

1062.—Palmgren, P. Warum ziehen die Vögel des Nachts? Orn. fenn. 13 1936 pp. 41–49.

1063.—Palmgren, P. Bemerkungen über die ökologische Bedeutung der biologischen Anatomie des Fusses bei einigen Kleinvogelarten. Orn. fenn. 13 1936 pp. 53–58.

1064.—Palmgren, P. *Emberiza pusilla* Pall. in Finnland brütend gefunden. Orn. fenn. 13 1936 pp. 153–159 2 photos. [In German.]

1065.—Palmgren, P. Ueber den Massenwechsel bei *Regulus r. regulus*.

Ornis fenn. 13 1936 pp. 159–164 2 diagr. [In German.]

Palmgren, P. vide Siivonen.

1066.—Paludan, K. Report on the Birds collected during Professor O. Olufsen's expedition to French Sudan and Nigeria in the year 1927; with field notes by the collector, Mr. Harry Madsen. Vidensk. Medd. naturh. Foren. Kjøb. 100 1936 pp. 247–346 2 photos 1 fig.

Paludan, K. vide Hartert.

Paris, P. vide Liénhart.

Parkes, A. S. vide Callow.

1067.—Pasteels, J. Analyse des mouvements morphogénétiques de gastrulation chez les oiseaux. Bull. Acad. Belg. Cl. Sci. (5) 22 1936 pp. 737–752 2 figs.

1068.—Patel, M. D. The physiology of the formation of "Pigeon's milk." Physiol. Zool. 9 1936 pp. 129–152 2 pls.

1069.—Paul, H. Calcium distribution in Chicken blood. Proc. Okla. Acad. Sci. 14 1934 pp. 32–34.

1070.—Peirson, L. G. Bird List. Rep. Marlboro' Coll. nat. Hist. Soc. 84 1936 pp. 23–28 4 photos.

1071.—Peitzmeier, J. Die Akinese bei Vögeln ein Instinct? Orn. Monatsb. 44 1936 pp. 110–116.

1072.—Pereira, R. A. The Snipe [of Hong Kong]. Hong Kong Nat. 7 1936 pp. 5–10.

1073.—Perry, R. The eclipse plumage of Drakes. Naturalist London 1936 pp. 105–110.

1074.—Perryman, C. E. Birds seen at the South Neptune Islands. S. Austr. Orn. 13 1936 pp. 230–232.

1075.—Peters, H. S. A list of external parasites from Birds of the eastern part of the United States. Bird-banding Boston 7 1936 pp. 9–27.

1076.—Peters, J. L. and Loveridge, A. Scientific results of an expedition to rain forest regions in Eastern Africa. Bull. Mus. comp. Zool. Harvard 79 1936 pp. 129–205 2 pls.

Peterson, R. T. vide Allen.

1077.—Petrov, S. G. The population of fowl near Shabalin. J. Biol. Moscow 5 1936 pp. 57–78 7 figs. [Russian, with English rés.]

1078.—Pettingill, O. S. The American Woodcock, *Philohela minor* (Gmelin). Mem. Boston Soc. nat. Hist. 9 no. 2 1936 pp. 167-391 10 pls. 7 text-figs.

1079.—Pettingill, O. S. Impressions of Grand Manam bird life. Wilson Bull. 48 1936 pp. 111-119 4 photos.

1080.—Pfeifer, S. Die Vögel unserer Heimat. Pp. 259 col. pls. and other illustr. Frankfurt a.M. (Cramer) 1936.

Philby, H. St. J. B. *vide* Bates.

1081.—Philippi, R. A. Aves de Arica y Alrededores (Extremo norte de Chile). Hornero B. Aires 6 1936 pp. 225-239 5 figs.

1082.—Philippov, M. I. Materials for our knowledge of Hurt-Getting Animals in the Serax Region of Turkomanian S.S.R. Bull. Zool. Station for Scientific Research in Turkomania, I. Ashkabad-Baku, 1936 pp. 121-140 (list of Birds, pp. 127, 128). [In Russian, with English Summary. N.V.]

1083.—Phillips, W. W. A. Birds of Mousakande Group, Gammaduwa, Central Province. Spolia zeylan. Colombo 19 1936 pp. 338-351.

1084.—Phillips, W. W. A. Avocets (*Recurvirostra avocetta avocetta*) at Minneriya. Spolia zeylan. Colombo 20 1936 pp. 149-150.

1085.—Pickens, A. L. Steps in the development of the Bird-Flower. Condor 38 1936 pp. 150-154.

1086.—Pickens, A. L. Notes on nesting Ruby-throated Hummingbirds. Wilson Bull. 48 1936 pp. 80-85 2 figs.

1087.—Pidcock, F. C. Eighth Report of the Devon bird-watching and preservation Society. Rep. Devons. Ass. Adv. Sci. 68 1936 pp. 159-185.

1088.—Pinto, A. Os Mutans do Brasil. Estudo particular de *Crax fasciolata* Spix. Bol. biol. S. Paulo 2 1935 pp. 69-75.

1089.—Pirnie, M. D. Michigan Wild-fowl management. Pp. xxi + 328 Lansing Mich. 1935. [Notice Auk 53 p. 109. N.V.]

1090.—Pirocchi, L. Contributo alla conoscenza del timo degli Uccelli. Arch. zool. Torino, 23 1936 pp. 81-96 6 figs.; also pp. 409-421 6 figs.

1091.—Pitman, C. M. R. Report on the Birds of Wiltshire for 1934. Wiltsh. Archaeol. nat. Hist. Mag. 47 1935 pp. 85-113.

1092.—Pitman, C. R. S. Bird migration [Ringed Stork in Uganda]. Uganda J. Kampala 1 1934 p. 154.

1093.—Pitou, L. Un oiseau rare en Auvergne. [*Colymbus*.] Bull. Soc. Hist. nat. Auvergne 17 1931 p. 12.

1094.—Poisson, H. et Lurat, G. H. Note sur un nid de Soui-Manga [*Cinnyris n. notatus*]. Oiseau Paris 6 1936 pp. 156-157 photo.

1095.—Poisson, R. Sur une invasion d'oiseaux à becs crochus en Normandie et dans le pays du Maine en l'an 1618. Bull. Soc. sci. Bretagne 8 1931 pp. 1-6.

1096.—Poncey, R. Notes sur quelques espèces d'oiseaux observées à la station ornithologique de Choiseul-la-Ville près de Versoix (Léman). Alauda 8 1936 pp. 220-227 3 figs.

1097.—Poncey, R. Notes ornithologiques concernant le Département de la Haute-Savoie. Alauda 8 1936 pp. 332-341.

1098.—Poncey, R. La collection d'oiseaux des "Pays les plus septentrionaux" rapportés en 1769 par Jean Louis Pictet à son ami la Professeur Horace Bénédicte de Saussure. Arch. suisse d'Orn. 1 1936 pp. 364-376 1 fig.

1099.—Portenko, L. The Bar-tailed Godwit and its races. Auk 53 1936 pp. 194-197 10 figs.; also E. Mayr pp. 367-368.

1100.—Porteous, A. M. Ornithological and other notes. Hist. Berwick Nat. Cl. 29 1936 pp. 112-117.

1101.—Porter, S. A West Indian Diary. Avicult. Mag. (5) 1 1936 pp. 53-59, 66-82, 96-112.

1102.—Portielje, A. F. J. Ein bemerkenswerter Grenzfall von Polygamie bzw. ascessorischer Promiskuität beim Höckerschwan, zugleich ein Beitrag zur Ethologie bzw. Psychologie *Cygnus olor* (Gm.). J. Orn. Berlin 84 1936 pp. 140-158.

1103.—Portmann, A. Die ontogenese der Vögel als Evolutionsproblem. Acta Biotheor. Leiden 1 1935 pp. 59-90.

1104.—Portmann, A. Die Ontogenese der Vögel als Evolutionsproblem. Verh. Schweiz. naturf. Ges. **117** 1936 pp. 224–241 3 figs.

1105.—Portmann, A. und Jecklin, L. Die Abhängigkeit der Hühnerembryonen vom Sauerstoff der Umgebung. Arch. suisses d'Orn. **1** 1936 pp. 281–286 1 fig.

1106.—Potter, L. B. Hummingbirds in southwestern Saskatchewan. Condor **38** 1936 p. 170.

1107.—Pounds, H. E. Notes on the flight of the Sparrow-Hawk. Brit. Bds. **30** 1936 pp. 183–189.

1108.—Powell, T. G. and others. On 1936 Birds in the Ipswich district. Trans. Suffolk Nats. Soc. **3** 1936 pp. 203–213 photo.

1109.—[Prater, S. H.] Migration of wildfowl. J. Bombay nat. Hist. Soc. **38** 1936 pp. 627–628, 833.

1110.—Prenn, F. Beobachtungen zur Lebensweise des Weidenlaubsängers (*Phylloscopus collybita* Vieill.). J. Orn. Berlin **84** 1936 pp. 378–385.

1111.—Price, J. B. The family relations of the Plain Titmouse. Condor, Berkeley Cal. **38** 1936 pp. 23–28.

1112.—Priest, C. D. The Birds of Southern Rhodesia. Vol. 4. Pp. ix + 420 10 col. pls. 122 other drawings London (W. Clowes) 1936 8vo.

1113.—Pring, C. J. Ornithological section: records for Somerset. Proc. Somersetsh. archaeol. nat. Hist. Soc. **81** 1936 pp. 244–249.

Profft, J. vide Dathe.

1114.—Promptov, A. N. The hybridization of Finches (Fringillidae, Aves.). III. Inheritance of pigmentation in the hybrids of the Siskin (*Spinus spinus* L.) and the Canary (*Serinus canarius* Boie). Zool. J. Moscow **15** 1936 pp. 640–656 3 figs. [Russian, with English rés.]

1115.—Ptouchenko, E. S. Sur la question de regime alimentaire de jeunes Milans noir (*Milvus k. korschun* (Gm.)). Bull. Soc. Nat. Moscou Sect. Biol. **45** 1936 pp. 42–50. [Russian, with French rés.]

1116.—Puschnigg, —. Vogelkundliche Beobachtungen der letzten Jahre in Kärnten. Carinthia II **123–124** 1934 pp. 97–104.

1117.—Putkonen, T. A. Einige Beiträge zur Vogel-fauna des Äyräpääjärvisees. Ann. Zool. Soc. zool.-bot. fenn. Vanamo Helsinki **2** No. 2 1935 pp. 9–11.

1118.—Putkonen, T. A. Ueber den Frühlingszug der Vögel auf dem See Äyräpääjärvi i. J. 1935. Orn. fenn. **13** 1936 pp. 70–79. [Finnish, with German rés.]

Pye, B. A. vide Haigh.

1119.—Quinn, J. P. and Burrows, W. H. Artificial insemination in Fowls. J. Hered. Wash. **27** 1936 pp. 31–37.

1120.—Rabor, D. S. Life histories of some common birds in the vicinity of Novaliches, Rizal Prov. Luzon. I. The Large-nosed Shrike, *Lanius schach nasutus* (Scopoli). Philipp. J. Sci. Manila **59** 1936 pp. 337–353 1 photo.

1121.—Radberg, E. Bidrag till kännedomen om bivräkens (*Pernis apivorus*) häckningsförhållanden. Fauna och Flora Uppsala **1936** pp. 206–209.

Rademaker, G. G. J. vide Visser.

1122.—Ralfe, P. G. The Black Guillemot (*Uria grylle*) p. 107, The Common Gulls pp. 134–135, 161–163 photos. J. Manx Mus. **3** 1936.

1123.—Rolfe, P. G. Ornithology of the Isle of Man. North Western Nat. Arbroath **10** 1935 pp. 335–348.

1124.—Rand, A. L. The Madagascar Hammerkop described as new. Amer. Mus. Nov. no. **827** 1936 pp. 1–2.

1125.—Rand, A. L. Results of the Archbold Expeditions. No. 11. *Meliphaga analoga* and its allies. Amer. Mus. Nov. no. **872** 1936 pp. 1–23.

1126.—Rand, A. L. Results of the Archbold expeditions. No. 12. Altitudinal variation in New Guinea Birds. Amer. Mus. Nov. no. **890** 1936 pp. 1–14.

1127.—Rand, A. L. The rediscovery of the Nuthatch *Daphoenositta* with notes on its affinities. Auk **53** 1936 pp. 306–310.

Rand, A. L. vide Mayr.

1128.—**Rapine, J.** Les mutations brusque en ornithologie. *Orgaan Cl. ned. Vogelk.* 9 1936 pp. 31-34.

Rapine, J. *vide* Lebeurier.

1129.—**Ratcliffe, H. L.** Diet and colour in Birds. *Nature London* 137 1936 p. 402.

Rancourt, M. *vide* Chappellier.

1130.—**Rawles, M. E.** A study in the localization of organ-forming areas in the Chick blastoderm of the head-process stage. *J. exp. Zool. Philadelphia* 72 1936 pp. 271-315 9 figs.

1131.—**Reboussin, R.** Faune ornithologique des régions naturelles de Loir-et-Cher. *Mem. Soc. Orn. Mamm. France* no. 3 1935 pp. 1-101 4 pls.

1132.—**Reboussin, R.** Le problème de la Mésange Rémiz. *Nature Paris* 1936 no. 2989 1936 pp. 457-458 2 figs.

1133.—**Reed, C. S.** Nomenclatura actual y distribución geográfica de las aves continentales de Chile según el Field Museum of Natural History. *Act. Soc. sci. Chile* 43 livr. 2 1933 pp. 1-48.

1134.—**Reed, C. S.** Las aves exóticas que viven aclimatadas en estado silvestre en algunas regiones de Chile. *Act. Soc. sci. Chile* 44 livr. 2 1934 pp. 1-38 7 pls.

1135.—**Rehren, J.** Die Vogelwelt des Glatzer Schneeberges in: Pax, Beitr. Biol. Glatzer Schneeberges Hft. 2 Breslau 1936 pp. 101-117 9 figs.

1136.—**Reis, J. e Nobrega, P.** Doenças das aves (Tratado de ornithopathologica). Pp. vi + 468 4 pls. 356 text-figs. São Paulo (Instituto biologico) 1936 8vo.

1137.—**Reiser, O.** Erlebnisse mit dem Bartgeier (*Gypaëtus barbatus*) in Bosnien und der Hercegovina. *J. Orn. Berlin* 84 1936 pp. 159-172 photo.

1138.—**Relyea, G. M.** An attempt to measure statistically the differences between eastern and western subspecies of the same species. *Auk* 53 1936 pp. 22-27.

1139.—**Remlinger, P. et Bailly, J.** Les Cigognes marocaines. *Nature Paris* 1936 no. 2985 pp. 256-260 6 photos.

1140.—**Rendahl, H.** Fågelboken, Sveriges fåglar i ord och bild. Pp. xx +

546 many illustr. Stockholm (Tidens forleg) 1935.

1141.—**Rensch, B.** Studien über klimatische Parallelität der Merkmalsausprägung bei Vögel und Säugern. *Arch. Naturgesch. Leipzig* 5 1936 pp. 317-363.

1142.—**Rensch, B.** Zur Terminologie der geographischen Variabilität. *Orn. Monatsb.* 44 1936 pp. 53-55.

1143.—**Renshaw, G.** A third specimen of the Poulet Rouge [*Aphanapteryx*]. *J. Soc. Preserv. Faun. Empire London* 29 1936 p. 60 photo.

1144.—**Rey.** Liste des oiseaux capturés dans la région havraise, de 1931 à 1936. *Bull. Soc. géol. Normandie* 38 1936 pp. 72-79.

1145.—**Richmond, W. K.** England's Birds. Pp. 1-294 many photos London (Faber) 1936 8vo.

Riddle, O. *vide* Burrows.

1146.—**Riddle, O.** [and others]. Action of the anterior pituitary hormones on basal metabolism of normal and hypophysectomized Pigeons and on a paradoxical influence of temperature. *Endocrinology Los Angeles* 20 1936 pp. 1-16 5 figs.

1147.—**Riley, G. M.** Light regulation of sexual activity in the male Sparrow (*Passer domesticus*). *Proc. Soc. exp. Biol.* 34 1936 pp. 331-332.

1148.—**Riley, J. H.** A new Babbler from southeastern Siam. [*Alciippe*.] *Proc. biol. Soc. Washington* 49 1936 pp. 25-26.

1149.—**Riley, J. H.** A new Flower-Pecker from Palawan Island, Philippines. [*Piprisoma*.] *Proc. biol. Soc. Washington* 48 1936 pp. 113-114.

1150.—**Ringleben, H.** Ueber einige Fälle von Polyandrie und Polygynie bei Vögeln. *Orn. Monatsb.* 44 1936 pp. 178-179.

Ringleben, H. *vide* Tischler.

Ringoen, A. R. *vide* Kirschbaum.

Rintoul, L. J. *vide* Baxter.

Rix, C. E. *vide* Condon.

1151.—**Roberts, A.** Report upon a survey of the higher Vertebrates of northeastern Zululand. *Ann. Transv. Mus.* 18 1936 pp. 163-222 12 pls. map.

1152.—Roberts, A. Ornithological notes. New South African Birds, etc. Ann. Transv. Mus. **18** 1936 pp. 255-269 2 text-figs.

1153.—Roberts, A. Some unpublished field notes made by Dr. (Sir) Andrew Smith between the years 1826 and 1831 in the Cape Colony (Cape Province of South Africa) and compiled from his manuscript notes. Ann. Transv. Mus. **18** 1936 pp. 271-323.

1154.—Roberts, A. Dr. H. Exton and his unpublished notes on South African Birds. Ostrich Pretoria **6** 1935 pp. 1-33 portr.

1155.—Roberts, A. Species and genera to be added to the South African bird-list. Ostrich Pretoria **6** 1935 pp. 48-49.

1156.—Roberts, A. Some interesting records of Birds from Southern Rhodesia. Ostrich Pretoria **7** 1936 pp. 74-76.

1157.—Roberts, A. Classification of South African Birds. Description of some new subspecies and a necessary change of name. Ostrich Pretoria **7** 1936 pp. 109-113.

1158.—Roberts, A. Major R. C. Bolster. Ostrich Pretoria **7** 1936 pp. 127-130 portr.

1159.—Roberts, S. Nesting of the Weebill, and notes on classification based on architecture. Emu **35** 1936 pp. 288-290.

1160.—Robien, P. Die grossen Kulturarbeiten im Oderdelta und ihre Wirkung auf die Vogelwelt. Beitr. Fortpfl.-biol. Vög. Berlin **12** 1936 pp. 114-117.

1161.—Robien, P. Die Vogelwelt Pommerns. 2. Nachtrag 1931-34. Mitt. Vogelwelt 1935 pp. 49-72.

1162.—Robien, P. Brutstudien an pommerschen Vögeln. Orn. Monatsb. **44** 1936 pp. 153-156.

1163.—Robinson, A. Notes on the Western Bower-bird. Emu **35** 1936 pp. 229-231.

1164.—Robinson, H. C. and Chasen, F. N. The Birds of the Malay Peninsula.—Vol. iii. Sporting Birds: Birds of the shore and estuaries. Pp. xix + 264 25 pls. map London (Witherby) 1936 8vo.

1165.—Rochon-Duvigneaud, A. Notes de vacances (Aout-Septembre 1935). Lescun, Aubisque, Gavarnie Ordesa (Pyrénées). Alauda Paris **7** 1935 pp. 506-509.

1166.—Rochon-Duvigneaud, A. et Veil, C. Dégradation des fonctions motrices et les réactions électriques des muscles de l'oeil des oiseaux. C.R. Soc. Biol. Paris **121** 1936 pp. 825-828.

1167.—Roessler, E. S. Viability of weed seeds after ingestion by California Linnets. Condor **38** 1936 pp. 62-65.

1168.—Romanoff, A. L. Effects of different temperatures in the incubator on prenatal and postnatal development of the Chick. Poultry Science **15** 1936 pp. 311-315.

1169.—Romanoff, A. L. and Grover, H. J. Electrical conductivity of yolk, albumen, allantoic and amniotic fluids of the developing birds' eggs. J. cell. comp. Physiol. **7** 1936 pp. 425-431.

1170.—Romanoff, A. L. and Sochen, N. Thermal effect on the rate and duration of the embryonic heart beat of *Gallus domesticus*. Anat. Rec. Philadelphia **65** 1936 pp. 59-68 3 figs.

1171.—Rooke, K. B. Birds seen in the North Atlantic, August and September, 1925. Brit. Bds. **29** 1936 pp. 366-377 3 figs.

1172.—Rossem, A. J. van. The Bush-tit of the Southern Great Basin. Auk **53** 1936 pp. 85-86.

1173.—Rossem, A. J. van. A red phase of the Black-crowned Night Heron. Auk **53** 1936 pp. 322-323.

1174.—Rossem, A. J. van. The Orange-bellied Redstart of western Central America. Condor **38** 1936 pp. 117-118.

1175.—Rossem, A. J. van. A United States record of the Pacific Golden Plover. What is the status of the inland Crested Cormorant of California? Condor **38** 1936 p. 217.

1176.—Rossem, A. J. van. Birds of the Charleston Mountains, Nevada. Pacific Coast Avifauna of the Cooper Orn. Club no. **24** 1936 pp. 1-65 13 photos.

1177.—Rossem, A. J. van. Description of a race of *Myiarchus cinerascens* from El Salvador. Trans. San Diego Soc. nat. Hist. **8** 1936 pp. 115-118.

1178.—Rossem, A. J. van. Notes on Birds in relation to the faunal areas of south-central Arizona. Trans. San Diego Soc. nat. Hist. **8** 1936 pp. 121-146 4 photos 3 maps.

1179.—Rossi, F. et Borghese, E. Sur le comportement des plumes embryonnaires cultivées in vitro. Arch. Anat. micr. Paris **31** 1935 pp. 459-478 10 figs.

1180.—Rössner, H. Die Vogelsammlung der österreichischen Kleinasien expedition 1934. SitzBer. Akad. Wiss. Wien (1) **144** 1935 pp. 299-312.

1181.—Rothschild, M. Rearing animals in captivity for the study of Trematode life histories. 1. *Larus ridibundus* L., the Black-headed Gull. J. mar. biol. Assoc. Plymouth **21** 1936 pp. 143-145.

1182.—Rourke, C. Audubon. Pp. x + 342 12 col. pls. and other illustr. London (Harrap) 1936 8vo.

1183.—Rowan, W. The nests and eggs of Canadian Waders and other birds. Bull. Bt. Orn. Cl. **57** 1936 pp. 36-38.

1184.—Rüppell, W. Heimfindeversuche mit Staren und Schwalben 1935. J. Orn. Berlin **84** 1936 pp. 180-198 2 figs.

1185.—Rüppell, W. Ueber das Brutvorkommen des Milans (*Milvus m. migrans*) in Niedersachsen. Orn. Monatsb. **44** 1936 pp. 3-5.

1186.—Rutke, P. Der Rohrschwirl (*Locustella l. luscinioides* (Savi)) in Pommern. Orn. Monatsb. **44** 1936 pp. 83-85.

1187.—Rydzeski, W. Études sur le notarium chez les oiseaux. Acta orn. Mus. zool. polon. **1** 1935 pp. 403-427 4 pls. [In French.]

1188.—Saalfeld, E. v. Untersuchungen über das Hacheln bei Tauben. Verh. Deutsch. zool. Ges. Leipzig **38** 1936 pp. 265-267 1 fig.

1189.—Saalfeld, Frhr. E. v. Untersuchungen über das Hacheln bei Tauben. 1. Mitt. Z. vergl. Physiol. **23** 1936 pp. 727-743 7 figs.

1190.—Salgues, R. Notulae tumorigiae. IV. Cancers spontanés chez l'oiseau. Oiseau Paris **6** 1936 pp. 302-312.

Salmon, H. M. *vide* Ingram.

1191.—Salomonsen, F. Zur Dialektbildung bei der Goldammer (*Emberiza citrinella*). Anz. orn. Ges. Bay. **2** 1925 pp. 346-351.

1192.—Salomonsen, F. On a new race of Willow Grouse. Bull. Bt. Orn. Cl. **56** 1936 pp. 99-100.

1193.—Salomonsen, F. Revision of the Greenland Rock Ptarmigans. Medd. Grønland **118** no. 2 1936 pp. 1-36 map.

1194.—Salvatori, A. Contributo alla conoscenza della permeabilità delle membrane dell' uovo di columbo e di gallina. Riv. Biol. Firenze **21** 1936 pp. 16-25 1 fig. also pp. 76-80.

1195.—Salverda, P. B. L'eau que préfèrent les oiseaux pour boire et pour se baigner. Arch. Néerland. Sci. La Haye (3C) **21** 1936 pp. 293-308.

1196.—Samorodoff, A. W. Le freux. Material sur le biologie et son rôle dans l'agriculture. Bull. Soc. Nat. Moscou Sect. Biol. **44** 1935 pp. 341-350. [Russian, with French rés.]

1197.—Sandstrom, C. J. Reciprocal chorio-allantoic transplants of embryonic Duck and Chick kidney tissue. Biol. Bull. Woods Hole **70** 1936 pp. 36-49.

1198.—Sarp, J. P. Pilgrimsfalken. Skånes Natur **22** 1935 pp. 48-53 4 figs.

1199.—Sassi, M. Nachruf an Otmar Reiser. Verh. orn. Ges. Bayern **21** 1936 pp. 74-76.

1200.—Saunders, A. A. The relation of field characters to the question of species and subspecies. Auk **53** 1936 pp. 283-287.

Sauser-Hall, P. *vide* Burnier.

1201.—Scalon, W. N. et Sludsky, A. A. Les oiseaux de bassin du Tas et de l'Elogoui. Gerfaut Bruxelles **26** 1936 pp. 25-51.

1202.—Schaefer, H. Die Ernährung der Raubvögel im Spiegel der Gewölforschung. Jber. schles. Ges. vaterl. Kult. **107** 1935 pp. 52-55.

Schauensee, R. M. *vide* Stresemann.

1203.—Schein, W. Storchstatistik in der Winsener Elbmarsch. Orn. Monatsb. **44** 1936 pp. 171-173.

1204.—Schildmacher, H. Vogel und Salzwasser. Ein Beitrag zur Frage des Wasserhaushaltes der Vögel. Orn. Monatsb. **44** 1936 pp. 13-19.

1205.—Schmaus, M. Ein Beitrag zur Ornithologie des Hunsrücks. Sitzber. naturf. Ver. preuss. Rheinl. Westf. 1932–33D 1934 pp. 36–43.

1206.—Schmidt, F. J. W. Winter food of the Sharp-tailed Grouse and Pinnated Grouse in Wisconsin. Wilson Bull. 48 1936 pp. 186–230 2 photos 1 fig.

1207.—Schmidt, S. [and others]. Immunisation active contre la peste aviaire. Biol. Medd. Kjøbenhavn 12 no. 6 1936 pp. 1–21 1 pl.

1208.—Schmidt, W. J. Eine seltsame Gansesichale. Ber. oberhess. Ges. Giessen 16 1935 pp. 58–65 1 pl.

1209.—Schmidt-Hoensdorf, F. Beobachtungen an Kolibris in Gefangenschaft. Z. naturw. Halle 90 1933 pp. 1–11 4 photos.

1210.—Schneider, C. O. Notas sobre aclimatación de algunas aves extranjeras en Chile. Comun. Mus. Concepción 1 1936 pp. 46–49.

1211.—Schnurre, O. Ein Beitrag zur Biologie des deutschen Uhus. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 1–12, 54–69.

1212.—Schnurre, O. Zum Vogelfang des Grossen Buntspechts. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 232–234.

1213.—Schnurre, O. Ernährungsbiologische Studien an Raubvögeln der Schorfheide. Märk. Tierw. Berlin 1 1935 pp. 145–164.

1214.—Schouteden, H. Contribution à la faune ornithologique du nord-est du Congo Belge. Ann. Mus. Congo Zool. (4) 1 fasc. 2 1936 pp. 41–156 map.

1215.—Schouteden, H. Addition au catalogue des oiseaux du nord-est du Congo. Rev. Zool. Bot. afr. Tervueren 28 1936 p. 431.

1216.—Schouteden, H. Quelques oiseaux reçus récemment. Rev. Zool. Bot. afr. Suppl. Bull. Cercle 13 1936 p. (18).

1217.—Schreurs, T. *Lanius collurio* L. und *Lanius senator* L. Ein Beitrag zur Biologie zweier Würgerarten. J. Orn. Berlin 84 1936 pp. 442–470 map 10 figs.

Schuhmacher, E. vide Krieg.

1218.—Schuster, L. Zur Brutbiologie des Schwarzen Milans. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 69–73.

1219.—Sch[uster], L. Otmar Reiser. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 160–161 portr.

1220.—Schuster, L. Einige Bemerkungen zum Brutgeschäft des Kleinspechts. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 221–225.

1221.—Schuyl, G. und Tinbergen, L. u. N. Ethologische Beobachtungen am Baumfalken (*Falco s. subbuteo* L.). J. Orn. Berlin 84 1936 pp. 387–433 2 figs.

1222.—Schüz, E. The White Stork as a subject of research. Bird-banding Boston 7 1936 pp. 99–107 3 figs.

1223.—Schüz, E. Der Bestand des Weissen Storches im Memelgebiet 1934. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 49–50.

1224.—Schüz, E. Internationale Bestands-Aufnahme am Weissen Storch 1934. Orn. Monatsb. 44 1936 pp. 33–41 map.

1225.—Schüz, E. Von der Mauser des Polar-Seetauchers (*Colymbus arcticus*). Orn. Monatsb. 44 1936 pp. 65–71 4 photos.

1226.—Schüz, E. XXIX. Bericht (1935) der Vogelwarte Rossitten der Kaiser Wilhelm-Gesellschaft zur Förderung der Wissenschaften. Vogelzug Berlin 7 1936 pp. 68–78 photo.

1227.—Schüz, E. Ring-Wiederfunde auswartiger Stationen 13. Vogelzug Berlin 7 1936 pp. 191–197 map.

Schüz, E. vide Krätzig.

Schüz, E. vide Mangels.

Schüz, E. vide Sielmann.

1228.—Schwenkel, H. Der Storchbestand in Württemberg 1934. Veröff. St. Natursch. Stuttgart 11 1935 pp. 105–110 map.

1229.—Sclater, W. L. New generic name for *Calamornis*. Bull. Bt. Orn. Cl. 57 1936 p. 22.

1230.—Sclater, W. L. *Botha fringillaris*. Ibis 1936 p. 201.

1231.—S[clater], W. L. Frans Ernst Blaauw. Ibis 1936 p. 383–384.

Sclater, W. L. vide Cheesman.

Sclater, W. L. vide Moreau.

1232.—Scott, C. D. Are Condors extinct in Lower California? *Condor* 38 1936 pp. 41-42.

Scott, H. M. *vide* Warren.

1233.—Sedgwick, E. H. Notes on the Chestnut-tailed Thornbill. *Emu* 35 1936 pp. 231-232.

1234.—Sedwitz, W. The half-hardy birds that wintered through 1933-1934 in the New York City region. *Proc. Linn. Soc. N.Y.* 47 1936 pp. 90-97.

1235.—Seigne, J. W. and Keith, E. C. Woodcock and Snipe. Pp. 1-254 8 pls. 2 text-figs. London (P. Allan) 1936 8vo.

1236.—Seilern, J. Graf v. Ornithologische Miscellen [S. Peru etc.]. *Ann. naturh. Mus. Wien* 47 1936 pp. 33-41.

1237.—Seitz, A. Ornithologisches vom Neusiedlersee. *Kócsag Budapest* 8 1935 pp. 29-33 2 photos.

1238.—Selevin, V. A. Faunistical data. Betpak-dala, Turkestan. *Acta Univ. Asiae Med. Tashkent* (ser. Zool.) no. 21 195 pp. 3-23 2 figs. [Russian, with English rés.]

1239.—Sergejév, A. L'influence des constructions de l'homme sur la distribution des oiseaux dans les steppes. *C.R. Acad. Sci. Moscou* 1936 vol. 2 pp. 165-168. [French.]

1240.—Serié, P. Nociones de taxidermia. El montaje de aves. *Hornero B. Aires* 6 1936 pp. 271-279 14 figs.

1241.—Serventy, D. L. Feeding methods of *Podargus*. With remarks on the possible causes of its aberrant habits. *Emu* 36 1936 pp. 74-90 2 pls.

1242.—Seth-Smith, D. The White-eared Grassfinch (*Poephila leucotis*) pp. 35-36 col. pl. The Pectoral Finch (*Munia pectoralis*) p. 95 col. pl.; The Chestnut-breasted Finch (*Munia castaneothorax*) p. 204 col. pl. *Avicult. Mag.* (5) 1 1936.

1243.—Seth-Smith, D. Display of Birds of Paradise observed in the Society's Gardens. *Proc. zool. Soc. London* 1936 pp. 807-808; also *T. C. S. Morrison-Scott* p. 809 2 figs.

1244.—Seydoux, R. La fauvette pitchou *Sylvia undata* en forêt de Fontainebleau. *Alauda* 8 1936 pp. 477-480.

1245.—Seys, G. Further bird records from Jehol. *China J. Shanghai* 24 1936 pp. 99-100.

1246.—Sharland, M. S. R. The Rosella Parrot. *Emu* 36 1936 pp. 1-3 photo.

1247.—Shaver, J. M. A mid-winter bird census of the Montgomery Bell project. *J. Tenn. Acad. Sci.* 11 1936 pp. 95-97.

1248.—Shaw, T. H. Variation in the body weight of the Tree-Sparrow, *Passer montanus saturatus* Stejneger. *Bull. Fan Memorial Inst. Biol. Peiping* 6 1935 pp. 65-69.

1249.—Shaw, T. H. Glimpse on the bird life of Hwailai [nr. Peiping]. *Bull. Fan Memorial Inst. Biol. Peiping* 6 1935 pp. 150-158 map.

1250.—Shaw, T. H. Birds of Hopei Province as recorded in Chinese literature. *China J. Shanghai* 24 1936 pp. 373-376.

1251.—Shaw, W. T. Winter life and nesting studies of Hepburn's Rosy Finch in Washington State. *Auk* 53 1936 pp. 9-16 4 photos.

1252.—Shaw, W. T. Winter life and nesting studies of Hepburn's Rosy Finch in Washington State. *Auk* 53 1936 pp. 133-149 6 photos.

1253.—Sheppard, R. W. The Blue and Lesser Snow Goose at Niagara Falls. *Auk* 53 1936 pp. 204-207.

1254.—Sheppard, R. W. [and others]. A preliminary list of the Birds of Lincoln and Welland Counties, Ontario. *Canad. Field Nat.* 50 1936 pp. 95-102, 118-122, 131-140, 149-152.

Sherman, F. *vide* Hudson.

1255.—Shestoperov, E. L. Materials for questions of Hunt-Getting economy of Tashaoz District [Turkmenistan]. *Bull. Zool. Sta. Sci. Res. Turkomania, Ashkabad-Baku* 1 1936 pp. 141-156 (List of Birds, pp. 147-151). [Russian, with English rés. N.V.]

1256.—Shestoperov, E. L. Materials for the knowledge of the Fauna of Karluke Region in Turkomanian S.S.R. *Bull. Zool. Sta. Sci. Res. Turkomania, Ashkabad-Baku* 1 1936 pp. 157-172 (including Birds). [Russian, with English rés. N.V.]

1257.—Shestsperov, E. L. Faunistic inspection in the neighbourhood of Tedjend. *Bull. Zool. Sta. Sci. Res. Turkomania, Ashkabad-Baku* 1 1936 pp. 173-190 (including Avifauna). [Russian, with English rés. N.V.]

1258.—**Shitkov**, B. M. L'arrivée des oiseaux migrateur et le phénologie. Bull. Soc. Nat. Moscou Sect. Biol. **44** 1935 pp. 333-337. [Russian, with French rés.]

Shortt, T. M. *vide* Snyder.

1259. — **Shoulejkin**, W. On the dynamics of a flock. Bull. Acad. Sci. Moscou **1935** pp. 985-995 4 figs. [Russian, with English rés.]

1260.—**Sick**, H. Vom Balzflug des Schwarzen Milans. Beitr. Fortpfl.-biol. Vög. Berlin **12** 1936 pp. 188-189.

1261.—**Sielmann**, H. Terek-Wasserläufer (*Terekia cinerea*) durchziehend in Ostpreussen. Orn. Monatsb. **44** 1936 p. 158; also **Schüz** pp. 158-159.

Sigalas, R. *vide* Lande.

1262. — **Siivonen**, L. Ueber den Frühlingszug von *Turdus ph. philomelos* Brehm in Finnland 1935. Orn. fenn. **13** 1936 pp. 37-40 map. [Finnish, with German rés.]

1263. — **Siivonen**, L. Die Stärkevariation des nächtlichen Zuges bei *Turdus ph. philomelos* Brehm und *T. musicus* L., auf Grund der Zuglaute geschätzt und mit der Zugunruhe einer gekäfigten Singdrossel verglichen. Orn. fenn. **13** 1936 pp. 59-63 4 diag.

1264.—**Siivonen**, L. Ein neuer Apparat zur Registrierung der Intensitätsvariation der Zugunruhe bei gekäfigten Zugvögeln. Orn. fenn. **13** 1936 pp. 67-69 figs.

1265.—**Siivonen**, L. und **Palmgren**, P. Ueber die Einwirkung der Temperatursenkung auf die Zugstimmung bei einer gekäfigten Singdrossel (*Turdus ph. philomelos*). Orn. fenn. **13** 1936 pp. 64-67 1 diag.

1266.—**Sits**, E. Two interesting birds found in Estonia. Ann. Soc. Rebus Nat. Tartu **42** 1935 pp. 63-69 2 photos. [Estonian, with English rés.]

1267.—**Sits**, E. Ornithologischer Bericht aus Eesti (Estland). Orn. Monatsb. **44** 1936 pp. 77-90.

1268.—**Skaggs**, M. B. The occurrence of White Herons in the Youngstown, Ohio, region. Wilson Bull. **48** 1936 pp. 269-272 map.

Sludsky, A. A. *vide* Scalon.

1269.—**Sluifers**, J. E. Waarnemingen betreffende Kleine en Kleinste Strand-

looper (*Calidris minuta* (Leisl.)) et *Calidris temminckii* (Leisl.)). Ardea Leiden **25** 1936 pp. 205-210 2 photos 1 graph.

1270.—**Smith**, F. R. The food and nesting habits of the Bald Eagle. Auk **53** 1936 pp. 301-305.

Smith, H. C. *vide* Stanford.

1271. — **Smith**, T. The Birds of Staffordshire (cont.). Trans. N. Staffs. F. Cl. Stafford **70** 1936 pp. A183-A212.

Smooker, G. D. *vide* Belcher.

1272.—**Snouckaert van Schauburg**, R. C. E. J. Baron. De geographische verbreiding der Pycnonotidae van Azië en den Indischen Archipel IV. Orgaan Cl. ned. Vogelk **9** 1936 pp. 52-67.

1273.—**Snyder**, L. L. and **Shortt**, T. M. A summary of recent events pertaining to the Blue and Lesser Snow Goose. Auk **53** 1936 pp. 173-177.

1274.—**Snyder**, L. L. and **Shortt**, T. M. 1933, a "Blue Jay Year." Canad. Field Nat. **50** 1936 p. 118.

Sochen, M. *vide* Romanoff.

Sody, H. J. V. *vide* Bouma.

1275.—**Sokolow**, N. N. [and others]. Ueber die Morphologie der Chromosomen in der Ordnung der Hühner. J. Biol. Moscow **5** 1936 pp. 79-98 18 figs. [Russian, with German rés.]

1276.—**Sokolovskaia**, I. Precipitation reaction and hybridization. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) **1936** pp. 465-489. [Russian, with English rés.]

1277.—**Sokolowskaja**, I. I. Vergleichende Untersuchung der Karyotypen von *Cairina moschata*, *Anas platyrhynchos* und der durch Kreuzung dieser Arten erhaltenen Bastarde. J. Biol. Moscow **4** 1935 pp. 893-904 3 figs. [Russian, with German rés.]

1278.—**Sokolowskaja**, I. I. Ueber Hybridationsversuche an Vögeln. Ueber einige hereditäre Erscheinungen bei Hybriden von *Cairina moschata* und *Anas platyrhynchos*. Zool. J. Moscow **14** 1935 pp. 785-801 8 figs. [Russian, with German rés.]

1279.—**Sokolowski**, J. On the nest of *Falco peregrinus*. Panstw. Rada Ochr. Przyr. Poznan **4** 1933 pp. 133-149 10 photos. [Polish only.]

1280.—Somalhausen, I. Korelationen in der Entwicklung einiger Rassenmerkmale bei den Hühnern. Trav. Inst. Zool. Biol. Kiev 8 1935 pp. 3–23 14 figs. [Russian, with German rés.]

1281.—Somerén, V. D. van. Territory and distributional variation in woodland birds. Scot. Nat. Edinb. 1936 pp. 35–45 3 figs.

Somerén, V. D. van *vide* Warwick.

1282.—Somerén, V. G. L. van. The Birds of Kenya and Uganda (vol. ii pt. 5 Charadriidae). J. E. Afr. Ug. nat. Hist. Soc. 13 1936 pp. 29–72 22 pls.

1283.—Sommerfeld, E. 2 albinotische Junge von *Muscicapa s. striata* (Pall.) in einer Brut. Anz. orn. Ges. Bay. 2 1935 pp. 352–353.

1284.—Sowerby, A. de C. The Owl in Chinese art. China J. Shanghai 25 1936 pp. 8–12 photos.

1285.—Spärck, R. Om antallet af ynglende, vildtlevende Knopsvaner in Danmark till belysning af fredningens virkning. Dansk orn. Foren. Tidsskr. 30 1936 pp. 17–20.

1286.—Spärck R. Om antallet af ynglende ederfugle i Danmark, til belysning af reservaternes betydning for bestandens størrelse. Dansk orn. Foren. Tidsskr. 30 1936 pp. 20–22.

1287.—Sparrow, R. A series of eggs of South African parasitic birds. Bull. Brit. ool. Assoc. 5 1936 pp. 5–7.

1288.—Spennemann, A. Ruttelnde Eulen (*Strix seloputo seloputo* Horsf.) auf Java. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 p. 208.

1289. — Spennemann. *Leptocoma jugularis ornata* (Less.). Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 255–256.

1290.—Spevazek, J. Wiederum eine deutsche Rauchschwalbe (*Hirundo rustica*) von den Kap Verdischen Inseln zurückgemeldet. Vogelzug Berlin 7 1936 p. 52.

1291.—Spirito, A. Ricerche sul comportamento dei fermenti embrionali. II. Perossi dasi e emoglobina negli Uccelli. Arch. zool. Torino 22 1936 pp. 223–257 14 figs.

1292.—Sprague, R. and Ivy, A. C. Studies in avian carbohydrate metabolism. Amer. J. Physiol. 115 1936 pp. 389–394.

1293.—Sprot, G. D. A tree-nesting colony of White-crested Cormorants in Trincomali Channel, British Columbia. Condor 38 1936 pp. 247–248 2 photos.

1294.—Sprunt, A. An unusual feeding habit of the Snowy Heron. The Roseate Spoonbill in Georgia. Auk 53 1936 pp. 203–204.

1295.—Stachanov, W. S. De la répartition géographique de certains oiseaux dans la contrée du Bas-Amour et sur l'île Sakhaline. Alauda 7 1935 pp. 468–479.

1296.—Stanford, J. K. Some rare birds in northern Burma. J. Bombay nat. Hist. Soc. 38 1936 pp. 625–626.

1297.—Stanford, J. K. On the breeding of the Pied Harrier (*Circus melanoleucus* (Pennant)) in northern Burma. J. Bombay nat. Hist. Soc. 39 1936 pp. 179–181.

1298.—Stanford, J. K. and Smith, H. C. The nesting of the Indian Crested Swift (*Hemiprocne coronata*) in Upper Burma. J. Bombay nat. Hist. Soc. 39 1936 pp. 125–126.

1299.—Stead, E. F. The New Zealand Saddlebacks [*Philesturnus*]. Ibis 1936 pp. 594–598.

1300.—Stead, E. F. The egg of the Long-tailed Cuckoo (*Eurodynamis tai-tensis*). Trans. Proc. Roy. Soc. N.Z. 66 1936 pp. 182–184.

1301.—Stead, E. F. The New Zealand Saddlebacks. [*Creadion*.] Trans. Proc. Roy. Soc. N.Z. 66 1936 pp. 185–187.

1302.—Stefanelli, A. Sulla presenza di organi copulatori erettili nel proctodeum di gallo domestico. Monit. zool. ital. Firenze 47 1936 pp. 78–82 1 pl. 1 text-fig.

1303.—Stegmann, B. K. Ueber das Prinzip der zoogeographischen Einteilung des paläarktischen Gebietes unter Zugrundelegung ornithologisches Faunentypen. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 523–563. [Russian with German rés.]

1304.—Stegmann, B. Die Vögel des nördlichen Baikal. J. Orn. Berlin 84 1936 pp. 58–139 2 maps 5 photos.

1305. — Stegmann, B. Die geographischen Formen der Flussschwärze in der Paläarkt. Orn. Monatsb. 44 1936 pp. 102–107.

1306. — Stegmann, B. Ueber das Flugvermögen des angestorbenen Scharbe, *Phalacrocorax perspicillatus* Pall. Orn. Monatsb. 44 1936 pp. 140–153 6 figs.

1307. — Stegmann, B. Ueber den Zug des Eisvogels (*Alcedo atthis*) in der Krim. Vogelzug Berlin 7 1936 p. 143; also H. Grote p. 201.

1308. — Stein, G. H. W. Beiträge zur Biologie papuanischer Vögel. J. Orn. Berlin 84 1936 pp. 21–57.

1309. — Steinbacher, F. Ueber *Egretta gularis* und verwandte Formen in Afrika. Orn. Monatsb. 44 1936 pp. 19–22.

Steinbacher, F. vide Hartert.

1310. — Steinbacher, G. Wiederfunde märkischer Ringvögel. Märk. Tierw. Berlin 1 1936 pp. 201–207; also 2 1936 pp. 51–57.

1311. — Steinbacher, G. Zur Vogel-fauna der Mark Brandenburg. Märk. Tierw. Berlin 1 1936 pp. 219–220.

1312. — Steinbacher, G. Contribution à l'anatomie et à la biologie des Colubris. Oiseau Paris 6 1936 pp. 412–417.

1313. — Steinbacher, G. Die Anatomie des Eisvogelfusses. Orn. Monatsb. 44 1936 pp. 5–13 3 figs.

1314. — Steinbacher, J. Zur Frage der Geschlechtsreife von Kleinvögeln. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 139–144.

1315. — Steinbacher, J. Instrumental Musik der Vögel. Natur u. Volk 66 1936 pp. 389–295 10 figs.

1316. — Steiner, H. Ueber die äusseren Gestaltung eines funfzehntägigen Embryos des Emus, *Dromiceius novae-hollandiae*. Rev. suisse Zool. Genève 43 1936 pp. 543–550 2 figs.

1317. — Steiner, H. Vererbung an Vogelbastarden. I. Einfache, monohybride Mendelspaltung beim Artbastard von *Amadina erythrocephala* × *A. fasciata* 116 1935 pp. 348–349. II. Farbungsatavismen bei Speciesbastarden der Ploceidae 117 1936 pp. 332–334. Verh. schweiz. naturf. Ges.

1318. — Steinfatt, O. Vogelkundliche Wanderungen am Neusiedler See. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 190–194, 225–232 2 photos.

1319. — Steiniger, F. Neue Beobachtungen über Reaktionshemmung (sog., "Tierische Hypnose") bei Vögeln. Biol. Zbl. Leipzig 56 1936 pp. 116–147 16 figs.

1320. — Steiniger, F. Ueber Reaktionshemmung bei jungen Möwen und Seeschwalben. Orn. Monatsb. 44 1936 pp. 135–140 6 photos.

1321. — Stemmler-Morath, C. Beobachtungen beim Brutgeschäft der Kiebitze *Sarciophorus tectus* (Bodd.) und *Belonopterus cayennensis* (Gm.). Zool. Garten Leipzig 8 1936 pp. 209–214 4 photos.

1322. — Steullet, A. B. y Deautier, E. A. Catálogo sistemático de las aves de la Republica Argentina. Obra del Cincuentenario Mus. La Plata 1 pt. 2 1936 pp. 257–492.

1323. — Stevens, O. E. The first descriptions of North American Birds. Wilson Bull. 48 1936 pp. 203–215.

1324. — Stevenson, J. O. Bird notes from the Hualpai Mountains, Arizona. Condor 58 1936 pp. 244–245.

1325. — Stockenberg, W. Die Orte besonderer Vitalfärbbarkeit des Hühnembryos und ihre Bedeutung für die Formbildung. Arch. Entw. Mech. Org. Berlin 153 1936 pp. 408–425 10 figs.

1326. — S[tone], W. William Louis Abbott. Auk 35 pp. 369–370.

1327. — Stone, W. Zoological results of the George Vanderbilt African Expedition of 1934. Part VI. Birds. Proc. Acad. nat. Sci. Philad. 88 1936 pp. 529–598; see also J. A. G. Rehn Introd. and Itinerary pp. 1–14 map.

1328. — Stonor, D. Studies on the Bank Swallow, *Riparia riparia riparia* (Linnaeus) in the Oneida Lake region. Roosevelt Wild Life Ann. Syracuse 4 no. 2 1936 pp. 127–233 2 maps 48 photos and text-figs.

1329. — Stonor, D. Wild life casualties on the highways. Wilson Bull. 48 1936 pp. 276–283.

1330. — Stott, F. C., Hartley, C. H. and Fisher, J. The marine foods of birds in an inland fjord region in West Spitsbergen. Part I. Plankton and shore benthos, pp. 356–369 2 maps. Part II. Birds, pp. 370–389 1 map. J. Animal Ecol. London 5 1936.

1331.—Stout, G. and Waterston, G. The Booted Warbler on Fair Isle. A new British Bird. Brit. Bds. 30 1936 pp. 226-227.

1332.—Streich, G. und Svetosarov, E. Die Bedeutung der Temperatur und des Geschlechtshormon in Prozesse der Mauser bei Vögeln. C.R. Acad. Sci. Moscou 1936 vol. 4 pp. 157-161; also 163-167.

1333.—Stresemann, E. The Formenkreis-theory. Auk 35 1936 pp. 150-158.

1334.—Stresemann, E. A nominal list of the Birds of Celebes. Ibis 1936 pp. 356-369. [Three new races.]

1335.—Stresemann, E. Zur Frage der Artbildung in der Gattung *Geospiza*. Orgaan Cl. ned. Vogelk. 9 1936 pp. 13-21.

1336.—Stresemann, E. *Colymbus arcticus viridigularis* (Dwight), Durchzügler an der Kurischen Nehrung. Orn. Monatsb. 44 1936 pp. 100-102.

1337.—Stresemann, E. [and others]. Nochmals: Das Einemsen des Gefieders. Orn. Monatsb. 44 1936 pp. 116-117.

1338.—Stresemann, E. and Schauensee, R. M. de. Notes on some South Asiatic species of the genus *Cyornis*. Proc. Acad. Nat. Sci. Philad. 88 1936 pp. 337-351 4 maps.

1339.—Strijbos, J. P. De blauwe Reiger. 192 pp. 60 photos Amsterdam (Veen). 1935. [N.V.]

1340.—Strindberg, L. En fågelsjö på Frösön. Fauna och Flora Uppsala 1936 pp. 156-163 5 photos.

Stscherbakow, F. A. *vide* Lobatschow.

1341.—Sudilowskaja, A. M. The Birds of Kashgaria. Acad. Sci. U.S.S.R. Lab. zool. Geogr. pp. 1-124 Moscow 1936 8vo. [Russian, with English rés.]

1342.—Sudilovskaja, A. M. Quelques particularités de la mutabilité de l'espèce des oiseaux de variabilité Kashgarie. Bull. Acad. Sci. Moscou 1935 pp. 781-788. [Russian, with French rés.]

1343.—Sugden, J. W. Sanctuaries of the bird islands of Great Salt Lake. Auk 53 1936 pp. 288-294.

1344.—Sulpin, L. M. On the faunal features of the northwest Tian Shan. C.R. Acad. Sci. Moscou 1936 vol. 3 pp. 449-451. [In English.]

1345.—Suomalainen, H. Der Grüne Laubsänger, *Phylloscopus nitidus viridanus* Blyth, in Finnland, nebst einigen Hauptzügen seiner Ausbreitungsgeschichte. Ornis fenn. 13 1936 pp. 89-124 map photo.

1346.—Sutton, G. M. Birds in the wilderness: Adventures of an ornithologist. Pp. xiv + 200 12 pls. New York (Macmillan Coy.) 1936.

1347.—Sutton, G. M. White-winged Crossbill on Baffin Island. Auk 53 1936 p. 91.

1348.—Sutton, G. M. Food capturing tactics of the Least Bittern. Auk 53 1936 pp. 74-75.

1349.—Sutton, G. M. Notes from Ellis and Cimarron Counties, Oklahoma. Auk 53 1936 pp. 432-435.

1350.—Sutton, G. M. Man-o'-war bird in Oklahoma. Auk 53 1936 p. 438.

1351.—Sutton, G. M. The juvenal plumage and post-juvenal molt in several species of Michigan Sparrows. Bull. Cranbrook Inst. Sci. no. 3 1935 pp. 1-36 8 col. pls.

1352.—Sutton, G. M. The post-juvenal molt of the Grasshopper Sparrow (*Ammodramus s. australis*). Occ. Pap. Mus. Zool. Univ. Mich. 336 1936 pp. 1-7 col. pl.

Sutton, G. M. *vide* Todd.

1353.—Sutton, J. Colour of the conjunctiva of the White-winged Chough (*Corcorax melanorhamphus*). S. Austr. Orn. 13 1936 pp. 184-186.

Svetosarov, E. *vide* Streich.

1354.—Swarth, H. S. Savannah Sparrow migration routes in the Northwest. Condor 38 1936 pp. 30-32 map.

1355.—Swarth, H. S. A list of the Birds of the Atlin region, British Columbia. Proc. Calif. Acad. Sci. (4) 23 1936 pp. 35-58.

1356.—Swarth, H. S. Origins of the fauna of the Sitkan district, Alaska. Proc. Calif. Acad. Sci. (4) 23 1936 pp. 59-78 map.

1357.—Swann, H. K. A Monograph of the Birds of Prey (Order Accipitres) edited by A. Wetmore. Pt. 14 pp. 353-448 4 pls. London (Wheldon & Wesley) 1936 4to.

1358.—Sy, M. Funktionell-anatomische Untersuchungen am Vogelflügel. J. Orn. Berlin 84 1936 pp. 199-296 52 figs.

1359.—Szabó, I. und M. Die Lebensdauer der Papageien. Zool. Anz. Leipzig 115 1936 pp. 269-272.

1360.—Szeppenwol, J. e Bron, A. L'origine et la nature de l'innervation primitive du coeur chez les embryons d'Oiseaux (Canard et Poulet). Rev. suisse Zool. Genève 43 1936 pp. 1-23 8 figs.

1361.—Taibel, A. M. Sprone e sesso. Rev. Biol. Firenze 21 1936 pp. 81-101.

1362.—Taibel, A. e Levi, G. Un caso di persistenza dell'ovidutto destro in *Phasianus colchicus*. Boll. Zool. Torino 7 1936 pp. 137-143 3 figs.

1363.—Taka-Tsukasa, Prince. The Birds of Nippon. Vol. i pt. 6 Bibliography pp. lxxvii-cviii. Tetraonidae pp. 291-326 2 pls. map photos.

1364.—Taka-Tsukasa, Prince and Ikeda, Baron S. Birds of Sado, Oki and other islands in the coasts of the Sea of Japan. Tori Tokyo 9 1936 pp. 127-141. [Japanese only.]

Tammilehto, R. P. *vide* Arhimo.

1365.—Tantow, F. Das Vogelleben der Niederelbe von Bleckede-Boizenburg bis Stade-Elmshorn. Pp. 160 Hamburg (Boysen) 1936 8vo. [N.V.]

1366.—Tate, R. C. Notes on further extension in range of the American Magpie in the Oklahoma panhandle. Proc. Okla. Acad. Sci. 13 1933 p. 10.

1367.—Taverner, P. A. Taxonomic comments on Red-tailed Hawks. Condor 38 1936 pp. 66-71 map.

Taverner, P. A. *vide* Allen, F. H.

1368.—Taylor, H. J. Thure Ludwig Theodore Kumlien. Wilson Bull. 48 1936 pp. 86-93 portr.

1369.—Technau, G. Die Nasendrüse der Vögel. Zugleich ein Beitrag zur Morphologie der Nasenhöhle. J. Orn. Berlin 84 1936 pp. 511-617 3 pls. 26 text-figs.

1370.—Tekke, M. J. Overzicht der terugmeldingen van in Nederland geringde vogels. V. De kievit *Vanellus vanellus* (L.). Orgaan Cl. ned. Vogelk. 8 1936 pp. 83-91 map.

Tekke, M. J. *vide* Brink.

1374.—Thijssse, J. P. en Tinbergen, N. De Zilvermeeuwen. Levende Nat. Amsterdam 40 1936 pp. 259-280, 304-308 25 photos.

1375.—Thomas, J. F. Food of nestling Swallows. Brit. Bds. 29 1936 pp. 244-245.

1376.—Thompson, Sir D'A. W. A glossary of Greek Birds. New ed. Pp. viii + 342 many illustr. London (Oxford Univ. Press) 1936. [Review Nature 139 p. 305.]

1377.—Thomson, A. L. Bird migration: a short account. Pp. 224 7 photos, 10 maps and diagrams. London (Witherby) 1936 8vo.

1378.—Thomson, A. L. Recent progress in the study of bird migration. Ibis 1936 pp. 472-530.

1379.—Thorpe, W. H. and others. Notes on the Birds of Lakes Ochrid, Malik, and Prespa, and adjacent parts of Yugoslavia, Albania and Greece. Ibis 1936 pp. 557-580.

1380.—Ticehurst, C. B. Examination of pellets of Montagu's Harrier. Brit. Bds. 29 1936 pp. 248-249.

1381.—Ticehurst, C. B. Petr Kuzmich Kozlov. Ibis 1936 pp. 203-204.

1382.—Ticehurst, C. B. On the Indian Ashy Drongos. Ibis 1936 pp. 273-280.

1383.—Ticehurst, C. B. A note on Razorbills (*Alca torda* L.). Ibis 1936 pp. 381-383.

1384.—[Ticehurst, C. B.] Rev. Henry H Slater. Ibis 1936 pp. 385-386.

1385.—Ticehurst, C. B. The Brown Shrike (*Lanius cristatus* Linn.) in Burma and Assam. J. Bombay nat. Hist. Soc. 38 1936 pp. 824-825.

1386.—Ticehurst, C. B. On birds nesting around Bury. Trans. Suffolk Nat. Soc. 3 1935 pp. 66-68.

1387.—Ticehurst, N. F. Nesting of the Pintail in Kent and Sussex. Brit. Bds. 30 1936 pp. 162-166.

1388.—Ticehurst, N. F. Notes on the local fauna: Birds. Hastings Nat. 5 1936 pp. 120-150.

1389.—Ticehurst, N. F. The Mute Swan in Hertfordshire. Trans. Herts. nat. Hist. Soc. 20 pt. 2 1936 pp. 74-84 figs.

1390.—Tichomirow, B. M. Korrelation zwischen dem allgemeinen Zustande des Organismus des K chleins und dem Zustande seiner Thymusdr se pp. 19-36 3 figs. Eine neue variante der Myolysatwirkung bei Zustandver nderung des Organismus des K chleins, pp. 37-44 2 figs. Trans. Inst. Biol. Peterhoff nos. 13-14 1935. [Russian, with German r s.]

1391.—Timmermann, G. und Gudmundsson, F. Ein Besuch der Mantelm wenkolonie auf der Insel Sandey im Thingvallavatn (S dwest - Island). Beitr. Fortpfl.-biol. V g. Berlin 12 1936 pp. 14-21 3 pls.

1392.—Tinbergen, L. Gegevens over het voedsal van Nederlandse Haviken (*Accipiter gentilis gallinarum* (Brehm)). Ardea Leiden 25 1936 pp. 195-200.

1393.—Tinbergen, N. Zur Soziologie der Silberm we, *Larus a. argentatus* Pont. Beitr. Fortpfl.-biol. V g. Berlin 12 1936 pp. 89-96.

1394.—Tinbergen, N. The function of sexual fighting in Birds; and the problem of the origin of "territory." Bird-banding Boston 7 1936 pp. 1-8.

1395.—Tinbergen, N. Waarnemingen en proeven over de sociologie van een Zilvermeeuwenkolonie. Levende Nat. Amsterdam 40 1936 pp. 262-280, 304-308 25 photos.

Tinbergen, N. u.L. *vide* Schuyt.

Tinbergen, N. *vide* Thijsse.

1396.—Tischler, F. Uebernachten Mehlschwalben gemeinschaftlich im Rohr? Orn. Monatsb. 44 1936 p. 117; also H. Ringleben pp. 159-160.

1397.—Todd, W. E. C. and Sutton, G. M. Taxonomic remarks on the Carolina Chickadee *Penthestes carolinensis* Proc. biol. Soc. Washington 49 1936 pp. 69-70.

1398.—Tolmer, L. Observations de Becs-Crois s (*Loxia*) dans le Calvados

pendant l t  de 1935. Bull. Soc. linn. Caen (8) 8 1936 p. 95.

1399.—Tolmer, L. Observations sur des oiseaux tu s ou observ s dans le d partement du Calvados depuis 1923. Bull. Soc. linn. Caen (8) 8 1936 pp. 5-45 (2nd pag.).

1400.—Tomkins, I. R. Notes on the winter food of the Short-eared Owl. Wilson Bull. 48 1936 pp. 77-79.

1401.—Toschi, A. Uccelli del Giuba. Riv. ital. Orn. 6 1936 pp. 173-200.

1402.—Townley, D. Some rarer Rhodesian Birds. Ostrich Pretoria 7 1936 pp. 9-23.

1403.—Townley, D. Field notes on little-known Southern Rhodesian Birds. Ostrich Pretoria 7 1936 pp. 103-108.

Trautman, M. B. *vide* Walker.

1404.—Treloar, T. R. and Hocking, J. Budgerigars: the standard of perfection and the classification of colour varieties. Pp. 77 London (Robertson & Mullens) 1936 4to. [N.V.]

1405.—Trimble, R. The bird collection of the Carnegie Museum. Wilson Bull. 48 1936 pp. 41-47.

1406.—Troller, J. Die Wasserramsel, *Cinclus cinclus* L. und ihre Unterarten in der Schweiz. Arch. suisses d'Orn. 1 1935 pp. 193-224; also pp. 357-363.

1407.—Trouche, L. L'ann e ornithologique en Tardenois [Aisne]. Alauda Paris 8 1936 pp. 54-85.

1408.—Tucker, B. W. The colouring of the soft parts of the Buff-backed Heron. Brit. Birds 30 1936 pp. 70-73 photo.

1409.—Tucker, B. W. An observation on the roosting of Swifts. Brit. Bds. 30 1936 pp. 206-208.

1410.—Tucker, B. W. The rookeries of Somerset. Proc. Somersetsh. archaeol. nat. Hist. Soc. 81 1936 pp. 149-240 7 maps.

1411.—Tufts, R. W. and others. Christmas Bird censuses 1935. Canad. Field Nat. 50 1936 pp. 23-30.

1412.—Tugarinov, A. J. Zur Frage der Bildung der Inselfauna. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 501-522. [Russian, with German r s.]

1413.—Tugarinov, A. e Kozlova-Pushkareva, E. [The Wintering of Birds in Talysh.] Tr. Azerbaidjan Sect. Acad. Sci. Baku 1935 pp. 1-124 (No. XXIII, Zool. Ser.). [Russian, with English res. N.V.]

1414.—Tully, H. The Little Owl in Northumberland and Durham. *Vascolum Newcastle* 22 1936 pp. 41-45.

1415.—Tuovinen, A. Der Vogelbestand der Insel Nesterinsaari in den Sommern 1934 und 1935. *Ornis fenn.* 13 1936 pp. 137-139 2 maps.

1416.—Tur, J. Les néoplasmoïdes embryonnaires obtenus par voie expérimentale. *Bull. int. Acad. Cracovie B II* 1935 pp. 183-200 1 pl.

1417.—Tur, J. Recherches sur les néoplasmoïdes embryonnaires. *Mem. Acad. Polon. Cracovie* 7 1935 pp. 1-41 4 pls.

1418.—Turkewitsch, B. G. Ein Versuch zur Systematik der Vögel und Säugetiere auf Grund der anatomischen Struktur ihres knöchernen Labyrinths. *Arch. zool. Torino* 22 1936 pp. 79-122 1 pl.

1419.—Turkevitsch, B. G. Structure anatomique du labyrinthe osseux chez les oiseaux et les mammifères comme un des caractères systématiques. *Trav. Inst. zool. Acad. Sci. U.R.S.S.* 4 1936 pp. 447-482 3 pls. [Russian only.]

1420.—Turkewitsch, B. G. Die Abhängigkeit der anatomischen Struktur des knöchernen inneren Ohres von der Körperlage der Vögel (insbesondere bei den Repräsentanten der Ordnung Lamellirotres). *Zool. Jahrb. Jena (Anat.)* 61 1936 pp. 121-138 1 pl.

1421.—Turner, E. L. Every garden a bird sanctuary. Pp. 1-190 7 pls. 12 text-figs. London (Witherby) 1935 8vo.

1422.—Twomey, A. C. Climographic studies of certain introduced and migratory Birds. *Ecology Brooklyn* 17 1936 pp. 122-132 12 figs.

1423.—Tyrrell, W. B. The Ospreys of Smith's Point, Virginia. *Auk* 53 1936 pp. 261-268 7 photos.

1424.—Unger, H. Beobachtungen über Auflagerung von ovarähnlichem Gewebe beim embryonalen Hoden der Amsel (*Turdus merula*). *Biol. Zbl. Leipzig* 56 1936 pp. 383-389 6 figs.

1425.—Unger, H. Beitrag zur Chromosomenforschung der Vögel. *Z. Zellf. mikr. Anat.* 25 1936 pp. 476-500 20 figs.

1426.—Urner, C. A. Warren Francis Eaton 1900-1936. *Proc. Linn. Soc. N.Y.* 47 1936 pp. i-ii portr.

1427.—Urner, C. A. Shore-birds on the north and central New Jersey coast. *Proc. Linn. Soc. N.Y.* 47 1936 pp. 77-89.

1428.—Utley, J. F. Notes on the bird population in Wensleydale, (V.C. 65). Summer, 1936. *Naturalist London* 1936 pp. 219-220.

1429.—Välikangas, I. Die Schleiereule, *Tyto alba guttata* (Brehm) zum ersten Mal in Finnland angetroffen. *Ornis fenn. Helsingfors* 13 1936 pp. 1-6 fig. map.

1430.—Van Deventer, W. C. A winter bird community in western New York. *Ecology Brooklyn* 17 1936 pp. 491-499.

1431.—Van Tyne, J. *Spizella breweri taverneri* in Texas. *Auk* 53 1936 p. 92.

1432.—Van Tyne, J. The discovery of the nest of the Colima Warbler (*Vermivora crissalis*). *Misc. Pub. Mus. Zool. Univ. Mich.* no. 33 1936 pp. 1-11 col. pl. map 6 photos.

1433.—Van Tyne, J. and Koelz, W. Seven new Birds from the Punjab. *Occ. Pap. Mus. Zool. Univ. Mich.* no. 334 1936 pp. 1-6.

1434.—Vayson de Pradenne, A. Les figurations d'oiseaux dans l'art quaternaire. Ipek Berlin & Leipzig 1934 1935 pp. 3-17 4 pls.

1435.—Vecchi, A. Un caso di ginandromorfismo bipartito con mosaico somatico nel pollo. *Arch. zool. Torino* 23 1936 pp. 377-395 3 pls.

1436.—Vecchi, A. I carotinoidi dei crostacei per la colorazione dei tuerli d'uova di gallina. *N. Ann. Agricolt. Roma* 15 1935 pp. 473-502 col. pl.

Veil, C. *vide* Rochon-Duvigneaud.

1437.—Venables, L. S. V. & Laek, D. Further notes on territory in the Great Crested Grebe. *Brit. Bds.* 30 1936 pp. 60-69 map.

1438.—Verlaine, L. Les oiseaux briseurs de coquilles d'*Helix*. C.R. Congr. Sci. Bruxelles 1930 pp. 789-792.

1439.—Verrier, L. Recherches sur la vision des oiseaux diurnes. Bull. biol. France-Belg. 70 1936 pp. 197-232 18 figs.

1440.—Verrier, M. L. La rétine des oiseaux diurnes et la théorie de la dualité de la vision. C.R. Acad. Sci. Paris 202 1936 pp. 159-161.

1441.—Verrier, M. L. Pourpre et cellules visuelles de la fovea des Oiseaux nocturnes et des autres Vertébrés. C.R. Acad. Sci. Paris 202 1936 pp. 2012-2014.

Verrier, M. L. *vide* Escher-Desrivières.

1442.—Vesey-Fitzgerald, D. Birds of the Seychelles and other Islands included in that Colony. Pp. 2 + 14 Victoria Seychelles (Govt. Printer) 1936 4to.

1443.—Vevers, H. G. and Fisher, J. A census of Gannets on Ailsa Craig, with a new method of estimating breeding-cliff populations. J. Animal Ecol. London 5 1936 pp. 246-251 1 pl. 1 text-fig.

1444.—Vijverberg, J. De kleine pluivier (*Charadrius dubius*). Levende Nat. Amsterdam 40 1936 pp. 230-235 4 photos.

1445.—Vincent, J. The Birds of Northern Portuguese East Africa. Comprising a list of, and observations on, the collections made during the British Museum Expedition of 1931-32. Part X (concluded). Ibis 1936 pp. 48-125.

Vincent, J. *vide* Boulton.

1446.—Visser, J. A. und Rademaker, G. G. J. Die optischen Reaktionen grosshirnloser Tauben. III. Arch. neerl. Sci. La Haye (3) 20 1935 pp. 284-295 1 pl.

Vogué, G. de *vide* Jouard.

1447.—Völker, O. Ueber den gelben Federsfarbstoff des Wellensittichs (*Melopsittacus undulatus* (Shaw)). J. Orn. Berlin 84 1936 pp. 618-630 2 figs.

1448.—Vorobiew, C. A. Matériaux pour l'avifaune de la région du bas Volga et des steppes limitrophes. Astrakhanskii Goszapovednik Nauchnye Trudy Goszapovednikov, Moscow (1). 1 1936 pp. 3-52 12 photos. [In Russian, with French rés. N.V.]

1449.—Voronov, E. M. Essay of ecological analysis of ornithofauna of the Karachishsko-Krilovsky forestry. Proc. Zool. Biol. Inst.-Scient. Res. Charkov 1 1936 pp. 230-258. [Russian, with English rés.]

1450.—Waarts, A. In een Brabantisch moeras. Levende Nat. Amsterdam 41 1936 pp. 33-39, 65-69 7 photos.

1451.—Wachs, H. Photography in the wild-life conservation parks of Germany. Photogr. u. Forsch. Dresden 1935 4 pp. 111-119 9 photos.

1452.—Waddington, C. H. and Cohen, A. Experiments on the development of the head of the Chick embryo. J. exp. Biol. Cambridge 13 1936 pp. 219-236 2 pls. 20 text-figs.

1453.—Wagner, H. Investigaciones sobre reacciones olfatorias en las aves. An. Inst. Biol. Mexico 7 1936 pp. 109-117.

1454.—Wagner, H. O. Ueber den Jahresrhythmus verschiedener Grasmücken (*Sylvia*) in Mexico. Vogelzug Berlin 7 1936 pp. 109-112 1 fig.

1455.—Wagstaff, H. G. The Merlin (*Falco columbarius aesalon*). Proc. Coventry nat. Hist. Soc. 1 1936 pp. 121-126 photo.

1456.—Wahby, A. Quelques propositions pour l'étude de la migration des oiseaux. Alauda 8 1936 pp. 86-90.

1457.—Wait, W. E. Occurrence of *Capella megala* Swinhoe in Ceylon. Spolia zeylan. Colombo 19 1936 pp. 337-338.

Wait, W. E. *vide* Henry.

Wachholtz, R. *vide* Koehler.

1458.—Walde, K. und Neugebauer, H. Tiroler Vogelbuch. Pp. 248 Innsbruck (Mar. Vereinsbuchh.) 1936 8vo. [N.V.]

1459.—Walker, C. F. and Trautman, M. B. Notes on the Horned Larks of the central Ohio region. Wilson Bull. 48 1936 pp. 151-155.

1460.—Walker, E. B. The daybreak song of the Scissortail Flycatcher. J. Tenn. Acad. Sci. 11 1936 pp. 25-30.

1461.—Walkinshaw, L. H. Notes on the Field Sparrow in Michigan. Wilson Bull. 48 1936 pp. 94-101 photo.

1462.—Wallis, C. W. K. Additional notes on the fauna of Edgbaston Park. Proc. Birmingham nat. Hist. Soc. **16** 1936 pp. 173-174.

1463.—Wallis, H. M. Notes on Birds observed nr. Fez by Miss R. Cooper. Bull. Bt. Orn. Cl. **56** 1936 pp. 76-78.

Wang, H. *vide* Weiss.

1464.—Ward, J. H. Rook roost in the Manchester area. Naturalist London 1936 pp. 153-156.

Ward, J. H. *vide* Cramp.

1465.—Warren, D. C. and Hutt, F. B. Linkage relations of crest, dominant white and frizzling in the Fowl. Amer. Nat. **70** 1936 pp. 379-394.

1466.—Warren, D. C. and Scott, H. M. Influence of light on ovulation in the Fowl. J. exp. Zool. Philadelphia **74** 1936 pp. 137-156.

1467.—Warren, E. R. Charles Edward Howard Aiken. Auk **53** 1936 pp. 371-372.

1468.—Warren, E. R. Charles Edward Howard Aiken. Condor **38** 1936 pp. 234-238 portr.

1469.—Warwick, T. and Someren, V. D. van. The roding of the Woodcock (*Scolopax rusticola rusticola* Linné). Scot. Nat. Edinb. **1936** pp. 165-172 map.

1470.—Wasenius, E. Om de i Finland fauna typerna av gökägä och deras geografiska utbredning. Ornis fenn. **13** 1936 pp. 147-153 map. [Swedish, with German rés.]

1471.—Waterman, A. J. Experiments on young chick embryos cultured in vitro. Proc. Nat. Acad. Sci. Washington **22** 1936 pp. 1-3.

1472.—Waterston, G. Bird notes from Fair Isle. Scot. Nat. Edinb. **1936** pp. 61-64.

Waterston, G. *vide* Stout.

1473.—Watmough, W. The cult of the Budgerigar. Pp. viii + 296 6 col. pls. and other illustr. London (Cage Birds) [1936] 8vo.

1474.—Webb, C. S. The Gaboon Fiery-breasted Bush-Shrike. (*Malaconotus cruentus gabonensis*.) Avicult. Mag. (5) **1** 1936 pp. 1-2 col. pl.

1475.—Webb, C. S. Collecting Waterfowl in Madagascar. Avicult. Mag. (5) **1** 1936 pp. 36-39 2 photos.

1476.—Wedemeyer, K. O. Ueber das Vorkommen des Schreiadlers in der Provinz Hannover und ihren Grenzgebieten. Orn. Monatsb. **44** 1936 pp. 71-73.

1477.—Weiss, P. and Wang, H. Neurofibrils in living ganglion cells of the chick, cultivated and in vitro. Anat. Rec. Philad. **67** 1936 pp. 105-117 3 figs.

1478.—Weisz, T. Seeregenpfeiferbeobachtungen bei Szeged. Kócsag Budapest **8** 1935 pp. 66-68 photo. [Magyar, with German rés.]

1479.—Welter, W. A. Feather arrangement, development, and molt of the Long-billed Marsh Wren. Wilson Bull. **48** 1936 pp. 256-269 8 figs.

1480.—Wetmore, A. The number of contour feathers in Passeriform and related birds. Auk **53** 1936 pp. 159-169.

1481.—Wetmore, A. Birds of the northern seas. Nat. geogr. Mag. Washington **69** 1936 pp. 95-122 6 col. pls. many photos.

1482.—Wetmore, A. Two new species of Hawks from the Miocene of Nebraska. Proc. U.S. Nat. Mus. **84** 1936 pp. 73-78 2 figs.

1483.—Wetmore, A. A new race of Song Sparrow from the Appalachian region. Smithson. misc. Coll. **95** no. 17 1936 pp. 1-3.

Wetmore, A. *vide* Swann.

Wetmore, P. W. *vide* Morley.

1484.—Wetzel, R. Primitivstreifen und Urkörper nach Störungsversuchen am 1-2 Tage bebrüteten Hühnchen. Arch. Entw. Mech. Org. Berlin **134** 1936 pp. 357-465 108 figs.

1485.—Wexelsen, H. The frill-back Pigeon. J. Hered. Wash. **27** 1936 pp. 161-163 4 figs.

1486.—Weydemeyer, W. and Marsh, V. L. The Bird life of Lake Bowdoin, Montana. Condor **38** 1936 pp. 185-198 map 4 photos.

1487.—Wharton-Tigar, N. Breeding the Black-crowned Waxbill, *Estrilda nonnula*. Avicult. Mag. (5) **1** 1936 pp. 323-325 photo.

1488.—Whistler, H. Further observations from Albania. *Ibis* 1936 pp. 335–356.

1489.—Whistler, H. Arctic Tern in Kashmir. *Ibis* 1936 pp. 600–601.

1490.—Whistler, H. A new race of Horsfield's Scimitar Babbler. *J. Bombay nat. Hist. Soc.* 38 1936 p. 699.

Whistler, H. *vide* Ali.

1491.—Whistler, H. and Kinnear, N. B. The Vernay scientific survey of the Eastern Ghats. Ornithological Section. Part XIII. *J. Bombay nat. Hist. Soc.* 38 1936 pp. 418–437, 672–698.

1492.—White, C. M. N. The range of the Hebridean Hedge-Sparrow. *Brit. Bds.* 30 1936 pp. 83–84.

1493.—White, C. M. N. Note on the races of *Petrochelidon nigricans*. *Bull. Bt. Orn. Cl.* 56 1936 pp. 90–92.

1494.—White, C. M. N. Note on the names and subspecies of *Petroica phoenicea* and *P. rodinogaster*. *Bull. Bt. Orn. Cl.* 56 1936 pp. 126–127.

1495.—White, C. M. N. Note on Australian Swallows and on *Petroica vittata*. *Bull. Bt. Orn. Cl.* 57 1936 pp. 26–28.

1496.—White, C. M. N. On *Tribonyx ventralis* (Gould 1837). *Ibis* London 1936 p. 379.

1497.—White, C. M. N. *Petroica goodenovii* and its races. *Ibis* 1936 pp. 601–602.

1498.—White, H. C. The food of Kingfishers and Mergansers on the Margaree river, Nova Scotia. *J. biol. Board Canada* 2 1936 pp. 299–309 2 figs.

1499.—Whitlock, F. L. Albatrosses and Petrels in the South-West (W.A.). *Emu* 36 1936 pp. 14–15.

Whitlock, F. L. *vide* Whittell.

1500.—Whitlock, R. [edited by]. South-eastern Bird report. Being an account of Bird-life in Hampshire, Kent, Surrey and Sussex during 1935. Salisbury (Author) [1936] 8vo.

1501.—Whittaker, I. Twite as fosterer of the Cuckoo. *Brit. Bds.* 30 1936 pp. 80–81.

1502.—Whittell, H. M. Marsh Crake (*Porzana pusilla*). *Emu* 35 1936 pp. 359–360.

1503.—Whittell, H. M. and Whitlock, F. L. The Bristle-birds of Western Australia. *Emu* 35 1936 pp. 197–201 col. pl. 2 photos.

1504.—Wild, S. V. The vicissitudes of a small rookery. North-Western Nat. Arbroath 11 1936 pp. 8–17.

1505.—Wilder, G. D. Migration notes. China J. Shanghai 24 1936 pp. 96–99, 225–227, 369–373, 25 pp. 296–300.

1506.—Wilder, G. D. The problem of Elise's Flycatcher [*Muscicapa elisae*]. China J. Shanghai 25 1936 pp. 339–343 col. pl.

1507.—Wilkinson, A. S. Notes on *Urodynamis taitensis* and description of its egg. *Emu* 36 1936 p. 141 photo.

1508.—Williams, A. B. The composition and dynamics of a Beech-Maple climax community. *Ecol. Monogr. Durham N.C.* 6 1936 Birds pp. 373–386.

Williams, E. J. *vide* Pallister.

1509.—Williams, T. S. Bird life round Formby. North Western Nat. Arbroath 11 1936 pp. 17–20.

1510.—Williams, T. S. Bird life round Formby. Past and present distribution of the Mistle Thrush. North-Western Nat. Arbroath 11 1936 pp. 122–125.

1511.—Williamson, K. B. and E. S. Nesting habits of the Yellow-breasted Sunbird, *Leptocoma jugularis ornata* (Less.). *Malayan Nat. Singapore* 2 1928 pp. 53–54.

1512.—Willmer, E. N. and Jacoby, F. Studies on the growth of tissues in vitro. IV. On the manner in which growth is stimulated by extracts of embryo tissues. *J. exp. Biol. Cambridge* 13 1936 pp. 237–248.

1513.—Wilson, A. An unusual St. Helena Waxbill. *Avicult. Mag.* (5) 1 1936 p. 174, see also E. Hopkinson pp. 197–198.

1514.—Windle, W. F. and Austin, M. F. Neurofibrillar developments in the central nervous system of Chick embryos up to 5 days' incubation. *J. comp. Neurol. Philad.* 63 1936 pp. 431–463 6 figs.

1515.—Winterbottom, J. M. Bird population studies: an analysis of the avifauna of the Jeanes school station, Mazabuka, Northern Rhodesia. J. Animal Ecol. London **5** 1936 pp. 294–311 3 maps 6 text-figs.

1516.—Winterbottom, J. M. Notes sur quelques Veuves du nord de la Rhodésie. Oiseau Paris **6** 1936 pp. 77–85 1 plan

1517.—Winterbottom, J. M. Bird population studies. VIII. Travel counts in Central Africa. Ostrich Pretoria **7** 1936 pp. 24–31 map.

1518.—Winterbottom, J. M. Notes on Birds around Beira in 1935. Ostrich Pretoria **7** 1936 pp. 32–38.

1519.—Winterbottom, J. M. Five African voyages. Ostrich Pretoria **7** 1936 pp. 90–98.

1520.—Witherby, H. F. Numbers of Montagu's Harriers breeding in Britain in 1935. Bt. Bds. **29** 1936 p. 247.

1521.—[Witherby, H. F.] Recovery of marked birds. Brit. Bds. **29** 1936 pp. 277–283, 310–320, **30** pp. 74–79, 125–130.

1522.—Witherby, H. F. The "British Bird" marking scheme. Progress in 1935. Brit. Bds. **29** 1936 pp. 339–344.

1523.—Witherby, H. F. Southern Cormorants in Dorset, Suffolk, Sussex and Kent. Brit. Bds. **29** 1936 pp. 358–359.

1524.—Witherby, H. F. Avocet ringed in Rhone Delta found in Essex. Brit. Bds. **30** 1936 p. 50.

1525.—Witherby, H. F. Injury-feigning by Wood-Lark. Brit. Bds. **30** 1936 pp. 81–82.

1526.—Witherby, H. F. Scandanavian Jackdaws in Scotland. Brit. Bds. **30** 1936 p. 224.

1527.—Witherby, H. F. Remarks on the races of the Grey Wagtail (*Motacilla cinerea*). Bull. Bt. Orn. Cl. **56** 1936 pp. 98–99.

1528.—Witschi, E. The bill of the Sparrow as an indicator of the male sex hormone. 1. Sensitivity. Proc. Soc. exp. Biol. Med. **33** 1935 pp. 484–486.

1529.—Witschi, E. Effect of gonadotropic and oestrogenic hormones

on regenerating feathers of Weaver Finches (*Pyromelana. franciscana*). Proc. Soc. exp. Biol. **35** 1936 pp. 484–489 4 figs.

1530.—Witschi, E. Secondary sex characters in Birds and their bearing on the theory of evolution. Scientia Bologna **60** 1936 pp. 262–270.

1531.—Witschi, E. and Woods, R. P. The bill of the Sparrow as an indicator for the male sex hormone. II. Structural basis. J. exp. Zool. Philadelphia **73** 1936 pp. 445–459 2 pls.

1532.—Wladimirski, A. Experimentelle Untersuchung des Inkubationsprozesses der Vogeleier. Trans. Inst. biol. Péterhof nos. **13–14** 1935 pp. 3–18 6 figs. [Russian, with German rés.]

1533.—Wodzicki, K. Studies on the Stork (*Ciconia ciconia* L.) in Poland. III. The Stork in the voivodship of Lwów. Ochr. Przyr. Krakow **15** 1935 pp. 156–195 14 figs. and 2 maps. [Polish, with English rés.]

1534.—Woitkewitsch, A. A. Der Zustand des Endokrinsystems während des Prozesses der Gefiederentwicklung mit besonderer Berücksichtigung der Schilddrüse pp. 169–188 7 figs. New materials on the problem of the interrelationship of parts in the regeneration of plumage, pp. 189–201. Biol. Generalis Wien **12** 1936.

1535.—Woitkewitsch, A. A. Zur Analyse der Bedeutung der Schilddrüse im Entwicklungsprozess des Gefieders. Biol. Zbl. Leipzig **56** 1936 pp. 268–279 4 figs.

1536.—Woitkewitsch, A. A. Ueber den Zusammenhang von Anlage und Wachstum der Federn mit der Schilddrüse. Biol. Zbl. Leipzig **56** 1936 pp. 401–406 4 figs.

1537.—Woitkewitsch, A. A. Hypothyreoidisationsversuche an jungen Tauben. Z. vergl. Physiol. **23** 1936 pp. 237–246 3 figs.

1538.—Woitkewitsch, A. A. Entwicklungsgeschichtliche Untersuchungen an Vogelschilddrüse. Z. Zellf. mikr. Anat. **24** 1936 pp. 512–524 7 figs.

1539.—Woitkewitsch, A. A. und Nowikow, B. G. Die jahreszeitlichen Veränderungen einiger endokriner Organe und die Mauser bei *Passer domesticus* L. Biol. Zbl. Leipzig **56** 1936 pp. 279–287 4 figs.

1540.—Wolfe, L. R. The eggs of the Eyebrowed Sparrow-Hawk, Red-thighed Hawk and Brazilian Laughing Hawk. *Ool. Rec. London* **16** 1936 pp. 83–84.

1541.—Wolff, E. La double action-masculinisante et féminisante de l'androstérone sur le tractus génital des embryons de poulet. *C.R. Soc. Biol.* **121** 1936 pp. 1474–1476.

1542.—Wolff, E. Sur la réaction des canaux de Muller des oiseaux aux hormones sexuelle. *C.R. Soc. Biol.* **123** 1936 pp. 237–239.

1543.—Wolff, E. et E. Sur les différences de sensibilité des embryons femelles de deux races de poules à une hormone sexuelle : l'androstérone. *C.R. Soc. Biol. Paris* **123** 1936 pp. 1191–1193.

1544.—Wolff, E. et Ginglinger, A. Sur la transformation des poulets mâles en intersexués par injection d'hormone femelle (folliculine) aux embryons. *Arch. Anat. Hist. Embryol.* **20** 1935 pp. 219–278 16 figs.

1545.—Woodman, H. M. Rare birds of the Zande district. *Sudan Notes* **19** 1936 pp. 184–188.

1546.—Woodring, G. B. Waterfowl of Radnor Lake near Nashville, Tennessee. *J. Tenn. Acad. Sci.* **11** 1936 pp. 241–250 4 figs.

Woods, R. P. *vide* Witschi.

1547.—Woods, R. S. Choice of nesting sites by Hummingbirds. *Condor* **38** 1936 pp. 225–227 2 photos.

Woods, R. S. *vide* Dyer.

1548.—Worth, C. B. Summary and analysis of some records of banded Ospreys. *Bird-banding Boston* **7** 1936 pp. 156–160 2 maps.

1549.—Wüst, W. Schrifttum über das Vorkommen des Weissen Storches in Bayern rechts des Rheins. *Verh. orn. Ges. Bayern* **20** 1935 pp. 562–567 map.

1550.—Wüst, W. Das Ismaninger Teichgebiet des Bayernwerkes (A.G.). 5. Bericht : 1934. *Verh. orn. Ges. Bayern* **20** 1935 pp. 567–588 map. 6. Bericht : 1935, *ibid.* **21** 1936 pp. 47–57.

1551.—Yamashina, Y. *Chaetura caudacuta formosana* subsp. nov. *Orn. Monatsb.* **44** 1936 p. 90.

1552.—Yamashina, Marquis Y. *Passerella iliaca insularis* Ridgway obtained in Hondo, Japan. *Tori Tokyo* **9** 1936 pp. 119–123 1 fig. [Japanese only.]

1553.—Yamashina, Marquis Y. and Inoue, M. On the distribution of *Ceryle lugubris pallida* in Hokkaido. *Tori Tokyo* **9** 1936 pp. 124–126 map photo. [Japanese only.]

1554.—Yeates, G. K. On the fighting of Blackcocks. *Brit. Bds.* **30** 1936 pp. 34–37 6 photos.

1555.—Yen, K. Y. Révision du genre *Alcippe* Blyth, 1844. *Oiseau Paris* **6** 1936 pp. 213–232, 435–454.

1556.—Zangheri, P. Fauna di Romagna. Uccelli. *Riv. ital. Orn.* **6** 1936 pp. 1–22, 73–82, 149–162, 270–280.

1557.—Zdobnitzky, F. Ueber die Entdeckung der Kolonie des Nachtreihers (*Nycticorax n. nycticorax* L.) in Dürnholz a. Thaya in Sudmähren, pp. 118–120. Die Familie der Reiher (Ardeidae) in Südmähren. Insbesondere die Nachtreiherkolonie (*Nycticorax n. n.*) bei Dürnholz, pp. 121–133. *Verh. naturf. Ver. Brünn* **67** 1936.

1558.—Zebe, V. Zur Biologie des Schlangennadlers. *Ber. Ver. Schles. Orn.* **21** 1936 pp. 33–82 22 pls.

1559.—Zimmer, J. I. Studies of Peruvian Birds. XIX. Notes on the genera *Geositta*, *Furnarius*, *Phleocryptes*, *Certhiaxis*, *Cranioleuca* and *Asthenes*. *Amer. Mus. Nov.* no. **860** 1936 pp. 1–17.

1560.—Zimmer, J. T. Studies on Peruvian Birds. XX. Notes on the genus *Synallaxis*. *Amer. Mus. Nov.* no. **861** 1936 pp. 1–26.

1561.—Zimmer, J. T. Studies of Peruvian Birds. XXI. Notes on the genera *Pseudocolaptes*, *Hylocistis*, *Hylocryptus*, *Thripadectes* and *Xenops*. *Amer. Mus. Nov.* no. **862** 1936 pp. 1–25.

1562.—Zimmer, J. T. Studies of Peruvian Birds. XXII. Notes on the Pipridae. *Amer. Mus. Nov.* no. **889** 1936 pp. 1–29.

1563.—Zimmer, J. T. Studies of Peruvian Birds. No. XXIII. Notes on *Doliornis*, *Pipreola*, *Attila*, *Laniocera*, *Rhytipterna* and *Lipaugus*. *Amer. Mus. Nov.* no. **893** 1936 pp. 1–15.

1564.—Zimmer, J. T. Studies of Peruvian Birds. No. XXIV. Notes on *Pachyramphus*, *Platypsaris*, *Tityra* and *Pyroderus*. Amer. Mus. Nov. no. 894 1936 pp. 1-26.

1565.—Zimmer, K. Methoden zur Messung der Atemfrequenz bei Vögeln. SitzBer. Ges. naturf. Fr. Berl. 1936 pp. 142-156.

1566.—Zimmermann, A. Ueber die Luftsäcke des Huhnes. Kócsag Budapest 8 1935 pp. 24-29 1 fig. [In German.]

1567.—Zimmermann, R. Ein schwarzgeflecktes Ei der Tafelente, *Nyroca ferina* (L.), und einige Beobachtungen am Nester der letzteren. Beitr. Fortpfl.-biol. Vög. Berlin 12 1936 pp. 96-98.

Zimmerman, R. *vide* Meise.

1568.—Zotta, A. R. Sinopsis de los Ciconiiformes argentinos. Hornero B. Aires 6 1936 pp. 240-248 4 figs.

1569.—Zotta, A. Sobre el contenido estomacal de aves argentinas. Hornero B. Aires 6 1936 pp. 261-270.

1570.—Zotta, A. R. Notas ornitológicas. Hornero B. Aires 6 1936 pp. 289-292.

Zujko, A. J. *vide* Bissonnette.

II.—SUBJECT INDEX.

For full reference see Titles.

COMPREHENSIVE AND GENERAL.

History.—Birds of Egyptian papyri, COBIANCHI, 256; Sacred animals of early Egypt, MONTEIRO, 971; Birds of classical Greek writers, THOMPSON, 1376; Pictet's 18th century notes on Lapland and Russia, PONCY, 1098; The 1618 Crossbill invasion of France, POISSON, 1095; Historical birds in quaternary art, VAYSON DE PRADENNE, 1434; Owl in Chinese art, SOWERBY, 1284; Swan-marks in Hertfordshire, N. F. TICEHURST, 1389; Early American bird illustrations, E. G. ALLEN, 19; Historical descriptions of N. American Birds, STEVENS, 1323.

Biography.—J. R. Audubon, ROURKE, 1182; A. E. Brehm, HILDEBRANDT, 588; H. Exton, ROBERTS, 1154; T. L. T. Kumlien, TAYLOR, 1368; J. D. Petersen, HELMS, 568; Sir A. Smith, ROBERTS, 1153.

Obituaries.—W. L. Abbott, STONE, 1328; C. E. H. Aiken, WARREN, 1467, 1468; M. Bartels, BROUWER, 171; F. E. Blaauw, BROUWER, 170; HEINROTH, 564; SCLATER, 1231; R. C. Bolster, ROBERTS, 1158; M. Boubier, MEYLAN, 937; L. Döderlein, KREIG, 740; W. F. Eaton, URNER, 1426; P. K. Kozlov, TICEHURST, 1381; T. N. Krabbe, HELMS, 567; K. Lambrecht, KLEINER, 715; P. LOWE, 835; J. D. D. La Touche, PALMER, 1061; L. Lavauden, DELACOUR, 328; JOUARD, 666; W. R. McLennan, D'OMBRAIN, 360; M. A. Menzbier, DÉMENTIEFF, 341; GROTE, 508; P. G. Ralfe, CUBBON, 281; O. Reiser, HELLMAYER, 566; KLEINSCHMIDT, 716; SASSI, 1199; SCHUSTER, 1219; F. J. W. Schmidt, LEOPOLD, 782; H. H. Slater, C. B. TICEHURST, 1384; Baron Snouckaert van Schauburg, DE BEAUFORT, 64; JOUARD, 672; H. S. Swarth, LINSDALE, 801; MATTHEWS, 907; A. Thorburn, GLADSTONE, 462; LODGE, 816.

General Works.—British Birds, HALL, 526; JOY, 685; Firth of Clyde area, MCWILLIAM, 865; Suppl. to Hartert's V. p. F., HARTERT, 548; Check list, Birds of France, MAYAUD & OTHERS, 913; Birds of Holland (completed), v. OORT, 1048; German Birds, FRIELING, 426; PFEIFER, 1080; Swedish Birds, RENDAHN, 1140; Russian, Europe and Asia, BUTURLIN & DEMENTIEV, 193; Japan, TAKA-TSUKASA, 1363; North Africa, HELM DE B., 560; Egypt, GREAVES, 486; West Africa (vol. iv), BANNERMAN, 40; S. Rhodesia (vol. iv), PRIEST, 1112; South Africa, GILL, 456; Malaya (vol. iii), ROBINSON & CHASEN, 1164; Norfolk and Lord Howe Is., MATTHEWS, 397; Catalogue Bds. of Americas (Pt. IX), HELLMAYER, 565; West Indies, BOND, 129; Oceanic Birds, MURPHY, 1006; Monograph Birds-of-Prey, SWANN, 1357; Migration, THOMSON, 1377; Flight, AYMAR, 32; Pathology, REIS & NOBREGA, 1136; Classical Greek Birds, THOMPSON, 1376.

Popular Works, Sketches and Addresses.—General, ALEXANDER, 11; British bird life, BLAND, 114; GORDON,

469; LOCKLEY, 813; F. A. LOWE, 833; RICHMOND, 1145; The Baltic Eiders, EEKE, 382; North America, SUTTON, 1346; Naturalist in the laboratory, HOPKINS, 606.

Bibliography.—French ornithology, BONNET DE P., 137; LEGENDRE, 780; Famous Bird pictures, NISSEN, 1027, 1028; The Crane in Bavaria, WÜST, 1549; L. Wolf's Calendar, 1648, LA COUR, 756; The works of A. E. Brehm, HILDEBRANDT, 588; Kjaerbølling, ANKER, 25; J. D. Petersen, HELMS, 568; H. S. Swarth, LINSDALE, 801.

Institutions and Museums.—Catalogue Nantes Museum, MARCHAND & KOWALSKI, 883; Carnegie Museum at Pittsburg, TRIMBLE, 1405; Directory of Bird-ringing Stations, CHAPPALLIER, 227; Report of the Skokholm (Pembroke), Bird Station, LOCKLEY, 814; Isle of May Station, MIDLOTHIAN ORN. CL., 946; Heligoland, DROST, 364; Rositten, SCHÜZ, 1226; Aland Is., LUNDBERGH, 840.

Methods and Technique.—Taxidermy, SERIÉ, 1240; Estimating populations, VEVERS & FISHER, 1443; Measuring restlessness in captive birds, SHIVONEN, 1264; For respiration physiology, ZIMMER, 1565; Making sperm smears, MUNRO, 1005; Trapping and caring for Hummingbirds, CORDIER, 267; Bird-catching among the Japanese Ainu, INUKAI, 638.

Economics.—Russian forests, KSTIAKOVSKY, 743; India, ALI, 13; Argentina, MARELLI, 884; Owls in the Rocky Mts., KELSO, 701; Weavers and rice destruction in Africa, FUGGLES-COUCHMAN, 434; Rooks in Russia, SAMORODOFF, 1196; Importance of *Collocalia* nests in Siam, GILES, 455; Destruction of *Doryphorus*, CHAPPELLIER & RAUCOURT, 228; Woodpeckers and damage to Pine forests, LIÉNHART, 790; Falconry with Eagles in Turkestan, DEMENTIEV, 445.

Conservation.—General, MADON, 868; TURNER, 1421; In London Parks, DUFF, 367; Norfolk, LONG, 820; Germany, HÄHNLE, 522; WACHS, 1451; Poland, NIEZABITOWSKI, 1024; WODZICKI, 1533; California, CHAMBERS, 219; *Colinus* in U.S.A., ERRINGTON & HAMERSTROM, 401; Waterfowl in U.S.A., LINCOLN, 798; PIRNIE, 1089; SUGDEN, 1343.

Naturalization.—Exotic Birds in Chile, REED, 1134; SCHNEIDER, 1210.

Domestication.—Tinamous in Argentina, LIEBERMANN, 789.

Aviculture.—Various notes, CHAWNER, 234; DELACOUR, 325, 326, 327, 331, 333; EZRA, 407; HOPKINSON, 607; SETH-SMITH, 1242; STEMMER-MORATH, 1321; Waterfowl, PIRNIE, 1089; Owls, MUNOZ D. C., 993; Parrots, MANNERING, 878; Budgerigar (*Melopsittacus*), TRELOAR & HOCKING, 1404; WATMOUGH, 1473; Hummingbirds, CORDIER, 267; SCHMIDT-HOENSDORF, 1209; Rearing Gulls for Trematode investigation, ROTHSCHILD, 1181; Diseases of Cagebirds, GRAY, 483.

Nomenclature.—Critical notes, MATTHEWS, 908.

Vernacular Names.—In Sarawak, BANKS, 38, 39.

Terminology.—Of geographical variation, RENSCH, 1142.

Classification and Taxonomy.—A natural system, v. BOETTICHER, 123; Based on gametic relationships, GHIGI, 449; Classification of the Ducks, DELACOUR, 330; The Formen-Kreis theory, STRESEMANN, 1333; The species and subspecies question, DEMENTIEFF, 346; HEIM DE B., 558; RELYEA, 1138; SAUNDERS, 1200; Problem of field-identification, GRISCOM, 495.

Phylogeny.—General, MIRANDA-RIBEIRO, 954; Colour and pattern in feathers, v. D. ELDERN, 389; Based on the structure of the bony labyrinth, TURKEWITSCH, 1418; Of Galliformes based on the chromosomes, SOKOLOW & OTHERS, 1275.

ANATOMY.

General Anatomy of Special Forms.—*Philohela*, PETTINGILL, 1078; *Phytotoma*, KÜCHLER, 744.

Plumage and Epithelial Structures.—Scales, hairs and feathers, MIRANDA-RIBEIRO, 954; Feathers, colour and pattern evolution, v. d. ELDERN, 389; FRIELING, 429, 430; HOSKER, 613; Fossil feathers, BACHOFEN-ECHT, 33; Eclipse-plumage of Ducks, PERRY, 1073; Number and weight of contour

feathers, WETMORE, 1480; Pterylography, *Telmatodytes*, WELTER, 1479; Skin pigmentation in *Dendrocopus*, DZIRNE, 379; The Bucconid bill, v. BOETTICHER, 121; Nasal glands, TECHNAU, 1369; Functional anatomy of wing, SY, 1353; Kingfisher foot, G. STEINBACHER, 1313; Spurs and sex, TAIBEL, 1361.

Brain and Nervous System.—Brain cortex, CRAIGIE, 279; In *Struthio*, CRAIGIE, 278; Middle brain, KUHLENBECK, 745; Cranial nerves, *Cypselus*, LORENZ, 831; Spinal cord and nerve-roots, HUBER, 619; Truncus collateralis thoracis, KOSTINOWITSCH, 730; Innervation of intestine and cloaca, ABRAHAM, 1, 2; Cytology ganglion cells, WEISS & WANG, 1477.

Sense Organs.—Eye (general), VERRIER, 1439; Retina and visual purple in nocturnal birds, VERRIER, 1440, 1441; Eye colour in Pigeons, LIÉNHAUT, 793; Orbital glands, LOEWTHAL, 818.

Osteology.—General, MARINELLI, 887; Bony labyrinth of ear, TURKEWITSCH, 1418, 1419, 1420; Condylar apophysis of the humerus, BAUDOUIN, 58; Sacrum, RYDZEWSKI, 1187; Ossification of the tendon of patagium, MATTHEWS, 898.

Osteology of Special Forms.—*Phalacrocorax*, BAUDOUIN, 57; Skull of *Picidae*, KRASSOWSKY, 732, 734.

Myology.—Bill and neck muscles in *Rynchops*, FRIELING, 428.

Alimentary Canal.—In Humming-birds, STEINBACHER, 1312; Tongue, *Anser*, GRESCHIK, 490; Esophagus and its glands, KADEN, 690; Pyloric glands, *Buteo* and *Bubo*, BROUSSY, 166.

Respiratory Organs.—Air sacs, ZIMMERMANN, 1566.

Urinogenetal Organs.—Abnormal testis, *Turdus*, UNGER, 1424; Copulatory organ, *Gallus*, STEFANELLI, 1902; Egg-membrane, MORAN & HALE, 975.

Glands.—Uropygial glands, HSU, 618.

Cytology.—Chromatophores in testis of Lagopidae, MATHIS, 909; No. of chromosomes, UNGER, 1425; In *Gallus*, SOKOLOW & OTHERS, 1275; AFONIN,

6; In Ducks, ALIKHANIAN, 17; SOKOLOWSKAJA, 1277; In Pigeons, HANCE, 533.

Growth.—Heterogonic growth in Creeper Fowl, LERNER, 783.

PHYSIOLOGY.

Plumage.—Effects of thyroid on feather growth, HOSKER, 612; LARIOV, 763; WOITKEWITSCH, 1534-1538; WOITKEWITSCH & NOWIKOW, 1539; Temperature and sex hormones effect, STREICH & SVETOSAROV, 1332.

Nervous System and Sense Organs.—Brain, TEN CATE, 211; Gastric nerves, NOLF, 1030, 1031, 1032; Problem of vision, ESCHER-DESRIVIERES & VERRIER, 402; VERRIER, 1439, 1440, 1441; Olfactory senses, WAGNER, 1453.

Respiration and Circulation.—Respiration, DOTTERWEICH, 362; Control of respiration, SAALFELD, 1188; Respiration rhythm, ZIMMER, 1535; Temperature regulation, SAALFELD, 1189; Effects of temperature on heart beat, ROMANOFF & SOCHEN, 1170; Specific gravity of blood, NICE & FISHMAN, 1016.

Metabolism and Assimilation.—In Pigeons, LECOQ & JOLY, 778; Carbohydrate metabolism, SPRAGUE & IVY, 1292; Gizzard, BROUSSY, 167; CAREY, 206; Vitamin requirements of Chicks, BIELY & CHALMERS, 97.

Excretion.—Nitrogen in fasting birds, FRITZ, 432.

Muscle and Movements.—LOEBENSTEIN, 817; Eye-muscles, ROCHON-DUVIGNEAUD & VELL, 1166; Problems of flight, MAGNAN & GIREED, 871; SY, 1358.

Reproduction.—Sex cycle in *Sturnus*, BISSONNETTE & ZUJCO, 107; In *Passer*, ALLENDER, 22, 24; Oviduct, ASMUNDSON & BURMESTER, 30; Motility of spermatozoa, GRODZINSKI & MARCHLEWSKI, 502; Determination and inversion of sex, DANTCHAKOFF, 300, 302; NISHIDA, 1026; WOLFF & GINGLINGER, 1544.

Endocrines and Other Glands.—Thymus, TICHOMIROW, 1390; Pituitary, RIDDLE & OTHERS, 1146; Nasal glands, TECHNAU, 1369.

Miscellaneous.—Incubation, WLADIMIRSKI, 1532; Crop-milk of Pigeons, PATEL, 1068; Lymphoid tissue in bone marrow, JORDAN, 664.

Experimental Physiology; Grafts.—NOWIKOW, 1037; SANDSTROM, 1197.

In Vitro and Vital Staining.—BURGARD, 184; DAVID, 310; MEYER, 935, 936; WATERMAN, 1471; WILLMER & JACOBY, 1512.

Castration and Similar Experiments.—NOWIKOW, 1038; PADOA, 1057; Semi-castration, BELSKY, 69; Brain extirpation, VISSER & RADEMAKER, 1446.

Effect of Light and other Rays.—Light and sexual activity, BENOIT, 73, 74; BISSENETTE & CSECH, 105, 106; CLARK & OTHERS, 247; IWANOWA, 644; KIRSCHBAUM & RINGOEN, 711; v. OORDT & JUNGE, 1047; RILEY, 1147; WARREN & SCOTT, 1466; X-ray effects, ESSENBERG, 404.

Effects of Various Injections.—Thyroxin, MILLER, 949; Folliculin, BERDNIKOFF, 78; DANTSCHAKOFF, 303, 304, 305, 306; Androsterone, WOLFF, 1541, 1543; Prolaction, BURROWS & BYELY, 189; Various Hormones, AGOSTINI, 7; BRENNEMAN, 156; WITSCHI, 1529, 1530; WOLFF, 1542; Sex hormones and bill colour in *Passer*, WITSCHI, 1528; WITSCHI & WOODS, 1531.

Miscellaneous; Experimental Physiology.—Precipitate method and Duck hybrids, SOKOLOVSKAIA, 1276; Supra-renal virilism, MCGOWAN, 851; Parabiotic twins and cell individuality, IRWIN & HILL, 641.

Biochemistry.—Pigeon muscle, LECOQ & DUFFAN, 777; Oestrin and androsterone, CALLOW & PARKES, 197; Porphyrin of egg, HUMANS v. d. B. & GROTEPASS, 587; Yellow pigment, *Melospittacus*, VOLKER, 1447; Yellow of egg yolk, VECCHI, 1436; Calcium in Chick's blood, PAUL, 1069.

Biophysics.—Blue colour in plumage, GOWER, 471; Dynamics of a flight of Cranes, SHOULEJIN, 1259; Weight and wing surface aerodynamics, GLADKOFF, 459; Strength and permeability of egg-membranes, MORAN, 974; MORAN & HALE, 975; SALVATORI, 1194.

Biomechanics.—Bill and neck *Rynchops*, FRIELING, 428; Wing movement, SY, 1353; Growth in Creeper Fowl, LERNER, 783; Measurements of subspecies, RELYEA, 1138.

EMBRYOLOGY.

General.—PORTMANN, 1104; Of *Dromiceius*, STEINER, 1316.

Early Stages.—First two days in Chick, WETZEL, 1484; Gastrulation, PASTEELS, 1067; Velocity of growth, early stages, ORRÚ, 1053; Vital-staining in early stages, STOCKENBERG, 1325; Early stages of feathering, ROSSI & BORGHESI, 1179; Organ-forming areas, RAWLES, 1130.

Plumage.—HOSKER, 613; JÜHN & FRAPS, 686; Feather development and endocrines, WOIKEWITSCH, 1534, 1535, 1536.

Nervous System.—Brain, WINDLE & AUSTIN, 1514; Middle brain, KUHNENBECK, 745; Medullary plate and provertebrae, GRÜNWALD, 512; Innervation of heart, SZEPSENWOL & BRON, 1360; Eye-forming capacity of blastoderm, L. F. CLARKE, 251.

Circulation and Respiration.—Erythrocytes, DAWSON, 317; Veins, GRODZIŃSKI, 501; CO₂ requirements of Chick, PORTMANN & JECKLIN, 1105.

Nutrition.—Micromelia and nutrition deficiency, LANDAUER, 759; Crop, MAYBERRY, 914; Liver-forming potencies, KUME, 748.

Endocrines.—Thyroid, BENAZZI, 70; WOIKEWITSCH, 1538; Feather development and endocrines, WOIKEWITSCH, 1534, 1535, 1536; Histogenesis of thymus, PIROCCHI, 1090.

Gonads.—General, DENNIS, 349; DANTSCHAKOFF, 307; Secretory activity of oviduct, ASMUNDSON & BURMESTER, 30; Chorioallantois, ARANJO, 27; Sexual cycle in *Passer*, ALLENDER, 22, 23; Sex determination and inversion, DANTSCHAKOFF, 300.

Miscellaneous.—Incubation and atmospheric pressure, CUNNINGHAM, 282; Orientation in Duck's egg, MOTOHASHI, 990; Racial characters in Fowls, SOMALHAUSEN, 1280; Mechanism of development of secondary sexual characters, CHAMPY, 220.

Experimental Embryology.—Brain tissue culture, MORITA, 983; Effect of temperature on developing eggs, ROMANOFF, 1168; Action of Soudan IV, BURNIER & SAUSER-HALL, 187; Effects of peroxydasis, SPIRITO, 1291; Effects of centrifuging, BEAMS & KING, 62; Head of the Chick, WADDINGTON & COHEN, 1452; Artificial insemination, QUINN & BURROWS, 1119; Electric conductivity, ROMANOFF & GROVER, 1169; Phagocytosis in Chick, HEINE, 563.

Experimental Teratology.—Twinning, HOOVER, 605; MORITA, 984; Artificial monsters, FRÖHLICH, 433; TUR, 1416, 1417.

Biochemistry.—Carbohydrate breakdown, NEEDHAM [& OTHERS], 1014.

ETHOLOGY.

General Habits and Local Field Observations.—Norway, BLAIR, 109; Russia, GROTE, 507; LOUKACHKINE, 832; Baikal region, Siberia, STEGMANN, 1304; French Sudan, PALUDAN, 1066; South Africa, ROBERTS, 1151, 1153; S. Rhodesia, TOWNLEY, 1402; Port. E. Africa, VINCENT, 1445; Zanzibar, PAKENHAM, 1059; Tanganyika Territory, MOREAU, 981; Bombay and South India, ALI, 14; ALI & ABDULALI, 16; Simalur I. nr. Java, JUNGE, 689; New Guinea, STEIN, 1308;

General Habits of Single Species or Groups.—S. American Gamebirds, KRIEG & SCHUMACHER, 741; *Colinus*, ERRINGTON & HAMERSTROM, 401; *Larus*, KIRKMAN, 710; TINBERGEN, 1393; *Recurvirostra*, MAKINK, 874; *Capella* at Hong Kong, PEREIRA, 1072; *Philotela*, PETTINGILL, 1078; *Falco* MOUILLARD, 991; *Pernis*, CLAUDON, 252; *Bubo*, SCHNURRE, 1211; *Asio*, MOUILLARD, 992; *Hemiprocne*, LOWTHER, 838; *Picus*, JOURDAIN, 683; LINDSALE, 802; BOYD, 147; STONER, 1328; *Troglodytes*, HARRISSON & BUCHAN, 546; *Phylloscopus*, PRENN, 1110; *Lanius*, SCHREURS, 1217; *Aegithalus*, PAECHNATZ, 1058; *Chalcomitra*, COWLES, 275; *Lullula*, KOCH, 722; *Zonotrichia*, BLANCHARD, 111; *Spizella*, WALKINSHAW, 1461; *Ammodramus*, W. H. NICHOLSON, 1020; *Corvus*, J. W. CAMPBELL, 199; BUR-

KITT, 185; JOURDAIN, 681; *Pica* HUGUES, 624; *Cyanocitta*, D. J. NICHOLSON, 1018.

Miscellaneous and Special Habits.—Anomalous Woodpeckers, LÖNNBERG, 828; Diving habits of young Ducks, GRENQUIST, 489; Drinking habits in Sahara, HEIM DE B. 560 (p. 223); Shell-smashing, VERLAINE, 1438; Roosting habits, *Apus*, TUCKER, 1409; Roosting in Glasshouses, BUNYARD 182; Roosting, *Certhia*, KENNEDY, 703; Home-finding, RÜPPELL, 1184; Injury-feigning, F. H. ALLEN & OTHERS, 20; CHISHOLM, 237; JOURDAIN, 679; WITHERBY, 1525; Use of Ants to get rid of vermin, ADLERSPARRE, 5; ALI, 15; STRESEMANN, 1337.

Territorial Habits and Instincts.—General discussion, MEISE, 928; TINBERGEN, 1394; In *Podiceps*, VENABLES & LACK, 1437; *Larus*, THJSSSE & TINBERGEN, 1374; *Gallinula*, MORLEY, 985.

Food Habits; General.—Birds and Butterflies, CARPENTER, 207; HEIKERTINGER, 556; Salt water drinking, SCHILDMACHER, 1204; Diet and colour, RATCLIFFE, 1129; Food of migrating Waders, GOETHE, 467; Insect food and mimicry in Australia, McKEOWN, 855; Of Humming birds, STEINBACHER, 1312; Mollusca feeding Birds, KLEINER, 714.

Food Habits; Local Observations.—British Is., CAMPBELL, 200; British Owls, LANCUM, 758; France, GUÉRIN, 514; French Ducks, MADON, 867; German Owls, SCHAEFER, 1202; In Spitsbergen, HARTLEY & FISHER, 550; STOTT & OTHERS, 1330; Australia, LEA & GRAY, 775; Argentina, ZOTTA, 1569; Arctic America, COTTAM, 270.

Food Habits; Single Species or Groups.—*Podiceps*, LANDE & SIGALAS, 760; *Tetrao*, LOBATSCHOW & STSCHERBAKOW, 812; American Tetraonidae, SCHMIDT, 1206; *Fulica*, COLLINGE, 258; *Ionornis*, McILHENNY, 853; *Larus*, JIRSIK, 655; *Aramus*, COTTAM, 271; HARPER, 542; *Egretta*, MICHAEL, 940; *Anas*, MUNRO, 1000; *Mergus*, MUNRO & CLEMENS, 1003; German Birds of Prey, SCHNURRE, 1213; *Accipiter*, L. TINBERGEN, 1392; *Circus*, ERRINGTON & BRECKENRIDGE, 400;

C. B. TICEHURST, 1380; *Falco*, R. M. BOND, 133, 135; *Haliaeetus*, F. R. SMITH, 1270; *Milvus*, PTOUCHENKO, 1115; OWLS, SCHAEFER, 1202; *Asio*, TOMKINS, 1400; *Athene*, HIBBERT-WARE, 583; *Bubo*, MARZ, 893; *Tyto*, BETTS, 95; *Mergus*, WHITE, 1498; *Podargus*, SERVENTY, 1241; Nestling *Hirundo*, THOMAS, 1375.

Migration; General Works and Problems.—General, WAHBY, 1456; LINCOLN, 799; Review of recent progress, THOMSON, 1378; Critical remarks on current theories, v. DOBBEN, 356; Critical notes on flying routes, GEYR v. S., 446; Weather effects, GARNETT, 441; Phenology and migration, SHITKOV, 1258; Restless period in caged birds, SIIVONEN, 1263; SIIVONEN & PALMGREN, 1265; Migration rhythm of European birds in captivity in Mexico, WAGNER, 1454; Direction finding in night migrants, PALMGREN, 1062; Food of migrants in Heligoland, GOETHE, 467; Trans-Atlantic flights, LINCOLN, 795; Trans-Pacific flights, BROOKS, 164; FALLA, 410.

Migrations; Local Observations.—British Is., MARGARY, 886; MACDONALD, 849; WHITLOCK, 1500; Essex, GLEGG, 465; Yorkshire, EDWARDS, 384; Lincolnshire, HAIGH & PYE, 523; Pembrokeshire, MACKWORTH-PRAED & GILBERT, 857; France, DELAMAIN & JOUARD, 335; Belgium, DUPOND, 372; Holland, BROUWER & v. DOBBEN, 172; v. DOBBEN, 355, 357; Sweden, LÖNNBERG, 822; Finland, PUTKONEN, 1118; Poland, MICZYNSKI, 942; China, WILDER, 1505; Japan, HANAOKA, 532; United States, LINCOLN, 796, 799; Kansas, HALL, 527; New Jersey, ALLEN & PETERSON, 21; New York, GRISCOM, 498.

Migration and Invasion; Single Species or Groups.—*Coturnix*, DUSE & OTHERS, 377; *Calidris*, DATHE, 308; *Vanellus*, TEKKE, 1370; *Himantopus*, BROUWER, 168; *Recurvirostra*, WITHERBY, 1524; *Grus*, LIBBERT, 788; *Ciconia*, DELAFOSSE, 334; GEYR v. S., 445, 447; PITMAN, 1092; *Ardea*, TEN KATE, 694; KNABE, 719; *Chen*, SNYDER & SHORTT, 1273; *Buteo*, BURR, 188; *Falco*, HEIDEMANN, 555; *Haliaeetus*, WORTH, 1548; *Speotyto*, BRECKLE, 155; *Alcedo*, STEGMANN, 1307; *Hirundo*, DAVIS, 314; SPEVA-

ZEK, 1290; *Turdus*, EICHLER, 388; *Luscinia*, GROTE, 510; DROST, 363; *Lanius*, ECCKE, 383; *Loxia*, JOUARD, 671, 673; MOLTONI, 962; *Chloris*, EHLERS, 387; *Passerculus*, SWARTH, 1354; *Plectrophenax*, MAYAUD, 910; *Spizella*, HEDWEILLER, 582; *Agelaius*, PACKARD, 1055; *Sturnus*, BOUMA & KOCH, 145; KRÄTZIG, 735, 736, 737.

Bird-ringing and Recovery of Ringed Birds.—General, CHALAUZ, 218; MOUNTFORT, 994; World-list of Ringing Stations, CHAPPELLIER, 227; Ringing and recoveries in British Is., WITHERBY, 1521, 1522; London area, HALE, 525; Belgium, DUPOND, 373; Holland, HAVERSCHMIDT, 553; JUNGE, 688; TEN KATE, 693; Sweden, LÖNNBERG, 825; MAGNUSSON, 873; Iceland, BJÖRNSSON, 108; Germany, MERKEL, 934; SCHÜZ, 1227; STEINBACHER, 1310; Poland, DOMANIEWSKI & KRECZMER, 359; Italy, MOLTONI, 963; India, PRATER, 1109; United States, LINCOLN, 797.

Flight.—Popular illustrated work, AYMAR, 32; Problem of weight and flight, GLADKOW, 460; Flight in the Waders, KIRCHNER, 709; Roding flight of Woodcock, WARWICK & v. SOMEREN, 1469; Accipitres, POUNDS, 1107; Humming birds, STEINBACHER, 1312.

Sexual Relations.—Age of breeding in small birds, STEINBACHER, 1314; Polyandry and polygamy, RINGLEBEN, 1150; Polygamy in *Cygnus*, DEWAR, 350; PORTIELJE, 1102; Courtship and display in *Tetrao*, *Lyrurus*, HASSFURTHER, 551; *Calidris*, CHRISTOLEIT, 243; *Nannopterum*, DAVIS & FRIEDMANN, 316; *Milvus*, SICK, 1260; *Colaptes*, NOBLE, 1029; *Menura*, LITTLEJOHNS, 805; *Chiroxiphia*, v. IHERING, 631; *Paradisidae*, MANSON-BAHR, 879; *Lophorina*, SETH-SMITH, 1243.

Social Relations.—*Larus*, TINBERGEN, 1395.

Bird and Flower Relations.—PICKENS, 1085.

Nidification and Oology; General.—Breeding habits in alpine regions, HEILFURTH, 557; Habits of downy young and nestlings, LINDALE, 800;

Variation in British Birds' eggs, BUNYARD, 181; Two different spp. of Hawk in one nest, NEWTON, 1015; Insect-Bird nesting associations, MOREAU, 978; Fixed breeding seasons in E. African forest, MOREAU, 980; Analysis of structure of Birds' nests, HALLADIN, 528; *Protocalliphora* (Dipt.) infesting Birds' nests, MASON, 895; Effects of light on breeding period, BISSENETTE, 103, 104; Egg-laying during migration, BURLEIGH, 186.

Nidification; Local Observations.—IRELAND, MALCOMSON, 875; FRANCE, DELAMAIN & JOUARD, 335; POMERANIA, ROBIEN, 1162; NORWAY, BLAIR, 109; ALAND IS., BOLLVIK, 128; N. RHODESIA, LEES, 779; S.W. AFRICA, HOESCH, 591; ORANGE FREE STATE, JOHNSON, 657; ZULULAND, ROBERTS, 1151; PORTUGUESE E. AFRICA, VINCENT, 1445; TANGANYIKA TERR., F. COUCHMAN, 435; KENYA AND UGANDA, PETERS & LOVERIDGE, 1076; ABYSSINIA, CHEESMAN & SCLATER, 235; INDIA, ALI, 14; ALI & ABDULALI, 16; MALAY PENINSULA, MADOC, 866; JAVA, BOUMA, 144; HOOGERWERF, 603; BORNEO, COOMANS DE R., 266; ARGENTINA, DAGUERRE, 284; URUGUAY, B. G. HARRISON, 544; TRINIDAD AND TOBAGO, BELCHER & SMOOKER, 68; SOUTH ORKNEYS, ARDLEY, 28; GREENLAND, DALGETTY, 291.

Nidification; Single Species.—BELCHER, 66; BIDDULPH, 96; BLANCHET, 112; CALDWELL, 195; CHANDLER, 221; CONGREVE, 262, 263; COWLES, 275, 276; DATHE & PROFFT, 309; DAVIDSON, 312; DE GARIS, 320; DICKINSON, 351; DIXON, 353; DUBOIS, 366; FLEAY, 419, 420; GILBERT, 452-454; GREAVES, 484-485; HAMERSTROM, 530; HARPER & DRABBLE, 540; HARROWES, 547; HENDRICKSON, 570; HENNINGS, 572; HESSE, 580; HOESCH, 592; HOFFMANN, 593; JOHNSTON, 659; JONES, 661; JORDAN, 665; JOURDAIN, 680; KINGHORN, 706; KRÖSCHER, 742; KUMAGAI, 747; LITTLEJOHNS, 807; LOWTHER, 838; LUSCHER, 841; MARPLES, 889, 890; MARSH, 891; MEKLEJOHN, 923; MEKLENBURTSEV, 932; MONRO, 970; MOREAU, 979; MORRISON-SCOTT, 988; MOUSLEY, 995; OWEN, 1054; PICKENS, 1086; POISSON & LURAT, 1094; RABOR, 1120; REISER, 1137; SCHUSTER, 1218, 1220; SCHUYL & TINBERGEN, 1221; SHAW, 1251, 1252; F. R.

SMITH, 1270; SPENNEMANN, 1289; STANFORD, 1297; STANFORD & SMITH, 1298; STEAD, 1300; TIMMERMAN & GUDMUNDSSON, 1391; TYRRELL, 1423; VAN TYNE, 1432; WILLIAMSON, 1511; WOLFE, 1540; WOODS, 1547; ZIMMERMANN, 1567.

Brood Parasitism.—General Cuckoo problems, CATHELIN, 212; FINCKENSTEIN, 418; In South Africa, SPARROW, 1287; In Europe and India, BAKER, 36; In India, LIVESSEY, 808; Type of eggs in Finland, WASENIUS, 1470; The Twite as a fosterer, WHITTAKER, 1501; *Cuculus micropternus*, O'DONEL, 1039; *Cacomantis*, LIVESSEY, 908; *Urodynamis* in New Zealand, WILKINSON, 1507; *Molothrus*, B. G. HARRISON, 543; *Phasianus* in Iowa, BENNETT, 72.

Voice and Song; General.—BRAND, 149, 150; Notes produced by feather modifications, STEINBACHER, 1315; Song degeneration in town birds, FRIELING, 427; Geographical variation of song in *Emberiza*, SALOMONSEN, 1191.

Voice or Song of Single Species.—*Strix*, SPENNEMANN, 1288; *Muscivora*, WALKER, 1460; *Pheugopedius*, CHAPMAN, 225; *Merula*, HENNEBERG, 571.

Moult, General.—FRIELING, 430; LIENHART, 792; Thyroid and other endocrine effects, HOSKER, 612; WOITKEWITSCH & NOWIKOW, 1539; Cause of blue colour in plumage, GOWER, 471.

Moult; Single Species.—*Colymbus*, SCHÜZ, 1225; N. American Fringillids, SUTTON, 1351; *Ammodramus*, SUTTON, 1352; *Carpodacus*, MAGEE, 869; *Loxia*, NIETHAMMER, 1021; *Agelaius*, PACKARD, 1056.

Psychology.—Social order, ALLEE, 18; Effects of magnetism, DAANJE, 283; Mathematics and counting, KOEHLER & WACHHOLZ, 724; Choice of water for drinking, SALVERDA, 1195; Measurement of irritability, COOK & FREDRICKSON, 265; Reflexes and reactions to stimuli, TEN CATE, 210; STEINIGER, 1320; Akinesis and hypnosis, PEITZMEIER, 1071; STEINIGER, 1319.

Ecology; General Problems.—Climate as a factor, TWOMEY, 1422; Woodlands and variation, v. SOMEREN,

1281; Winter birds in field quantitative research, KLOCKARS, 718; Size of feet in relation to biotope, PALMGREN, 1063.

Ecology; Regional Problems.—Russian forests, VORONZOV, 1449; N. African deserts, HEIM DE B., 560; Breeding season in E. African forests, MOREAU, 980; Studies on Kilimanjaro, MOREAU, 981; In California, EWAN, 405; GRINNELL & LINDSALE, 494; Forests of Iowa, WILLIAMS, 1508; Birds and plants in Presque Isle, Penn., JENNINGS, 652; Winter studies in W. New York, VAN DEVENTER, 1430; In Dutchess Co., New York, GRISCOM, 498.

Effects of External Conditions.—Parallel climatic effects on coat colour and plumage of Mammals and Birds, RENSCH, 1141; Winter in New York State, SEDWITZ, 1234; City growth and bird-life, EATON, 380; UERNER, 1427; Hurricanes in Cuba, HUNTINGTON & BARBOUR, 626; Cultivation and human activities, ROBIEN, 1160; SERGEJEV, 1239; Desert conditions in Kashgaria, SUDILOVSKAYA, 1342; Altitude in New Guinea, RAND, 1126; Sun eclipses, GRISCOM, 497; Adaptation of *Cariama* to the savannas, FRIELING, 431; Effects of external conditions on feathering of Owls' feet, KELSO, 698.

Population Studies and Censuses.—In British Is., HARDY, 535; MIDDLETON, 943; SUSSEX, MAYNARD, 916; N. Rhodesia, WINTERBOTTOM, 1515, 1517; In Michigan, LINDSALE, 804; Census of *Podiceps* in Gt. Britain, HOLLOM, 597; *Perdix* in England, MIDDLETON, 944; *Ardea* in England, E. M. NICHOLSON, 1019; Gannets, EDWARDS & OTHERS, 386; Ailsa Crag Gannets, VEVERS & FISHER, 1443; *Hirundo* in Britain, BOYD, 147; Rookeries in Midlothian, MIDL. ORN. CL., 945; Population fluctuations *Bonasa*, CLARKE, 248.

Phenology.—British Isles, MARGARY, 886; Ireland, GRIMES, 491.

Pathology.—General work, REIS & NOBREGA, 1136; Cage birds, GRAY, 483; Deaths in Zoological Gardens, HAMERTON, 531; Parasitic diseases, HERMAN, 578; Bone fracture, ERRINGTON, 398; KORSHOLT, 728; Cerebral disorders, DELAPLANE, 337; Plague, SCHMIDT, 1207; Cancer, SALGUES,

1190; Aspergillosis, BRASSARD & BERNARD, 154; Enteritis in Gamebirds, MORLEY & WETMORE, 987; Typhus, KRENN, 738; Effects of injuries, LABITTE, 755.

Parasites.—List of parasites of American Birds, PETERS, 1075.

Longevity.—In Parrots, SZABÓ, 1359.

Mortality and Destruction.—Hurricane in Cuba, HUNTINGTON & BARBOUR, 626; Hail in Illinois, MIZELLE, 955; Oil pollution of sea, ADAM, 4; Tar pits in Arizona, BORELL, 140; Motorcars on roads, BARNES, 48; STONOR, 1329; Differential sex mortality in Gamebirds, ERRINGTON, 397; Waste and reproduction, MUNRO, 1004; Partridge mortality in England, MIDDLETON, 944; *Puffinus* in S. Australian islands, F. W. JONES, 662; *Chen* at Niagara, SHEPPARD, 1253; *Bombycilla* through eating dates, FOSSLER, 423.

Miscellaneous Papers on Fossil Birds.—BACHOFEN-ECHE, 33; STEGMANN, 1306.

AETIOLOGY.

Evolution.—Ontogenesis and phylogeny, PORTMANN, 1103; Evolution of locomotion, MAGNE DE LA C., 872; Parallelism in speciation, KLEINSCHMIDT, 717.

Variation.—Sudden mutations, RAPINE, 1128; Variation among Galapagos Geospizids, LOWE, 834; Atavistic variations, LIENHART, 792; Colour variation and aberration, v. BOETTICHER, 118, 120; Weight variation in *Passer*, SHAW, 1248; Altitudinal variation in New Guinea, RAND, 1126; Albino *Copsichus*, MOLTONI, 967.

Teratology.—MICHENER, 941; Kipping Geese, LÜHMANN, 839; Twin embryo Chicks, CHIANG, 236; HOOVER, 635; MORITA, 984; Stenoccephaly, GALLERA, 438; Artificial monsters, FRANKE, 424; FRÖHLICH, 433; Pigmele Sparrow, CANELLA, 205; Asymmetry in Gyrfalcon, DEMENTIEFF, 343.

Hybrids.—General, LEGENDRE, 781; CHAPMAN, 224; Hybrids and speciation, MEISE, 926; Experiments with Pheasants, GHIGI, 448; Bloodtests and specific qualities in hybrid Doves,

IRWIN, 642; *Carina* × *Anas*, SOKOLOWSKAJA, 1278; Hybrid Hummingbirds, BERLIOZ, 83; Natural hybrids in *Passer*, MEISE, 927; The *Colaptes* problem, DEAKIN, 318.

Genetics.—Of colour factors, GROEBELS, 503; Persistence in egg-laying, HAYS, 554; Glutathione and size inheritance, GREGORY, 488; *Gallus*, BRANDT, 152; HUTT, 628; DUNN & LANDAUER, 371; WARREN & HUTT, 1465; PETROV, 1077; *Columba*, WEKELSEN, 1485; Hybrid *Serinus*, PROMPTOV, 1114; Hybrid *Amadina*, STEINER, 1317.

Gynandromorphs.—General theory, ESPINASSE, 403; Bipartite Pullet, VECCHI, 1435.

Sex Problems.—DANTSHAKOFF, 300, 301, 302, 303, 304, 305, 306, 307; Sex determination, OKLAND, 1040; Secondary sex characters and hormones, AGOSTINI, 7; Sex reversal, NISHIDA, 1025, 1026; Spurs and sex, TAIBEL, 1361.

Polymorphism and Dimorphism.—LEGENDRE, 781; LEVI, 786; NOWIKOW, 1036.

Regeneration.—Feathers, HOSKER, 612.

GEOGRAPHY AND FAUNAS.

Zoogeographical Problems.—Formation of insular faunas, TUGARINOV, 1412; Faunal types and divisions of Palaearctic, STEGMANN, 1303; N. African problems, HEIM DE B., 580; Origin of Kilimanjaro fauna, MOREAU, 981; The Guillemard line (Borneo-Sulu), HACHISUKA, 517; Endemism in N.W. America, McCABE, 847; Origin of Galapagos fauna, P. LOWE, 834; STRESEMANN, 1335; Problems of S. Atlantic and Pacific, MURPHY, 1006.

PALAEARCTIC REGION.

General.—HARTERT, 548; STEGMANN, 1303, 1305.

British Is.—General, BERRY, 92; GORDON, 469, 470; HALL, 526; HARDY, 535; HOLLOM, 597; JOY, 685; F. A. LOWE, 833; MARGABY, 886; RICHMOND, 1145; C. B. TICE-

HURST, 1383; WHITLOCK, 1500; New British Bird, STOUT & WATERSTON, 1331.

English Counties.—Middlesex and London area, BAYNE, 60; DUFF & OTHERS, 367; MACPHERSON, 863; Kent, N. F. TICEHURST, 1387, 1388; MANNERING, 877; Sussex, HARRISON, 545; MAYNARD, 916; N. F. TICEHURST, 1387, 1388; Hants, JOURDAIN, 682; Bucks, BLAND, 114; Wilts, PEIRSON, 1070; PITMAN, 1091; Somersets, PRING, 1113; TETLEY, 1373; TUCKER, 1410; Dorset, BLATHWAYT, 115; WITHERBY, 1523; Devon, BUTTERS, 192; GIBBARD, 450; W. P. LOWE, 836; PIDCOCK, 1087; Herts, LLOYD, 810; OLDHAM, 1042, 1043; Essex, J. W. CAMPBELL, 201; GLEGG, 465; Suffolk, COOK, 264; LAST, 767; MORLEY, 936; POWELL & OTHERS, 1108; C. B. TICEHURST, 1386; Norfolk, GARNETT, 441; LONG, 820; Cambridgeshire, BRINDLEY, 157; Lincoln, COX & MAY, 277; HAIGH & PYE, 523; Bedfordshire, HUXLEY, 629; Warwick, WALLIS, 1462; Gloucester, DAVIS, 315; Derbyshire, JOURDAIN, 678; Staffordshire, BRYAN, 177; T. SMITH, 1271; Cheshire, BOYD, 146; WARD, 1464; Lancashire, HARDY, 536; WARD, 1464; WILLIAMS, 1509, 1510; Yorkshire, BOOTH, 138; CHISLETT, 240; EDWARDS, 384, 385; HILL, 589; UTLEY, 1428; Cumberland and Westmorland, GRAHAM, 472; Durham, TEMPERLEY, 1371; Northumberland, COURTENAY, 273; ELTRINGHAM, 392; GENT, 443; LEVETT, 784, 785; TEMPERLEY, 1371; TULLY, 1414.

Wales.—Glamorgan, INGRAM & SALMON, 636; Pembrokeshire, LOCKLEY, 815.

Scotland.—BAXTER & RINTOUL, 61; McWILLIAM, 865; Berwickshire, PORTEOUS, 1100; Dumfriesshire, GLADSTONE, 461; Ayrshire, CLANCEY, 246; Lanark and Renfrew, CLANCEY, 245.

Ireland.—GRIMES, 491; HUMPHREYS, 625; MALCOMSON, 875; Antrim, C. WHITE, 1492.

Smaller British Islands.—Fair I., STOUT & WATERSTON, 1331; WATERSTON, 1472; Hebrides, BIRD, 100; N. Uist and Benbecula, CAMPBELL, 202; Barra, McRURY & OTHERS, 864; I. of

Man, COWIN, 274; RALFE, 1122, 1123; North Bull I., Co. Dublin, KENNEDY, 704; Skokholm I., Pembroke, LOCKLEY, 814; Steep Holm I., Somerset, LEWIS, 787; I. of May, Fife, MIDLOTHIAN ORN. CL. 946; Farne Is., PALLISTER & WILLIAMS, 1060.

France. — JOUARD, 668, 669; LEGENDRE, 780; MAYAUD & OTHERS, 913; Aisne, TROUCHE, 1407; Auvergne PITOU, 1093; Basses-Pyrénées, ROCHON-DUVIGNEAUD, 1165; Bouches-de-Rhône, MOUNTFORT, 993; Brittany, LEBEURIER & RAPINE, 776; Brittany and Vendée, MARCHAND & KOWALSKI, 883; Calvados, DELAPCHIER, 336; TOLMER, 1398, 1399; Chablais, BERTHET, 93; Gironde, LANDE & SIGULAS, 760; Haute-Savoie, PONCY, 1097; Loir-et-Cher, REBOUSSIN, 1131; Moselle, DELAFOSSE, 334; LIÉNHART, 791; Pyrénées-Orient, MAYAUD, 911; Provence, L'HERMITTE, 579; Languedoc, GLEGG, 466; Seine-Inf., LASNIER, 766; REY, 1144; Seine-et-Marne, SEYDOUX, 1244; Somme, LABITTE, 753, 754; Vosges, CLAUDON, 253; Sept-Iles, Brittany, FEUILLÉE-BILOT, 417; Noirmoutier I., Vendée, MAYAUD, 912.

Belgium.—V. BENEDEN, 71; DUPOND, 372, 373, 374; WAARTS, 1450; Luxembourg, FELTGEN, 413; MORBACH, 976.

Holland.—V. D. BRINK & TEKKE, 158; BROUWER, 168, 169; CLUB V. NED. VOGELK., 255; JUNGE, 687, 688; VAN OORT, 1048; SLUITERS, 1269.

Germany.—FRIELING, 426; KIRCHNER, 709; PFEIFER, 1080; Westphalia, KUHLMANN, 746; SCHMAUS, 1205; Hannover, FALTER, 411; RÜPPELL, 1185; WEDEMEYER, 1476; Hamburg and District, TANTOW, 1365; Schleswig-Holstein, EMEIS, 393; HAGEN, 521; Brandenburg, BÄHEMANN, 34; GLASEWALD, 463; HESSE, 580, 581; G. STEINBACHER, 1311; Saxony, DATHE, 308; MEISE, 929; Pomerania, BANZHAF, 46; ROBIEN, 1161, 1162; RUTHKE, 1186; Silesia, KRÄMER, 731; REHREN, 1135; W. Prussia, DOBRICK, 358; LÜTTSCHWAGER, 842; E. Prussia, GAUPP, 442; HORNBERGER, 609; LÜTTSCHWAGER, 843; MANGELS & SCHÜZ, 876; SCHÜZ, 1223, 1226; SIELMANN, 1261; STRESEMANN, 1336; Wurtemberg, LÖHRL, 819; SCHWEN-

KEL, 1228; Bavaria, v. BESSERER, 94; DIETZ, 352; MÜLLER, 996; WÜST, 1549, 1550; Heligoland, DROST, 364.

Austria. — PUSCHNIGG, 1116; v. SEILERN, 1236; SEITZ, 1237; STEINFATT, 1318; WALDE & NEUGEBAUER, 1458.

Hungary.—WEISZ, 1478.

Czechoslovakia. — ČERNÝ, 215; HACHLER, 520; HOŘICE, 608; MUSILEK, 1007, 1009; MUSILEK & ČERNÝ, 1010; MUSELEK & HOŘICE, 1012; NEČAS, 1013; ZOBNITZKY, 1557.

Switzerland. — BLANCHET, 112; BLOESCH, 116; CORTI, 268; HALLER, 529; HEILFURTH, 557; MEYLAN & HUBER, 939; PONCY, 1093; TROLLER, 1406.

Denmark. — BARFOD, 47; CHRISTIANSEN, 241; GERNA, 444; HOLSTEIN, 600; JESPERSON, 653; KJAER, 712; KNUDSEN, 720, 721; KOEFOED, 723; SPÆRCK, 1285, 1286; Danish Islands, Anholt, HØRNING, 610; Egholm, CHRISTIANSEN, 242; Ertholm, BERNSTRÖM, 91; Ertholm, LOPPENTHIN, 829; Christiansø, HELMES & CHRISTIANSEN, 569.

Norway.—BLAIR, 109; SALOMONSEN, 1192.

Sweden.—BORG, 141; DURANGO, 376; JANSSON, 649; JOHANSSON, 653; KOLTHOFF, 727; LÖNNBERG, 822, 823, 825, 826; MAGNUSSEN, 873; NORDSTRÖM, 1034; NOREHN, 1035; NORLIND, 1033; OLDERZ, 1041; OLROG, 1045; OLSSON, 1046; RADBERG, 1121; RENDAHL, 1140; SARP, 1198; STRINDBERG, 1340; Åland Is., BOLLVIK, 128.

Northern and Arctic Islands.—Iceland, BIRD, 101; BJÖRNSSON, 108; GUDMONDSSON, 513; HOLMES & KEITH, 599; TIMMERMAN & GUDMUNDSSON, 1391; Spitsbergen, HARTLEY & FISHER, 553; STOTT & OTHERS, 1330.

Finland.—KLOCKHARS, 718; PALMGREN, 1064, 1065; PUTKONEN, 1117, 1118; SUOMALAINEN, 1345; TUOVINEN, 1415; VÄLIKANGAS, 1429; WASENIUS, 1470; Espoo Is., G. of Finland, ARHIMO & TAMMILEHTO, 29.

Estonia.—SITS, 1266, 1267; Oesel, ECKE, 382; HÄRMS, 539.

Poland.—DOMANIEWSKI & KRECZMER, 359; DUNAJEWSKI, 368, 369; NIEZABITOWSKI, 1024; SOKOLOWSKI, 1279; WODZICKI, 1533.

Russia.—BUTURLIN & DEMENTIEV, 193; DEMENTIEV, 338; GROTE, 507; PONCY, 1098; Ukraine, CHARLEMAGNE, 229, 230, 231; Lower Volga region, VOROBIEW, 1448; Caucasus, KOSLOWA, 729.

Spain.—HUTCHINSON, 627.

Italy.—BISACCO-PALAZZI, 102; DUSE & OTHERS, 377; FESTA, 416; MOLTONI, 962, 963, 964, 966, 968, 969; ZANGHERI, 1556.

Yugoslavia.—HIRTZ, 590; REISER, 1137; THORPE & OTHERS, 1379.

Albania.—THORPE & OTHERS, 1379; WHISTLER, 1488.

Greece.—KATTINGER, 695; MEIKLEJOHN, 923; THOMPSON, 1376.

Bulgaria.—V. BOETTISCHER, 119; KLEINER, 713.

Roumania.—CĂLINESCU, 196; CĂTUNEANU, 213; V. DOBAY, 354; HÖHR, 596; KAMNER, 692.

Mediterranean Islands.—Balearics, BERNATH, 88; MUNN, 997; Corsica, V. SEILERN, 1236; Sicily, ORLANDO, 1051, 1052; Crete, MEIKLEJOHN, 924; Cyprus, FERRIER, 415.

North Africa.—HEIM DE B., 530; MOROCCO, BANNERMAN, 42; REMLINGER & BAILLY, 1139; WALLIS, 1463; Tunisia, GUIRTCHITCH, 516; Egypt, COBIANCHI, 253; GREAVES, 486; JOURDAIN & LYNES, 684; KOENIG, 725; MONTEIRO, 971; Sahara, HEIM DE B., 532.

Western Asia.—Asiatic Turkey, BIRD, 100; RÖSSNER, 1180; Syria and Palestine, HEIM DE B., 561; Palestine, LUKE, 839A; Talysh, Transcaucasus, TUGARINOV & KOZLOVA-P., 1413.

Russian Asia.—DEMENTIEV, 338; Siberia, PORTENKO, 1099; W. Siberia, IOHANSEN, 639; KHAKHLOFF, 705; Taimyr, DÉMENTIEFF, 344; E. Siberia, SCALON & SLUDSKY, 1201; STEGMANN, 1304; MIKHEL, 947; Ussuri and Vladivostok, MUSELEK, 1008; Coast

Prov. and Sakhalin, STACHANOV, 1295; Turkestan, DAHL, 285, 286, 287, 288, 289; IVANOV, 643; PHILIPPOV, 1082; SELEVIN, 1238; SHESTOPEROV, 1255, 1256, 1257.

Central Asia.—Tian-Shan, ŠULPIN, 1344; SUDILOWSKAJA, 1341, 1342.

Eastern Palaearctic Asia.—Jehol, SEYS, 1245; Korea, BERGMAN, 80, 81; N. China, SHAW, 1249, 1250; WILDER, 1505.

Japan.—HANAOKA, 532; KUMAGAI, 747; KURODA, 750; TAKA-TSUKASA, 1363, 1364; YAMASHINA & INOUE, 1553.

ETHIOPIAN REGION.

General.—GRANT & M.-PRAED, 474-482; M.-PRAED & GRANT, 858, 859, 860; MOREAU, 977; STONE, 1327.

West Africa.—BANNERMAN, 40; Sierra Leone, BANNERMAN, 41; French Sudan and Nigeria, PALUDAN, 1066; Nigeria, BANNERMAN, 44; CLARKE, 249, 250; FAIRBAIRN, 409; French Equatorial Africa, BERLIOZ, 82; BLANCOU, 113; Belgian Congo, BERLIOZ, 84; CHAPIN, 223; LYNES, 844; SCHOUTEDEN, 1214, 1215; Cameroon, BANNERMAN, 43; GROTE, 511; Gaboon, MACLATCHY, 861; Angola, BOULTON & VINCENT, 143.

South Africa.—GILL, 456; ROBERTS, 1151-1155, 1157; SPARROW, 1237; South-West Africa, HOESCH, 591; Transvaal, LANE, 761; S. Rhodesia, BLOOMHILL, 117; PRIEST, 1112; ROBERTS, 1156; TOWNLEY, 1402, 1403.

Central and East Africa.—N. Rhodesia, LEES, 779; WINTERBOTTOM, 1515, 1516, 1517; Portuguese E. Africa, BENSON, 77; VINCENT, 1445; WINTERBOTTOM, 1518; Nyasaland, ASTLEY-MABERLEY, 31; BENSON, 75, 76; KINNEAR, 708; Tanganyika Territory, FUGGLES-COUCHMAN, 434, 435; MEISE, 930; MOREAU, 980, 981; Zanzibar and Pemba, PAKENHAM, 1059; Kenya and Uganda, PETERS & LOVEBRIDGE, 1076; VAN SOMEREN, 1282.

Northeastern Africa.—Italian Somaliland, MOLTONI, 957, 958, 959; TOCHI,

1401; Abyssinia, CHEESMAN & SCLATER, 235; Anglo-Egyptian Sudan, KOENIG, 725; WOODMAN, 1545.

Arabia.—BATES, 51-54.

Madagascar and Neighbouring Islands.—RAND, 1124; WEBB, 1475; Seychelles, VESEY-FITZGERALD, 1442.

INDIAN REGION.

General.—BERLIOZ, 85; DELACOUR 329; YEN, 1555.

Indian Empire and Ceylon.—ALI, 13; TICEHURST, 1382; WHISTLER & KINNEAR, 1491; Kashmir, R. S. P. BATES, 55; WHISTLER, 1489; Punjab, VAN TYNE & KOELZ, 1433; Bombay Pres., ALI, 12; ALI & ABDULALI, 16; Travancore and Cochin, ALI & WHISTLER, 14; Ceylon, HENRY, 573; PHILLIPS, 1083, 1084; WAIT, 1457; Madras Pres., BIDDULPH, 96; WHISTLER, 1490; Bengal, LAW, 772; Sikkim and N.E. Himalaya, INGLIS, 632, 633, 634, 635; Burma, MILNER, 953; STANFORD, 1296, 1297.

Malaya.—Malay Peninsula, MADOC, 866; ROBINSON & CHASEN, 1164; Malayan Islands, BERLIOZ, 87; SNOUCKAERT, 1272; Simalur, I. nr. Sumatra, JUNGE, 689; Java, BOUMA, 144; HOOGERWERF, 602, 603, 604; KURODA, 749; Borneo, COOMANS DE R., 266; Celebes, STRESEMANN, 1334; Philippines, HACHISUKA, 518, 519; MCGREGOR & MANUEL, 852; MANUEL, 880, 881, 882; RABOR, 1120; Palawan, RILEY, 1149.

Indochina.—Siam, DEIGNAN, 322, 323, 324; GILES, 455; RILEY, 1148; French Indochina, KINNEAR, 707.

South China.—Hong Kong, FOK YEN SANG, 421; HERKLOTS, 574, 575, 576, 577; L., 752; PEREIRA, 1072; FORMOSA, KURODA, 751; YAMASHINA, 1551.

AUSTRALIAN REGION.

New Guinea and Surrounding Islands.—HARTERT & PALUDAN, 549; MAYR, 918, 919; MAYR & RAND, 920, 921, 922; RAND, 1125, 1127; STEIN, 1308.

Australian Commonwealth.—Australia, MACK, 854; MATHEWS, 897;

C. M. N. WHITE, 1493, 1494, 1495, 1497; Queensland, BERNEY, 90; HANKS, 534; JACK, 646; KINGHORN, 706; LORD, 830; New South Wales, A. H. CHISHOLM, 238; E. C. CHISHOLM, 239; GANNON, 439, 440; GILBERT, 452-4; HYEM, 630; Victoria, BARRETT, 49; BRYANT, 179, LITTLEJOHNS, 805; MILNE, 952; Tasmania, F. W. JONES, 661; South Australia, BRANDON, 151; BROWN & OTHERS, 173, 174; CLELAND, 254; CONDON, 260; CONDON & RIX, 261; F. W. JONES, 662; TERRILL, 1372; S. Neptune Is., S. Australia, PERRYMAN, 1074; Kangaroo I., S. A. LASHMAR, 764; Western Australia, MATHEWS, 902; WHITLOCK, 1499; WHITTELL & WHITLOCK, 1503; Melville I., W. A. GOODFELLOW, 468.

New Zealand and Neighbouring Islands.—New Zealand, D'OMBRAIN, 361; FALLA, 410; MATHEWS, 897; STREAD, 1299, 1300, 1301; Norfolk and Lord Howe, MATHEWS, 897.

Pacific Islands.—CHAPIN, 222; MAYR, 917; Midway I., DENIG, 348; Hawaiian Is., BRYAN, 178; CAUM, 214.

NEOTROPICAL REGION.

General.—HELLMAYR, 565; ZIMMER, 1560, 1561, 1562, 1563, 1564.

South America and Islands.—South Orkney Is., ARDLEY, 28; Argentina, ANON., 26; BELCHER, 66, 67; DAGUERRE, 284; HARPER & DRABBLE, 540; KRIEG, 739; KRIEG & SCHUMACHER, 741; LAUBMANN, 768; LIEBERMANN, 789; MARELLI, 884; ORFILA, 1050; STEULLET & DEAUTIER, 1322; ZOTTA, 1568, 1569, 1570; Uruguay, B. G. HARRISON, 544; Paraguay, INSFRAN, 637; KRIEG & SCHUMACHER, 741; Chile, BULLOCK, 180; GIGOUX, 451; HOUSSE, 614; PHILIPPI, 1081; REED, 1133, 1134; SCHNEIDER, 1210; Juan Fernandez I., CHAPIN, 222; MATHEWS, 899; Peru, v. SEILERN, 1236; ZIMMER, 1559, 1560, 1561, 1562, 1563, 1564; Ecuador, BLAKE, 110; Galapagos Is., P. LOWE, 834; STRESEMANN, 1335; Brazil, PINTO, 1088; Matto Grosso, LAUBMANN, 768; Santa Catharina, LAUBMANN, 769; Venezuela, CARRIKER, 208; Colombia, KELSO, 700.

Central America.—Panama, DAVIDSON, 311; GRISWOLD, 500; Salvador,

v. ROSSEM, 1174, 1177; Honduras, DEIGNAN, 321; Bay Is., Honduras, BOND, 132.

West Indies.—BOND, 129; PORTER, 1101; Trinidad and Tobago, BELCHER & SMOOKER, 68; Tobago, KELSO, 697; Grenada, DANFORTH, 293; Mona I., DANFORTH, 296; St. Lucia, DANFORTH, 295; Antigua, BOND, 130; Virgin Is., DANFORTH, 294; St. Kitts and Nevis, DANFORTH, 298; St. Croix, BEATTY, 63; Cuba, Virgin I., Barbuda St. Kitts, DANFORTH, 297; Puerto Rico, DANFORTH, 292; Bahamas, GREENWAY, 487.

NEARCTIC REGION.

(Including Mexico).

General.—HELLMAYR, 565; KELSO, 701; McCABE, 847; SUTTON, 1346; TAVERNER, 1367.

Mexico.—DEL CAMPO, 204; KELSO, 699; MOORE, 973; Lower California, SCOTT, 1232.

Western United States.—California, BRODKORB, 161, 162; DIXON, 353; EWAN, 405; GRINNELL, 493; GRINNELL & LINSDALE, 494; HUEY, 621; JAEGER, 648; McLEAN, 862; MILLER, 950, 951; Nevada, COTTAM, 269; LINSDALE, 803; VAN ROSSEM, 1172, 1176; Oregon, JEWETT, 654; Washington, BALMER, 37; VAN ROSSEM, 1175; SHAW, 1251, 1252; Montana, LINCOLN, 794; WEYDEMAYER & MARSH, 1486; Colorado, G. ALEXANDER, 10; Utah, BEHLE, 65; SUGDEN, 1343; Arizona, BORELL, 140; HARGRAVE, 538; HUEY, 622; JENKS, 651; v. ROSSEM, 1178; STEVENSON, 1324.

Middle United States.—Texas, BRANDT, 153; VAN TYNE, 1431, 1432; Louisiana, CHAPMAN, 224; LOWERY, 837; Oklahoma, SUTTON, 1349, 1350; TATE, 1366; Kansas, HALL, 527; Minnesota, GABRIELSON, 436; Wisconsin, GRANGE, 473; Michigan, BRODKORB, 159; BURT, 190; LINSDALE, 804; Ohio, ALDRICH, 9; CAMPBELL, 203; HICKS, 585; HICKS & DAMBACH, 586; MOSELEY, 989; SKAGGS, 1268; WALKER & TRAUTMAN, 1459; Indiana, BUTLER, 191; Illinois, BONNELL, 135; Tennessee, SHAVER, 1247; WOODRING, 1546.

Eastern United States.—Florida, DEMERITT, 347; LONGSTREET, 821; W. H. NICHOLSON, 1020; Georgia, SPRUNT, 1294; S. Carolina, HUDSON & SHERMAN, 620; Virginia, TYRRELL, 1423; W. Virginia, WETMORE, 1483; Maryland, COURT, 272; District of Columbia, BARTSCH, 50; Pennsylvania, JENNINGS, 652; New Jersey, EATON, 380; URNER, 1427; New York, GRISCOM, 498; HICKEY, 584; McKITTRICK, 856; SEDWITZ, 1234; STONOR, 1328; VAN DEVENTER, 1430; Massachusetts, EMILIO, 394, GRISCOM, 496; LAWSON, 774; New Hampshire, JACKSON, 647.

Canada.—TUFTS & OTHERS, 1411; Nova Scotia, H. C. WHITE, 1498; Grand Manan, New Brunswick, PETTINGILL, 1079; Newfoundland, BROOKS, 165; Ontario, BAILLIE & HARRINGTON, 35; CLARKE, 248; LLOYD, 811; SHEPPARD & OTHERS, 1254; SNYDER & SHORTT, 1273; Manitoba, BAUMGARTNER, 59; Saskatchewan, POTTER, 1106; Alberta, BUNYARD, 183; KALMBACH, 691; MUNRO, 1002; ROWAN, 1183; British Columbia, MUNRO, 1001; SPROT, 1293; SWARTH, 1355; Akpatok I., Hudson Str., DAVIS, 313; Baffinland, DALGETTY, 291; SUTTON, 1347; Ellesmere Land, HAIG-THOMAS, 524.

Alaska.—FRIEDMANN, 425; SWARTH, 1356; Aleutian Is., EYERDAM, 406.

Greenland.—DALGETTY, 291; SALOMONSEN, 1193.

THE OCEANS.

Atlantic.—ROOKE, 1171; South Atlantic and S. Pacific, MURPHY, 1006; Atlantic and Indian Ocean, WINTERBOTTOM, 1519; Pacific, MARELLI, 885; Japan seas, MATHEWS, 901.

FOSSIL BIRDS.

Eocene.—France, GAILLARD, 437; Germany, LAMBRECHT, 757; Eocene and Oligocene Germany, BACHOFEN-ECHT, 33.

Miocene.—Nebraska, WETMORE, 1482; California, COMPTON, 259.

Pleistocene and Post-Tertiary.—California, H. HOWARD, 615, 616, 617; Bavaria, BRUNNER, 176.

Tertiary and Post-Tertiary.—Germany, HAUPT, 552.

III.—SYSTEMATIC.

The classification of Sharpe's "Hand-list" is here followed as regards orders and families. The genera are arranged alphabetically in the families. This method is a change from the old system, as so many alterations in nomenclature and generic status have been introduced since the publication of the "Hand-list."

Full references are given only in the case of new genera and species. In other cases the numeral in heavy Clarendon refers to the List of Titles, where the full reference will be found. The figures in smaller Clarendon refer to the volume number of the full reference.

ORDER RHEIFORMES.

Rhea avicultural notes, DELACOUR 326.

ORDER STRUTHIONIFORMES.

Struthio cerebral cortex of brain, CRAIGIE 278.

ORDER CASUARIFORMES.

Dromiceius novae-hollandiae external characters of an embryo, STEINER 1316; Nesting habits in Melbourne Zool. Gardens, FLEAY 419.

†*Dromaius diemenianus* a recently discovered egg descr., MASON 896.

ORDER TINAMIFORMES.

Monograph of Argentine Tinamous and the problem of their domestication, LIEBERMANN 789.

Field observations on the Tinamous of Argentina and Paraguay, KRIEG & SCHUHMACHER 741.

ORDER GALLIFORMES.

Field observations on the Gamebirds of Argentina and Paraguay, KRIEG & SCHUHMACHER 741.

Chromatophores in the testes of Game birds, MATHIS 909.

Hybrid experiments with tropical genera of Pheasants, GHIGI 448.

Enteritis in American Gamebirds, MORLEY & WETMORE 987.

Differential sex mortality in Gamebirds, ERRINGTON 397.

FAM. MEGAPODIIDAE.

Megapodius pritchardi descr. of eggs from Ninafou I., Tongan Group, DAVIDSON 312.

FAM. CRACIDAE.

Crax fasciolata plumage development and habits, GUIMARÃES 515.

Mutu and *Crax* review with key of Brazilian forms, PINTO 1088.

Ortalis vetula deschauenseei subsp. n. Utila I., Honduras, BOND Proc. Acad. Philad. 88 p. 356.

FAM. TETRAONIDAE.

Bonasa umbellus fluctuation studies in Ontario and its causes, CLARKE 248.—*B. u. togata* present status and field obs. in Wisconsin, GRANGE 473.

Lagopus account of Japanese forms, TAKA-TSUKASA 1363.—*L. lagopus variegatus* subsp. n. Islands in Trondhjems Fjord, SALOMONSEN Bull. B.O.C. 56 p. 99.—*L. mutus* revision of the races, four recognized, SALOMONSEN 1193.—*L. rupestris* food in Greenland and other notes p. 590, DALGETTY 291.

Lyrurus tetrix habits of young birds in Belgium, DUPONT 375.—*L. t. britannicus* fighting methods, YEATES 1554.

Pedioecetes phasianellus winter food in Wisconsin, SCHMIDT 1206.

Tetrao u. urogallus status distr. and habits in the Vosges, CLAUDON 253; Food analysis of Russian birds, LOBAT-SCHOW & STSCHERBAKOW 812.—*T. urogallus* × *Lyrurus tetrix* display of the hybrid, HASSFURTHER 551.—*T. parvirostris macrurus* range, field notes N. of Baikal p. 96, STEGMANN 1304.

Tetrastes bonasia critical note on the Russian races, DANILOWITSCH 299.

Tympanuchus c. americanus winter food in Wisconsin, SCHMIDT 1206.

FAM. PHASIANIDAE.

Afropavo congensis gen. et sp. n. Belgian Congo, CHAPIN Rev. Zool. Bot. afr. 29 1936 p. 2 photos.

Alectoris r. rufa strange movements to water in spring, GLEGG 464.—*A. graeca saxatilis* and other races distr. and habits in France, etc., LAVAUDEN 771.

Coturnix c. coturnix discussion of migration in France and elsewhere, HUGUES 623; Migration movements in Italy, DUSE & OTHERS 377; Status and protection in Tunisia p. 482, GUERTCHITCH 516; Follicular hormone injection effect on secondary sexual characters, AGOSTINI 7.—*C. c. japonica* taken in the Philippines p. 319, MCGREGOR & MANUEL 852.

Crossoptilon harmani habits and habitat in Tibet, BATTYE 56.

Excalfactoria chinensis papuensis subsp. n. New Guinea, MAYR & RAND Amer. Mus. Nov. no. 888 p. 1.

Fringilla f. fringilla, *F. bicalcaratus ayesha* range, habits, historical notes, etc., LAVAUDEN 770.—*F. f. parkerae* subsp. n. Punjab, VAN TYNE & KOEBZ Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 1.—*F. schlegeli*, *F. icterorhynchus* taxonomy and distr. in Ubangi-Chari region p. 349, BERLIOZ 82.—[*F.*] *Perdix levalliantoides* A. Smith = *Scleroptila gariensis* pt. (A. Smith) p. 321, ROBERTS 1153.—*F. squamatus* review of the E. African races p. 374, M.-PRAED & GRANT 859.—*F. jacksoni* the type-locality, *F. j. gurae* Bowen of doubtful validity p. 198, M.-PRAED & GRANT 858.

Gallus "dom." structure of the copulatory organ, STEFANELLI 1302.—*G. g. mughi*, *G. sonneratii* distr. and status in S. India p. 681, WHISTLER 1491.

Graphephasianus scintillans notes col. pl., DELACOUR 331.

Perdica asiatica distr. and races p. 685, *P. a. ceylonensis* Ceylon, *P. a. vidali* S. Konkan subsp. n. p. 686, WHISTLER J. Bombay N.H. Soc. 28

Perdix perdix estimate of populations in Gt. Britain, MIDDLETON 943; Population control in England, mor-

talinity and its causes, MIDDLETON 944; Brachydactyly due to pathological conditions, HOMONNAY 601.

Phasianus colchicus instance of persistent right oviduct, TAIBEL & LEVI 1362; Induced to lay in January by artificial lighting, BISSONNETTE & CSECH 105.—*P. c. torquatus* nesting habits in Iowa, U.S.A., HAMERSTROM 530; Using other birds' nests in Iowa, BENNETT 72.

Pternistis afer revised distr. of E. African races p. 43, GRANT & M.-PRAED 482.

Rheinartia ocellata avicultural and other notes photo, DELACOUR 327.

Syrmatiscus soemmeringi scintillans note col. pl., DELACOUR 325.

FAM. NUMIDIDAE.

Guttera l. lividicollis taxonomy and races discussed p. 178, ROBERTS 1151.

Numida mitrata, *N. meleagris* revision and review of the E. African races p. 370, M.-PRAED & GRANT 859.—*N. meleagris blancoui* subsp. n. N.E. Cameroon, GROTE Ann. Monatsb. 1936 p. 158.

FAM. MELEAGRIDAE.

Meleagris effect of castration on secondary sex characters, PADOA 1057.

†*Parapavo californicus* again recorded in Pleistocene of California, H. HOWARD 617.

FAM. ODONTOPHORIDAE.

Colinus v. virginianus winter range habits ecology and conservation methods in Iowa and Wisconsin, ERRINGTON & HAMERSTROM 401; Effects of winter and populations study in Iowa, ERRINGTON 396; Effects of light on earlier laying, BISSONNETTE & CSECH 106.

Odontophorus loricatus taxonomic note p. 39, v. SEILERN 1236.

ORDER TURNICIFORMES.

Turnix tridactyla (Pennant) this name must be used for the Andalusian Quail, MATHEWS 904.

ORDER PTEROCLIDIFORMES.

Pterocles exustus ellioti is the correct name for the Indian race p. 681, WHISTLER 1491.

ORDER COLUMBIFORMES.

Eye colour in Pigeons, LIENHART 793.

The formation of crop-milk in the Pigeons, PATEL 1068.

Blood studies on specific characters in species and species-hybrids in Doves, IRWIN 642.

FAM. TRERONIDAE.

Review of the Ptilinopodinae (genera *Haemtaena*, *Leucotreron*, *Neoleucotreron* and *Ptilinopus*) of the Philippines with descr. and keys, MANUEL 882.

Dendrophassa bicincta S. Indian races nomencl. distr. p. 673, WHISTLER 1491.

Ducula chalconota races reviewed p. 235, HARTERT & PALUDAN 549.

Leucotreron leclancheri longialis subsp. n. Batan I., Philippines, MANUEL Philipp. J. Sci. 59 p. 307.

Lopholaimus antarcticus range, breeding and other habits col. pl., GILBERT 452.

Muscadivora aenea pusilla range and type locality p. 674, WHISTLER, 1491.

Neoleucotreron merrilli faustinoi subsp. n. Mt. Tabuan Luzon P.I., MANUEL Philipp. J. Sci. 59 p. 307 col. pl.

Phapitreron review of the Philippine spp. and races p. 290, *P. amethystina celestinoi* Bohol p. 300, *P. a. mindanaensis* Mindanao p. 301 subsp. n., MANUEL Philipp. J. Sci. 59 1936.

Ptilinopus p. pulchellus note p. 234, HARTERT & PALUDAN 549.

FAM. COLUMBIDAE.

Calopelia puella brehmeri notes pp. 558, 580, STONE 1327.

Columba guinea type-locality fixed Senegal, GRANT & M.-PRAED 481.

Columbigallina passerina nigrirostris subsp. n. St. Kitts W.I., DANFORTH J. Agr. Univ. P. Rico 19 1935 p. 483.

Dialiptila (= *Columba*) *phoeonota* laying 17 eggs in 12 months, JOHNSON 658.

Gallicolumba sanctaecrucis, *G. jobiensis chalconota* addt. descr. p. 3, MAYR 917.

Leptotila verreauxi chloroauchenia habits in Paraguay, INSFRAN 637.

Ena capensis type locality Cape Peninsula, GRANT & M.-PRAED 478.

Stigmatopelia senegalensis only three races recognizable, M.-PRAED & GRANT 860.

Streptopelia decaocto decaocto status in Roumania, CALINESCU 196.—*S. capicola* type-locality and races, only two recognizable, M.-PRAED & GRANT 860.—*S. roseogrisea* *S. senegalensis* note on races in French Sudan p. 290, PALUDAN 1066.—*S. fulvopectoralis* Granvik appears to be an erythristic phase of *S. decipiens perspicillata* Fisch. & Reichw. p. 104, GRANT & M.-PRAED 477.—*S. lugens* recorded for Arabia p. 19, BATES 52.—*S. orientalis meena* discussion of Indian races and their distr., WHISTLER 1491.

Turtur afer kilimensis in N.E. Transvaal p. 269, ROBERTS 1152.

Turturoena iriditorques type locality is Liberia not Gaboon p. 14, BATES 52.

Tympanistria t. tympanistria type loc. is Gamtoos River, Cape Prov. p. 105, GRANT & M.-PRAED 477.

ORDER RALLIFORMES.

FAM. RALLIDAE.

Amaurornis phoenicurea variabilis subsp. n. Celebes, STRESEMANN Ibis 1936 p. 369.—*A. phoenicurea cleptea* = *A. p. javanica* descr. nestling p. 3, JUNG 689.

†*Aphanapteryx* evidence of another live example formerly in Europe, RENSCHAW 1143.

Fulica atra food and feeding habits in England, COLLINGE 258.—*F. a. americana* nests eggs and young obs. in Iowa, HENDRICKSON 570.

Gallinula c. chloropus territorial and other habits in winter, MORLEY 985.—*G. chloropus brachyptera* nest and egg photo p. 7, HOESCH 591.—*G. tenebrosa* field obs. in Q'sland, LORD 830.

Hypotaenidia torquata remigialis subsp. n. Celebes, STRESEMANN Ibis 1936 p. 368.—*H. philippensis* breeding and other habits in New S. Wales, GILBERT 453.

Ionornis martinica prey on eggs and young of other birds, McILHENNY 853.

Porzana pusilla colour of legs in Australian race, WHITTELL 1502.

Rallacula key to spp. and races p. 239, *R. leucospila steini* sp. n. W. New Guinea ROTHSCHILD Mitt. zool. Mus. Berlin 21 p. 239.

Rallus pectoralis nesting and other habits in N.S. Wales, GILBERT 454.

Sarothrura elegans habits and cry, MABERLEY 846.—*S. elegans reichenovi* in Kenya p. 153, PETERS & LOVERIDGE 1076.—*S. lineata* type-loc. Knysna, GRANT & M.-PRAED 474.

Tribonyx ventralis no races recognizable, C. M. N. WHITE 1496.

ORDER PODICIPEDIFORMES.

Food of Grebes nr. Arcachon, LANDE & SIGALAS 760.

Podiceps c. cristatus census of 1935 in Britain, HOLLOM 597; Census and distr. in S.E. Counties of England, HOLLOM 598; Field notes in Herts, LLOYD 810; Observations on "territory" and breeding density, VENABLES & LACK 1437.—*P. griseigena* racial variation, LÖNNBERG 824.—*P. ruficollis* near Melbourne field-obs. and photos, LITTLEJOHNS 807; Breeding and other habits and photo of juv in S. Australia, TERRILL 1372.

ORDER COLYMBIFORMES.

Colymbus adamsii taken in Czechoslovakia, MUSILEK 1011.—*C. arcticus* details of moult, SCHÜZ 1225.—*C. a. viridigularis* recorded in East Prussia, STRESEMANN 1336.—*C. glacialis* in Auvergne, PITOU 1093.

Gavia adamsii in Austria p. 41, v. SEILERN 1236.—*G. stellata* wrongly recorded in Montana, LINCOLN 794.

ORDER SPHENISCIFORMES.

Pygoscelis adeliae and other Penguins in S. Orkney, field-observations, ARDLEY 28.

ORDER PROCELLARIIFORMES.

A key to the families and genera of the Order and remarks on taxonomy and nomenclature, MATHEWS 903.

The ossification of tendons in the patagial fan of the Tubinares, MATHEWS 898.

Albatrosses and Petrels of Western Australia, WHITLOCK 1499.

Movements of Puffins and Petrels off S. California coast, MILLER 950.

FAM. HYDROBATIDAE (olim PROCELLARIIDAE).

Oceanodroma leucorhoa in East Gothland Sweden, fig., LÖNNBERG 823.—*O. castro* nesting in Hondo, Japan, KUMAGAI 747.

FAM. PROCELLARIIDAE (olim PUFFINIDAE).

Alphapuffinus assimilis glauerti subsp. n. S.W. Australia, MATHEWS Bull. B.O.C. 57 p. 24.

Cookilaria leucoptera hypoleuca recorded for Philippine Is., p. 318, MCGREGOR & MANUEL 852.

Cymochorea melania note on the races in Japanese seas, MATHEWS 901.

Fulmarus g. glacialis recent extension of breeding range in British Is., GORDON 470; Colonies and present status in Northumberland, LEVETT 784, 785; Nesting on Farne Is., BOOTH 139.

Macronectes giganteus colour phases in S. Orkney and other notes p. 358, ARDLEY 28.

Priocella antarctica nesting in S. Orkney p. 364, ARDLEY 28.

Pseudobulweria gen. n. for type *Thalassidroma macgillivrayi* Gray, MATHEWS Ibis 1936 p. 309 fig. of bill.

Pterodroma neglecta revision and key of races, MATHEWS 906; On the colour of the shafts of the primaries p. 25, MATHEWS 902.—*P. neglecta juana* subsp. n. Juan Fernandez Is., Pacific, MATHEWS Bull. B.O.C. 56 p. 59.—*P. rostrata trouessarti* recorded for Philippine Is. p. 317, MCGREGOR & MANUEL 852.

Puffinus assimilis lherminieri taken in Sussex, a new British Bird, HARRISON 545.—*P. kuhlii* recorded for Moravia, MUSILEK 1009.—*P. griseus* nesting on Tasman I., off Tasmania, JONES 661.—*P. leucomelas* in the Philippine Is., p. 318, MCGREGOR & MANUEL 852.—*P. tenuirostris* breeding notes on S. Australian Islands and their decreasing numbers, F. W. JONES 662.

FAM. DIOMEDEIDAE.

The Albatrosses of South Australia occurrences, key and identifications, CONDON 260.

Wanderings and other habits of Albatrosses, JONES 660.

ORDER ALCIFORMES.

Review of the Auks with col. pls. and photos, WETMORE 1481.

Alca torda britannica subsp. n. British coasts, C. B. TICEHURST Ibis 1936 p. 383.

Uria ringvia is a good species and other taxonomic notes on the genus, KRASSOVSKY 733.

ORDER LARIFORMES.

Gulls of the Bristol area, TETLEY 1373.

The marine foods of Gulls and other seabirds in Spitsbergen, HARTLEY & FISHER 550.

Chlidonias leucoptera breeding nr. Bentheim, N.W. Germany, FALTER 411.

Gelochelidon nilotica ringed in Denmark recovered in Barbados, LINCOLN 795; Recorded for Philippines p. 322, MCGREGOR & MANUEL 852.

Hydrochelidon caspia recorded for Philippine Is. p. 322, MCGREGOR & MANUEL 852.

Larus a. argentatus social problems and habits in Holland, TINBERGEN 1393, 1395; Studies on social life and habits in Holland, photos, THIJSSSE & TINBERGEN 1374.—*L. argentatus*, *L. fuscus* further discussion of taxonomy and races, MEINERTZHAGEN & LOWE 925.—*L. argentatus vegae* recorded for the Philippines Is. p. 321, MCGREGOR & MANUEL 852.—*L. marinus* a visit to a breeding colony in Iceland, TIMMERMANN & GUDMUNDSSON 1391.—*L. canus stegmanni* nom. n. pro *L. c. major* Middend. 1853 nec Brehm 1831, BRODKORB Orn. Monatsb. 1936 p. 122.—*L. r. ridibundus* habits, a study in behaviour, KIRKMAN 710; Food of young in Czechoslovakia, JIRSIK 655; Methods of rearing in captivity for Trematode studies, ROTH-SCHILD 1181.—*L. genei* status in Egypt and colour of bill p. 47, JOURDAIN & LYNES 684.—*L. glaucus* status in Schleswig-Holstein, HAGEN 521.—*L.*

hemprichii status in Zanzibar waters p. 256, PAKENHAM 1059.—*L. novae-hollandiae* recorded for New Guinea p. 42, MAYR & RAND 922.—*L. philadelphia* nesting in British Columbia, MUNRO 999; Critical note on occurrence in Germany, NIETHAMMER 1023.—*L. pipixcan* sight record in Devonshire, W. P. LOWE 836.—*L. delawarensis* in Alberta, field obs. nesting and population, MUNRO 1002.

Pagophila alba in Massachusetts, LAWSON 774.

Rynchops nigra intercedens functional anatomy of the bill and muscles, FRIELING 428.—*R. n. cinerascens* recorded for Glover's I., Grenada W.I., DANFORTH 293.

Sterna hirundo revision of Palaearctic races, 5 recognized, STEGMANN 1305; On Zanzibar I. in July p. 256, PAKENHAM 1059.—*S. hirundo*, *S. macrura* downy plumage of nestlings compared, BERGMAN & FABRICIUS 79.—*S. macrura* in Kashmir, first Indian record, WHISTLER 1489.—*S. s. sandvicensis* on the Baltic coast nr. Danzig, DOBBRICK 358.—*S. anaetheta*, *S. sumatrana* nesting notes in Fukien, China, CALDWELL 195.—*S. albifrons sinensis*, *S. a. anaethetus* nesting notes, Malay Pen., MADOC 866.—*S. albifrons guineae* in French Sudan note p. 287, PALUDAN 1066.—*S. fuscata* recorded for S. Africa from Zululand coast, ROBERTS 1155.

ORDER CHARADRIIFORMES.

Phylogeny and classification of the Charadriiformes, v. BOETTCHER 122.

The Waders of Kenya and Uganda, v. SOMEREN 1282.

North American Waders migrating to New Zealand, BROOKS 164.

Migrating Waders at Queen Charlotte Is., Br. Columbia, MUNRO 1001.

Coloured plates of German Waders in flight distribution status, etc., KIRCHNER 709.

The insect food of Waders passing Heligoland on migration, GOETHE 467.

FAM. THINOCORYTHIDAE.

Thinocorys rumicivorus nest and eggs with photo taken in Rio Negro, Argentina, BELCHER 66.

FAM. CHARADRIIDAE.

Afroxechus forbesi nesting and other field notes, Nigeria, FAIRBAIRN 409.

Anomalophrys superciliosus field notes Nigeria, CLARKE 249.

Arenaria interpres oahuensis descr. of N. Zealand examples p. 6, FALLA 410.

Belonopterus chilensis cayennensis recorded for Panama, GRISWOLD 499; Nesting habits in captivity, STEMMLER-MORATH 1321.

Calidris minuta, *C. temminckii* field observation in Holland, SLUITERS 1269.—*C. temminckii* migration movements and ecology in Saxony, DATHE 308.—*C. minuta* courting habits, CHRISTOLEIT 243.

Capella account of spp. occurring in Hong Kong, *C. g. raddei* col. pl., HERKLOTS 575; habits of Hong Kong spp., PEREIRA 1072.—*C. gallinago* general account and shooting hints, SEIGNE & KEITH 1235.—*C. megala* recorded in Ceylon, WAIT 1457.—*C. paraguayae aridina* recorded for Argentina p. 289, ZOTTA 1570.

Charadrius alexandrinus nesting note nr. Szeged, Hungary, WEISZ 1478.—*C. a. seebohmii* breeding in Java, HOOGERWERF 604.—*C. a. occidentalis* nesting in Chile, BULLOCK 180.—*C. alexandrinus* and *C. cantianus* their status and distinctions in Europe and N.E. Africa p. 44, GRANT & M.-PRAED 482.—*C. dubius* photographed on nest, VIJVERBERG 1444.—*C. dubius curonicus* breeding and nesting habits nr. Berlin, KRÖSCHE 742.—[*C.*] *Aegialitis pallidior* Strickl. type examined and allies discussed p. 265, ROBERTS 1152.

Erolia melanotos recorded from Calvados, France, DELAPCHIER 336.—*E. minutilla* taken at mouth of Somme, first record for France, LABITTE 754.

Haematopus ostralegus pitanay in Argentina p. 289, ZOTTA 1570.

Hemiparra c. crassirostris type locality White Nile betw. 3° and 4° N. lat. GRANT & M.-PRAED 476.

Himantopus himantopus invasion of Holland 1935, BROUWER 168.—*H. osculans* eggs identified by Swinhoe in reality those of *Synthliboramphus antiquus*, JOURDAIN 675.

Leucopoliis marginatus pallidus note on Zululand ex. p. 182, ROBERTS 1151.

Limicola f. falcinellus captured in Bay of Somme, France, LABITTE 753.

Limnocyrtus minimus in Saxony, MEISE 929.

Limosa lapponica races reviewed, 3 recognized, *L. l. menzbieri* subsp. n. Anadyr region, E. Siberia, PORTENKO Auk 1936 p. 195.

Numenius arquata suschkini Neumann 1929 is not a recognizable race, GRANT & M.-PRAED 477.

Phalaropus fulicarius on Yorkshire moors, CHISLETT 240.—*P. jourdaini* further critical remarks, JOURDAIN 677.

Philohela minor a detailed monograph of history, life history, structure, etc., PETTINGILL 1078.

Philomachus pugnax effect of winter castration on males, v. OORDT & JUNGH 1047; Recorded for Philippines p. 320, MCGREGOR & MANUEL 852.

Pluvialis dominica fulva in Washington State, v. ROSSEM 1175; in California, GRINNELL 493.

Recurvirostra avosetta life history, conduct, courtship, habits in Holland, MAKINK 874; Ringed in Rhone Delta taken in Essex, WITHERBY 1524.—Status in Ceylon, PHILLIPS 1084.

Sarciophorus tectus breeding habits in captivity, STEMMLER-MORATH 1321.

Scolopax r. rusticola general account and shooting, SEIGNE & KEITH 1235; The "roding" flight in Scotland, WARWICK & v. SOMEREN 1469; Recorded for Philippine Is. p. 320, MCGREGOR & MANUEL 852.

Terekia cinerea in Sweden fig. p. 16, LÖNNBERG 823; A transmigrant in East Prussia, SIELMANN 1261; Observed at Beira, BENSON 77.

Tringa t. totanus nesting at Tring reservoirs, Herts, owing to drought, OLDHAM 1042; Variation in the extent of the web between the toes, MACDONALD 848.—*T. t. curhinus* races discussed p. 18, JUNG 689.—*T. hypoleucos* again found breeding in Denmark, HOLSTEIN 600.—*T. ochropus* nesting in Czechoslovakia, MUSILEK 1007.—*T. melanoleuca* nesting notes in Alberta, ROWAN 1183; BUNYARD 183.

Vanellus vanellus recovery of ringed birds in Holland, TEKKE 1370.

FAM. CURSORIIDAE.

Cursorius cursor somalensis type-locality Sogsoda Plain, Somaliland, GRANT & M.-PRAED 475.

Rhinoptilus africanus hartingi type locality Sogsoda Plain, Somaliland, GRANT & M.-PRAED 475.—*R. chalcopaterus* no distinguishable southern race is recognizable p. 103, GRANT & M.-PRAED 477.

FAM. OEDICNEMIDAE.

Burhinus oediconemus eggs from various localities descr., JOURDAIN 680; Two races recognized in E. Africa p. 199, M.-PRAED & GRANT 858.

FAM. OTIDAE.

Eupodotis canicollis parva subsp. n. Italian Somali, MOLTONI Atti Soc. ital. Milano 74 p. 342 fig.—*E. australis* present status and habits in Queensland, BERNEY 90.

Otis t. tarda status in Brandenburg, HESSE 581.

ORDER GRUIFORMES.

FAM. GRUIDAE.

Grus g. grus biophysics and dynamics of a flying flock over the Black Sea, SHOULEJKIN 1259; General account of migration movements, LIBBERT 788.

†*Palaeogrus geiselalensis* sp. n. Eocene nr. Halle, LAMBRECHT Nova Acta Leop. 3 1935 p. 361 fig.

FAM. ARAMIDAE.

Aramus scolopaceus pictus its distr. and its food *Pomacea* a freshwater snail, HARPER 542; Food and feeding habits, COTTAM 271.

FAM. CARIAMIDAE.

Cariama cristata structure and habits and adaptation to life on the savannas of Paraguay, FRIELING 431.

ORDER ARDEIFORMES.

FAM. PLEGADIDAE

(olim IBIDIDAE).

Plegadis falcinellus recorded breeding in Java, HOOGERWERF 604; Nesting in Victoria, BARRETT 49.

Threskiornis aethiopicus melanocephalus nesting notes in Java p. 123 photos, HOOGERWERF 603.—*T. spinicollis* economic value in W. Australia, JENKINS 650.

FAM. PLATALEIDAE.

Ajaia ajaia again recorded in Georgia, SPRUNT 1294.

FAM. CICONIIDAE.

Ciconia c. ciconia status, nesting and ringing in dep. Moselle, DELAFOSSE & OTHERS 334; Recoveries of birds ringed in Holland, HAVERSCHMIDT 553; Popular illustrated work, G. HOFFMANN 595; General account of investigations in Germany, SCHÜZ 1222; International enquiry as to status and populations, SCHÜZ 1224; Status and numbers in E. Prussia in 1934, GAUFF 442; HORNBERGER 609; SCHÜZ 1223; In Denmark, LANGE 762; Status and distr. in 1934 in West Prussia, LUTTSCHWAGER 842; Statistics of population in Winsen, Hannover, SCHEIN 1203; Nesting range in Bavaria, DIETZ 352; Wüst 1549; Present status in Württemberg, SCHWENKEL 1228; Migrations of young birds, critical notes, GEYR v. S. 447; Status and statistics in Switzerland, BLOMSCH 116; Habits, conservation and status in Lwow (Lemberg) distr., Poland, WODZICKI 1533; Migration and the Mediterranean crossing, GEYR v. S. 445; Status, population statistics and migration in Algeria, BOUET 142; Range migration status habits in Morocco, REMLINGER & BAILLY 1139; Ringed bird killed in Uganda in Febr., PITMAN 1092.—*C. nigra* general notes and photos, EBERLE 381; Nesting in Sweden, photos, JANSSON 649; Status and distr. in Poland, DUNAJEWSKI 369.

FAM. SCOPIDAE.

Scopus umbretta races and nesting in Eritrea 2 photos, MOLTONI 960.—*S. u. tenuirostris* subsp. n. Madagascar, RAND Amer. Mus. Nov. 827 p. 1.

FAM. BALAENICEPIDAE.

Balaeniceps rex popular account, DECHAMBRE 319.

FAM. ARDEIDAE.

The Herons of Moravia, ZDOBNITZKY 1557.

The heronries of N. Italy, MOLTONT 966.

Nesting notes on Javan Herons and Egrets, HOOGERWERF 603.

Review of the Herons of Argentina, ZOTTA 1568.

White Egrets in Ohio, SKAGGS 1268.

Ardea c. cinerea census of breeding stock; recent notes, NICHOLSON 1019; Status and distr. in Poland map, DUNA-JEWSKI 368; Northward breeding range in Sweden, OLDERZ 1041; Ringed in E. Prussia recovered from inland Togoland, KNABE 719; Popular work with photos, STRIJOS 1339;—*A. p. purpurea* migrations ringing results, TEN KATE 694.—*A. purpurea manillensis* recorded for Hong Kong, HERKLOTS 576.—*A. h. herodias* colonial nesting in Ohio, MOSELEY 989.

Ardeola i. ibis colour of eye and other soft parts in Spain, TUCKER 1408.

Botaurus lentiginosus peeti subsp. n. California, BRODKORB Occ. Pap. Mus. Zool. Univ. Mich. no. 333 p. 2.

Butorides javanicus icastopterus = *B. striatus javanicus* p. 22, JUNGE 689.

Egretta schistacea, *E. dimorpha* and their relationships to *E. garzetta* further discussed, F. STEINBACHER 1309.—*E. thula* feeding habits, MICHAEL 940; SPRUNT, 1294.

Ixobrychus sturmi nesting note p. 139, PETERS & LOVERIDGE 1076.—*T. eurythmus* in Amherst distr. Burma, a new Indian record, MILNER 953.—*I. exilis* food capturing habits, SUTTON 1348.—*I. exilis hesperus* migration south to Peru, CARRIKER 209.

Nesophlox evelynae salita subsp. n. Caicos I., Bahamas, GREENWAY Proc. N. Engl. Zool. Cl. 15 p. 105.

Nycticorax nycticorax hoactli a red phase recorded in California, v. ROSSEM 1173.—*N. caledonicus* recorded for Java and breeding there, HOOGERWERF 604; Breeding in Java, HOOGERWERF 602.—*N. leuconotus* recorded from Zanzibar p. 251, PAKENHAM 1059.

ORDER PHOENICOPTERIFORMES.

Phoenicopterus ruber antiquorum occurrence in Pomerania, BANZHAF 46;

Migration in Gujerat, India, ACHARYA 3.—*P. r. chilensis* nesting notes in Argentina photos, HARPER & DRABBLE 540.

ORDER ANSERIFORMES.

The classification of the Anatidae with several proposed new subgenera, DELACOUR, 330.

The bony labyrinth of the ear in the Ducks, TURKEWITSCH 1420.

Chromosomes of ducks and duck-hybrids, SOKOLOWSKAJA 1277.

The precipitation method of tracing relationships among Ducks and their hybrids, SOKOLOVSKAYA 1276.

The Diving Ducks, DELACOUR 333.

Eclipse plumage of Ducks, PERRY 1073.

Food and feeding habits of Ducks etc., MADON 867.

Diving habits of young diving Ducks in Finland, GRENQUIST 489.

Essex Duck decoys, J. W. CAMPBELL 201.

Duck migration notes from Pembroke-shire, MACKWORTH-PRAED & GILBERT 857.

Ringed Indian Ducks recovered in N. Asia, PRATER 1109.

Duck conservation situation in N. America, LINCOLN 798.

Aixopsis gen. n. for type *Anas brasiliensis* Gmel., DELACOUR Oiseau 6 p. 376.

Alopochen aegyptiacus adopting nest of *Elanus* high up in a Pine, JOHNSON 658.

†*Anabernicula minuscula* note p. 34, H. HOWARD 615.

Anas p. platyrhynchos nesting notes in Germany, DATHE & PROFF 309; Banding studies of semidomesticated birds, ERRINGTON & ALBERT 399; Food habits in Brit. Columbia, MUNRO 1000.—*A. penelope* in Nigeria, BANNERMAN 41; *A. querquedula* note at Elstree, Herts, LLOYD 810.—*A. rubripes tristis* note on nesting and egg-hatching, MOUSLEY 995.—*A. a. acuta* nesting in Kent and Sussex, N. F. TICEHURST 1387.

Anser distr. and key of British spp., BERRY 92; *Anser* dom. structure of a remarkable egg-shell, SCHMIDT 1208; The Kipp-wing abnormal variation, LÜHMANN 839.—*A. fabalis* review of the races, range and characters, DEMENTIEFF 342; Note on N. Siberian races p. 488, DEMENTIEFF 344.—*A. erythropus* nesting notes in Finnmark, CONGREVE 262.—*A. carneirostris* in the Sieben-burgen, Romania note fig. p. 92, KAMNER 692.—*A. albifrons*, *A. erythropus* anatomy of the tongue, GRESCHIK 490.

Branta bernicla further contribution to discussion on races, BIRD 99; JOURDAIN 677; Effects of eating decayed Zostera-weed in Denmark, CHRISTIANSEN 241.—*B. leucopsis* recorded in Egypt p. 45, JOURDAIN & LYNES 684.

Cairina moschata × *Anas platyrhynchos* hybrids descr. and discussion, SOKOLOWSKAJA 1278.

Casarca variegata general account col. pl., OLIVER 1044.

Callonetta subg. n. for type *Anas leucophrys* Vieill., DELACOUR Oiseau 6 p. 369.

Chen caerulescens, *C. h. hyperborea* mortality at Niagara Falls, SHEPPARD 1253; Migrations and status in N. Canada, SYNDER & SHORTT 1273.

Cygnus olor historical notes in Herts also swan-marks, C. F. TICEHURST 1389; On the present status of wild-breeding birds in Denmark, SPÄRCK 1285; Polygamy and other unusual sex relations, PORTIELJE 1102; Male associating with two females, DEWAR 350.—*C. davidi* historical note and question of validity, JABOUILLE 645.

Mergus m. merganser nesting in Dumfriesshire, GLADSTONE 461.—*M. m. americanus* feeding habits and economics in Nova Scotia, WHITE 1498; Food habits in Bt. Columbia, MUNRO & CLEMENS 1003.—*M. serrator* nesting in the Ukraine, CHARLEMAGNE 229.

Netta rufina in Lorraine, LIÉNHAUT 791.

Nettion creca note on status in N. America, CRUICKSHANK 280.

Nyroca ferina a black-spotted egg, ZIMMERMANN 1567; Recorded for the Philippine Is. p. 319, MCGREGOR & MANUEL 852.

Oxyura australis nesting notes photo nest in S. Austr. p. 213, CONDON & RIX 261.

Phaeonetta gen. n. for type *Anas erythrophthalma* Wied, DELACOUR Oiseau 6 p. 377.

Somateria molissima on the present status in Denmark and effects of conservation, SPÄRCK 1286; Nesting and eggs in Iceland, GUDMONSSON 513; Popular sketch in Baltic, ECKE 382.

Spatula clypeata diving habits, LLOYD 810.

ORDER ICHTHYORNITHIFORMES.

†*Diatryma* (?) *côlei* sp. n. Eocene nr. Lyons, GAILLARD C.R. Acad. Sci. Paris 202 p. 966.

ORDER PELECANIFORMES.

FAM. PHALACROCORACIDAE.

Range and distribution of the Cormorants, v. BOETTICHER 127.

Nannopterum harrisi display in Washington Zoo, DAVIS & FRIEDMANN 316.

Phalacrocorax carbo adaptive characters of the skeleton and external structure, KOLESNIKOV 726; In the Volga delta, DUNNE 370.—*P. c. subcormoranus* osteology especially of skull, BAUDOUIN 57.—*P. c. sinensis* in S. and E. England, WITHERBY 1523; Recorded in Suffolk p. 211 Ticehurst under POWELL 1108.—*P. ater* *territori* breeding in Java, HOOGERWERF 602.—*P. varius* breeding notes in S. Austr. p. 208, CONDON & RIX 261.—*P. auritus* on the race found in Buena Vista lake, California, v. ROSSEM 1175.—*P. a. auritus* nesting and courting of young male, MENDALL 933; Appears to be the race on Great Salt Lake and its lessening numbers, BEHLE 65; Nesting in a tree in Ballnigall Is., Bt. Columbia, SPROT 1293.

†*Phalacrocorax perspicillatus* general account and discussion of its alleged flying disabilities, STEGMANN 1306.

FAM. ANHINGIDAE (olim PLOTIDAE).

Anhinga anhinga recorded for District of Columbia, BARTSCH 50.

FAM. SULIDAE.

†*Moris vagabundus* descr. of skull Miocene Cal., COMPTON 259.—*M. reykana* sp. n. Pleistocene California, H. HOWARD Condor 1936 p. 213 fig.

Morus capensis in Zanzibar waters in July p. 250, PAKENHAM 1059.

Sula bassana distr. and breeding populations in British Isles, EDWARDS & OTHERS 386; Census on Ailsa Craig, Scotland, VEVERS & FISHER 1443.

FAM. FREGATIDAE.

Fregata magnificens recorded for Oklahoma, SUTTON 1354.

FAM. PHAETHONIDAE.

Phaethon rubricauda courting and other habits on Lord Howe I., photo, CHAFFER 216.

FAM. PELECANIDAE.

Pelecanus philippensis recorded in Java, HOOGERWERF 602.—*P. crispus* range and status in Yugoslavia p. 574, THORPE & OTHERS 1379.—*P. rufescens* in Italian Somali photo p. 335, MOLTONI 958.

ORDER CATHARTIDIFORMES.

Cathartes aura aura as well as *C. a. teter* in Texas, BRANDT 153.

Coragyps atratus in Indiana, status and habits, BUTLER 191.

Gymnogyps californianus present status in Lower California, SCOTT 1232.

Sarcoramphus papa Bartram's *Vultur sacra* of Florida identified with it, HARPER 541.

ORDER ACCIPITRIFORMES.

Monograph of the Birds of Prey, Pt. 14, SWANN 1357.

Food of German Accipitres, SCHNÜRRE 1213.

The Accipitrine Birds of the Nile Valley, KOENIG 725.

Nesting notes of Accipitres in N. Rhodesia, LEES 779.

Review of the Hawks of southern India, WHISTLER & KINNEAR 1491.

Nests and eggs of Bornean Hawks, COOMANS DE R. 266.

Results of banding Hawks and Owls, LINCOLN 796.

Hawk migration at Cape May, N. Jersey, U.S.A., ALLEN & PETERSON 21.

FAM. AEGYPTIDAE

(olim VULTURIDAE).

†*Eocathartes robustus* gen. et sp. n. Eocene nr. Halle, LAMBRECHT Nova Acta Leop. 3 1935 p. 362 fig.

Torgos t. tracheliotus nesting notes in Zool. Gardens, MORRISON-SCOTT 988.

FAM. FALCONIDAE.

Accipiter n. nisus various forms of flight, POUNDS 1107; Nesting and other habits, OWEN 1054.—*A. brevipes* in the Siebenburgen, Romania p. 97, KAMNER 692; Recorded from nr. Mecca, BATES 51.—*A. gentilis gallinarum* feeding habits in Holland, TINBERGEN 1392.—*A. virgatus kashmiriensis* subsp. n. N.W. Himalaya, WHISTLER J. Bombay N.H. Soc. 38 p. 435.—*A. s. superciliosus* nest and eggs in Brazil, WOLFE 1540.

Aquila chrysaetos account of employment in Falconry in Turkestan, DEMENTIEV 345; Economic status and need of conservation in N. California, DALE 290.—*A. chrysaetos*, *A. heliaca* distr. and status in Balkan Peninsula p. 568, THORPE & OTHERS 1379.—*A. maculata* status in Hanover Province, WEDEMEYER 1476.—*A. pomarina* and *A. clanga* status and question of nesting in France, JOUARD 669.—*A. n. orientalis* and *A. pomarina* in S. Africa note and correction p. 266, ROBERTS 1152.—*A. verreauxi* nesting notes in S.W. Africa, HOESCH 592.

Astur badius dussumieri distr. taxonomy, etc. p. 432, *A. trivirgatus layardi* subsp. n. Ceylon p. 434, WHISTLER J. Bombay N.H. Soc. 38.

Buteo b. buteo histology of pyloric glands, BROUSSY 166; Yearly movements and status in C. Europe, BURR 188.—*B. r. rufinus* in Switzerland, MEYLAN & HUBER 939.—*B. vulpinus intermedius* in Brandenburg and E. Prussia, BÄHRMANN & SCHÜZ 34.—*B. borealis* critical notes on races and phases, TAVERNER 1367.—*B. platypterus brunnescens* subsp. n. Puerto Rico, DANFORTH & A. J. SMITH J. Agr. Univ. Puerto Rico 19 1935 p. 485.—

B. magnirostris sinus-honduri subsp. n. Bonacca I., Honduras, BOND Proc. Acad. Philad. 88 p. 355.

Circæetus gallicus habits in Silesia, ZEBE 1558.

Circus pygargus number nesting in Britain, WITHERBY 1520; examination of food pellets, C. B. TICEHURST 1380.—*C. cyaneus* nesting notes in Germany, HENNINGS 572.—*C. macrourus* status in Holland v. D. BRINK & TEKKE 158.—*C. melanoleucus* nesting note N. Burma, STANFORD 1297.—*C. hudsonius* food habits in north Middle U.S.A., ERRINGTON & BRECKENRIDGE 400.

Cuncuma leucogaster note on a juv. ex. from Solomon Is., JOURDAIN 676.

Falco peregrinus in Sweden, photos, SARP 1198; Nesting notes and photos in Poland, SOKOŁOWSKI 1279.—*F. p. leucogenys* in Taimyr note p. 487, DEMENTIEFF 344.—*F. p. anatum* habits and status in Chile, HOUSSE 614; and other N. Amer. spp. food-habits, R. M. BOND 133.—*F. gyrfalco* a remarkable abnormally coloured example from Greenland, DÉMENTIEFF 343.—*F. gyrfalco cherrug* an escape from captivity in Germany, recovered nr. Moscow, DEMENTIEFF 340.—*F. subbuteo* variation and races p. 92, STEGMANN 1304.—*F. s. subbuteo* nesting and other habits, SCHUYL & TINBERGEN 1221.—*F. c. aesalon* field notes in Warwickshire, WAGSTAFF 1455.—*F. c. columbarius* speed and eyesight, R. M. BOND 134.—*F. mexicanus* nesting notes in Montana, MARSH 891; Food listed from pellets, R. M. BOND 135.—*F. tinnunculus* migrations from ringed returns, HEIDEMANN 555; Field observations in France, MOUILLARD 992.—*F. t. objurgatus* distr. descr. and taxonomy p. 420, WHISTLER 1491.

†*Falco ramenta* sp. n. Miocene Nebraska, *F. falconellus* Shufeldt is unidentifiable, WETMORE Proc. U.S. Nat. Mus. 84 p. 75 figs.

Gypaëtus barbatus present status in Siebenburgen, Romania p. 98, KAMNER 692; Present and past status and nesting notes in Bosnia, REISER 1137; Probably on Kilimanjaro p. 864, MOREAU 981.

Gypohierax angolensis longevity in captivity and status in S. Africa, BIGALKE 98.

Haematornis cheela melanotis status nomencl. distr. S. India p. 426, WHISTLER 1491.

Haliaetus leucocephalus food and nesting habits in Delaware, F. R. SMITH 1270; Status in Illinois, BONNELL 136; History of a specimen in Boston Museum, KENNARD 702.—*H. sandfordi* addt. descr. p. 1, MAYR 917.

Harpagus diodon nest and eggs in Brazil, WOLFE 1540.

Herpetotheres c. queribundus nest and eggs in Paraguay, WOLFE 1540.

Hieraaëtus pennatus on the Chari river French Afr. p. 350, BERLIOZ 82.

Machaerhamphus anderssoni bat-catching habits at Zanzibar p. 253, PAKENHAM 1059.

Milvago chimango temucoensis range and characters p. 292, ZOTTA 1570.

Milvus m. migrans breeding habits in Germany, SCHUSTER 1218; Breeding in N. Hanover, RÜPPEL 1185; Courtship flights, SICK 1260.—*M. k. korschun* food and feeding habits of young birds in C. Russia, PTOUCHENKO 1115.

†*Palaeoborus howardae* sp. n. Miocene Nebraska, WETMORE Proc. U.S. Nat. Mus. 84 p. 73 figs.

Pernis apivorus field notes in dep. des Vosges, CLAUDON 252; Status in Sweden, RADBERG 1121; Nesting in N. Italy, MOLTONI 968.

Polyborus cheriway auduboni recorded for Washington State, BALMER 37.

Spizaëtus ayresii Gurney must be called *Anomalaëtus dubius* (A. Smith) p. 321, ROBERTS 1153.—*S. cirrhatus vanheurni* subsp. n. Simalur nr. Sumatra, JUNGE Temminckia 1 p. 24.

Uroaëtus audax economic status discussed, MCGILP 850; Troublesome among lambing ewes and killing sheep, CAIN 194; Recorded for New Guinea p. 42, MAYR & RAND 922.

FAM. PANDIONIDAE.

Pandion haliaëtus in the O.F. State Prov. far inland, JOHNSON 658.—*P. h. carolinensis* nesting and other habits in Virginia, TYRRELL 1423; Migration in eastern U.S.A. from banding, WORTH 1548.

ORDER STRIGIFORMES.

Economics of British Owls, LANCUM 758.

Yorkshire Owls, HILL 589.

Danish Owls, JESPERSON 653.

Movements of Swedish Owls, LÖNNBERG 826.

Food of Owls in Germany, SCHAEFER 1202.

Results of banding Hawks and Owls, LINCOLN 796.

Owls of the Rocky Mt. region, economics, habitats and key, KELSO 701.

The feathering of the legs of Owls and its relation to external conditions, KELSO 698.

Habits of Owls in captivity, MUÑOZ D. C. 998.

Colour variation in Owls, v. BOETTICHER 118.

FAM. STRIGIDAE
(olim BUBONIDAE).

Aegolius tengmalmi distribution in Turkestan, DAHL 289.

Asio f. flammeus field notes in Auvergne, MOUILLARD 991; Added to Philippine list p. 323, MCGREGOR & MANUEL 852; Winter food in Georgia, U.S.A., TOMKINS 1400.

Athene noctua experiments on the food of captive birds, HIBBERT-WARE 583; Status and economics in Northumberland and Durham, TULLY 1414.

Bubo b. bubo habits in Germany, SCHNURRE 1211; Evidence of preying on Roedeer (*Capreolus*), MEISE & ZIMMERMANN 931; Food analysis on the Åland Is., MÄRZ 893.

Ciccaba virgata eatoni subsp. n. S. Mexico, KELSO Auk 1936 p. 215.

Glaucidium capense field observation and nesting notes S. Rhodesia p. 9, TOWNLEY 1402.

Ninox jacquinoti floridae, N. j. mono addt. descr. p. 7, MAYR 917.

Otus flammeolus habits and other notes, L. MILLER 951.—*O. vermiculatus huberi* subsp. n. "Bogota," KELSO Auk 1936 p. 448.

Rhinopteryx clamator oberi subsp. n. Tobago W.I., KELSO Auk 1936 p. 82.

Scotopelia peli fischeri in S. Rhodesia field notes p. 17, TOWNLEY 1402.

Speotyto cunicularia hypogaea migration from banding methods, BRECKLE 155.

Spiloglaux boobook photo of young bird, MONRO 970.

Strix woodfordi suahelica note on races p. 160, PETERS & LOVERIDGE 1076.—*S. seloputo seloputo* rattling noise in Java, SPENNEMANN 1288.

FAM. TYTONIDAE
(olim STRIGIDAE).

Tyto a. alba food habits in Worcestershire from cast pellets, BETTS 95; Status in I. of Man, COWIN 274.—*T. a. guttata* first record for Finland, VÄLKANGAS 1429.—*T. a. interposita*, *T. a. crassirostris* addt. descr. p. 8, MAYR 917.—*T. capensis* (Smith) name must be replaced by *T. punctata* (Licht.), p. 268, ROBERTS 1152.

ORDER PSITTACIFORMES.

Review with keys and descr. of the Parrots of Argentina, ORFILA 1050.

Avicultural guide for Parrots, MANERNER 878.

Longevity in Parrots, SZABÓ 1359.

FAM. LORIIDAE.

Coriphilus peruvianus note on scarcity col. pl., DELACOUR 325.

Vini kuhli note col. pl., DELACOUR 325.

FAM. CYCLOPSITTACIDAE.

Neopsittacus musschenbroekii medius subsp. n. W. New Guinea, STRESEMANN Mitt. zool. Mus. Berlin 21 p. 231.

Opopsitta coxeni first descr. of nest and eggs from Q'sland, KINGHORN 706.

FAM. PSITTACIDAE.

Aprosmictus erythropterus papua subsp. n. Terr. Papua, MAYR & RAND Mitt. zool. Mus. Berlin 21 p. 241.

Dasyptilus pesqueti note col. pl., MAYR 915.

Melopsittacus undulatus general work on variation and aviculture, WATMOUGH 1473; A general account with

col. figs. of colour-variations, MOLTONI 931; Budgerigar aviculture, TRELOAR & HOCKING 1404; Analysis, and origin of the yellow pigment, VÖLKER 1447.

Poicephalus rufiventris pallidus type locality Burao, Somaliland p. 47, GRANT & M.-PRAED 482.

Platyercus eximius field notes photo, SHARLAND 1246.

Psittacella madaraszi major subsp. n. W. New Guinea, ROTHCHILD Mitt. zool. Mus. Berlin 21 p. 233.

Psittacula nipalensis the blue variation and its breeding p. 273, EZRA 407.

ORDER CORACIIFORMES.

FAM. PODARGIDAE.

Aegotheles wallacei races reviewed p. 225, HARTERT & PALUDAN 549.—*A. albertisi wondiwoi* subsp. n. Dutch New Guinea, MAYR & RAND Mitt. zool. Mus. Berlin 21 p. 242.

Podargus strigoides aberrant feeding habits, SERVenty 1241; Nesting notes in captivity, FLEAY 420.

FAM. CORACIIDAE.

A review of the Rollers with remarks on phylogeny and relationships, BOETTICHER 126.

Coracias garrula semenovi ranges south in the Bombay Pres., ALI 12.

Eurystomus gularis in the Belgian Congo, SCHOUTEDEN 1215.—*E. orientalis oberholseri* subsp. n. Simalur nr. Sumatra, JUNGE Temminckia 1 p. 30 col. pl.

FAM. ALCEDINIDAE.

Sikkim and Darjeeling Kingfishers, INGLIS 632.

Anatomy of the Kingfisher leg and foot, G. STEINBACHER 1313.

Alcedo atthis migration in Russia, STEGMANN 1307.—*A. atthis ispida* incubation and egg-breaking habits, BROWN 175; Colour of bill in two sexes, CLANCEY 244.—*A. hercules* genl. acct. col. pl., INGLIS 635.

Ceryle lugubris pallida range in Japan, YAMASHINA & INOUE 1553.

Ceyx lepidus pallidus, C. l. malaitae addt. descr. p. 5, MAYR 917.—*C. rufidorsus* at Simalur, notes p. 35, JUNGE 689.

Halcyon chloris critical note on races p. 36, JUNGE 689.—*H. c. mala*, *H. c. pavuvu* addt. descr. p. 6, MAYR 917.

Megaceryle alcyon feeding habits and economics in Nova Scotia, WHITE 1498.

Tanyptera hydrocharis rediscovered in New Guinea, T. galatea taxonomic note p. 42, MAYR & RAND 922.

FAM. BUCEROTIDAE.

Bycanistes cristatus detailed observations on breeding habits, MOREAU 979.

†*Geiseloceros robustus* gen. et sp. n. Eocene nr. Halle, LAMBRECHT Nova Acta Leop. 3 1935 p. 365 figs.

Lophoceros deckeni, *L. melanoleucus* nesting habits, MOREAU 979.—*L. melanoleucus* auct. further discussion of name and taxonomy p. 268, ROBERTS 1152.—*L. nasutus* notes on races and taxonomy figs. p. 266, ROBERTS 1152.

FAM. UPUPIDAE.

Upupa epops major nesting and other habits in Egypt, GREAVES 484.

FAM. PHOENICULIDAE

(olim IRRISORIDAE).

Phoeniculus purpureus zuluensis subsp. n. N.E. Zululand, ROBERT Ann. Transv. Mus. 18 1936 p. 190.

Rhinopomastus minor extimus Friedmann = *R. m. cabanisi* p. 870, MOREAU 981.

FAM. MEROPIDAE.

A review of the family and its classification, v. BOETTICHER 124.

FAM. CAPRIMULGIDAE.

Caprimulgus europaeus movements of young birds, MOFFAT 956.—*C. inornatus* note on juv. from French Sudan p. 294, PALUDAN 1066.—*C. nigriscapularis* in Sierra Leone, BANNERMAN 41.

Lurocatis semitorquatus noctivagus subsp. n. Panama, GRISWOLD Proc. N. Engl. Zool. Cl. 15 p. 101.

Lyncornis macrotis jacobsoni subsp. n. Simalur I. nr. Sumatra, JUNGE Temminckia 1 p. 39 1 pl.

FAM. MACROPTERYGIDAE.

Hemiprocne coronata breeding and other habits photos, LOWTHER 838; also in Upper Burma, STANFORD & SMITH 1298.

FAM. MICROPODIDAE
(olim CYPSELIDAE).

Apus apus nocturnal roosting habits, TUCKER 1409.

Chaetura caudacuta formosana subsp. n. Formosa, YAMASHINA Orn. Monatsb. 1936 p. 90.

Collocalia the Esculent Nest Swifts of Sarawak occurrence habits economics p. 306, BANKS 38; the trade in nests in Java, BOYER 148.—*C. francica*, *C. innominata* their edible nests, trade legislation, literature, etc. in Siam, GILES 455.—*C. esculenta cyanoptila* note on races p. 41, JUNGE 689.—*C. vanikorensis pelewensis*, *C. v. ponapensis*, *C. lowi orientalis* addt. descr. p. 11, MAYR 917.

Cypselus apus on the glossopharyngeal and trigeminal nerves, LORENZ 831.

Hirundanapus celebensis dubius note on validity p. 323, MCGREGOR & MANUEL 852.

Micropus affinis abessynicus note in French Sudan p. 295, PALUDAN 1066.

Tachynautes parvus myochrous nesting and other habits p. 104, TOWNLEY 1403.

FAM. TROCHILIDAE.

The digestive organs and the flight of the Hummingbirds, STEINBACHER 1312.

The methods of capture and of caring for Hummingbirds in cages, CORDIER 267.

Avicult. notes on Hummingbirds, SCHMIDT-HOENSDORF 1209.

Anthracothorax prevosti nigrilineatus subsp. n. Bonacca I., Honduras, BOND Proc. Acad. Philad. 88 p. 359.

Archilochus colubris nesting notes, S. Carolina, sketches, PICKENS 1086.—*A. alexandri* choice of nesting sites, WOODS 1547.

Calypste anna night-roosting habits, DYER 378.

Helianthea and the allied genera, general account, range and taxonomy, BERLIOZ 86.

Heliotrypha simoni probably = hybrid *H. exortis* × *Eriocnemis aureliae*, BERLIOZ 83.

Ionolaima whitelyana a race of *I. schreibersi* p. 36, v. SEILERN 1236.

Phaethornis superciliosus moorei not in S. Peru p. 36, v. SEILERN 1236.

Threnetes leucurus rufigaster note p. 35, v. SEILERN 1236.

FAM. COLIIDAE.

Colius striatus note on E. African races p. 871, MOREAU 981.

ORDER COCCYGES.

FAM. MUSOPHAGIDAE.

Corythaecola c. cristata type locality is Sierra Leone p. 133, GRANT & M.-PRAED 480.

Corythaixoides leucogaster type locality Central Abyssinia p. 133, GRANT & M.-PRAED 480.

Turacus fischeri recorded for Zanzibar I. p. 258, PAKENHAM 1059.—*T. leucolophus* note on orig. descr. p. 158, PETERS & LOVERIDGE 1076.—*T. reichenowi* note p. 191, ROBERTS 1151.

FAM. CUCULIDAE.

A list of South African Cuckoos and their fosterers with descr. eggs, SPARROW 1287; and of European and Indian Cucko's eggs with remarks, BAKER 36.

The Cuckoo problem in India with four photos, LIVESEY 808.

Cacomantis merulinus querulus nesting and other notes in Burma, LIVESEY 809.—*C. castaneiventris arfakianus* note p. 229, HARTERT & PALUDAN 549.

Centropus burchellii not *C. senegalensis* is figured on le Vaillant's pl. 219 p. 268, ROBERTS 1152.

Ceuthmochares aereus note on races p. 582, STONE 1327.

Clamator serratus type locality Cape Peninsula, *C. hypopinaris* Rondebosch Cape Peninsula, GRANT & M.-PRAED 478.

Coccytes albonotatus and *C. caroli* both synonyms of *C. cafer* p. 124, GRANT & M.-PRAED 479.

Coccyzus m. minor a resident and breeding in Trinidad p. 9, BELCHER & SMOOKER 68.

Cuculus canorus breeding problems discussed, CATHELIN 212; Further observation on the problem of the laying of the egg, FINCKENSTEIN 418;

Seven types of eggs in Finland and their distribution, WASENIUS 1470; Attacked by a Stonechat nr. Simla, JONES 663.—*C. clamosus* type locality Cradock div., Cape Prov., GRANT & M.-PRAED 478.—*C. clamosus* and *C. gabonensis* status and synonymy, GRANT & M.-PRAED 479.—*C. p. poliocephalus* not *C. p. rockii* is the race occurring in East Africa p. 131, GRANT & M.-PRAED 480.—*C. m. micropterus* parasitizing *Dicrurus* in N. Bengal, O'DONEL 1039; Note on nesting p. 3, ALI 14.

Eudynamis scolopacea simalurensis subsp. n. Simalur I. off Sumatra, JUNGE Temminckia 1 p. 43 pl.

Geococcyx californianus attacking a Rattle-snake, COCKERELL 257.

Microdynamis parva griseus subsp. n. New Guinea, MAYR & RAND Amer. Mus. Nov. no. 868 p. 2.

Neomorphus radiolus addt. ex-amples from Ecuador, BLAKE 110.

Pachyococcyx validus recorded for S. Africa from Kruger Nat. Park, ROBERTS 1155.—*P. validus canescens* notes in S. Rhodesia p. 15, TOWNLEY 1402.

Rhopodytes viridirostris nesting note S. India, BIDDULPH 96.

Urodynamis taitensis descr. egg. in *Mahona albicilla* nest in N. Zealand, photo, WILKINSON 1507; On the parasitic habits and eggs, STEAD 1300.

ORDER SCANSORES.

FAM. INDICATORIDAE.

Indicator indicator observations on habits in Eritrea, FOSSATI 422.

Prodotiscus insignis zambesiae recorded for S. Africa from S. Rhodesia, ROBERTS 1155.

FAM. CAPITONIDAE.

A critical review of the Oriental Barbets with keys and descr., BERLIOZ 85.

Lybius vieilloti type-locality and races p. 320, PALUDAN 1066.

FAM. RHAMPHASTIDAE.

Selenidera maculirostris races in Brazil, p. 22, LAUBMANN 769.

ORDER PICIFORMES.

FAM. BUCCONIDAE.

On the curious double-pointed bill in some of the Buccos especially in *Nystactes*, v. BOETTICHER 121.

Malacoptila s. striata note on name and races p. 23, LAUBMANN 769.—*M. semicincta* in S.E. Peru p. 39, v. SEILERN 1236.

FAM. PICIDAE.

The osteology of the Picine skull with conclusions on affinities, classification and taxonomy, KRASSOVSKY 732, 734.

Reflections on the diagnostic characters of the genera of Woodpeckers p. 15, BATES 52.

Anomalous behaviour and habits among Woodpeckers, LÖNNBERG 828.

Asyndesmus lewisi winter and acorn-storing habits, LINSDALE 802.

Brachypternus benghalensis palliolatus subsp. n. Punjab, VAN TYNE & KOELZ. Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 2.

Campephilus principalis surviving in Louisiana, present status, LOWERY 837.

Campethera permista in French Sudan note on races p. 303, PALUDAN 1066.

Celeus grammicus latifasciatus subsp. n. S.E. Peru, v. SEILERN Ann. naturh. Mus. Wien 47 p. 36.

Centurus santacruzi insulanus Utila I. p. 360, *C. rubriventris tysoni* Bonacca I. p. 361 subsp. n. Honduras, BOND Proc. Acad. Philad 88.

Chrysophilopicus abingoni anderssoni subsp. n. S.W. Africa, ROBERTS Ann. Transv. Mus. 18 p. 255.

Colaptes auratus, *C. cafer* natural hybridization and genetic studies, DEAKIN 318.—*C. auratus luteus* sexual selection and courtship habits, NOBLE 1029.

Dendrocopos major pigmentation of the skin, sexual, seasonal and developmental changes, DZIRNE 379.

Dryobates major feeding on Lepidoptera cocoons, HEIM DE B. 559; A nest plunderer, SCHNURRE 1212; A wanderer to N. Italy, MOLTONI 969; Attacking and damaging Pines and other trees,

LIÉNHART 790; Invasion of 1935 into Czechoslovakia, MUSILEK & ČERNÝ 1010.—*D. minor* breeding habits in Germany, SCHUSTER 1220.—*D. leucotos* on the race in N. Baikal p. 110, STEGMANN 1304.—*D. villosus* notes on the New England races and their distinctions GRISCOM 496.

Dryocopus martius definitely recorded in Albania p. 345, WHISTLER 1488.

Leuconotopicus minor serbicus subsp. n. Velika (Montenegro), BUTURLIN Polnyi opredelitel' ptits S.S.S.R. iii p. 205.

Mesopicos griseocephalus review of races, three recognized p. 12, MOREAU 977.

Picumnus castelnau note p. 38, v. SEILERN 1236.

Picus viridis discussion of European races and of the validity of *P. v. virescens*, NIETHAMMER 1022.—*P. v. virescens* observation on winter habits, JOURDAIN 683; Arrangement of nesting holes on a tree trunk, MARPLES 890.—*P. vittatus dawae* subsp. n. Punjab, VAN TYNE & KOELZ Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 3.

Thripias namaquus note on races and their distribution, two only recognized, MOREAU 977.—*T. n. saturatus* addt. specimen noted p. 352, BERLIOZ 82.

ORDER MENURIFORMES.

Menura novaehollandiae notes, photos, display and other habits, LITTLEJOHNS 805, 807.

ORDER PASSERIFORMES.

FAM. FORMICARIIDAE.

Formicivora grisea rufiventris subsp. n. U. Orinoco, Venezuela, CARRIKER Auk 1936 p. 316.

Herpsilochmus rufimarginatus frater note p. 34, v. SEILERN 1236.

Microrhopias quixensis albicauda taxonomic note p. 34, v. SEILERN 1236.

Myrmeciza lophotes note p. 35, v. SEILERN 1236.

Pyrgilena leucoptera note on races p. 26, LAUBMANN 769.

FAM. DENDROCOLAPTIDAE.

Asthenes humilis cajamarcae subsp. n. Peru, ZIMMER Amer. Mus. Nov. 860 p. 16.

Certhiaxis mustelina, *C. cinnamomea orenocensis* notes descr. p. 11, ZIMMER 1559.

Crinioleuca marcapatae, *C. albipes discolor* descr. remarks p. 14, ZIMMER 1559.

Furnarius torridus, *F. leucopus* taxonomy and status p. 5, ZIMMER 1559.—*F. rufus commersoni* in Matto Grosso note p. 597, LAUBMANN 768.

Geositta cunicularia descr. and taxonomy of races p. 1, ZIMMER 1559.

Hylocryptus notes on Peruvian spp. and races p. 10, ZIMMER 1561.

Lepidocolaptes angustirostris chacoensis subsp. n. Formosa Prov., Argentina, LAUBMANN Verh. orn. Ges. Bayern 20 p. 601.

Phleocryptes melanops brunneescens descr. and discussion p. 8, ZIMMER 1559.

Pseudocolaptes lawrencii johnsoni range and other notes p. 1, *P. boissonneautii* descr. of races, *P. b. carabayae* subsp. n. S.E. Peru p. 8, ZIMMER Amer. Mus. Nov. 862.

Synallaxis discussion of recently described races p. 1, *S. azarae ochracea* sp. n. Ecuador p. 5, ZIMMER Amer. Mus. Nov. no. 861.

Thripadectes notes on Peruvian and other forms p. 13, ZIMMER 1561.

Xenotistes rufosuperciliatus acritus in S. Catharina p. 29, LAUBMANN 769.

Xenops tenuirostris and other forms, notes and descriptions of Peruvian and other races p. 16, ZIMMER 1561.

FAM. TYRANNIDAE.

Cnemonax gen. n. for genotype *Empidonax atriceps* Salvin, BRODKORB Occ. Pap. Mus. Zool. Univ. Mich. no. 331 p. 1.

Empidonax t. trailli an abnormal habitat in Ohio, CAMPBELL 203.

Muscisaxicola albilora, *M. alpina grisea* recorded for Argentina p. 290, ZOTTA 1570.

Muscivora forficata daybreak song in Texas, WALKER 1460.

Myiarchus cinerascens flavidior sp. n. Salvador, v. ROSSEM Trans. S. Diego Soc. Nat. Hist. 8 p. 116.—*M. tyrannulus insularum* subsp. n. Utila I., Honduras, BOND Proc. Acad. Philad. 88 p. 361.

Myiozetetes s. similis in S. Catherina, Brazil, p. 32, LAUBMANN 769.

Oncostoma olivaceum nesting notes in the Canal Zone, Panama, HARROWES 547.

Platyrinchus m. mystaceus races and names discussed p. 33, LAUBMANN 679.

Tolmomyias sulphurescens assimilis, T. s. peruvianus remarks p. 34, v. SEILERN 1236.

FAM. PIPRIDAE.

Chiroxiphia caudata courting and dancing habits, v. IHERING 631.

Heterocercus linteatus notes range p. 27, ZIMMER 1562.

Machaeropterus pyrocephalus pallidiceps Venezuela, ZIMMER Amer. Mus. Nov. no. 889 p. 17.

Manacus manacus longibarbatulus subsp. n. Rio Xingu, Brazil, ZIMMER Amer. Mus. Nov. no. 889 p. 19.

Pipra fasciicauda saturata p. 2, Peru, *P. aureola borbae* p. 5 Rio Madeira Brazil, *P. pipra occulta* p. 9 Peru, *P. p. pygmaea* p. 10 Peru, *P. p. discolor* p. 12 N. Peru, *P. p. separabilis* p. 14 Rio Xingu, Brazil, subspp. n. and annotated list of other forms, ZIMMER Amer. Mus. Nov. no. 889.

Pipreola riefferii confusa subsp. n. E. Ecuador and notes on other races, ZIMMER Amer. Mus. Nov. no. 893 p. 2.

Schiffornis turdinus aeneus p. 22, Peru, *S. major duidae* Venezuela p. 26 subspp. n. with notes on other races, ZIMMER Amer. Mus. Nov. no. 889.

FAM. COTINGIDAE.

Attila cinnamomeus no races recognized p. 5, ZIMMER 1563.

Doliornis sclateri descr. of female p. 1, ZIMMER 1563.

Laniocera hypopyrra no races, notes on variation, etc. p. 8, ZIMMER 1563.

Lipaugus c. cryptolophus in Peru notes p. 14, ZIMMER 1563.

Pachyramphus spodiurus, *P. rufus*, taxonomic notes p. 1, *P. castaneus amazonicus* Rio Madeira, Brazil p. 6,

P. polychopterus tenebrosus N.E. Peru p. 10, *P. albogriseus guayaquilensis* W. Ecuador p. 17 subspp. n., ZIMMER Amer. Mus. Nov. no. 894.

Platypsaris rufus audax range p. 19, ZIMMER 1564.

Pseudattila gen. n. for type *Attila phoenicura* Pelz., ZIMMER Amer. Mus. Nov. 893 p. 6.

Pyroderus scutatus masoni characters taxonomy p. 24, ZIMMER 1564.

Rhytipterna simplex intermedia subsp. n. Rio Tapajoz, Brazil p. 11, *R. immunda* extension of range and type loc. discussed p. 12, ZIMMER Amer. Mus. Nov. 893.

Tityra semifasciata fortis, T. inquisitor albitorques taxonomy and range p. 20, ZIMMER 1564.

FAM. PHYTOTOMIDAE.

Phytotoma rara anatomy and affinities to Cotingidae, KÜCHLER 744.

FAM. PITTIDAE.

Pitta anerythra addt. descr. p. 13, MAYR 917.

FAM. HIRUNDINIDAE.

Delichon urbica do they roost in reed-beds? TISCHLER 1396.

Hirundo rustica and *Delichon urbica* experiments in home finding, RÜPFELL 1184.

Hirundo rustica variation and races in the Palaearctic region, DÉMENTIEFF 339; Report of enquiry—size of brood, no. of clutch, census, etc. in Britain, BOYD 147; Field observations in Yorkshire, ELLIS 391; Migration observations in S.W. France p. 144, GLEGG 466; German ringed bird recovered in Cape Verde Is., SPEVAZEK 1290; Food of nestlings, THOMAS 1375.—*H. a. abyssinica* in Ubangi-Chari p. 352, BERLIOZ 82.—*H. g. griseopyga* unusual nesting habits p. 164, CHEESMAN 235.—*H. lucida clara* critical note p. 316, PALUDAN 1066.—*H. neoxena* at nest with young bird, photo, ELLIOTT 390.—*H. tahitica javanica* note on races p. 46, JUNGE 689.—*H. tahitica parsoni* subsp. n. Queensland, C. M. N. WHITE Bull. B.O.C. 57 p. 27.—*H. erythrogaster* results of banding in Massachusetts, DAVIS 314.

Petrochelidon nigricans review of races and their ranges, C. M. N. WHITE 1493; Critical remarks on Australian races, IREDALE 640.

Ptyonoprogne rupestris details of nesting habits in the Wendelstein, Bavaria, HOFFMANN 593.

Riparia r. riparia status, distr., weight, body-temperature, breeding and other habits in New York State, STONER 1328.—*Riparia paludicola brevicaudata* in Formosa breeding and other habits [Japanese], OO-U-KIJO 1049.

FAM. MUSCICAPIDAE.

Alseonax cannot be separated from *Muscicapa* and a list of the recognized races of *M.* (olim *Alseonax*) *adusta*, *M. adusta sjostedti* nom. n. pro *Alseonax obscura* Sjöst. 1893 preocc. p. 374-5, GROTE 505.—*A. m. murinus* note on supposed colour change and races p. 876, MOREAU 981.

Batis m. molitor taxonomic note p. 200, ROBERTS 1151.

Bradornis pallidus West African races p. 308, PALUDAN 1066.

Chloropetella holochlorus, *C. suahelica* is a synonym p. 12, MOREAU 977.

Culicicapa ceylonensis hercnocara = *C. c. ceylonensis* p. 48, JUNGE 689.

Cyornis a new review with distr. maps and key, STRESEMANN & DE SCHAUNSEE 1338.

Melaenornis ardesiaca sp. n. Belgian Congo, BERLIOZ Bull. Mus. Paris 8 p. 329.

Monacha castaneiventris obscurior, *M. barbata ganongae* addt. descr. p. 18, MAYR 917.

Muscicapa s. striata a brood with two albinos, SOMMERFELD 1283.—*M. collaris* recorded in Estonia photo, SITS 1266.—*M. p. parva* distr. in Carpathians, ČERNÝ 215.—*M. hypoleuca* type of breeding dress of male, DROST 365.—*M. elisae* history of discovery, range and affinities probably a distinct species col. pl., WILDER 1506.

Myioparus [i.e. *Parisoma*] *plumbeus orientalis* its systematic position, eggs and distinctions from *Parisoma* p. 199, ROBERTS 1151.

Parisoma buryi rediscovered by Philby in Arabia p. 18, BATES 52.

Petroica phoenicea, *P. rodinogaster* synonymy, nomenclature and races, WHITE 1494.—*P. vittata* note on the races p. 27, C. M. N. WHITE 1495.—*P. goodenovi* no races recognizable, WHITE 1497.—*P. rosea* field observations, JACK 646.

Platysteira peltata nesting and other habits in S. Rhodesia p. 11, TOWNLEY 1402.

Poecilodryas placens steini subsp. n. W. New Guinea, HARTERT & PALUDAN Mitt. zool. Mus. Berlin 21 p. 211.—*P. luctuosus* (Pucheran 1853) must replace *P. cerviniventris* (Gould 1858), MATHEWS 900.

Pogonocichla stellata guttifer note on races p. 880, MOREAU 981.—*P. lebombo* subsp. n. N.E. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 208.

Rhipidura brachyrhyncha two phases and notes on other W. New Guinea forms p. 215, HARTERT & PALUDAN 549.—*R. brachyrhyncha*, *R. devisi* colour phases or distinct spp. note p. 43 MAYR & RAND 922.

Seicercus ruficapilla minulla distr. range to Kenya p. 180, PETERS & LOVERIDGE 1076.

Terpsiphone paradisi procera note on races p. 49, JUNGE 689.

FAM. CAMPEPHAGIDAE.

Coracina lineata makirae addt. descr. p. 13, MAYR 917.—*C. papuensis orionom* p. 244, *C. caeruleogrisea adamsoni* p. 245 subspp. n. Terr. Papua, MAYR & RAND Mitt. zool. Mus. Berlin 21.

Lalage sykesi eximia subsp. n. Punjab, VAN TYNE & KOELZ Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 4.—*L. karu trobriandi* subsp. n. Trobriand Is., New Guinea, MAYR Amer. Mus. Nov. 869 p. 1.

Pericrocotus flammeus minythomelas races discussed p. 53, JUNGE 689.—*P. peregrinus galbinus* subsp. n. Punjab, VAN TYNE & KOELZ Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 4.

FAM. PYCNONOTIDAE.

Systematic revision of the Pycnonotids of the East Indian Archipelago, SNOUCKAERT v. S. 1272.

Aegintha temporalis note col. pl., CHAWNER 234.

Arizelocichla tephrolaema revision of the races and their distinguishing characters, GROTE 504.—*A. chlorigula* no races can be distinguished p. 11, MOREAU 977.

Chloropsis jerdoni, *C. a. aurifrons* distr. and status in Bengal, LAW 773.

Eurillas virens note on races p. 176, PETERS & LOVERIDGE 1076.—*E. v. zanzibaricus* addt. information p. 263, PAKENHAM 1059.

Minodoria striaticeps note and col. fig. p. 197, HACHISUKA 519.

Phyllastrephus flavostriatus babaulti subsp. n. Belgian Congo, BERLIOZ Bull. Mus. Paris 8 p. 330.

Pycnonotus luteolus note on range in Bengal, LAW 772.

FAM. TIMALIIDAE.

Alcippe revision with synonymy keys and descr. *Alcippe delacouri* nom. n. pro *Minla cinerea* (Blyth) 1874 pre-occupied p. 449, YEN 1555.—*A. nipalensis eremita* subsp. n. S.E. Siam, RILEY Proc. biol. Soc. 49 p. 25.—*A. nipalensis grotei* nom. n. pro *A. n. major* Delacour 1926 nec Baker 1920, DELACOUR Orn. Monatsb. 44 p. 24.

Alethe macclouniei njombe subsp. n. N. Nyasaland, BENSON Bull. Brit. Orn. Cl. 56 p. 100.—*A. moori* Alex. 1903 is a synonym of *Illadopsis poliothorax* Reich. 1900 and note on the type, BANNERMAN 45.

Androphobus viridis addt. descr. fig. bill p. 221, HARTERT & PALUDAN 549.

Anurophasis cinereiceps note and col. pl. p. 197, HACHISUKA 519.

Argya fulva buchanani note on races p. 307, PALUDAN 1066.

Borisia review of the spp. and subsp. with descr. range and col. pl., HACHISUKA 518.—*B. dennistouni*, *B. capitalis*, *B. nigracapitatus* note, col. figs. p. 418, HACHISUKA 519.

Cinclosoma ajaz two races in N. Guinea p. 222, HARTERT & PALUDAN 549.

Dasycrетаpha speciosa note col. fig. p. 418, HACHISUKA 519.

Drymodes brunneopygia nesting and other habits photos, DICKISON 351.

Eupetes caerulescens notes on N. Guinea forms p. 222, HARTERT & PALUDAN 549.—*E. leucostictus centralis* subsp. n. Weyland Mts., New Guinea, MAYR Amer. Mus. Nov. 869 p. 1.

Hylacola carita, *H. pyrrhopygia* overlapping ranges in Victoria, MILNE 952.

Illadopsis rufipennis distans in Zanzibar taxonomic note p. 263, PAKENHAM 1059.

Leonardina woodi note and col. fig. of unique example p. 196, HACHISUKA 519.

Lioptilornis rufocincta in Ruanda note p. 331, BERLIOZ 84.

Mixornis revision of spp. and races *M. gularis lutescens* p. 11 col. pl., *M. flavicollis kelleyi* p. 21 col. pl., DELACOUR 329.

Pomatorhinus horsfieldii maderaspatensis subsp. n. Salem, distr. in India, WHISTLER J. Bombay N.H. Soc. 38 p. 699.—*P. ferruginosus stanfordii* additional details of range, etc., STANFORD 1296.

* *Pseudotharrhaleus caudatus* note and col. fig. p. 196, HACHISUKA 519.

Ptilocichla falcata note and col. fig. p. 197, HACHISUKA 519.

Stachyris nigriceps rileyi nom. n. pro *S. n. dilutus* Rob. & Kloss 1919 nec 1918, CHASEN Bull. B.O.C. 56 p. 115.

Turdoides t. terricolor descr. distr. habits col. pl., INGLIS 634.

Vitia parens, *V. ruficapilla castaneoptera*, *V. r. funebris* addt. descr. p. 15, MAYR 917.

FAM. TROGLODYTIDAE.

Heleodytes turdinus chanchamayoensis notes p. 33, v. SEILERN 1236.

Pheugopedius fascioventris albigularis song on Barro Colorado I., Panama, CHAPMAN 225.

Telmatodytes palustris pterylography and moult, WELTER 1479.

Troglodytes troglodytes hirtensis nesting and song, HARRISON & BUCHAN 546.—*T. t. islandicus* present status and field notes p. 325, HOLMES & KEITH 599.

FAM. CINCLIDAE.

Cinclus cinclus review of races especially Swiss ones, *C. c. montanus*

subsp. n. p. 198 over 1800 M. in Switzerland, TROLLER Arch. suisses d'Orn. 1 p. 193, also critical remarks, O. MEYLAN pp. 287-297.

FAM. MIMIDAE.

Dumetella carolinensis social habits after nesting, GILL 457; Attachment to territory and mate, GILL 458.

Mimus p. polyglottos territorial and other habits in autumn in Tennessee, LASKEY 765.

FAM. TURDIDAE.

Afrochla [= *Turdus*] *olivacea transvaalensis* subsp. n. Woodbush, Transvaal, ROBERTS Ostrich 7 p. 109.

Caffronis [i.e. *Cossypha*] *caffra drakensbergi* subsp. n. Wakkerstroom, Transvaal, ROBERTS Ostrich 7 p. 110.

Cichladusa arcuata habits p. 103, TOWNLEY 1403.

Copsychus s. saularis an albino from Coorg, India, descr., MOLTONI 967.

Cossypha semirufa intercedens on Kilimanjaro note p. 880, MOREAU 981. — *C. insulana* no affinity to *C. bocagei*, GROTE 509.

Cyanosylvia suecica robusta in Hong Kong p. 81, HERKLOTS 577.

Erithacus rubeculus armoricanus subsp. n. Brittany with notes on dimensions and habits, LEBEURIER & RAPINE Oiseau 6 p. 252.

Geokichla gurneyi kilimensis note p. 878, MOREAU 981.

Ianthia cyanura recorded for Hong Kong p. 81, HERKLOTS 577.

Luscinia megarhyncha and races *L. luscinia* breeding and winter range, with map, GROTE 510. — *L. luscinia* recorded 22 Dec. in S. Rhodesia p. 76, ROBERTS 1156. — *L. megarhynchos* distr. in the Ukraine, CHARLEMAGNE 229. — *L. suecica gaekei* migration routes over the North Sea, DROST 363.

Monticola saxatilis range and habit in Siebenbürgen, Romania, v. DOBAY 354.

Oenanthe leucopyga aegra at Tibesti ext. of range and nesting habits, HEIM DE B. 562.

Phoenicurus p. phoenicurus nesting notes in Denmark, KOEFOED 723. — [*P.*] *Saxicola galtoni* Strickl. note p. 265, ROBERTS 1152.

Pentholaea albifrons limbata young plumage p. 353, BERLIOZ 82.

Pinarochroa sordida rudolphi Mad. is a valid race p. 178, PETERS & LOVERIDGE 1076. — *P. s. hypospodia* fading of old Museum skins p. 879, MOREAU 981.

Prunella modularis hebridum recorded from Antrim and elsewhere, C. M. N. WHITE 1492. — *P. m. occidentalis* in Brittany, habits and systematics p. 466, LEBEURIER & RAPINE 776.

Saxicola torquata theresae taken in Ayrshire, CLANCEY 246. — *S. t. hibernans* in Brittany habits and systematics p. 86, LEBEURIER & RAPINE 776. — *S. t. felix* subsp. n. S.W. Arabia, BATES Bull. B.O.C. 57 p. 20.

Saxicoloides fulicata munda subsp. n. Punjab, VAN TYNE & KOELZ Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 5.

Sialia sialis cause of blue colour of plumage, GOWER 471.

Turdus merula Rossitten ringed bird taken in Brittany, CHALAUX 218; Morning song in Giessen, HENNEBERG 571. — *T. p. philomelos* migration from ringed returns, EICHLER 388; Spring migration in Finland, SIIVONEN 1262. — *T. coburni* in N. Uist, CAMPBELL 202. — *T. viscivorus* present and past status about Formby, Lances, WILLIAMS 1510. — *T. dauma aureus* in Corsica p. 40, v. SEILERN 1236. — *T. olivaceus helleri* note on validity p. 176, PETERS & LOVERIDGE 1076. — *T. margaretae* addt. descr. p. 14, MAYR 917.

Tychaodon barbata wilsoni subsp. n. N.E. Zululand, ROBERTS p. 209, also in Transvaal p. 269 Ann. Transv. Mus. 18.

FAM. SYLVIIDAE.

Acanthiza revision of Australian spp. with descr. and distr., MACK 854. — *A. uropygialis* field notes in W. Austr., SEDGWICK 1233.

Acrocephalus s. scirpaceus nesting in Estonia photo, SITS 1266. — *A. paludicola* in Neusiedler lake, Austria p. 40, v. SEILERN 1236. — *A. stentorius meridionalis* status discussed, etc. p. 484, ALI & WHISTLER 14. — *A. baeticatus nyong* subsp. n. S. Cameroon, BANNERMAN Bull. B.O.C. 57 p. 9.

Apalis thoracica capensis nom. n. pro *A. t. sclateri* Roberts 1929 nec Alexander 1903, ROBERTS Ann. Transv. Mus.

8 p. 306.—*A. t. youngi* subsp. n. N. Nyasaland, KINNEAR Bull. B.O.C. 57 p. 8.—*A. t. arnoldi*, *A. chirindensis vumbae* subsp. n. S. Rhodesia, ROBERTS Ostrich 7 p. 75.

Artisornis metopias bensoni Vincent is an *Apalis* closely allied to *A. bamen-dae* p. 101, BENSON 76.

Bradypterus brachypterus centralis subsp. n. Lake Chad, BANNERMAN Bull. B.O.C. 57 p. 43.—*B. cinnamomeus rufiflavus* a distinct race p. 881, *B. mariae* note p. 882, MOREAU 981.

Caffrillas barratti wilsoni ranges to N.E. Zululand p. 203, ROBERTS 1151.

Calamocetor gen. nom. n. pro *Calamornis* ScL 1920 nec Gould 1874, SOLATER Bull. B.O.C. 57 p. 22.

Calamonastes simplex neglectus subsp. n. Nyasaland, BENSON Bull. B.O.C. 56 p. 71.

Chlorodyta ruddi in Zululand nest and egg p. 206, ROBERTS 1151.

Cisticola j. juncidis nesting habits in Egypt p. 41, JOURDAIN & LYNES 684.—*C. j. salimali* subsp. n. Travancore, WHISTLER J. Bombay N.H. Soc. 38 p. 487.—*C. dambo kasai* p. 109, *C. pipiens congo* p. 110 subsp. n. Belgian Congo; *C. angusticauda* Reichen. should remain in that genus and not in *Apalis* with addt. descr. and field notes p. 112, LYNES Bull. B.O.C. 56.—*C. sub-ruficapilla*, *C. lais* relationships taxonomy and range in Cape Prov., LYNES 845.

Dasyornis longirostris, *D. broadbenti* notes col. pl. field notes, WHITTELL & WHITLOCK 1503.

Dryodromas fulvicapilla lebombo subsp. n. N.E. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 205.

Eremomela griseoflava in French Sudan note on races p. 316, PALUDAN 1066.

Franklinia gracilis Ceylon and Travancore races discussed p. 488, ALI & WHISTLER 14.

Geobasileus and *Acanthiza* distr. maps and key to species, A. G. CAMPBELL 198.

Hippolais caligata taken on Fair Isle. A new British Bird, STOUT & WATERTON 1331.—*H. p. pallida* nesting notes in Egypt, GREAVES 485.—*H. olivetorum*

in South Africa, type examined p. 265, ROBERTS 1152.

Locustella l. luscinioides occurrence in Pomerania, RUTKA 1186.—*L. fluviatilis* recorded for Arabia p. 18, BATES 52.

Orthotomus sutorius race in Travancore discussed p. 486, ALI & WHISTLER 14.

Phylloscopus collybita field observations and habits in Tyrol, PRENN 1110.—*P. b. borealis* recorded for Holland, JUNGE 687.—*P. b. bonelli* nesting notes in Switzerland, LÜSCHER 841.—*P. nitidus viridanus* in Finland and account of its range in E. Europe, SUOMALAINEN 1345.—*P. trivirgatus bougainvillei*, *P. t. pallescens*, *P. t. makirensis* addt. descr. p. 17, MAYR 917.—*P. t. albigularis* nom. n. pro *P. t. albigula* Roths. 1931 nec Hesse 1912, HARTERT & PALUDAN Mitt. zool. Mus. Berlin 21 p. 218.

Prinia flavicans bihe subsp. n. Angola, BOULTON & VINCENT Bull. B.O.C. 57 p. 7.—*P. mystacea mutatrix* subsp. n. S. Tanganyika Terr., MEISE Orn. Monatsb. 1936 p. 23.—*P. inornata franklinii* taxonomy and plumages p. 495, ALI & WHISTLER 14.

Scotocerca inquieta grisea subsp. n. Arabia, BATES Bull. B.O.C. 57 p. 21.

Sericornis nouhuysi monticola subsp. n. Mt. Albert, New Guinea, MAYR & RAND Mitt. zool. Mus. Berlin 21 p. 246.—*S. beccarii* and other N. Guinea forms notes p. 216, HARTERT & PALUDAN 549

Smicrornis [i.e. *Schoenicola*] *brevirostris* its peculiar nest and note on classification, ROBERTS 1159.

Suthora unicolor canaster notes in N. Burma new to the Indian list, STANFORD 1296.

Sylvia borin recorded from Zanzibar p. 265, PAKENHAM 1059.—*S. ruppelli* nesting note in Crete, MEIKLEJOHN 923, 924.—*S. undata* at Fontainebleau, SEYDOUX 1244.

Sylvietta icteropygialis Lafr. must replace *S. griseoflava*, p. 267, ROBERTS 1152.

FAM. VIREONIDAE.

Vireo nelsoni Bond from Michoacan Mexico addt. particulars, BOND 131.

FAM. BOMBYCILLIDAE
(olim AMPELIDAE).

Bombycilla garrulus invasion of N. Italy, MOLTONT 964.—*B. cedrorum* death from eating dates in S. California, FOSSLER 423; Trapping for banding in California, FELTES 412.

FAM. PRIONOPIDAE.

Hypocolius ampelinus in Arabia note p. 548, BATES 54.

Melanorhynchus nigrescens meeki note p. 207, HARTERT & PALUDAN 549.

Myiolestes megarhynchus wuroi subsp. n. Terr. Papua, MAYR & RAND Mitt. zool. Mus. Berlin 21 p. 247.—*M. m. ferrugineus* subsp. n. W. New Guinea, HARTERT & PALUDAN Mitt. zool. Mus. Berlin 21 p. 206.

Pitohui cristatus and other forms in W. New Guinea notes p. 207, HARTERT & PALUDAN 549.

Prionops poliocephala in Abyssinia question of the type-locality and distr. p. 170, CHEESEMAN & SOLATER 235.—*P. p. plumata* field notes, Nigeria, CLARKE 250.—*P. alberti* in Kivu note on plumage p. 332, BERLIOZ 84; Note fig. pp. 17-18, SCHOUTEDEN 1216.

Tephrodornis pondiceriana freta subsp. n. Punjab, VAN TYNE & KOELZ Occ. Pap. Mus. Zool. Univ. Mich. no. 334 p. 5.

FAM. LANIIDAE.

Chlorophoneus abboti critical discussion on status p. 884, MOREAU 981.

Eulacestoma nigropectus clara addt. descr. and ext. of range p. 202, HARTERT & PALUDAN 549.

Gymnorhina hypoleuca, *G. tibicen* overlapping and interbreeding in Victoria, MILNE 952.

Laniarius lühderi castaneiceps a valid race p. 189, PETERS & LOVERIDGE 1076.

Lanius e. excubitor nesting in Brandenburg, HESSE 580.—*L. minor* nesting near Geneva, BLANCHET 112.—*L. c. collurio* migrations of C. European birds to Africa, ECKE 383.—*L. collurio*, *L. senator* nesting and feeding habits in Rhineland, SCHREIBS 1217.—*L. collaris smithii* notes, photo Nigeria, MARSHALL 892.—*L. cristatus* status in Burma and Assam and possible breeding, TICEHURST 1385.—*L. schach nasutus* nesting

and other habits in Philippine Is., RABOR 1120.—*L. s. stresemanni* in S.E. New Guinea p. 43, MAYR & RAND 922.

Malaconotus poliocephalus Licht. name is preoccupied, must be replaced by *M. blanchoti* Steph. and note changes necessary in the subspecific names p. 373, GOTE 505.—*M. cruentus gabonensis* note col. pl., WEBB 1474.

Nilarus nigritemporalis in Zululand p. 198, ROBERTS 1151.

Otomela cristata on the races in Abyssinia on migration p. 171, CHEESEMAN & SOLATER 235.

Pachycephala soror three races recognized, *P. schlegelii viridipectus* subsp. n. Weyland Mts., N. Guinea, p. 203 and notes on other N.G. spp., HARTERT & PALUDAN Mitt. zool. Mus. Berlin 21.—*P. pectoralis fergussonis* subsp. n. D'Entrecasteaux Is., New Guinea, MAYR Amer. Mus. Nov. 869 p. 2.—*P. rufogularis* note on status and habits photos, CHISHOLM 238.

Rhagologus leucostigma addt. information p. 206, HARTERT & PALUDAN 549.

Tchagra tchagra natalensis distr. note p. 196, ROBERTS 1151.

FAM. PARIDAE.

Nesting habits of Tits in Germany, BERNDT 89.

Aegithalos caudatus note on the French races, JOUARD 668; Habits in winter, PAECHNATZ 1058.

Baeolophus inornatus family relations and territorial habits in California, PRICE 1111.

Parus m. major abnormal nesting habits, JOUARD & DE VOGUÉ 674.—*P. atricapillus* revision of Palaearctic races JOUARD 670.—*P. a. kleinschmidti* nesting notes in Cumberland, JOHNSTON 659.—*P. capitulo-fusconigricanti* sp. n. ? HÖHR Verh. Siebenbürg. Ver. Nat. 83-84 p. 42.

Penthestes what is the correct genotype? JOUARD 667.—*P. carolinensis extimus* subsp. n. W. Virginia and discussion of taxonomy of other races, TODD & SUTTON 1397.

Psaltriparus minimus cecaumenorum ranges to Nevada and S.E. California, v. ROSSEM 1172.

Remiz pendulina problems of nest construction, REBOUSSIN 1132.

FAM. REGULIDAE.

Regulus regulus, *R. ignicapillus* distr. in Czechoslovakia, HACHLER 520.—*R. r. regulus* varying winter population near Helsingfors, PALMGREN 1035.—*R. r. apache* subsp. n. Arizona, JENKS Condor 1936 p. 239.

FAM. SITTIDAE.

Daphaenositta miranda rediscovery in S.E. New Guinea, habits and affinities, RAND 1127.

Sitta castanea ionkinensis subsp. n. French Indochina, KINNEAR Bull. B.O.C. 56 p. 71.

FAM. CETHIIDAE.

Certhia familiaris recorded from Luxembourg, MORBACH 976.—*C. f. britannica* roosting habits in Ireland, KENNEDY 703.—*C. familiaris macrodactyla* range and status in Belgium, v. BENEDEN 71.—*C. brachydactyla* breeding in Caucasus, KOZLOWA 729.

Climacteris placens steini subsp. n. Weyland Mt., N. Guinea, MAYR Amer. Mus. Nov. 369 p. 5.

FAM. ZOSTEROPIDAE.

Zosterops virens discussion of races p. 196, PETERS & LOVERIDGE 1076.—*Z. v. meruensis* addt. notes, also nesting details p. 887, MOREAU 981.—*Z. capensis basuticus* subsp. n. Basutoland, ROBERTS Ann. Trans. Mus. 18 p. 256.—*Z. flavilateralis longensis* in N.E. Transvaal p. 269, ROBERTS 1152.—*Z. s. simplex* at Hong Kong descr. habits col. pl., HERKLOTS 574.—*Z. lateralis* a disseminator of plant seeds in Australia, GANNON 439.

FAM. DICAETIDAE.

Dicaeum trigonostigma antioproctum notes and races p. 72, JUNGE 689.—*D. geelvinkianum violaceum* subsp. n. Goodenough Is. nr. New Guinea, MAYR Amer. Mus. Nov. 369 p. 6.

Melanocharis arfakiana rediscovered in New Guinea p. 44, MAYR & RAND 922.

Neneba striativentris axillaris note p. 201, HARTERT & PALUDAN 549.

Piprisoma diversum sp. n. Palawan, RILEY Proc. biol. Soc. 49 p. 113.

FAM. NECTARINIIDAE.

Sunbirds of the Sikkim and Darjeeling areas, INGLIS 633.

Chalcomitra a. amethystina nesting and other habits in Natal, COWLES 275.

Cinnyris cupreus races discussed, *C. c. septentrionalis* subsp. n. Uganda p. 60 and notes on other spp. in Port. E. Afr., VINCENT Ibis 1936.—*C. n. notatus* photo of a nest in Madagascar, POISSON & LURAT 1094.—*C. sericea vicina* subsp. n. Mand. Terr. New Guinea, MAYR Amer. Mus. Nov. 369 p. 5.

Leptocoma jugularis ornata nesting notes in Java, SPENNEMANN 1289; Nesting habits at Singapore, WILLIAMSON 1511.

Maricornis bifasciata microrhyncha recorded for S. Rhodesia nesting notes p. 23, TOWNLEY 1402.

Nectarinia formosa centralis note p. 194, PETERS & LOVERIDGE 1076.—*N. f. major* subsp. n. Natal, ROBERTS Ostrich 7 p. 110.

Notiocinnyris chalybeus capricornensis subsp. n. Transvaal, ROBERTS Ann. Transv. Mus. 18 p. 256.

FAM. MELIPHAGIDAE.

List of the Honey-eaters which have been imported alive, HOPKINSON 607.

Glycichaera fallax taxonomic relationships p. 43, MAYR & RAND 922.

Melidectes torquatus cahni and other forms, note on races p. 195, HARTERT & PALUDAN 549.—*M. t. nuchalis* subsp. n. Weyland Mts., New Guinea, MAYR Amer. Mus. Nov. 369 p. 7.—*M. belfordii kinneari* subsp. n. Dutch New Guinea, MAYR Bull. B.O.C. 57 p. 42.—*M. leucostephes brassi* subsp. n. Terr. Papua, MAYR & RAND Mitt. zool. Mus. Berlin 21 p. 247.

Meliphaga descr. and key of New Guinea forms, *M. mimikae granti* Terr. of Papua p. 4, *M. montana auga* S.E. New Guinea, *M. m. setakwa* Dutch New Guinea p. 6, *M. m. sepik* Sepik river, *M. m. huonensis* Huon Pen. p. 8, *M. m. aicora* S.E. New Guinea p. 9, *M. orientalis facialis* Arfak Mts. p. 16, *M. o. becki* Huon Pen. p. 17, *M. gracilis cinereifrons* Terr. Papua, *M. g. stevensi* S.E. New Guinea p. 20 all subsp. n., RAND Amer. Mus. Nov. no. 872.—*M. montana* note on races p. 197, HARTERT & PALUDAN 549.

Philemon corniculatus ellioti in S. New Guinea p. 44, MAYR & RAND 922.

Xanthotis chrysotis and other forms taxonomy and races p. 198, HARTERT & PALUDAN 549.

FAM. MNIOTILTIDAE.

Dendroica erithachorides v. *D. petechia* nomenclature discussed p. 363, BOND 132.—*D. castanea* in U.S. Virgin Is., DANFORTH 294.

Myioborus miniatus hellmayri subsp. n. El Salvador, v. ROSSEM Condor 38 p. 117.

Oporornis formosus nesting in Missouri and Maryland, DE GARIS 320.

Vermivora crissalis nest in Texas and other field notes col. pl., etc., VAN TYNE 1432.

FAM. MOTACILLIDAE.

Anthus c. campestris in Fair I. first record for Scotland p. 62, WATERSTON 1742; Breeding and other habits in Sweden, DURANGO 376.—*A. rufogularis* nesting and other habits in Norway, CONGREVE 263.—*A. spinoletta meinertzhageni* subsp. n. S. Uist, Hebrides, BIRD Bull. B.O.C. 56 p. 55.—*A. richardi rufuloides* nom. n. pro *A. r. raalteni* auct. and discussion of taxonomy p. 111, ROBERTS 1157.—*A. rufulus waitei* subsp. n. Punjab, WHISTLER J. Bombay N.H. Soc. 38 p. 766.

Motacilla alba lugubris roosting in glass-houses, BUNYARD 182.—*M. maderaspatensis*, *M. cinerea caspica* and other forms in Travancore notes, comments p. 759, ALI & WHISTLER 14.—*M. cinerea* critical remarks on the eastern races, WITHERBY 1527; Nesting in Denmark, KJÆR 712.—*M. aguinip vidua* field notes Nigeria, FAIRBAIRN 409.—*M. clara* field notes p. 106, TOWNLEY 1403.—*M. flava* on the three races found breeding in Bulgaria—*feldeggii*, *dombrowskii*, *flava*, KLEINER 713.—*M. flava* resembling *M. f. taiwana* in Czechoslovakia, MUSELEK & HOŘICE 1012.

FAM. ALAUDIDAE.

Africorys africanus zuluensis subsp. n. N.E. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 215.

Alauda arvensis intermedia noted for Arabia p. 17, BATES 52.—*A. gulgula punjabii* subsp. n. Punjab, WHISTLER J. Bombay N.H. Soc. 38 p. 767.

Alaudula r. adamsi and *Galerida cristata* laying in the same nest, NEWTON 1015.

Ammomanes deserti Arabian races their status and distr. discussed, BATES 53, also 54.—*A. erythroclamyx* = *Pseudammomanes burra* Bangs notes on existing examples p. 264, ROBERTS 1152.

Anacorys africanoides transvaalensis Transvaal p. 262, *A. a. gobabisensis*, *A. a. omaruru* S. W. Afr. p. 263 subsp. n., ROBERTS Ann. Transv. Mus. 18.

Botha fringillaris range and history, SCLATER 1230; Note on characters and known ex. p. 263, ROBERTS 1152.

Calandrella brachydactyla hermonensis note on status not a geogr. race p. 549, *C. blanfordi* in Arabia, generic status, p. 550, BATES 54.—*C. blanfordi philbyi* subsp. n. nr. Mecca, BATES Bull. B.O.C. 56 p. 130; Probably the same as *Spizocorys eremica* Reichw. & Peters p. 14, BATES 52.

Calendulauda albescens saldanhae Saldanha Bay, *C. a. karruensis* de Aar both Cape Prov. subspp. n., ROBERTS Ann. Trans. Mus. 18 p. 258.

Certhilauda review and taxonomy of S. African forms p. 259, *C. subcoronata gilli* p. 260 Beaufort W., *C. semitorquata transvaalensis* Rustenburg, Tr. p. 261 subspp. n., ROBERTS Ann. Trans. Mus. 18.—*C. nivosa* Swains. = *Galerida cristata senegallensis* (Linn.) p. 257, ROBERTS 1152.

Chersomanes albofasciata, *Alauda rufopalliat*a = *Certhilauda semitorquata* (Smith); *A. ferruginea* is a *Pseudammomanes* identification of Lafresn. types p. 267, ROBERTS 1152.

Eremalauda eremodites addt. information p. 553, BATES 54.

Galerida cristata discussion of western Asian races and their synonymy, BIRD 100.

Heterocorys breviunguis (Sund.) must be called *H. chauna* (A. Smith) 1836 p. 320, ROBERTS 1153.

Lullula a. arborea general habits in Holland, KOCH 722; Injury-feigning, WITHERBY 1525.

Mirafraga cheniana A. Smith, *Zonotrichia africana* A. Smith is a synonym p. 320, ROBERTS 1153.—*M. affinis ceylonensis* subsp. n. Ceylon, WHISTLER J. Bombay N.H. Soc. 38 p. 769.

Otocoris alpestris the races and their status in Ohio, WALKER & TRAUTMAN 1459.—*O. a. leucolaema* nesting and other habits in Montana, DuBOIS 366.

Rhamphocorys clotbey in Arabia note p. 555, BATES 54.

Sabota sabota discussion of subsp. p. 261, *S. s. herero* subsp. n. S.W. Africa p. 262, ROBERTS Ann. Transv. Mus. 13.

Spizocoryx sclateri capensis a good race p. 264, ROBERTS 1152.

FAM. FRINGILLIDAE.

Juvenal plumages and moults of some N. Amer. Fringillidae, col. pls., SUTTON 1351.

Acanthis h. hornemanni undoubtedly occurs in Iceland, BIRD 101.

Ammodramus savannarum australis moults and plumages col. pl., SUTTON 1352.—*A. s. floridanus* nesting and other habits in Florida, NICHOLSON 1020.

Arremon flavirostris polionotus in Matto Grosso note p. 606, LAUBMANN 768.

Auripasser luteus tilemsiensis a doubtful race p. 331, PALUDAN 1066.

Calcarius lapponicus on Skokholm I., Pembrokeshire, LOCKLEY 815.

Carduelis carduelis britannica history and status around New York City, NICHOL 1017.—*C. flammea* history, note on invasions in C. Europe, KELM 696.—*C. f. cabaret* sexual distinctions, MASAREY 894.—*C. flavirostris* fostering a Cuckoo, WHITTAKER 1501.—*C. albigularis* descr. and range in Czechoslovakia, HOŘICE 608.

Carpodacus mexicanus frontalis germination of seeds after ingestion, ROESSLER 1167.—*C. m. rhodopnus* subsp. n. Sinaloa Mexico, MOORE Condor 1936 p. 203.—*C. p. purpureus* average age by the banding method, MAGEE 870; Wing moult, MAGEE 869.

Carpospiza b. brachydactyla in Arabia note p. 545, BATES 54.

Chloris c. chloris migration studies by ringing, EHLERS & OTHERS 387.

Oithya sulphurata wilsoni subsp. n. N.E. Zululand, ROBERTS Ann. Trans. Mus. 13 p. 216.

Cyanerpes cyaneus notes, MOLTONI 965.

Emberiza citrinella geographical variation in the song, SALOMONSEN 1191.—*E. schoeniclus mackenziei* subsp. n. S. Uist, Hebrides, BIRD Bull. B.O.C. 56 p. 54.—*E. pusilla* found breeding in N. Finland, PALMGREN 1064.—*E. hortulana* on Skokholm I., Wales, LOCKLEY 815.—*E. icterica* question of status as occurring in Holland, BROUWER 169.—*E. melanocephala* nesting note in Thessaly, MEIKLEJOHN 923.

Fringilla coelebs further notes on a group with a curious song in the Erzgebirge Germany, HOFFMANN 594; Proportion of sexes in captured individuals, CHARTERIS 232.

Fringillaria capensis vincenti adt. information, field notes p. 121, VINCENT 1445.

Geospiza and allied genera in the Galapagos, historical review and discussion of diversity of form of bill and plumage pattern, LOWE 834; Question of the origin of the various forms on the Galapagos, STRESEMANN 1335.

Junco identification of the Rocky Mountain species and races, MILLER 948.—*J. caniceps dorsalis* three broods in Arizona, HARGRAVE 537.

Leucosticte tephrocotis littoralis nesting and other habits in Washington State photos, SHAW 1251, 1252.—*L. t. dawsoni* nesting notes in California photos, DIXON 353.

Loxia curvirostra general reflections on invasions, JOUARD 671; Status and habits in Suffolk, LAST 767; Historical invasion in Normandy in 1618, POISSON 1095; Recent invasions of W. France and note on habits, etc., CHALAUZ 217; French invasion 1935, notes, JOUARD 673; In Calvados, France, in 1935, TOLMER 1398, 1399; The Italian invasion of 1935, MOLTONI 962; Invasion in Czechoslovakia, NEČAS 1013; Method of feeding on larch cones, MORETON 982; Experiments on the sexual dimorphism—castration and

injections, NOWIKOW 1038.—*L. pytyopsittacus* moult of male, NIETHAMMER 1021.—*L. leucoptera* on Buffin I., Arctic Canada, SUTTON 1347.

Loxigilla noctis ridgwayi (Cory) is the name of the Antigua Bird, BOND 130.

Melophus melanicterus recorded for Formosa, KURODA 751.

Melospiza melodia euphonia subsp. n. W. Virginia, WETMORE Smithson. misc. Coll. 95 no. 17 p. 1.

Passer domesticus and its races and *P. hispaniolensis* relationships interbreeding overlap and distribution, MEISE 927.—*P. d. domesticus*, *P. m. montanus* range and nesting in the highlands of Switzerland, HALLER 529.—*P. domesticus* annual cycle of gonad activity in Oklahoma, ALLENDER 22, 23, 24; Effects of light on sex cycle in male, KIRSCHBAUM & RINGOEN 711; RILEY, 1147; Colour of the bill in male effected by male hormone, WITSCHI & WOODS 1531.—*P. montanus saturatus* weight variation near Peiping, SHAW 1248;—*P. buryi*, *P. hufufae* both = *P. d. indicus* p. 545, BATES 54.—*P. griseus* races in French Sudan p. 330, PALUDAN 1066.

Passerculus sandwichensis migration routes in N.W. America, SWARTH 1354.

Passerella iliaca insularis in Hondo, Japan, YAMASHINA 1552.

Plectrophenax nivalis migrations and status in France and discussion of races and their distinctions, MAYAUD 910.

Poliospiza angolensis Gmelin name preoccupied must stand as *P. tobacca* (Vieill.) p. 373, GROTE 505.

Pyrrhula p. pyrrhula, *P. p. cineracea* overlapping ranges, GROTE 506.

Serinops flaviventris guillarmodi subsp. n. Basutoland, ROBERTS Ann. Transv. Mus. 18 p. 256.

Serinus spinus × *S. canarius* genetics of the hybrids, PROMPTOV 1114.—*S. canaria* the domestic races desc. figs., ALDEGHI 8.—*S. angolensis philbyi* addt. information p. 547, BATES 54.

Sicalis flaveola pelzelni note p. 38, LAUBMANN 769.

Spizella p. pusilla status, nesting and other habits in Michigan, WALKINSHAW 1461.—*S. arborea* sex differences, measurements, migrations, etc. from banding HEYDWEILLER 582.—*S. breweri tavernei* in Texas in winter, VAN TYNE 1431.

Sporophila lineola a South American bird taken in New Hampshire, JACKSON 647.—*S. melanocephala ochracea* in Matto Grosso note p. 604, LAUBMANN 768.

Zonotrichia capensis matutina races discussed p. 40, LAUBMANN 769.—*Z. leucophrys nuttalli* breeding behaviour and other habits, BLANCHARD 111.

FAM. TANAGRIDAE.

Catalogue of the Tanagers of America including the families Tersinidae and Thraupidae, HELLMAYR 565.

Habia rubica bahiae subsp. n. Bahia, Brazil, HELLMAYR Field Mus. Pub. Zool. 13 p. 301.

Neothraupis gen. n. for *Tanagra fasciata* Licht., HELLMAYR Field Mus. Pub. Zool. 13 p. 432.

Piranga r. rubra in Colorado, G. ALEXANDER 10.—*P. erythromelas* in St. Lucia, W.I., DANFORTH 295.

Rhamphocelus dimidiatus pallidirostris nom. n. pro *R. d. albirostris* Griscom (not *Tanagra albirostris* Bodd.), HELLMAYR Field Mus. Pub. Zool. 13 p. 256.

Tanagra cayennensis list of races p. 42, LAUBMANN 769.—*T. imitans* sp. n. Costa Rica, HELLMAYR Field Mus. Pub. Zool. 13 p. 63.

FAM. PLOCEIDAE.

The Whydahs of N. Rhodesia, WINTERBOTTOM 1516.

The Estrildinae of Hong Kong descr. habits, col. pl. of *Munia orizivora*, HERKLOTS 574.

Weavers and other birds raiding and destroying rice fields in Tanganyika Territory, FUGGLES-COUCHMAN 434.

Genetic studies of colour in Ploceid hybrids, STEINER 1317.

Sexual cycle and plumage dimorphism in Ploceidae, LEVI 786.

Amauresthes fringilloides in N.E. Transvaal p. 269, ROBERTS 1152.

Amblyospiza albifrons nesting notes in Natal p. 84, VINCENT 1445.

Bathilda ruficauda note and col. pl., CHAWNER 234.

Cryptospiza sanguinolenta Vinc. and *C. ocularis* Shelley = *C. richenovii australis* Sharpe, BENSON 76.

Erythrura trichōa probably introduced in the Philippines p. 325, MCGREGOR & MANUEL 852.

Estrilda astrild cavendishi host to *Vidua* and *Hypochera* p. 109, VINCENT 1445.—*E. nonnula* breeding and other habits, WHARTON-TIGAR 1487.—*E. xanthophrys* W. ScI. again rediscovered, WILSON 1513.

Euplectes and *Coliuspasser* description and comparison of the nests in Port. East Africa p. 89, VINCENT 1445.

Euplectes xanthomelas transvaalensis subsp. n. Woodbush Transvaal, ROBERTS Ostrich 7 p. 111.

Glaucestrilda perreini poliogastra nesting habits p. 219, ROBERTS 1151.

Hypargos margaritatus in Zululand p. 217, ROBERTS 1151.

Hypochera on the spp. and races in Port. E. Afr. and their diagn. characters p. 111, VINCENT 1445.

Lonchura leucosticta rediscovered in New Guinea p. 44, MAYR & RAND 922.—*L. castaneothorax uropygialis*, *L. tristissima hypomelaena* addt. notes p. 191, HARTERT & PALUDAN 549.

Munia pectoralis, *M. castaneothorax* notes col. pls. pp. 95, 204, SETH-SMITH 1242.

Ortygospiza locustella races and field notes p. 101, VINCENT 1445.

Pirenestes m. minor discussion of the races in Port. E. Afr. p. 98, VINCENT 1445.

Plocepasser mahali nesting notes in Damaraland photos p. 16, HOESCH 591.

Ploceus melanocephalus race in French Sudan p. 335, PALUDAN 1066.—*P. v. velatus* p. 7, *P. intermedius cabanisi* p. 11 nests and eggs photos, HOESCH 591.—*P. spilonotus* nesting and other

habits in Natal, COWLES 276.—*P. bojeri* affinities breeding habits p. 199, PETERS & LOVERIDGE 1076.—*P. philippinus travancoreensis* subsp. n. Travancore, ALI & WHISTLER J. Bombay N.H. Soc. 38 p. 504.

Poephila gouldiae polymorphic variations and their breeding in captivity, LEGENDRE 781.—*P. leucotis* note col. pl., SETH-SMITH 1242.—*P. acuticauda* notes col. pl., CHAWNER 234.

Sycobrotus bicolor lebomboensis subsp. n. N.E. Zululand, ROBERTS Ann. Mus. Transv. 18 p. 220.

Vidua macroura parasitic nesting habits in Abyssinia, p. 194, CHEESMAN 235.

FAM. ICTERIDAE.

Agelaius p. phoeniceus results obtained by banding, PACKARD 1055; notes on plumage development and moult, PACKARD 1056.—*A. humeralis* taken at Key West new to N. Amer. fauna, DEMERITT 347.

Molothrus a. ater egg-laying during migration, BURLEIGH 186.—*M. b. bonariensis* note on eggs and fosterers in Uruguay, B. G. HARRISON 543.

Quiscalus quiscula breeding ranges of the four forms and intergradation in Louisiana, CHAPMAN 224.

FAM. STURNIDAE.

Acridotheres tristis races and their status in S. India p. 502, ALI & WHISTLER 14.

Creatophora carunculata nesting notes in Damaraland p. 13, HOESCH 591.

Pastor roseus nesting distr. and economics in C. Asia, MEKLENBURTSEV 932.

Sturnia malabarica range and status of races in S. India p. 501, ALI & WHISTLER 14.

Sturnus v. vulgaris fighting for nest-sites, MARPLES 888; Nesting behaviour, MARPLES 889; Ovarian seasonal changes, BISSENETTE & ZUJCO 107; Experiments in home-finding, RÜPPEL 1184; Further results from ringing, BOUMA & KOCH 145; Late summer movements in E. Prussia, KRÄTZIG 735, 736; Migrations of E.

Baltic birds, KRÄTZIG 736, 737; Status in Alberta, KALMBACH 691; Social relations among American birds, FERGUSON 414.—*S. v. ferdinandi* subsp. n. Bulgaria, v. BOETTICHER Bull. Inst. R. Hist. nat. Sophia 9 p. 50.

FAM. EULABATIDAE.

Aplonis mystacea note p. 190, HARTERT & PALUDAN 549.

Cinnyricinclus l. leucogaster in Arabia, note on original reference to Bodd. p. 543, BATES 54; Oldest reference to this name in Boddaert p. 53, VINCENT 1445.

Creadon taxonomy, plumage changes and distinctions between the N. and S. Island birds in New Zealand, STEAD 1301.

Grafisia torquata note and distr. p. 353, BERLIOZ 82.

Melanopyrrhus anais orientalis races p. 190, STRESEMANN & PALUDAN 549.

Onychognathus morio ruppellii taxonomic note p. 193, PETERS & LOVE-RIDGE 1076.—*O. m. shelleyi* field notes p. 55, VINCENT 1445.—*O. tristratii hadramanticus* note p. 542, BATES 54.

Philesturnus [olim *Creadon*] *carunculatus* plumages and distinctions of the forms in the North and South Islands of N. Zealand, STEAD 1299.

Planagura gen. n. for type *Spreo albicapillus* Blyth of Somaliland, v. BOETTICHER Oiseau Paris 6 p. 347.

FAM. PARAMYTHIIDAE.

Paramythia montium olivaceum note p. 200, HARTERT & PALUDAN 549.

FAM. BUPHAGIDAE.

Buphagus erythrorhynchus habits in Natal p. 56, VINCENT 1445.

FAM. ORIOLIDAE.

Oriolus o. kundoo moults and plumages p. 497, ALI & WHISTLER 14.—*O. m. larvatus*, *O. chlorocephalus* field notes p. 48; VINCENT 1445.—*O. chinensis diffusus* genl. acct. col. pl. Hong Kong, HERKLOTS 575.

FAM. DICRURIDAE.

Dicrurus longicaudatus, *D. leucophaeus*, taxonomic review of races in India, TICEHURST 1382.

Dissemurus paradiseus platurus races reviewed p. 62, JUNG 689.

FAM. PARADISEIDAE.

On the display of some species of Birds-of-Paradise illustrated by tempera-paintings, MANSON-BAHR 879.

Astrapia splendidissima helios subsp. n. Dutch New Guinea, MAYR Amer. Mus. Nov. 869 p. 3.

Cicinnurus regius note on races p. 189, STRESEMANN in HARTERT & PALUDAN 549.

Drepanornis albertisi inverse subsp. n. ROTHSCHILD in HARTERT & PALUDAN Mitt. zool. Mus. Berlin 21 p. 188.

Epimachus meyeri note on races p. 188, ROTHSCHILD in HARTERT & PALUDAN 549.

Manucodia (Eucorax) comrii note on eggs and their variability, JORDAN 665.—*M. c. trobriandi* subsp. n. Trobriand Is., New Guinea, MAYR Amer. Mus. Nov. 869 p. 3.

FAM. PTILONORHYNCHIDAE.

Ailuroedus crassirostris facialis subsp. n. Dutch New Guinea, MAYR Amer. Mus. Nov. 869 p. 4.

Chlamydera guttata field notes Western Australia, ROBINSON 1163.

Lophorina superba minor display in Zool. Gardens figs., SETH-SMITH 1243.

FAM. CORVIDAE.

Aphelocoma californica carrying acorns up the mountain slopes in California, GRINNELL 492.

Colaeus m. monedula in Fair I. first record for Scotland p. 61, WATERSTON 1742; Recorded in Fair Isle and elsewhere in Scotland, WITHERBY 1526; Breeding in cliffs, HORST & OTHERS 611.

Corcorax melanorhamphus colour of the eye, SUTTON 1353.

Corvus c. corax breeding and general habits, JOURDAIN 681; Taken near Havre, LASNIER 766; Conservation and status in Polish Carpathians, NIEZABITOWSKI 1024.—*C. c. cornix* a pied variation, LÖNNBERG 827.—*C. c. corone* breeding with *C. c. cornix* in Ireland, MONTGOMERY 972.—*Corvus f. frugilegus* the loss of the facial plumes during early years, CHAPPELLIER 226;

Courtship, mobbings, pellets and other habits, J. W. CAMPBELL 199; Habits of young birds, BURKITT 185; Census of rookeries in Somerset, TUCKER 1410; Habits in Northumberland, GENT 443; 8 years' observations on a Cheshire rookery, WILD 1504; Roosts nr. Manchester, WARD 1464; Rookeries in Midlothian, MIDL. ORN. CL. 945; Erythristic eggs from Ireland, MALCOMSON 875; Rookeries in C. Sweden, JOHANSSON 656; Economic status in Russia, SAMORODOFF 1196.—*C. rhipidurus* breeding in the mountains west of Dead Sea p. 40, JOURDAIN & LYNES 684.—*C. enca celebensis* subsp. n. Celebes, STRESEMANN Ibis 1936 p. 368. *C. bennetti* photo of nest in Victoria, CHANDLER 221.—*C. brachyrhynchos* age determination, EMLEN 395.

Cyanocitta cristata biophysics of blue in plumage, GOWER 471; Migrations and

status in Ontario 1933, SNYDER & SHORTT 1274.—*C. c. florincola* nesting and other habits, D. J. NICHOLSON 1018.

Gymnorhinus cyanocephalus review of races, *G. c. rostratus* subsp. n. California, BRODKORB Occ. Pap. Mus. Zool. Univ. Mich. no. 332 p. 2.

Lalacitta lidthi general notes and habits col. pl., EZRA 408.

Pica pica field notes in Dep. Gard, France, HUGUES 624; Variations and races in Turkestan, DAHL 285.—*P. p. asirensis* subsp. n. Asir, Arabia, BATES Bull. B.O.C. 57 p. 19.—*P. p. hudsonia* extension of range and status in Oklahoma, TATE 1366.

Pyrrhonorax pyrrhonorax habits in Abyssinia at high elevations p. 176, CHEESMAN 235.

XVI. MAMMALIA

ARRANGED BY

W. L. SCLATER, M.A.

CONTENTS.

| | PAGE. |
|--------------------------|-------|
| I. TITLES | 1 |
| II. SUBJECT INDEX | 53 |
| III. SYSTEMATIC | 63 |

I.—TITLES.

1.—Abe, Y. On the Corean Wolf again (an answer to Mr. Pocock). Zool. Mag. Tokyo **48** 1936 pp. 639–644 1 fig. [Japanese, with English rés.]

2.—Abramson, D. I. and Margolin, S. A purkinje conduction network in the myocardium of the Mammalian ventricles. J. Anat. London **70** 1936 pp. 250–259 6 pls. 1 text-fig.

3.—Acharya, H. G. Roosts of Flying Fox. J. Bombay nat. Hist. Soc. **38** 1936 pp. 812–813.

4.—Adams, L. A. Dental variations of the Dog, *Canis domesticus*. Trans. Illinois Acad. Sci. **28** 1936 pp. 243–244.

5.—Addé-Lacomme, J. Étude de l'*Aceratherium* de Bézac (Ariège). Bull. Soc. Hist. nat. Toulouse **67** 1935 pp. 76–105 9 figs.

6.—Agacino, E. M. Un nuevo Microtinae del centro de España. Bol. Soc. esp. Hist. nat. **36** 1936 pp. 151–154 3 figs.

7.—Aguilera, T. G. El hombre fossil de Pekin (*Sinanthropus pekinensis*). Mem. Soc. cubana Hist. nat. **10** 1936 pp. 173–194 1 pl.

8.—Ahrens, T. G. Recent developments in the preservation of the Wisent in Germany. J. Mammal. Baltimore **17** 1936 pp. 137–138.

9.—Ahrens, T. G. Breeding back to the extinct Auerochs. J. Mammal. Baltimore **17** 1936 pp. 266–268.

10.—Aldous, C. M. Food habits of *Lepus americanus phaeonotus*. J. Mammal. Baltimore **17** 1936 pp. 175–176.

11.—Allen, G. M. The type specimen of *Erinaceus albiventris* Wagner. J. Mammal. Baltimore **17** 1936 pp. 62–63.

12.—Allen, G. M. The status of *Vespertilio pilosus* Peters. J. Mammal. Baltimore **17** 1936 pp. 168–169.

13.—Allen, G. M. A new genus and a new subspecies of African Dormouse. J. Mammal. Baltimore **17** 1936 pp. 292–293.

14.—Allen, G. M. Zoological results of the George Vanderbilt African Expedition of 1934. Part II—The Forest Elephant of Africa. Proc. Acad. Nat. Sci. Philad. **88** 1936 pp. 15–44 4 pls.

15.—Allen, G. M. Two new races of Indian Bats. Rec. Ind. Mus. Calcutta **38** 1936 pp. 343–346.

16.—Allen, G. M. and Lawrence, B. Scientific results of an expedition to rain forest regions in eastern Africa. III. Mammals. Bull. Mus. comp. Zoöl. Harvard **79** 1936 pp. 31–126 5 pls.

Allen, W. M. *vide* Lyon.

17.—Allen, W. M. and Heckel, G. P. Prolongation of the corpus luteum in the pseudopregnant Rabbit. *Science* **84** 1936 pp. 161–162.

18.—Ameghino, F. Observaciones generales sobre el órden de Mamíferos estinguidos sud-americanos. Llamados Toxodontes (Toxodontia) y sinópsis de los géneros y especies hasta ahora conocidos. *An. Mus. La Plata Entrega Especial* 1936 pp. 1–66.*

Ameghino, F. *vide* Torcelli.

19.—d'Andrade, R. Apontamentos para um estudo sobre a origem e domesticação do cavallo na Península hiberica aproximações. Pp. 1–30 9 + 19 figs. Lisboa (Tipogr. Colonial) 1926 8vo [sep. pub.].

20.—Andrade, R. de. Alguns elementos dentários para a classificação dos equídeos actuais. *Bull. Soc. portug. Sci. nat.* **12** no. 9 1936 pp. 71–85 4 pls. 19 text-figs.

21.—Anderson, C. The origin of the Australian Mammals. *Aust. Mus. Mag. Sydney* **6** 1936 pp. 133–137.

22.—Andreeva, E. G. On the proportions of the leg bones of some Bovinae. *C.R. Acad. Sci. Moscow* **1936** no. 4 pp. 29–33 2 figs. [in English].

Andrews, F. N. *vide* Phillips.

23.—Adrianos, K. and Laryn, N. The mode of occurrence of the bones of Upper Sarmat vertebrates of the Eldar steppe. *Bull. Soc. Nat. Moscou Sect. Géol.* **43** 1935 pp. 559–569 map. [Russian with English rés.]

24.—Anthony, R. et Friant, M. Essai sur l'évolution de la molaire chez les ongulés artiodactyles. *Mem. Mus. Hist. nat. Belg.* (2) **3** 1936 pp. 489–495 9 figs.

25.—Anthony, R. et Grzybowski, J. de. Le néopallium du mouton—étude de son développement et interprétation de ses plissements. *J. Anat. London* **71** 1936 pp. 41–53 31 figs.

26.—Antonius, P. Beobachtungen an Einhufern in Schönbrunn XIII u. XIV. *Zool. Garten, Leipzig* **8** 1936 pp. 100–113 13 figs.

27.—Antonius, O. Unregelmässige Geweihbildung bei einem Wapiti. *Zool. Garten Leipzig* **8** 1936 pp. 116–122 9 figs.

28.—Antonius, O. Die Rückzuchtung des polnischen Wildpferdes. *Zool. Garten Leipzig* **8** 1936 pp. 190–200 3 photos; also K. Szczerkowski pp. 189–190.

29.—Antonius, O. Beobachtung an Rindern in Schönbrunn. IV. Zur Weiterentwicklung und Systematik des afrikanischen Büffel. *Zool. Garten Leipzig* **8** 1936 pp. 265–270 5 figs.

30.—Aoki, B., and Matsumoto, K. Distribution of the parietal cells in the stomach of *Rattus losea* (Swinhoe). *Zool. Mag. Tokyo* **48** 1936 pp. 489–496 4 figs. [Japanese, with English rés.]

31.—Apor, L. Beiträge zur Kenntnis der Schädeldachnähte. *Allat. Közlem. Budapest* **33** 1936 pp. 84–89. [Magyar, with German rés.]

Archbold, R. *vide* Tate.

32.—Argiropulo, A. I. Matériaux pour la faune des rongeurs de l'Asie Centrale et des parties limitrophes du Kazakhstan. *Trav. Inst. zool. Acad. Sci. U.R.S.S.* **4** 1936 pp. 425–446 4 pls. 1 map.

33.—Arlton, A. V. An ecological study of the Mole. *J. Mammal. Baltimore* **17** 1936 pp. 349–371 5 figs.

Armour, J. C. *vide* Friedman.

34.—Astanan, L. P. Craniological differences of the species of the genus *Marmota*. *Bull. Inst. sci. Lesshaft Leningrad* **19** no. 2 1936 pp. 29–40 5 figs. [Russian with English rés.]

35.—Astanan, L. P. Morphological characteristics of species of genus *Apodemus* (Mammalia, Muridae). *Bull. Inst. sci. Lesshaft. Leningrad* **19** no. 2 1936 pp. 41–50 2 figs. [Russian, with English rés.]

* This paper was printed in 1887, but owing to a personal quarrel between the author and the late Dr. Moreno was never published or distributed except possibly in limited numbers. There is a copy received in 1916 in the Geological Library of the Natural History Museum and two of the three new genera are to be found in the Berlin Nomenclator now in the course of publication. It is therefore known to Paleontologists though never formally published previously to 1936.

36.—Astanin, L. Age variability of the skeleton of Mammalia and definition of age by skeleton. Bull. Inst. sci. Lesshaft. Leningrad 19 no. 2 1936 pp. 203–231 5 figs. [Russian, with English rés.]

37.—Astre, G. Le Lièvre blanc constitue-t-il, aux Pyrénées, une reliete des époques glaciaires? Bull. Soc. Hist. nat. Toulouse 68 1935 pp. 387–398.

38.—Aufrère, L. Le *Cervus somonensis* du Muséum national d'Histoire naturelle. C.R. Acad. Sci. Paris 202 1936 pp. 960–961 1 fig.

39.—Aufrère, L. Le *Cervus somonensis* Desm. et les éléments d'une faune chaude à Menchecourt. C.R. Séances Soc. géol. Fr. 1936 pp. 35–37.

40.—Augier, M. Voûte chondrocrânienne et cerveau (*Sus*, *Homo*). Arch. Anat. Hist. Embryol. Strasbourg 21 1936 pp. 15–30 1 pl. 7 text-figs.

41.—Aurell, G. und Wohlfart, G. Studien über den mikroskopischen Bau der quergestreiften Muskulatur. Mit besonderer Rücksicht auf die Hypothese einer helikoidalen Anordnung gewisser Strukturen der Muskelfasern. Z. mikr. anat. Forsch. Leipzig 40 1936 pp. 402–444 30 figs.

42.—Averin, V. G. et Schtamm, M. G. La trouvaille de l'hérissin oreillard (*Hemiechinus auritus* Gmel.) en Ukraine. Trav. Soc. Nat. Charkow 50 no. 2 1927 pp. 51–53. [Russian only.]

43.—Ayer, M. Y. The archaeological and faunal material from Williams cave, Guadalupe Mountains, Texas. Proc. Acad. nat. Sci. Philad. 88 1936 pp. 599–618 1 pl.

44.—Babudieri, B. Ricerchi ematologiche sullo scorbuto sperimentale della cavia. Arch. zool. Torino 22 1936 pp. 347–369.

45.—Bächler, E. Der Stand der Steinwildkolonien in den Schweizeralpen. Jb. St. Gallis naturw. Ges. 67 1935 pp. 131–234 35 photos.

46.—Bachman, C. [and others]. Further studies of sex skin reactions in *Macaca mulatta*. Proc. Soc. exp. Biol. 33 1936 pp. 549–551.

Bailey, E. E. *vide* Bissonnette.

47.—Bailey, V. The Mammals and life zones of Oregon. North Amer. Fauna Washington D. C. 55 1936 pp. 1–416 col. map 52 pls. 102 text-maps.

48.—Bakalov, P. Die Hipparionien-fauna von Kalimanzi und Kromidovo, Bezirk Sweti Wratsch, S.W. Bulgarien. (I. Fissipedia und Suidae.) Annu. Univ. Sofia 30 no. 3 1934 pp. 313–349 7 pls.

49.—Bakalov, P. Ein neuer Fund von *Mastodon borsoni* Hays in Bulgarien. Festschrift E. Strand Riga 1 1936 pp. 77–78 1 pl.

50.—Baker, J. R. and Z. also Bird, T. F. The seasons in a tropical rain forest (New Hebrides). Part 3. Fruit Bats (Pteropidae) pp. 123–141 1 fig. Part 4. Insectivorous Bats (Vespertilionidae and Rhinolophidae) pp. 143–161 1 pl. 1 text-fig. J. Linn. Soc. London 40 1936.

51.—Bang, F. B. Observations on limb arteries of the Woolly Monkey (*Lagothrix lagothericha*). Anat. Rec. Philadelphica 66 1936 pp. 387–395 4 figs.

52.—Banks, E. A collection of montane Mammals and Birds from Mulu in Sarawak. Sarawak Mus. J. 4 1935 pp. 327–332.

Banks, E. *vide* Selous.

53.—Baptista, B. V. Investigações anatomicas sobre os Bradypodidae. O nervo vago no *Bradypus tridactylus*. Mem. Inst. Osw. Cruz. Rio de J. 31 1936 pp. 361–372 7 pls.

54.—Barbour, T. *Eumops* in Florida. J. Mammal. 17 1936 p. 414.

55.—Barclay, E. N. The Roe-Deer of European Turkey. Ann. Mag. Nat. Hist. (10) 17 1936 404–405.

56.—Barmasov, A. P. [and others]. The standards of the Dogs of the north. Trans. arctic Inst. Leningrad 56 1936 pp. 1–177 many figs. [Russian only.]

Barrera, S. E. *vide* Ferraro.

57.—Barris, R. W. [and others]. Optic connection of the diencephalon and midbrain of the Cat. J. comp. Neurol. 62 1935 pp. 117–153 4 pls. 3 text-figs.

58.—Barron, D. H. A note on the course of the proprioceptor fibres from the tongue. *Anat. Rec. Philadelphia* **66** 1936 pp. 11–15.

Barto, E. *vide* Huestis.

58A.—Bartz, J. Das Unterpliocän in Rheinhausen. *Mitt. Oberrh. geol. Ver.* **25** 1936 pp. 119–226 6 figs.

Basselaar, H. J. *vide* Möunig.

59.—Battye, R. K. M. Occurrence of the Panther (*Panthera pardus* Linn.) in Tibet. *J. Bombay nat. Hist. Soc.* **38** 1936 pp. 609–610 photo.

60.—Baüdouin, Le putois vison dans le marais de Monto. La Genette dans les dunes. *Bull. Soc. Sci. nat. Ouest Nantes* (5) **4** 1935 pp. viii–x.

61.—Bayer, H. G. A. Mitteilung über Untersuchungen an den Augäpfeln von *Capreolus capreolus* und *Cervus dama*. *Zool. Anz. Leipzig* **116** 1936 pp. 236–241.

62.—Bechthold, G. Einige neue Unterarten asiatischer Herpestiden. *Z. Säugetierk. Berlin* **11** 1936 pp. 149–153.

63.—Beer, G. R. de and Fell, W. A. The development of Monotremata. Part III. The development of the skull of *Ornithorhynchus*. *Trans. Zool. Soc. Lond.* **23** 1936 pp. 1–42 7 pls.

64.—Behney, W. H. Nocturnal explorations of the Forest Deer-Mouse. *J. Mammal. Baltimore* **17** 1936 pp. 225–230 4 figs.

65.—Beltrami, G. Sulle placchette anucleate dell' alveolo pulmonare *Monit. zool. ital. Firenze* **47** 1936 pp. 35–45 3 figs.

66.—Bemmel, A. C. V. van. De Geschiedenis van de Equidae. *Vakbl. Biol. Helder* **18** 1936 pp. 1–12.

Benedict, F. G. *vide* Bruhn.

67.—Benedict, F. G. and Bruhn, J. M. Chimpanzee Metabolism. *Proc. Nat. Acad. Sci. Washington* **22** 1936 pp. 394–397.

68.—Benedict, F. G. and Lee, R. C. The heart rate of the Elephant. *Proc. Amer. Phil. Soc. Philad.* **76** 1936 pp. 335–341.

69.—Benedict, F. G. and Lee, R. C. Studies on the body temperature of Elephants. *Proc. Nat. Acad. Sci. Wash.* **22** 1936 pp. 405–408.

70.—Benham, W. B. The teeth of an extinct Whale *Microcetus hectori* n. sp. *Trans. Proc. Roy. Soc. N.Z.* **65** 1935 pp. 239–243 2 pls.

71.—Bennejeant, C. La dentition de l'*Australopithecus africanus* (Dart). *Mammalia* **1** 1936 pp. 8–14 1 pl. 6 text-figs.

Bennejeant, *vide* Friant.

72.—Bennett, H. S. The development of the blood supply to the heart in the embryo Pig. *Amer. J. Anat.* **60** 1936 pp. 27–53 3 pls.

73.—Benson, S. B. Geographic variation in *Neotoma lepida* in Arizona. *Occ. Pap. Mus. Zool. Univ. Mich.* no. **317** 1935 pp. 1–9 map.

74.—Benson, S. B. Notes on the sex ratio of breeding of the Beaver in Michigan. *Occ. Pap. Mus. Zool. Univ. Mich.* **335** 1936 pp. 1–6 1 graph.

75.—Benson, S. B.—A biological reconnaissance of Narvajo Mountain, Utah. *Univ. Calif. Pub. Zool.* **40** 1935 pp. 439–456.

76.—Bentley, F. H. Wound healing in vitro. *J. Anat. London* **70** 1936 pp. 498–506 2 pls. 9 text-figs.

77.—Bergman, S. Observations on the Kamchatkan Bear. *J. Mammal. Baltimore* **17** 1936 pp. 115–120.

78.—Berkelbach van der Sprenkel, H. Microscopical investigations of the innervation of the tooth and its surroundings. *J. Anat. London* **70** 1936 pp. 233–241 2 pls. 1 text-fig.

79.—Bernström, J. Korta anteckningar om Ertholmenes vertebratfauna. *Fauna och Flora, Uppsala* **1936** pp. 164–174.

80.—Bierens de Haan, J. A. und Kooyman, D. Bildung und Zerstörung von Handlungsrhythmen bei einem Schweinsaffen. *Arch. neerl. Zool.* **2** 1936 pp. 143–159.

81.—Bierens de Haan, J. A. Ueber einen "sprechenden" Hund in Amsterdam, sowie einige Bemerkungen über solche Hunde in allgemeinen. *Zool. Anz. Leipzig* **114** 1936 pp. 57–63.

Biese, W. *vide* Hilzheimer.

Bikow, S. *vide* Skedenow.

Bird, T. F. *vide* Baker.

82.—Birula, N. B. Les lois écologiques de la distribution stationnaire du petit Spermophile (*Citellus pygmaeus* Pall.). Abs. Works zool. Inst. Moscow State Univ. 3 1936 pp. 117–144 5 figs. [Russian, with French rés.]

Bishop, G. H. *vide* Julianelle.

Bisschop, J. H. R. *vide* Curson.

83.—Bissonette, T. H. and Bailey, E. E. Litters from Ferrets in January induced by increased exposures to light after nightfall. Amer. Nat. 70 1936 pp. 454–458.

84.—Björkman, A. und Wohlfart, G. Faseranalyse der Nn. oculomotorius, trochlearis und abducens des Menschen und des N. abducens verschiedener Tiere. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 631–647 10 figs.

85.—Black, J. D. Mammals of Northwestern Arkansas. J. Mammal. Baltimore 17 1936 pp. 29–35.

86.—Blackmore, L. M. The distribution of Bats in Devonshire. Rep. Devons. Ass. Adv. Sci. 67 1935 pp. 435–438.

87.—Blair, W. F. The Florida Marsh Rabbit. J. Mammal. Baltimore 17 1936 pp. 197–207.

88.—Blair, W. F. The Nine-banded Armadillo in northeastern Oklahoma. J. Mammal. Baltimore 17 1936 pp. 293–294.

89.—Blair, W. F. and Kilby, J. D. The Gopher Mouse—*Peromyscus floridanus*. J. Mammal. Baltimore 17 1936 pp. 421–422.

90.—Blanc, A. C. Sulla fauna quaternaria dell' Agro Segretario. Proc. verb. Soc. tosc. Sci. nat. 44 1935 pp. 108–110.

Blanc, A. C. *vide* Breuil.

91.—Blanc, G. A. Sulla presenza di *Equus hydruntinus* nelle ghiaie quaternarie dell' Aniene. Rend. Acc. Lincei (6) 23 1936 pp. 827–830 2 figs.

92.—Blancou, L. Contribution à l'étude de la faune sauvage de l'Oubangui-Chari. Mammifères et oiseaux des bassins supérieurs de l'Ouham, de la Nana Barya et de la Pendé. Bull. Soc. Rec. congol. 1936 pp. 1–36 [sep. pag.].

93.—Blancou, L. Buffles de l'Oubangui-Chari-Tschad. Terre et la Vie,

Paris 5 2^{me} sem. 1935 pp. 202–223 maps and photos.

Blandau, R. *vide* Young.

94.—Bode, F. D. Tooth characters of Protohippine Horses with special reference to species from the *Merychippus* zone, California. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) no. 453 1934 pp. 39–64 2 pls. 6 text-figs.

95.—Bode, F. D. The fauna of the *Merychippus* zone, North Coalinga district, California. Pub. Carnegie Instn. Washington (Contrib. Paleont.) no. 453 1935 pp. 65–96 2 pls. 10 text-figs.

Bode, F. D. *vide* Stock.

96.—Bodian, D. The projection of the lateral geniculate body on the cerebral cortex of the Opossum, *Didelphis virginiana*. J. comp. Neurol. 62 1935 pp. 469–494 15 figs.

97.—Boeke, J. Le plexus nerveuse de la cornée de vertébrés supérieurs et ses connections avec les cellules conjonctives. L'iris du macaque. Bull. Histol. appl. Lyon 13 1936 pp. 113–128 5 figs.

98.—Boeke, J. Innervationsstudien. IX. Zur Nervenversorgung der Augenhäute. III. Die Beziehungen der Nervenfasern der Iris zu den Bindegewebszellen beim Affen. Die "interstitiellen" Elemente des Irisstromas und der sympathische Grundplexus. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 477–520 26 figs.

99.—Boettger, C. R. Zur Frage des Riesenwuchses gewisser Tierarten auf Inseln. SitzBer. Ges. naturf. Fr. Berlin for 1935 1936 pp. 341–344.

100.—Boettischer, H. von. Ueber das Vorkommen des Tigeriltis (*Vormela peregusna* Gueld.) in Bulgarien. Z. Säugetierk. 11 1936 pp. 277–278.

101.—Bogatcheff, V. The Seal in the Miocene of the Caspian Basin. Ann. Lenin State Univ. Baku (Sect. Nat. Hist. and Med.) 6 1927 pp. 135–148 1 pl. [Russian, with English rés.]

102.—Bogdashew, N. Ein seltener Fall des erhalten gebliebenen Systems von zwei vorderen Hohlvenen beim Hunde. Anat. Anz. Jena 83 1936 pp. 29–31.

103.—Bogdaschew, N. Anatomisch-histologischer Bau der Metacarpalknochen und zum Teil der Metatarsalknochen einiger Pferderassen im Zusammenhang mit ihrer Funktion. *Anat. Anz. Jena* **83** 1936 pp. 103–121 1 fig.

104.—Bogoliubskij, S. Problems of evolutionary morphology of the domestic animals. *Bull. Acad. Sci. U.R.S.S. (Ser. Biol.)* **1936** pp. 317–374 27 figs. [Russian, with English rés.]

105.—Bohlin, B. Bemerkungen über einige pontischen Antilopen Gattungen. *Ark. Zool. Stockholm* **28A** no. 18 1936 pp. 1–22 1 pl. 6 text-figs.

106.—Bohlin, B. Notes on some remains of fossil Mammals from China and Mongolia. *Bull. Geol. Soc. China, Peking* **15** 1936 321–330 1 pl.

107.—Böker, H. Die Begründung der anatomischen Sammlungen in Jena durch Goethe. *Anat. Anz. Jena* **81** 1936 pp. 293–302 3 figs.

108.—Bole, B. P. A new race of Kangaroo Rat from southwestern Utah. *Sci. Publ. Cleveland Mus.* **5** no. 1 1936 pp. 1–2.

109.—Bonillas, Y. The dentition of *Lambdotherium*. *J. Mammal. Baltimore* **17** 1936 pp. 139–142 3 figs.

110.—Bonnievie, K. Abortive differentiation of the ear vesicles. *Genetica 's-Gravenhage* **18** 1936 pp. 105–125 3 pls. 12 text-figs.

111.—Boorsook, H. The specific dynamic action of protein and amino acids in animals. *Biol. Rev. Cambridge* **11** 1936 pp. 147–180.

112.—Bordas, A. Los Peltateloidea de la colección Ameghino. *Physis B. Aires* **12** 1936 pp. 1–18 5 figs.

113.—Bordas, A. F. Un nuevo mamífero del Colpodon de Gaiman (*Proheptoconus trelewense*) gen. et sp. n. *Physis B. Aires* **12** 1936 pp. 110–112 1 fig.

114.—Borghese, E. Ricerche sul lacunoma e sull' apparato reticolare interno in alcune cellule epiteliali di mammiferi. *Anat. Anz. Jena* **81** 1936 pp. 305–318 1 pl.

115.—Borghese, E. Apparato reticolare interno e lacunoma nell' epitelio gastrico e intestinale dei Mammiferi. *Mem. Accad. Lincei (6)* **6** 1936 pp. 263–307 1 pl.

116.—Borghese, E. e Nascimbene, A. La zona di transizione fra mucosa esofagea e gastrica in alcune specie di Mammiferi. *Arch. ital. Anat.* **36** 1936 pp. 67–100 2 pls.

117.—Boring, A. M. and Kao, Y. Two hermaphrodite Goats. *Peking nat. Hist. Bull.* **11** 1936 pp. 115–118 1 pl.

Boucher, J. *vide* Roman.

118.—Bourdillon, Sir B. Notes on an unusual specimen of *Adenota kob thomasi*. *J. Soc. Preserv. Faun. Empire London* **28** 1936 pp. 23–24 photos.

119.—Bourdelle, E. Notes ostéologiques et ostéométriques sur les Anes sauvages d'Afrique. *Bull. Mus. Hist. nat. Paris* **7** 1935 pp. 304–314.

120.—Bourne, G. The phylogeny of the adrenal gland. *Amer. Nat.* **70** 1936 pp. 159–178.

121.—Bowden, A. O. and Lopatin, I. A. Pleistocene Man in southern California. *Science* **84** 1936 pp. 507–508.

Bowden, F. P. *vide* Marshall.

122.—Boyd, M. F. The occurrence of the American Bison in Alabama and Florida. *Science* **84** 1936 p. 203.

123.—Brambell, F. W. R. and Hall, K. Anatomical and histological studies of an intersexual Lesser Shrew (*Sorex minutus* L.), with special reference to the effects of the male hormones on the uterus and vagina. *J. Anat. London* **70** 1936 pp. 339–348 4 pls. 2 text-figs.

124.—Brambell, F. W. R. and Rowlands, I. W. Reproduction of the Bank Vole (*Eutamias glareolus* Schreber). I. The oestrous cycle of the female. II. Seasonal changes in the reproductive organs of the male. *Philos. Trans. London* **226 B** 1936 pp. 71–97 2 pls. 9 text-figs. pp. 99–120 4 pls. 6 text-figs.

125.—Breuil, H. e Blanc, A. C. Il nuovo cranio di *Homo neanderthalensis* e la stratigrafia del giacimento di Saccopastore (Roma). *Bol. Soc. geol. ital.* **54** 1935 pp. 289–300 1 pl. 2 text-figs.

126.—Bridges, W. The Haitian Solenodon. *Bull. New York zool. Soc.* **39** 1936 pp. 13–18 photos.

127.—Briggs, E. A. The red blood corpuscles of primitive Mammals. *Nature London* **138** 1936 p. 762.

128.—Brooklehurst, H. C. The Giant Panda. J. Soc. Preserv. Faun. Empire London 28 1936 pp. 21-23 photo.

129.—Brongersma, L. D. Some comments upon H. C. Raven's paper: Wallace's Line and the distribution of Indo-Australian Mammals. Arch. neerl. Zool. 2 1936 pp. 240-256.

130.—Brongersma, L. D. On the subspecies of *Rhizomys sumatrensis* (Raffles) with some notes on related species. Zool. Meded. Leiden 19 1936 pp. 137-164 4 figs.

131.—Broili, F. und Schröder, J. Beobachtungen an Wirbeltieren der Karrooformation. XIX. Ein neuer Fund von *Tritylodon* Owen. SitzBer. bayer. Akad. Wiss. 1936 pp. 187-228 2 pls. 9 text-figs.

132.—Broom, R. A new fossil Baboon from the Transvaal. Ann. Transv. Mus. 18 1936 pp. 393-396 2 figs.

133.—Broom, R. A new fossil Anthropoid skull from South Africa. Nature London 138 1936 pp. 486-488 4 figs.

134.—Broom, R. Dentition of *Australopithecus*. Nature London 138 1936 p. 719 2 figs.

135.—Broom, R. Some points in the anatomy of the Platypus snout. S. Afr. J. Sci. Cape Town 32 1935 pp. 322-328 3 figs.

136.—Brown, C. E. Rearing wild animals in captivity and gestation periods. J. Mammal. Baltimore 17 1936 pp. 10-13.

Bruhn, J. M. vide Benedict.

137.—Bruhn, J. M. and Benedict, F. G. The respiratory metabolism of the Chimpanzee. Proc. Amer. Acad. Sci. Boston 71 1936 pp. 259-326 6 figs.

138.—Brunner, G. Eine Kleinsäugerfauna aus dem Mittel-Diluvium mit *Spalax* sp. Abh. naturf. Ges. Nürnberg 26 no. 2 1936 pp. 1-24 1 pl. 13 text-figs.

139.—Brunner, G. Zur Diluvial fauna des Büttnerloches bei Thuisbrunn (Oberfranken). Cbl. Min. Geol. Paläont. Stuttgart 1936 B pp. 242-255 19 figs.

140.—Brunner, G. Das Grubenloch bei Oberklausen. Eine spätdiluviale Fauna mit *Ursus arctos* L. und *Gulo gulo* L. Mitt. Höhlen- u. Karstf. Berlin 1936 Sonderheft pp. 33-52 8 pls.

141.—Brunner, G. Das Grubenloch bei Oberklausen. I. Eine spätdiluviale Fauna mit *Ursus arctos* L. und *Gulo gulo* L. Z. Säugetierk. Berl. 11 Sonderh. 1936 pp. 257-276 8 pls.

142.—Bucy, P. C. A comparative cyto-architectonic study of the motor and premotor areas in the primate cortex. J. comp. Neurol. 62 1935 pp. 293-331 10 pls.

143.—Burchak-Abramovich, N. I. *Mastodon borsoni* Lart. from the Balta deposits of the Village Holdashevka, Vinnitza district. J. Geol. ukrain. Acad. Sci. 2 no. 2 1935 pp. 142-145 2 photos. [Russian with English rés.]

144.—Burchak-Abramowitsch, N. Ueber den Fund eines Mammut in den Dorfe Tyschtschinzi im kyjiwer Gebiet. Ukrainische Akad. Wiss. "Die Quartärperiode" Lief. 8 1935 pp. 133-139. [Russian, with German rés.]

145.—Burtchak-Abramowitch, N. I. Skull of a Brown Bear (*Ursus arctos arctos* L.) in the quaternary deposits of Zbranki village (Ovruch region). Ukrainische Akad. Wiss. "Die Quartärperiode" Lief 10 1935 pp. 97-105 3 figs. [Russian, with German rés.]

146.—Burhoe, S. O. Linkage studies of waved coat in the House Mouse. J. Hered. 27 1936 pp. 119-120.

147.—Burlet, H. M. de und Kooman, A. Manifestation des Doppelnatur des Bogengangssystems in der Ontogenese des Vertebratenlabyrinthes. Proc. K. Akad. Wet. Amsterdam 39 1936 pp. 937-942 6 figs.

148.—Burrows, H. A protective action of progesterone on the genital organs of male Mice. Nature London 138 1936 p. 164.

149.—Burt, W. H. A study of the baculum in the genera *Perognathus* and *Dipodomys*. J. Mammal. 17 1936 pp. 145-156 6 figs.

150.—Burt, W. H. Notes on the habits of the Mohave Ground Squirrel. J. Mammal. Baltimore 17 1936 pp. 221-224.

- 151.—Butarin, N. S. The chromosome complex of Arkhar (*O. polii karelini* Sev.), Kurdiuchny Ram (*Ovis steatopyga*) and their F-hybrid. C.R. Acad. Sci. Moscou 1935 vol. 4 pp. 287-290 5 figs. [English.]
- 152.—Butcher, E. O. Hair growth on skin transplants in the immature albino Rat. Anat. Rec. Philadelphia 64 1936 pp. 161-171 1 pl.
- 153.—Buxton, C. L. Transplantation of the hypophysis cerebri to the anterior chamber of the eye in albino Rats. Anat. Rec. Philadelphia 64 1936 pp. 277-283 1 pl.
- 154.—Buxton, P. A. Breeding dates of domestic Rats trapped in Lagos, Nigeria, and certain other countries. J. Animal Ecol. 5 1936 pp. 53-66 2 figs.
- 155.—Buyse A. A case of extreme sex-modification in an adult bovine free martin. Anat. Rec. Philadelphia 66 1936 pp. 43-58 3 figs.
- 156.—Cabrera A. Subspecific and individual variation in the Burchell Zebras. J. Mammal. Baltimore 17 1936 pp. 89-112 21 figs. and map.
- 157.—Cabrera A. Las especies del género *Glossotherium*. Notas Mus. La Plata Paleont. 1 1936 pp. 193-206.
- 158.—Cabrera A. Un nuevo carnívoro del Chapadmalense de Miramar. Notas Mus. La Plata Paleontol. 1 1936 pp. 301-308 4 figs.
- 159.—Cahalane V. N. Age variation in the teeth and skull of the Whitetail Deer. Sci. Pub. Cranbrook Inst. Sci. no. 2 1932 pp. 1-14 8 pls.
- 160.—Cahn, A. R. Further notes on the Giant Beaver [*Castoroides*]. J. Mammal. Baltimore 17 1936 pp. 66-67.
- 161.—Caius, J. F. et Chhapgar, S. K. La géophagie chez les animaux sauvages. Broteria Lisboa 32 1936 pp. 91-96, 116-129 map photos.
- 162.—Calderon, W. F. Animal painting and anatomy. Pp. 1-336 many illustr. London (Seeley Service) 1936 8vo [Review Nature 139 p. 6.]
- 163.—Călinescu, R. I. Focile dela Capul Caliacra. Bul. Soc. Nat. România Bucuresti no. 8 1936 pp. 6-10 fig. map. [Roumanian.]
- 164.—Callenfels, P. V. van S. Recent discoveries of skulls and Pleistocene stone implements in Java. Man London 36 1936 pp. 274-275.
- 165.—Camillo, I. R. Di una collezione osteologica di mammiferi fossili e viventi conservata nel Museo di Storia Naturale di Trento. Studi trentini Trento 17 1936 pp. 215-245 3 pls.
- 166.—Campbell, B. The comparative myology of the forelimb of the Hippopotamus, Pig and Tapir. Amer. J. Anat. 59 1936 pp. 201-247 7 figs.
- 167.—Campenhout, E. van. Origine du nerf olfactif chez le porc. Arch. Anat. micr. Paris 32 1936 pp. 391-407 16 figs.
- 168.—Campenhout, E. van. Contribution à l'étude de l'origine des ganglions des nerfs craniens mixites chez le Porc. Arch. Biol. Liège 47 1936 pp. 585-604 2 pls. 2 text-figs.
- 169.—Campenhout, E. van et Grenade, A. Contribution à l'étude de l'innervation de la vésicule biliaire. Bull. Histol. appl. Lyon 13 1936 pp. 309-318 4 figs.
- 170.—Campo, R. M. del. Mammalia in: Contribuciones al conocimiento de la fauna de Actopan HGO. An. Inst. Biol. Mexico 7 1936 pp. 283-286.
- 171.—Carey, E. J. Studies in the wave-mechanics of muscle. III. The anastomotic fibers, central nuclei and intercalated discs in the cross-striated muscles of the Guinea-Pig (*Cavia cobaya*). Anat. Rec. Philadelphia 64 1936 pp. 327-341 3 pls. 2 text-figs. also pp. 343-355 2 pls. 3 text-figs.
- 172.—Carleton, A. The limb-bones and vertebrae of the extinct Lemurs of Madagascar. Proc. zool. Soc. London 1936 pp. 281-307 9 pls. 2 text-figs.
- 173.—Carr, R. When the Wolf was at the door. Hist. Berwicksh. Nat. Cl. 29 1936 pp. 71-75.
- 174.—Carvajal, E. Nota sobre un yacimiento de fósiles vertebrados en el plioceno de la Provincia de Logroño. Bol. Inst. Geol. Esp. 47 pt. 2 1936 pp. 319-333 2 maps 29 figs.
- 175.—Case, E. C. and Stanley, G. M. The Bloomfield Hills Mastodon. Bull. Cranbrook Inst. Sci. no. 4 1935 pp. 1-8 5 pls. 1 map.

176.—Castle, W. E. Size inheritance in Mice. *Amer. Nat.* **70** 1936 pp. 209–217.

177.—Castle, W. E. Further data on linkage in Rabbits. *Proc. Nat. Acad. Sci. Washington* **22** 1936 pp. 222–225.

178.—Castle, W. E. and Law, L. W. Satin, a new hair mutation of the Rabbit. With a chromosome map of the Rabbit. *J. Hered. Wash.* **27** 1936 pp. 235–240 2 figs.

179.—Castle, W. E. and Reed, S. C. Studies of inheritance in lop-eared Rabbits. *Genetics Menasha* **21** 1936 pp. 297–309.

180.—Castle, W. E. [and others]. Studies of size cross in Mice. *Genetics Menasha* **21** 1936 pp. 66–78, 310–323.

181.—Castle, W. E. [and others]. Identical twins in a Mouse cross. *Science* **84** 1936 p. 581.

182.—Cave, A. J. E. On the cardiac arteries of the Asiatic Elephant. *J. Anat. London* **71** 1936 pp. 124–127.

183.—Celestino da Costa, A. Les paraganglions cervicaux des embryons de Chéiroptères. *C.R. Soc. Biol. Paris* **122** 1936 pp. 242–244.

184.—Chadwick, C. S. Cyclic morphologic variations in the anterior hypophysis of the Guinea Pig. *Amer. J. Anat.* **60** 1936 pp. 129–147 2 figs.

185.—Chaffee, R. G. A new Heteromysid skull of the genus *Cupidinimus*. *J. Mammal. Baltimore* **17** 1936 pp. 419–420.

186.—Chang, M. Transposition of size- and pattern-discrimination in the White Rat. *Sci. Rpt. nat. Tsing Hua Univ. Peiping (B)* **2** 1936 pp. 89–110 1 fig.

187.—Chapman, F. M. José, 1936. *Nat. Hist. New York* **38** 1936 pp. 126–134 photos.

188.—Chapman, F. M. White-lipped Pecary. *Nat. Hist. New York* **38** 1936 pp. 408–413 5 photos.

189.—Chapsky, K. K. The Walrus of the Kara Sea. Results of the investigation of the life history, the geographical distribution and stock of Walruses in the Kara Sea. *Trans. arctic Inst. Leningrad* **67** 1936 pp. 1–124 34 figs. [Russian, with English rés.]

190.—Chard, J. S. R. British animal tracks. Pp. 1–80 many illustr. London (Pearson) 1936 8vo.

191.—Charlemagne, N. W. Zoogeographische Skizzen. *Trav. Mus. Zool. Kiev* **15** 1935 pp. 27–38 1 map. [Russian, with German rés.]

192.—Charvilhat, —. Considérations générales sur les Mammifères disparus de l'Auvergne pendant les trois derniers siècles et sur quelques espèces en voie de disparition. *Bull. Soc. Hist. nat. Auvergne* **15** 1929 pp. 50–54 fig.

Chase, H. B. *vide* Wright.

193.—Chasen, F. N. New and noteworthy Bats from the Malay Peninsula. *Bull. Raffles Mus. Singapore* **12** 1936 pp. 133–134.

194.—Chasen, F. N. A note on Malaysian *Gunomys*. *Bull. Raffles Mus. Singapore* **12** 1936 pp. 135–136.

195.—Chesley, P. and Dunn, L. C. The inheritance of taillessness (anury) in the House Mouse. *Genetics Menasha* **21** 1936 pp. 525–536.

Chhapgar, S. K. *vide* Caius.

Chi'en, G. *vide* van Dyke.

196.—Chillingworth, F. P. [and others]. Vascular injection as influenced by negative pressure. *Anat. Rec. Philadelphia* **66** 1936 pp. 113–117 1 pl. 1 text-fig.

197.—Chiodi, V. Il nodo seno-atriale del *Delphinus delphis*. *Clin. Vet. Milano* **57** 1934 pp. 421–426 2 figs.

198.—Christensen, K. Sympathetic and parasympathetic nerves in the orbit of the Cat. *J. Anat. London* **70** 1936 pp. 225–232 2 pls. 7 text-figs.

199.—Cid, R. B. Sobre la histogénesis de las crestas palatinas. *Arch. chilenos Morf. Santiago* **1** no. 2 1925 pp. 444–472 23 figs.

200.—Clara, M. Vergleichende Histologie des Nierenglomerulus und der Lungen alveole. Nach Untersuchungen beim Menschen und beim Kaninchen. *Z. mikr. anat. Forsch. Leipzig* **40** 1936 pp. 147–280 22 figs.

201.—Clark, F. H. The estrous cycle of the Deer-Mouse *Peromyscus maniculatus*. *Contr. Lab. Vertebr. Genetics Univ. Michigan* **1** 1936 pp. 1–7.

202.—Clark, F. H. The estrous cycle of the Cotton-Rat, *Sigmodon hispidus*. Contr. Lab. Vertebr. Genetics Univ. Michigan 2 1936 pp. 1-2.

203.—Clark, F. H. Linkage of pink-eye and albinism in the Deer-Mouse. J. Hered. Wash. 27 1936 pp. 259-260.

204.—Clark, F. H. Geotrophic behaviour on a sloping plane of arboreal and non-arboreal races of Mice of the genus *Peromyscus*. J. Mammal. Baltimore 17 1936 pp. 44-47.

205.—Clark, F. H. Linkage relations of hydrocephalus (hyi.) in the House Mouse, *Mus musculus*. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 474-478.

206.—Clark, W. E. Le G. The thalamic connections of the temporal lobe of the brain in the Monkey. J. Anat. London 70 1936 pp. 447-464 2 pls. 9 text-figs.

207.—Clark, W. E. Le G. The termination of ascending tracts in the thalamus of the Macaque Monkey. J. Anat. London 71 1936 pp. 7-40 11 figs.

208.—Clark, W. E. Le G. The problem of the claw in the Primates. Proc. zool. Soc. London 1936 pp. 1-24 1 pl. 13 text-figs.

Clegg, J. *vide* Wagstaffe.

209.—Cloudman, A. M. and Little C. C. The genetics of tumour formation in Mice, in relation to the gene T for brachyury. J. Genet. London 32 1936 pp. 487-504 2 figs.

210.—Cohrs, P. und Knobloch, D. von. Das subfornikale Organ des 3. Ventrikels. Z. Anat. Entwges. 105 1936 pp. 491-518 21 figs.

211.—Cohrs, P. und Schneider, K. M. Kryptorchismus beim Löwen und Hypoplasie der Genetalorgane mit kryptorchismus bei Edelhirsch. Zool. Garten Leipzig 8 1936 pp. 201-209 9 figs.

212.—Colbert, E. H. Tertiary Deer discovered by the American Museum Asiatic Expeditions. Amer. Mus. Nov. no. 854 1936 pp. 1-21 10 figs.

213.—Colbert, E. H. *Palaeotragus* in the Tung Gur Formation of Mongolia. Amer. Mus. Nov. no. 874 1936 pp. 1-17.

214.—Coleman, E. Climbing habits and further notes on hibernation of the

Echidna. Vict. Nat. Melbourne 53 1936 pp. 124-128 2 photos.

215.—Colyer, Sir F. Variations and diseases of the teeth of animals. Pp. viii + 750 1007 figs. London (Bale) 1936 8vo.

216.—Condren, J. M. Observations on the seasonal and reproductive activities of the Eastern Chipmunk. J. Mammal. Baltimore 17 1936 pp. 231-234 1 fig.

217.—Connolly, C. J. The fissural pattern of the Primate [including Lemurids] brain. Amer. J. phys. Anthropol. Philad. 21 1936 pp. 301-422 67 figs.

218.—Coolidge, H. J. Zoological results of the George Vanderbilt African expedition of 1934. Part IV. Notes on four Gorillas from the Sanga river region. Proc. Acad. Nat. Sci. Philad. 88 1936 pl. 479-501 2 pls.

219.—Corner, G. W. [and others]. On normal and aberrant corpora lutea of the Rhesus Monkey. Amer. J. Anat. 59 1936 pp. 433-457 7 pls. 1 text-fig.

220.—Cottam, C. Food of Arctic Birds and Mammals collected by the Bartlett expeditions of 1931, 1932 and 1933. J. Wash. Acad. Sci. 26 1936 pp. 165-177.

221.—Cotton, W. B. Note on the Giant Forest Hog (*Hylochoerus meinertzhageni*). Proc. zool. Soc. London 1936 pp. 687-688.

222.—Courrier, R. et Gros, G. Les réactions du Singe mâle impubère à certaines substances hormonales. Bull. Soc. Hist. nat. Alger 26 bis. 1935 pp. 150-155 6 pls.

223.—Cowan, I. McT. Distribution and variation in Deer (Genus *Odocoileus* of the Pacific coastal region of North America. Calif. Fish Game 22 1936 pp. 155-246 63 maps and figs.

224.—Cowan, I. McT. Notes on some Mammals in the British Columbia Provincial Museum with a list of the type specimens of North American recent Mammals in the Museum. Canad. Field Nat. 50 1936 pp. 145-148.

225.—Cowan, I. McT. Nesting habits of the Flying Squirrel, *Glaucomys sabrinus*. J. Mammal. Baltimore 17 1936 pp. 58-60.

226.—Cowan, I. McT. A distributional study of the *Peromyscus silkensis* group of White-footed Mice. Univ. Calif. Pub. Zool. **40** 1935 pp. 429-438 map.

Cowan, I. M. *vide* Racey.

227.—Cowles, R. B. Notes on the Mammalian fauna of Umzumbe Valley, Natal, South Africa. J. Mammal. Baltimore **17** 1936 pp. 121-130.

228.—Cox, W. T. Snowshoe Rabbit migration, tick infestation and weather cycles. J. Mammal. Baltimore **17** 1936 pp. 216-221.

229.—Craft, W. A. and Warner, E. A. Observations on different types of hair whorls in Mammals, and the inheritance of hair whorls in Swine. Proc. Okla. Acad. Sci. **14** 1934 pp. 23-27 1 pl.

230.—Crew, F. A. E. A repetition of McDougall's Lamarckian experiment. J. Genet., London **33** 1936 pp. 61-101 5 charts 11 text-figs.

Cuenca, C. L. *vide* Ranquini.

231.—Curson, H. H. and Bisschop, J. H. R. Anatomical study no. 60. Some comments on the hump of African Cattle. Onderstepoort J. Pretoria **5** 1935 pp. 621-644 19 figs.

232.—Cutright, P. R. Maturation phenomena in the Mouse. Proc. Penn. Acad. Sci. **6** 1932 pp. 154-156.

Cutter, R. D. *vide* Starks.

233.—Cutuly, E. Quantitative study on the adrenals of hypophysectomized Rats. Anat. Rec. Philadelphia **66** 1936 pp. 119-122.

234.—Dabelow, Neue Ergebnisse über das Gefässsystem der Lymphknotens und andere lymphatischer Organe. Verh. anat. Ges. Jena **43** 1936 pp. 187-206 8 figs.

235.—Dahr, E. Report on recently discovered bones of the Wild Cat, *Felis silvestris* Schreb., from the Stone Age in Sweden, with some notes on the morphological structure of the tarsus in diverse families among the Carnivora. Ark. Zool. Stockholm **28A** no. 12 1935 pp. 1-7 3 figs.

236.—Danilov, A. A. On fixing salt ration norms for animals. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 491-499. [Russian, with English rés.]

237.—Danilowitsch, A. P. Ueber die Verbreitung einiger Arten der Familie Muscardinidae in der U.d.S.S.R. Folia zool. hydrobiol. Riga **9** 1936 pp. 61-62.

Danini, E. S. *vide* Durymanova-Savik.

238.—Danini, E. S. and Olshvang, N. A. Observations on the ecology of Rodents of the town of Okhansk and its vicinity (Sverdlovsk Province). Bull. Inst. Rech. biol. Perm **10** 1936 pp. 251-260. [Russian with English rés.]

239.—Danneel, R. und Lubnow, E. Zur Physiologie der Kalteschwärzung beim Russenkaninchen. II. Der Einfluss von Röntgenstrahlen auf die Pigmentbildung. Biol. Zbl. Leipzig **56** 1936 pp. 573-584 3 figs.

240.—Danner, M. Das postembryonale Wachstum der serösen Zungendrüsens der Ratte unter dem Gesichtspunkt der geweblichen Korrelationen. Z. mikr. anat. Forsch. Leipzig **39** 1936 pp. 443-476 18 fig.

241.—Dantchakoff, V. Hormones sexuelles et rôle du placenta dans l'ontogenèse des Mammifères. C.R. Acad. Sci. Paris **202** 1936 pp. 2179-2181.

242.—Dantchakoff, V. L'hormone male adulte dans l'histogenèse sexuelle du Mammifère. C.R. Soc. biol. Paris **123** 1936 pp. 873-876 3 figs.

Darlow, A. E. *vide* Hawkins.

243.—Daron, G. H. The arterial pattern of the tunica mucosa in the uterus of *Macacus rhesus*. Amer. J. Anat. **58** 1936 pp. 349-419 11 pls.

244.—Darteville, E. Les premiers restes de Mammifères du tertiaire du Congo: La faune miocène de Malembe. C.R. Congr. Sci. Bruxelles **1935** vol. i pp. 715-720.

245.—Dathe, H. Georg Grimpe.† Z. Säugetierk. **11** 1936 pp. 272-273 portr.

246.—Davies, G. Distribution of the Badger (*Meles meles*) around Denbigh with notes on its food and habits. J. Animal Ecol. **5** 1936 pp. 97-104 map.

247.—Davis, D. E. Status of *Microtus enixus* and *Microtus terrae-novae*. J. Mammal. Baltimore **17** 1936 pp. 290–291.

Davis, D. E. *vide* Enders.

248.—Davis, D. H. S. A reconnaissance of the fauna of Akaptok Island, Ungava Bay. J. Animal Ecol. London **5** 1936 pp. 319–332 2 photos.

249.—Davis, W. B. Young of the Brush Rabbit, *Sylvilagus bachmani*. Murrelet, Seattle **17** 1936 pp. 36–40 4 photos.

250.—Deakin, A. Induction of mammary ducts. Nature London **137** 1936 pp. 619–620 1 fig.

251.—Deanesly, R. The reproductive processes of certain Mammals. Part xi—Growth and reproduction in the Stoat (*Mustela erminea*). Philos. Trans. London **225B** 1935 pp. 459–492 4 pls. 7 text-figs.

252.—Deanesly, R. and Rowlands, I. W. Growth of the reproductive and endocrine organs in the Guinea-Pig. J. Anat. London **70** 1936 pp. 331–338 9 figs.

Debiasi, E. *vide* Ottaviani.

253.—Dechambre, E. Observations sur les Makis de la Ménagerie du Jardin des Plantes. Bull. Mus. Hist. nat. Paris **7** 1935 pp. 315–319.

254.—Dechambre, E. Attitudes et allures des Kangourous. Terre et la Vie Paris **6** 1936 pp. 156–164 7 photos.

255.—Defrise, A. Il problema della cito- ed istoarchitettonica del glomerulo renale dei Mammiferi dal punto di vista ontogenetico. Monit. zool. ital. Firenze **47** 1936 pp. 237–247 3 figs.

De Garis, C. F. *vide* Glidden.

256.—Degerbøl, M. Nogle bemaerkninger om Grønlands Pattedyr i historisk tid paa Grunlag af knoglemateriale fra Affalds-dynger og eskimoiske Husruiner og Kokkenmøddinger. Forh. skand. naturf. Møte **19** 1936 pp. 484–486.

257.—Degerbøl, M. Animal remains from the west settlement in Greenland with special reference to livestock. Medd. Grønland. **88** no. 3 1936 pp. 1–54 1 pl. 6 text-figs.

258.—Degerbøl, M. Animal bones from King Oscar Fjord region in East Greenland. Medd. Grønland. **102** no. 2 1935 pp. 95–97.

259.—Delafosse, W. Deuxième contribution à l'étude de la faune quaternaire du département de la Moselle. ii. Les Eléphants. Bull. Soc. Hist. nat. Metz (3) **34** 1935 pp. 167–212 8 pls. 3 maps 6 text-figs.

260.—Delap, P. Deer in Wicklow. Irish Nat. Journ. Belfast **6** 1936 pp. 82–88 1 pl.

261.—Deraniyagala, P. E. P. Some Vertebrate fossils from Ceylon. Geol. Mag. London **73** 1936 pp. 316–318 3 text-figs.

262.—Desaive, P. A propos du rôle et de l'origine des histiocytes dans l'ovaire irradié du Lapine adult. Arch. biol. Liège **47** 1936 pp. 385–398.

263.—Devincenzi, G. L. Mamíferos del Uruguay. An. Mus. Montevideo (2) **4** no. 10 1935 pp. 1–96 12 pls. 9 text-figs.

Diakow, F. A. *vide* Hykes.

264.—Diakov, F. A. and Křiženecký, J. The relation of the gonadotropic hormones to vitamin E. Biol. Generalis Wien **11** 1936 pp. 149–158 4 figs.

265.—Dice, L. R. The Prairie Deer-Mouse. Bull. Cranbrook Inst. Sci. no. 2 1932 pp. 1–8 9 photos.

266.—Dice, L. R. Age variation in *Peromyscus maniculatus gracilis*. J. Mammal. Baltimore **17** 1936 pp. 55–57.

267.—Dice, L. R. and Leraas, H. J. A graphic method of comparing several sets of measurements. Contr. Lab. Vertebr. Genetics Univ. Michigan **3** 1936 pp. 1–3 1 fig.

268.—Dicks, F. Miscellaneous notes on the Woodrat. Murrelet, Seattle **17** 1936 p. 19.

269.—Didier, R. et Mathias, P. Le Hamster (*Cricetus cricetus* (L.)). Notes biologiques. Mammalia **1** 1936 pp. 15–23 5 figs.

270.—Didier, R. et Thoyer-Rozat, P. Deux monstres monocéphaliens déradelphes. Mammalia **1** 1936 pp. 65–67 2 pls.

271.—Dietrich, W. O. Ueber den Fussbau von *Anoplotherium* (Mamm., Ungulata). Cbl. Min. Geol. Paläont. Stuttgart 1936B pp. 296–303 1 fig.

272.—Dobyns, B. M. Note on artery of the moderator band [of the heart]. Anat. Rec. Philadelphia 66 1936 pp. 397–400 1 fig.

273.—Dollmann, G. The Rabbit menace. Nat. Hist. Mag. London 5 1936 pp. 297–311 5 photos.

274.—Dollmann, G. Vermin. Nat. Hist. Mag. London 5 1936 pp. 345–361 photos.

Dollman, G. *vide* Hett.

Dollman, G. *vide* Rothschild.

275.—Dornfeld, E. J. Nuclear and cytoplasmic phenomena in the centrifuged adrenal gland of the albino Rat. Anat. Rec. Philadelphia 65 1936 pp. 403–415 2 pls.

276.—Dorofeev, S. V. Observations on the reproduction period of Greenland Seals (*Histiophoca groenlandica oceanica* Lepechin). C.R. Acad. Sci. Moscow 1936 vol. 2 pp. 47–48.

277.—Dorofeev, S. W. and Freimann, S. J. [edited by]. The Marine Mammalia of U.S.S.R. Far East (resources and commercial use). Trans. Inst. Fish. Oceanogr. Moscou 3 1936 pp. 1–276 many illustr. [Russian, with German rés.]

278.—Dove, W. F. Artificial production of the fabulous unicorn. A modern interpretation of an ancient myth. Sci. Monthly New York 42 1936 pp. 431–436 4 figs.

279.—Dover, C. The fauna of the Batu Caves. Malayan Nat. Singapore 2 1928 pp. 35–38.

Dow, R. S. *vide* Larsell.

280.—Družinin, A. N. Zur Frage des Baues und der Evolution des Ellbogen-gelenkes der Säugetiere. C.R. Acad. Sci. Moscou 1936 vol. 3 pp. 239–244 2 figs. [in German].

281.—Družinin, A. N. Zur Kenntnis der Anatomie des Yaks (*Poephagus grunniens* L.). C.R. Acad. Sci. Moscou 1936 vol. 4 pp. 201–204.

282.—Dry, F. W. The genetics of the Wensleydale breed of Sheep. ii. Colour, fertility, and intensity of selection. J. Genet. London 33 1936 pp. 123–134.

283.—Dubecq, X. J. Sur la musculature masticatrice du Kangourou géant (*Macropus giganteus*). Proc. verb. Soc. Sci. phys. nat. Bordeaux 1934–35 1936 pp. 6–7.

284.—Du Bois, F. S. and Foley, J. O. Experimental studies on the vagus and spinal accessory nerves of the Cat. Anat. Rec. Philadelphia 64 1936 pp. 285–307 2 pl. 15 text-figs.

285.—Duke, H. L. *Hypsignathus monstrosus*. Uganda J. Kampala 1 1934 pp. 72–74.

286.—Dunn, L. C. 'Studies of multiple allelomorphic series in the House-Mouse. A description of Agouti and albino series of allelomorphs. J. Genet. London 33 1936 pp. 443–453.

Dunn, L. C. *vide* Chesley.

287.—Durymanova-Savik, N. P. Contributions to the ecology and biology of the Rodents of the Troitsk district former Ural Prov. 2. Some observations on the character of food of some Rodents, pp. 101–113. 3. Notes on the anatomy and biology of *Cricetulus eversmanni* Br. by E. S. Danini & N. A. Olschwang pp. 115–123 2 pls. 4. Influence of farming on the spread of Rodents of steppe stations by F. V. Startseva & G. A. Glumov pp. 125–143 Bull. Inst. Rech. biol. Perm 10 no. 3 1936.

288.—Dutertre A. P. La molaire de Mammouth d'Hautes-Sombres près Wissant (Pas-de-Calais). Ann. soc. géol. Nord Lille 59 1934 pp. 175–183 1 fig.

289.—Dyke H. B. van and Ch'en, G. Observations on the biochemistry of the genital tract of the female Macaque particularly during the menstrual cycle. Amer. J. Anat. 58 1936 pp. 473–499 3 pls. 3 text-figs.

290.—Dymond, J. R. Life history notes and growth studies on the Little Brown Bat, *Myotis lucifugus lucifugus*. Canad. Field Nat. 50 1936 pp. 114–116 1 fig.

291.—Efimenko, P. Quelques résultats de l'étude de l'homme fossile en U.R.S.S. (1932–1935). Beitr. Kennt. Quartärs. Ud.S.S.R. Leningrad 1936 pp. 118–127. [French only.]

Eglitis, J. *vide* Mathis.

- 292.—Egorin, N. F. [New races *Apodemus*, *Eutamias*.] Animadv. Syst. Mus. Zool. Inst. Biol. Univ. Tomskensis no. 3 1936 pp. 1-4. [Russian, with German rés.]
- 293.—Egorin, N. Der Maulwurf des Salairgebirges und sein Erwerbsfang. Trav. Inst. Scient. Biol. Tomsk 2 1936 pp. 136-154 2 figs. [Russian, with German rés.]
- 294.—Ehrenberg, K. Vergleichende Untersuchungen an juvenilen Schädeln und Milchgebiss der Höhlenhyäne und ihre rezenten Verwandten. Anz. Akad. Wiss. Wien 72 1935 pp. 67-71.
- 295.—Ehrenberg, K. Die plistozaenen Baeren Belgiens. ii Theil: Die Baeren vom "Trou du Sureau" (Montaigle). Mem. Mus. Hist. nat. Belg. 71 1935 pp. 1-97 6 pls.
- 296.—Ehrlich, R. H. History and development of Mutton Sheep in Germany. J. Hered. Wash. 27 1936 pp. 323-328 2 figs.
- 297.—Eidmann, H. Zur Kenntnis der Ersatzdentinbildung bei den Cerviden. Zool. Anz. Leipzig 116 1936 pp. 225-236 6 figs.
- 298.—Einhorn, N. H. and Rowntree, L. G. Biological effects of homologous thymus implants in successive generations of Rats. Science 84 1936 pp. 23-24.
- 299.—Eisentraut, M. Die Sumpfburgen der Maulwurfs. Märk. Tierw. Berlin 2 1936 pp. 40-51 6 figs.
- 300.—Eisentraut, M. Bisherige Ergebnisse der Fledermausberingung. SitzBer. Ges. naturf. Fr. Berlin for 1935 1936 pp. 344-346.
- 301.—Eisentraut, M. Ergebnisse der Fledermausberingung nach dreijähriger Versuchszeit. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 1-26 3 text-figs.
- 302.—Eisentraut, M. Zur Fortpflanzungsbiologie der Fledermäuse. Z. Morph. Ökol. Tiere Berlin 31 1936 pp. 27-63 11 figs.
- 303.—Eisentraut, M. Beitrag zur Mechanik des Fledermausfluges. Z. wiss. Zool. Leipzig 148 1936 pp. 159-188 18 figs.
- 304.—Elder, J. H. Report of a case of inherited polymastic in Chimpanzee. Anat. Rec. Philadelphia 65 1936 pp. 83-87 1 pl.
- Elder, J. H. *vide* Yerkes.
- 305.—Elder, J. H. and Yerkes, R. M. The sexual cycle in the Chimpanzee. Anat. Rec. Philadelphia 67 1936 pp. 119-143 6 figs.
- 306.—Elder, J. H. and Yerkes, R. M. Chimpanzee births in captivity: a typical case history and report of sixteen births. Proc. roy. Soc. London 120B 1936 pp. 409-421.
- 307.—Elliott, H. C. Studies on articular cartilage. I. Growth mechanisms. Amer. J. Anat. 58 1936 pp. 127-145 2 pls.
- 308.—Elliott, J. S. Bedfordshire "Vermin" payments. Concerning the destruction of vermin by Parish Officials, etc. Pp. 82 2 pls. Luton (Public Mus.) 1936 8vo.
- 309.—Elton, C. House Mice (*Mus musculus*) in a coal-mine in Ayrshire. Ann. Mag. Nat. Hist. (10) 17 1936 pp. 553-558.
- 310.—Elton, C. and Swynnerton, G. The Canadian Snowshoe Rabbit inquiry 1934-35. Canad. Field Nat. 50 1936 pp. 71-81 3 maps see also H. Lloyd pp. 129-131.
- Emery, F. E. *vide* Winter.
- 311.—Emery, F. E. and Schwabe, E. L. The vaginal smears of Rats as influenced by frequent examinations. Anat. Rec. Philadelphia 64 1936 pp. 147-154 2 figs.
- 312.—Emmert, E. W. A study of the histogenesis of the thymus in vitro. Anat. Rec. Philadelphia 66 1936 pp. 59-73 9 figs.
- 313.—Enciso, F. El notocordio en el embrión de conejo (*Lepus cuniculus*). Bol. Soc. ibér. Cienc. nat. Zaragoza. 30 1931 pp. 51-57 4 figs.
- 314.—Enders, R. K. *Bassaricyon pauli*, a new species from Panama. Proc. Acad. Nat. Sci. Philad. 88 1936 pp. 365-366.
- 315.—Enders, R. K. and Davis, D. E. Body temperatures of some Central American Mammals. J. Mammal. Baltimore 17 1936 pp. 165-166.
- Engelmann, C. *vide* Kröning.
- 316.—Engels, W. L. Distribution of races of the Brown Bat (*Eptesicus*) in western North America. Amer. Midl. Nat. Notre Dame 17 1936 pp. 653-660 map.

317.—Engels, W. L. An insular population of *Peromyscus maniculatus* subsp. with mixed racial character. Amer. Midl. Nat. Notre Dame 17 1936 pp. 776–780.

318.—Engström, H. Studien über die postnatale Entwicklung der Nebennierenrinde der weissen Ratte. Anat. Anz. Jena 83 1936 pp. 1–19 12 figs.

Enzmann, E. V. *vide* Pincus.

319.—Errington, P. L. Food habits of a Weasel family. J. Mammal. Baltimore 17 1936 pp. 406–407.

320.—Esch, H. Der haustrierte Säugetier-Enddarm und seine morphologische Stellung. Anat. Anz. Jena 83 1936 pp. 84–103 4 figs.

Evans, C. *vide* Swanson.

321.—Falkenstein, B. Distribution of Ground Squirrels and their importance in agriculture in U.S.S.R. Summary Sci. Res. Work Inst. Plant Protect. Leningrad for 1935 1936 pp. 40–43 map. [Russian only.]

322.—Faworski, B. Einige Befunde betreffend die Frage über die Architektonik des N. phrenicus. Anat. Anz. Jena 82 1936 pp. 390–400 3 figs.

323.—Feldman, H. W. Grizzle, a color character in the Black Rat. Amer. Nat. 70 1936 pp. 502–504.

324.—Feldman, H. W. Piebald characters of the Deer-Mouse. J. Hered. 27 1936 pp. 301–304 1 pl.

Fell, W. A. *vide* de Beer.

Férestier-Tadié, M. *vide* Jolly.

325.—Ferraro, A. and Barrera, S. E. Posterior column fibres and their termination in *Macacus rhesus*. J. comp. Neurol. 62 1935 pp. 507–530 14 figs.

326.—Fetisoff, A. S. Biology of the Siberian Weasel. J. Mammal. Baltimore 17 1936 pp. 36–38.

327.—Fick, R. Kurzer Bericht über meine Untersuchungen an der Wirbelsäule der Menschenaffen. Z. Säugetierk. 11 1936 pp. 261–271 2 pls.

328.—Fieandt, H. von und Saxén, A. Struktur und Funktion der Plana semilunata und des sog. Randepithels im statischen Labyrinth des Menschen und des Hundes. Ueber den Golgi-Apparat in den Drüsenzellen, pp. 407–423 12 figs. Beiträge zur Histologie

der Stria vascularis und der Prominentia spiralis bei Säugern (Hund und Mensch) pp. 424–446 16 figs. Z. Anat. Entwges. 106 1936; also 106 pp. 534–552 15 figs. pp. 553–557 4 figs.

329.—Finlayson, H. H. Notes on some Victorian Mammals. Trans. roy. Soc. S. Aust. 59 1935 pp. 221–226 1 pl.

330.—Finlayson, H. H. On Mammals from the Lake Eyre basin. Part ii. The Peramelidea. Trans. roy. Soc. S. Aust. 59 1935 pp. 227–236 1 fig.

331.—Fischel, W. Neue Versuche zur Feststellung des Anwendens erlernter Verhaltensformen bei Affen. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 261–265.

Fisher, C. *vide* Ingram.

332.—Fisher, R. A. and Mather, K. Verification in Mice of the possibility of more than fifty per cent. recombination. Nature London 137 1936 pp. 362–363.

333.—Fleay, D. Observations on the birth of a Wallaby. Aust. Zool. Sydney 8 1936 pp. 153–155 1 pl.

334.—Florentin, P. Contribution à l'anatomie de l'amygdale chez les mammifères. Pp. 197 [1936 ?] Nancy (Thomas). [N.V.]

Foley, J. O. *vide* Du Bois.

335.—Forbes, J. Some notes on the coloration of Baboon skin. Anat. Rec. Philadelphia 65 1936 pp. 51–54 4 figs.

336.—Formozov, A. Wanderungen des gemeinen Eichhörnchens. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 97–164 13 figs. [Russian only.]

337.—Fox, D. L. Structural and chemical aspects of animal coloration. Amer. Nat. 70 1936 pp. 477–493.

338.—Frapont, C. Les hommes fossiles d'Engis. Arch. Inst. Paléont. humaine Paris Mem. 16 1936 pp. 1–52 4 pls. 40 text-figs.

339.—Frank-Kamenetzki, A. G. Das Fett des *Marmotta sibirica* Pall. Bull. Inst. sci. Biol. Géogr. Irkutsk 7 1–2 1936 pp. 7–16. [Russian, with German rés.]

340.—Franklin, K. J. and McLachlin, A. D. The uterine vein entries in the Rabbit. J. Anat. London 71 1936 pp. 103–104 2 figs.

341.—Fraser, F. C. Recent strandings of the False Killer Whale, *Pseudorca crassidens* with special reference to those found at Donna Nook, Lincolnshire. Scot. Nat. Edinb. 1936 pp. 105–114 map.

342.—Fraser, F. C. Vestigial teeth in specimens of Cuvier's Whale (*Ziphius cavirostris*) stranded on the Scottish coast. Scot. Nat. Edinb. 1936 pp. 153–157 3 figs.

343.—Frechkop, S. Notes sur les Mammifères. Le Hamster montrant la différence fondamentale entre les molaires des Rongeurs et celles des Ongulés. Bull. Mus. Hist. nat. Belg. 12 no. 18 1936 pp. 1–8 4 figs.

344.—Frechkop, S. Sur la classification des Ongulés. Mammalia 1 1936 pp. 37–48.

345.—Frechkop, S. Le pied de l'homme (Essai anthropologique). Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 319–334 9 figs.

Freimann, S. J. *vide* Dorofeev.

346.—Frenzel, C. Knochenfunde in der Reyersdorfer Tropfsteinhöhle in: Pax, Beitr. Biol. Glatzer Schneeberges Hft. 2 Breslau 1936 pp. 121–134 4 figs.

347.—Friant, M. La fosse sylvienne du *Macrorhinus leoninus* L. Bull. Inst. océanogr. Monaco no. 709 1936 pp. 1–6 4 figs.

348.—Friant, M. De l'interprétation des prémolaires chez les Primates. Bull. Mus. Hist. nat. Paris 7 1935 pp. 341–343 1 fig. also Bennejeant pp. 343–348 3 figs.

349.—Friant, M. *L'Aplodontia asiatica* Schl. du Pontien de Mongolie. Bull. Mus. Hist. nat. Paris 8 1936 p. 115.

350.—Friant, M. Interprétation de la molaire supérieure jeune de l'*Echippus* et considérations sur la phylogénie des Equidés. Bull. Mus. Hist. nat. Paris 8 1936 pp. 200–204 6 figs.

351.—Friant, M. L'évolution morphologique de la dentition chez les mammifères placentaires. Bull. Soc. Nat. Luxembourg 29 1935 pp. 45–57 12 figs.

352.—Friant, M. Essai de systématization de la dentition des mammifères. Bull. Soc. philom. Paris 118 1936 pp. 69–72.

353.—Friant, M. Le nombre des incisives inférieures chez les Primates. Bull. Soc. zool. Fr. 60 1936 pp. 447–450 6 figs.

354.—Friant, M. Un caractère de l'adaptation de l'extrémité antérieure aux fonctions prédatrices chez les Felidés et les Ursidés. Bull. Soc. zool. Fr. 61 1936 pp. 260–265 7 figs.

355.—Friant, M. Recherches sur la morphologie dentaire et les affinités des Rongeurs fossiles et actuels du groupe des Coendinés (*Steiromys Erethizon Coendu*). Proc. zool. Soc. London 1936 pp. 725–732 4 pls.

Friant, M. *vide* Anthony.

356.—Friedman, M. H. F. and Armour, J. C. Gastric secretion in the Groundhog (*Marmota monax*) during hibernation. J. cell. comp. Physiol. 8 1936 pp. 207–211 1 fig.

357.—Friend, G. F. The sperms of British Muridae. Quart. J. micr. Sci. London 78 1936 pp. 419–443 30 figs.

358.—Fromaget, J. Sur la stratigraphie des formations récentes de la Chaîne annamitique septentrionale et sur l'existence de l'Homme dans le Quaternaire inférieur de cette partie de l'Indo-chine. C.R. Acad. Sci. Paris 203 1936 pp. 738–741.

359.—Froriep, E. Zur Frage der Sertoli'schen Zellen. Anat. Anz. Jena 82 1936 pp. 1–20 5 figs.

360.—Fu, T. S. The Squirrels of Sung-shan and its vicinity. Bull. Fan Memorial Inst. Biol. Peiping Zool. 6 1936 pp. 255–262.

361.—Fujimoto, H. A new locality of *Stegodon orientalis shodoensis* Matsumoto? J. geol. Soc. Japan 43 1936 pp. 45–46 1 pl. 1 map. [Japanese only.]

Fulton, J. F. *vide* Walker.

362.—Furlong, E. L. New Merycodonts from the Upper Miocene of Nevada. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) 453 1934 pp. 1–10 5 pls.

363.—Gagnebin, E. Ossements de Mammouth trouvés dans la moraine de Renens, près Lausanne et recensement des restes de Mammouth connus dans la région lémanique. Bull. Soc. vaud. Sci. nat. 58 1935 pp. 385–391.

364.—Galli, A. Due casi di sutura parietale verticale completa in crani di scimmie. *Boll. Zool. Torino* 7 1936 pp. 1-5 2 figs.

365.—Garbowski, T. Die Rolle des Gedächtnisses bei einer blind-geborenen Katze. *Bull. int. Acad. Cracovie* 1936 (B.ii) pp. 1-35 1 pl. 4 text-figs.

366.—Garbowski, T. Le rôle de la mémoire chez un chat aveugle de naissance. *C.R. Acad. Cracovie* 1936 no. 1 pp. 5-6.

Garlough, F. E. *vide* Scheffer.

367.—Garrison, E. R. and Turner, C. W. The effect of udder irrigation and milking interval on milk secretion. *Res. Bull. Agr. Exp. Sta. Univ. Missouri* no. 234 1936 pp. 1-39 14 figs.

368.—Gärtner, E. Beobachtungen an *Manis javanica* Desm. *Zool. Garten Leipzig* 8 1936 pp. 226-227.

369.—Gates, W. H. Keeping Bats in captivity. *J. Mammal. Baltimore* 17 1936 pp. 268-273.

370.—Gatti, A. Great Mother Forest. Pp. 1-344 many photos, map London (Hodder & Stoughton) 1936 8vo.

371.—Gazin, C. L. A new Mustelid Carnivore from the Neocene beds of north-western Nebraska. *J. Wash. Acad. Sci.* 26 1936 pp. 199-207 3 figs.

372.—Gazin, C. L. A taeniodont skull from the Lower Eocene of Wyoming. *Proc. Amer. Phil. Soc. Philad.* 76 1936 pp. 597-612 5 pls. 2 text-figs.

373.—Gazin, C. L. A study of the fossil Horse remains from the Upper Pliocene of Idaho. *Proc. U.S. Nat. Mus.* 83 1936 pp. 281-320 11 pls. 4 text-figs.

374.—Gehrke, P. J. Zur Frage der Morphologie des Magens der Säugetiere. i. Entwicklung des einfachen und komplizierten Magens. *Gegenbaurs morph. Jahrb. Leipzig* 77 1936 pp. 517-572 28 figs.

Geiling, E. M. K. *vide* Wislocki.

375.—Genna, G. E. L'uomo di Neandertal in Italia "*Homo neanderthalensis* var. *aniensis* (Sergio Sergi)." *Riv. ital. Paleont. Pavia* 42 1936 pp. 36-47 1 pl. 3 figs.

376.—Georgi, W. Ueber Defektbildungen an Schädeln von kleinen Hundrassen. *Anat. Anz. Jena* 82 1936 pp. 400-406 3 figs.

377.—Gerber, E. Ueber neuere Murmeltierfunde aus dem bernischen Diluvium. *Mitt. naturf. Ges. Bern* für 1935 1936 pp. 24-28 1 fig.

378.—Gersh, I. The site of renal elimination of hemoglobin in the Rabbit. *Anat. Rec. Philadelphia* 65 1936 pp. 371-375.

379.—Gigoux, E. E. Mamíferos en: *Zoologia del Aysen. Bol. Mus. nac. Chile* 14 1935 p. 59.

380.—Giles, F. H. Philology in relation to the Tapir. *J. Siam Soc.* 10 1936 pp. 167-168.

381.—Gillet, S., et Théobald, N. Les sables marins de l'Oligocène du Haut-Rhin. *Bull. Serv. Carte geol. Alsace-Lorraine* 3 1936 pp. 37-76 1 pl. [Mamm. p. 69.]

382.—Gillman, J. The cyclical changes in the external genital organs of the Baboon (*P. porcarius*). *S. Afr. J. Sci. Cape Town* 32 1935 pp. 342-355 1 pl. 2 text-figs.

383.—Glasstone, S. The development of tooth germ in vitro. *J. Anat. London* 70 1936 pp. 260-266 2 pls.

384.—Glidden, E. M. and De Garis, C. F. Arteries of the Chimpanzee (*Pan spec. ?*). *Amer. J. Anat.* 53 1936 pp. 501-527 7 figs.

Glówczyński, Z. *vide* Rogoziński.

Glumov, G. A. *vide* Durymanova-Savik.

385.—Godwin, M. C. The early development of the thyroid gland in the Dog with especial reference to the origin and position of accessory thyroid tissue within the thoracic cavity. *Anat. Rec. Philadelphia* 66 1936 pp. 233-291 2 pls. 2 text-figs.

386.—Goetz, R. H. Studien zur Placentation der Centetidae. 1. Eine Neu-Untersuchung der Centetesplacenta. *Z. Anat. Entwges.* 150 1936 pp. 315-342 16 figs.

387.—Goldman, E. A. A new Otter from Kamchatka. *J. Mammal. Baltimore* 17 1936 p. 164.

- 388.—Goldman, E. A. A new Coyote from Honduras. *J. Wash. Acad. Sci.* **26** 1936 pp. 32-34.
- 389.—Goldman, E. A. New Pocket Gophers of the genus *Thomomys*. *J. Wash. Acad. Sci.* **26** 1936 pp. 111-120.
- 390.—Goldman, E. A. Two new Flying Squirrels from Mexico. *J. Wash. Acad. Sci.* **26** 1936 pp. 462-464.
- 391.—Goldman, E. A. A new Puma from Texas. *Proc. biol. Soc. Washington* **49** 1936 pp. 137-138.
- Goodale, H. D. *vide* Keeler.
- 392.—Goodwin, G. G. A new Flying Squirrel from Honduras. *Amer. Mus. Nov. no.* **898** 1936 pp. 1-2.
- 393.—Goodwin, G. G. The Mammals of Connecticut. *State Geol. & Nat. Hist. Surv. Bull. no.* **53** pp. 221 33 pls. 19 figs. 1935. [N.V.]
- 394.—Goodwin, G. G. Big Game Animals in the north-eastern United States. *J. Mammal. Baltimore* **17** 1936 pp. 48-50.
- 395.—Goormaghtigh, N. On the existence of abdominal vagal paraganglia in the adult Mouse. *J. Anat. London* **71** 1936 pp. 77-90 2 pls. 2 text-figs.
- 396.—Gorer, P. A. The detection of a hereditary antigenic difference in the blood of Mice by means of human group A serum. *J. Genet. Cambridge* **32** 1936 pp. 17-31.
- 397.—Gould, N. E. Nova Scotia Mammal notes. *Canad. Field Nat.* **50** 1936 pp. 103-104.
- 398.—Gowen, J. W. Inheritance as it affects survival of Rats fed on diet deficient in vitamin D. *Genetics Menasha*, **21** 1936 pp. 1-23 3 figs.
- 399.—Granger, W. and Gregory, W. K. Further notes on the gigantic extinct Rhinoceros, *Baluchitherium*, from the Oligocene of Mongolia. *Bull. Amer. Mus. nat. Hist.* **72** 1936 pp. 1-73 4 pls. 47 text-figs.
- 400.—Gränning, W. Beitrag zur vergleichenden Anatomie der Muskulatur von Harnblase und Harnröhre. *Z. Anat. Entwickges.* **105** 1936 pp. 226-250 17 figs.
- 401.—Grater, R. K. Bailey Bobcat contributes new Mammal records. *J. Mammal Baltimore* **17** 1936 pp. 170-171.
- 402.—Gray, J. Studies in animal locomotion. VI. The propulsive powers of the Dolphin. *J. exp. Biol. Cambridge* **13** 1936 pp. 192-199 3 figs.
- 403.—Gray, R. W. The Scoresbys and the Greenland Whale. *Naturalist London* 1936 pp. 145-151.
- Graziosi, P. *vide* Stehlin.
- 404.—Green, C. V. An example of thoracopagus tribrachius in the Mouse. *Anat. Rec. Philadelphia* **64** 1936 pp. 409-412 2 figs.
- 405.—Green, C. V. Shifts in expressivity in the heterozygote of a dominant lethal gene in the Mouse. *J. exp. Zool. Philadelphia* **73** 1936 pp. 231-262 9 figs.
- 406.—Green, C. V. Multiple lethal genes in the Mouse. *J. Hered. Wash.* **27** 1936 pp. 181-182 1 fig.
- 407.—Green, C. V. Observations on the New York Weasel, with remarks on its winter dichromatism. *J. Mammal. Baltimore* **17** 1936 pp. 247-250.
- 408.—Green, H. U. The Beaver of the Riding Mountain, Manitoba. An ecological study and commentary. *Canad. Field Nat.* **50** 1936 pp. 1-8 4 photos. pp. 8-23, 36-50 9 photos.; pp. 61-67 3 photos.; pp. 85-92 photo.
- 409.—Green, M. H. Brain and skull sizes and forms in Rats. *Proc. Penn. Acad. Sci.* **7** 1933 pp. 188-192.
- 410.—Green, M. H. Cerebral atrophy in Rats. *Proc. Penn. Acad. Sci.* **8** 1934 pp. 19-22 3 figs.
- 411.—Green, M. H. Effect of extirpation of skull parts in Rats. *Proc. Penn. Acad. Sci.* **9** 1935 pp. 22-25 2 figs.
- 412.—Greep, R. O. [and others]. Effects of two hypophyseal gonadotropic hormones on the reproductive system of the male Rat. *Anat. Rec. Philadelphia* **65** 1936 pp. 261-271 1 pl.
- 413.—Gregory, W. K. On the phylogenetic relationships of the Giant Panda (*Ailuropoda*) to other Arctoid Carnivora. *Amer. Mus. Nov. no.* **878** pp. 1-29 22 figs.
- 414.—Gregory, W. K. Henry Fairfield Osborn. *Proc. Amer. Philos. Soc. Philad.* **76** pp. 395-408.

415.—Gregory, W. K. Habitus factors in the skeleton of fossil and recent Mammals. Proc. Amer. Phil. Soc. Philad. 76 1936 pp. 429-444 14 figs.

Gregory, W. K. *vide* Granger.

Grenade, A. *vide* Campenhout.

416.—Griffin, D. R. Bat banding. J. Mammal. Baltimore 17 1936 pp. 235-239.

417.—Grinnell, J. Differentiation in Pocket Gophers of the *Thomomys bottae* group in northern California and southern Oregon. Univ. Calif. Pub. Zool. 40 1935 pp. 403-416 2 pls.

418.—Grinnell, J. and Hill, J. E. Pocket Gophers (*Thomomys*) of the lower Colorado valley. J. Mammal. Baltimore 17 1936 pp. 1-10 map.

419.—Grinnell, J. and Hill, J. E. A new Pocket Gopher from Kern County, California. Proc. biol. Soc. Washington 49 1936 pp. 103-104.

420.—Grinnell, J. and Linsdale, J. M. Vertebrate animals of Point Lobos Reserve 1934-1935. Pub. Carnegie Instn. Washington no. 481 1936 pp. vi + 159 39 figs. maps. [Mamm. pp. 133-149.]

421.—Grollman, A. The adrenals. Pp. xii + 410 17 figs. Baltimore (Williams & Wilkins Coy.) London (Baillière) 1936 8vo.

422.—Gromier, E. La vie des animaux sauvages de l'Afrique. Pp. 343 36 pls. Paris (Payot) 1936. [Notice Nature 138 p. 780.]

423.—Gromova, N. Ueber Funde von Wildschafen und Wildziegen in den quartären Ablagerungen der Krim. C.R. Acad. Sci. Moscou 1935 vol. 4 1935 pp. 105-108. [In German.]

424.—Gromow, V. Ergebnisse der Forschung der quartären Säugetiere und des Menschen im Gebiete der U.d.S.S.R. Beitr. Kennt. Quartärs U.S.S.R. Leningrad 1936 pp. 97-117. German only.]

Gros, G. *vide* Cournier.

425.—Grosser, O. Ueber vergleichende Anatomie und Phylogenese der Placenta. Stufenfolge der Placenten, Amnionbildung, Mischplacenta (Katze).

Alterung der Placenta. Verh. anat. Ges. Jena 43 1936 pp. 15-33 14 figs.

426.—Grüneberg, H. Some linkage tests with Wavy Mice. J. Genet. Cambridge 32 1936 pp. 1-3.

427.—Grüneberg, H. Further linkage data on the albino chromosome of the House-Mouse. J. Genet. Cambridge 33 1936 pp. 255-265.

428.—Grüneberg, H. Inheritance of tail tip pigmentation in the House-Mouse. J. Genet. Cambridge 33 1936 pp. 343-345.

429.—Grüneberg, H. Grey-lethal, a new mutation in the House-Mouse. J. Hered. Wash. 27 1936 pp. 105-109 6 figs.

430.—Grynfeldt, J. Sur les cristal-loïdes de la glande mammaire. C.R. Acad. Sci. Paris 202 1936 pp. 1300-1302 4 figs.

Grzybowski, J. *de vide* Anthony.

431.—Gueinzus, A. Einige Bemerkungen über *Castor fiber* L. Z. Säugetierk. Berlin 11 1936 pp. 237-241.

432.—Gühler, U. Beitrag zur Geschichte von *Cervus* (*Rucervus*) *schomburghii*. Z. Säugetierk. Berlin 11 1936 pp. 20-31 2 pls.

433.—Gulat, K. Die Entwicklung der Schneidezähne der Nagetiere unter besonderer Berücksichtigung der Kapillaren. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 382-399 6 figs.

434.—Gulbekian, C. G. Variation in the frequency of mutations produced by X-raying of the spermatozoons in the male and in the seminal receptacle of the females. J. Biol. Moscou 5 1936 pp. 33-38.

435.—Gunn, R. M. C. Fertility in Sheep. [Artificial semen emission.] Bull. Council Sci. industr. Res. Australia no. 94 1936 pp. 1-116.

436.—Gureev, A. Craniological characters of *Lepus europaeus* Pall. and *L. timidus* L. Trav. Inst. zool. Acad. Sci. U.R.S.S. 3 1936 pp. 353-366 8 figs. [Russian with English rés.]

437.—Gutzschebauch, A. Der Hoden der Haussäugetiere und seine Hüllen in biologischer und artdiagnostischer Hinsicht. Z. Anat. Entwges. 105 1936 pp. 433-458 10 figs.

438.—Guyénot, E. et Naville-Trollet, I. Masculinisation provoquée de femelles de cobayes (extraits hypophysaires et urine de femme enceinte). *Rev. suisse Zool. Genève* **43** 1936 pp. 415-454 2 pls.

439. — Guyénot, E. [and others]. Action physiologique et séparation des hormones auxogène, crinogène et thyreo-stimulante de hypophyse. *Arch. Anat. Hist. Embryol. Strasbourg* **20** 1935 pp. 15-218 107 figs.

440. — Habernoll, A. Natur und Bedeutung der tierbedingten Umfälle in Deutschland. *Sitzber. Ges. naturf. Fr. Berlin* for 1935 1936 pp. 403-441.

441.—Häggqvist, G. Analyse der Faserverteilung in einem Rückenmark-querschnitt (Th. 3). *Z. mikr. anat. Forsch. Leipzig* **39** 1936 pp. 1-34 31 figs.

442.—Hain, A. M. and Robertson, E. M. Congenital urogenital anomalies in Rats including unilateral renal agenesis. *J. Anat. London* **70** 1936 pp. 566-576 12 figs.

443.—Haldane, J. B. S. A provisional map of human chromosomes. *Nature London* **137** 1936 pp. 398-400.

444.—Hall, E. R. A new Pocket Gopher from New Mexico. *J. Wash. Acad. Sci.* **26** 1936 pp. 296-298.

445.—Hall, E. R. A new Meadow Mouse from Bowen Island, British Columbia. *Murrelet Seattle* **17** 1936 pp. 15-16.

446.—Hall, E. R. Identity of the Bowron Lake Moose of British Columbia. *Murrelet Seattle* **17** 1936 p. 17.

447.—Hall, E. R. Nevadan races of the *Microtus montanus* group of Meadow Mice. *Univ. Calif. Pub. Zool.* **40** 1935 pp. 417-428 map.

448.—Hall, J. E. Horn growth as observed in Black-buck and Nilgai. *J. Bombay nat. Hist. Soc.* **38** 1936 pp. 618-619.

449.—Hall, K. The structure and development of the urethral sinus in the male white Mouse, with notes on its occurrence in other Rodents. *J. Anat. London* **70** 1936 pp. 413-428 1 pl. 12 text-figs.

Hall, K. *vide* Brambell.

450.—Haltenorth, T. Die verwandtschaftliche Stellung der Grosskatzen zueinander. *Z. Säugetierk. Berlin* **11** 1936 pp. 32-105 26 pls.

451.—Haltenorth, T. Ein Leopard-Puma-Bastard. *Z. Säugetierk. Berlin* **11** 1936 pp. 285-288 photo.

452.—Hamerton, A. E. Report on the deaths occurring in the Society's Gardens during the year 1935. *Proc. zool. Soc. London* **1936** pp. 659-686 3 pls.

453.—Hamilton, J. E. The Southern Sea Lion, *Otaria byronia* (De Blainville). *Discovery Rpts.* **8** 1934 pp. 269-318 13 pls. 7 text-figs.

454.—Hamilton, W. J. Abnormal pronuclei in the Ferret. *J. Anat. London* **70** 1936 pp. 429-431 1 pl.

455.—Hamilton, W. J. Food habits of the Mink in New York. *J. Mammal. Baltimore* **17** 1936 p. 169.

456.—Hamilton, W. J. Seasonal food of Skunks in New York. *J. Mammal. Baltimore* **17** 1936 pp. 240-246.

457.—Hamilton, W. J. The food and breeding habits of the Raccoon. *Ohio J. Sci.* **36** 1936 pp. 131-140 1 pl. 1 text-fig.

458.—Hanko, B. L'origine del Cavallo ungherese. *Riv. Biol. Firenze* **20** 1936 pp. 165-192 2 pls.

459.—Harman, M. T. Parthenogenesis in the ovaries of Guinea Pigs. *Trans. Kans. Acad. Sci.* **38** 1935 pp. 319-320.

460.—Harman, M. T. and Smith, A. Some observations on the development of the teeth of *Cavia cobaya*. *Anat. Rec. Philadelphia* **66** 1936 pp. 97-111. 2 pls.

461.—Harman, M. T. and Smith, A. Some observations on the development of the teeth of *Cavia cobaya*. *Trans. Kans. Acad. Sci.* **38** 1935 p. 323.

462.—Harrison, H. The Shinyana Game experiment: a few early observations. *J. Animal Ecol. London* **5** 1936 pp. 271-293 4 photos. 5 text-figs.

463.—Hasse, G. *Saiga tartarica* dans le pléistocène belge. *C.R. Congr. Sci. Bruxelles* 1930 pp. 973-977 2 figs.

464.—Hatfield, D. M. A revision of the *Pipistrellus hesperus* group of Bats. *J. Mammal. Baltimore* **17** 1936 pp. 257-262 map.

465.—Hatt, R. T. The Hyraxes collected by the American Museum Congo expedition. Bull. Amer. Mus. nat. Hist. **72** 1936 pp. 117–141 5 pls. 3 text-figs.

466.—Haupt, O. Bemerkungen über die Hirsche aus dem Dinotheriensand Rheinhessens. Notizbl. Ver. Erdk. Darmstadt (5) **16** 1935 pp. 50–55 1 pl.

467.—Haupt, O. Andere Wirbeltiere des Neozoikums. Oberrheinisches Fossilkatalog Berlin Lief. **4** 1935 pp. 1–103. [Mamm. pp. 33–67, 68–95.]

468.—Hausman, L. A. Further studies of the hair of the fossil Ground Sloth (*Nothrotherium shastense*) and of its problematical "ovate bodies." Amer. J. Sci. New Haven (5) **31** 1936 pp. 223–228 4 figs.

469.—Hawkins, L. E. and Darlow, A. E. A preliminary note on the oestrous cycle in the Sheep. Proc. Okla. Acad. Sci. **11** 1931 pp. 15–18.

470.—Hayman, R. W. On a new subspecies of *Mesembriomys hirsutus* from Melville Island. Ann. Mag. N.H. (10) **17** 1936 pp. 366–368.

471.—Hayman, R. W. A note on *Dologale dybowski* Pousargues. Ann. Mag. nat. Hist. (10) **18** 1936 pp. 626–630.

472.—Hayman, R. W. On a collection of Mammals from the Gold Coast (with a note on the Leopards by R. I. Pocock). Proc. zool. Soc. Lond. for 1935 1936 pp. 915–937 1 pl.

473.—Hayne, D. W. Burrowing habits of *Peromyscus polionotus*. J. Mammal. Baltimore **17** 1936 pp. 420–421.

474.—Heck, H. Bemerkungen über die Mähne der Urwildpferde. Zool. Garten Leipzig **8** 1936 pp. 179–189 12 photos.

Heckel, G. P. *vide* Allen.

475.—Heim de Balsac, H. Biogéographie des mammifères et des oiseaux de l'Afrique du Nord. Bull. biol. France-Belg. Suppl. **21** 1936 pp. 1–447 16 maps 12 photos 16 text-figs.

476.—Heim de Balsac, H. Note sur *Gerbillus dallonii* nov. sp. en : Mission au Tibesti. Mém. Acad. Sci. Paris **62** 1936 pp. 43–46 2 figs.

477.—Heinrich, G. Ueber die von mir im Jahre 1935 in Bulgarien gesammelten Säugetiere. Bull. Inst. Roy. Hist. nat. Sophia **9** 1936 pp. 33–48.

478.—Helbing, H. Die Carnivoren des Steinheimer Beckens. A. Mustelidae. Palaeontographica Stuttgart Suppl. viii 1936 pp. 1–56 4 pls. 13 text-figs.

479.—Helbing, H. *Cyrtionyx antiqua* (Blainv.) ein Lutrine aus dem europäischen Pleistocaen. Verh. schweiz. naturf. Ges. **116** 1935 p. 337.

480.—Helbing, H. *Felis silvestris* Briss. aus dem Magdalénien des Freudenthals bei Schaffhausen. Verh. schweiz. naturf. Ges. **116** 1935 p. 337–338.

481.—Helbing, H. Zur odontologischen Charakteristik des *Pseudoeurctos* Gebisses. Verh. schweiz. naturf. Ges. **117** 1936 p. 301.

482.—Heller, F. Die Kleinsäugerreste aus dem Travertin des Biedermannschen Steinbruchs von Untertürkheim Bad Cannstatt. Jh. Ver. vaterl. Naturk. Württemb. **90** 1934 pp. 20–30.

483.—Heller, F. Eine oberpliocäne Wirbeltierfauna aus Rheinhessen. N. Jahrb. Min. Geol. Paläont. Stuttgart **76** 1936 pp. 99–160 5 pls. 4 text-figs.

484.—Heller, F. Neue Beuteltierreste aus der mitteleozänen Braunkohle des Geiseltales bei Halle (Saale). Nova Acta Leop. Carol. Halle **4** 1936 pp. 311–316 1 pl.

485.—Hendrickson, G. O. Summer studies on the Cottontail Rabbit (*Sylvilagus floridanus mearnsi* (Allen)). Iowa Sta. Coll. J. Sci. **10** 1936 pp. 367–371.

486.—Herrath, E. v. Einiges über die Beziehungen zwischen Bau und Funktion der Säugermilz. Verh. anat. Ges. Jena **43** 1936 pp. 182–186.

487.—Herre, W.—Untersuchungen an Hirnen von Wild- und Hausschweinen. Verh. Deutsch. zool. Ges. Leipzig **38** 1936 pp. 200–211 3 figs.

488.—Herter, K. Von den Igelrn der Mark. Mark. Tierw. Berlin **2** 1936 pp. 31–40 4 figs.

489.—Herter, K. Die Säugetiere der Greifswalder Oie und des Ruden. Z. Säugetierk. Berlin 11 1936 pp. 274–276.

490.—Hett, G. S. and Dolman, G. British Bats. Nat. Hist. Mag. London 5 1936 pp. 193–201 6 figs.

491.—Hibbard, C. W. Established colonies of the Mexican Free-tailed Bat in Kansas. J. Mammal. Baltimore 17 1936 pp. 167–168.

Hill, J. E. *vide* Grinnell.

492.—Hill, R. T. [and others]. Hypophysectomy of the Goat. Res. Bull. Agr. Exp. Sta. Univ. Missouri no. 230 1935 pp. 1–18 7 figs.

493.—Hill, W. C. O. Studies on the cardiac anatomy of the Elephant. i. The coronary blood vessels. J. Anat. London 70 1936 pp. 386–398 3 pls. 2 text-figs.

494.—Hill, W. C. O. Note on Barbe's Leaf-monkey (*Trachypithecus barbei* Blyth). Proc. zool. Soc. London 1936 pp. 105–109 1 fig.

495.—Hill, W. C. O. The affinities of the Lorisoids. *Spolia zeylan.* Colombo 19 1936 pp. 288–314.

496.—Hill, W. C. O. The penis bone in the Ceylonese Squirrels; with special reference to its taxonomic importance. *Spolia zeylan.* Colombo 20 1936 pp. 99–113 7 figs.

497.—Hill, W. C. O. Supplementary observations on Purple-faced Leaf-Monkeys (Genus *Kasi*). *Spolia zeylan.* Colombo 20 1936 pp. 115–133 1 pl.

498.—Hill, W. C. O. On a hybrid Leaf-Monkey; with remarks on the breeding of Leaf-Monkeys in general. *Spolia zeylan.* Colombo 20 1936 pp. 135–148 1 pl. 2 text-figs.

499.—Hilzheimer, M. Der Bär aus dem Grubenloch (*Ursus arctos nemoralis* Degerbøl) pp. 55–83. Der Vielfrass (*Gulo gulo* L.) aus dem Grubenloch, pp. 84–91. Die übrigen Grosssäugetiere pp. 92–93. Das geologische Alter der Bären- und Vielfrassreste, pp. 93–95 5 pls. Mitt. Höhlen- u. Karstf. Berlin 1936 Sonderheft. See also W. Biese pp. 95–99.

500.—Hilzheimer, M. Ueber drei neue Formen des Rentieres. Z. Säugetierk. Berlin 11 1936 pp. 154–158 1 fig.

501.—Hilzheimer, M. Der Bär aus dem Grubenloch (*Ursus arctos nemoralis* Degerbøl), pp. 279–307 6 pls. Der Vielfrass (*Gulo gulo* L.) aus dem Grubenloch, pp. 308–315 3 pls. Die übrigen Grosssäugetiere pp. 316–317. Z. Säugetierk. Berlin 11 Sonderh. 1936.

502.—Hinton, M. A. C. Some interesting points in the anatomy of the freshwater Dolphin *Lipotes* and its allies. Proc. Linn. Soc. London 1935–36 1936 pp. 183–185.

503.—Hintzsche, E. Karl Wilhelm Zimmermann zum Gedächtnis. Anat. Anz. Jena 82 1936 pp. 300–313 portr. bibliogr.

504.—Hirschfelder, H. Das Primordialcranium von *Manatus latirostris*. Z. Anat. Entwges. 106 1936 pp. 497–533 21 figs.

505.—Ho, H. J. A new Cricetidae of central Shensi. Abstr. Paps. Sci. Conf. Nanning 1935 p. 69 (3rd pag.).

506.—Hoepke, H. und Peter, H. Das Verhalten des Igelthymus bei saurer und basischer Ernährung. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 263–314 18 figs.

507.—Hoerr, N. L. IV. The structure of the myelin sheath of nerve fibers. Anat. Rec. Philadelphia 66 1936 pp. 91–95. 3 figs.

508.—Holyoke, E. A. The role of the primitive mesothelium in the development of the Mammalian spleen. Anat. Rec. Philadelphia 65 1936 pp. 333–349 2 pls.

509.—Honigmann, H. Studies on the nutrition of Mammals.—Part i. Proc. zool. Soc. London 1936 pp. 517–530.

510.—Hooft, C. Recherches sur le rôle du tissu conjonctif dans la glande mammaire. Bull. Histol. appl. Lyon 13 1936 pp. 178–193 15 figs.

511.—Hooper, E. T. The taxonomic status of *Dipodomys heermanni berkeleyensis* Grinnell. J. Mammal. Baltimore 17 1936 pp. 418–419.

512.—Hoover, E. E. Migration of Gray Squirrels. Science 83 1936 pp. 284–285.

- 513.—Hopwood, A. T. New and little-known fossil Mammalia from the Pleistocene of Kenya Colony and Tanganyika Territory.—I. Ann. Mag. Nat. Hist. (10) 17 1936 pp. 636-641.
- 514.—Hopwood, A. T. Contribution to the study of some African mammals. i. The humerus and femur of certain East African Antelopes. J. Linn. Soc. London 40 1936 pp. 71-92 6 figs.
- 515.—Hopwood, A. T. Earth-movements, ice ages, and faunas. Geol. Mag. London 73 1936 pp. 185-188.
- 516.—Horn, C. A. Life span of splenectomized Rats. Proc. Penn. Acad. Sci. 9 1935 pp. 26-31.
- 517.—Howard, E. B. Early man in America with particular reference to the southwestern United States. [A symposium by various authors.] Amer. Nat. 70 1936 pp. 314-372.
- 518.—Howell, A. B. The musculature of antebrachium and manus in the Platypus. Amer. J. Anat. 59 1936 pp. 425-432 2 figs.
- 519.—Howell, A. B. The phylogenetic arrangement of the muscular system. Anat. Rec. Philadelphia 66 1936 pp. 295-316.
- 520.—Howell, A. B. Phylogeny of the distal musculature of the pectoral appendage. J. Morph. Philadelphia 60 1936 pp. 287-315 3 figs.
- 521.—Howell, A. H. A revision of the American Arctic Hares. J. Mammal. Baltimore 17 1936 pp. 315-337 map 2 pls. 2 photos.
- 522.—Howell, A. H. Description of a new Red Squirrel from Isle Royale, Michigan. Occ. Pap. Mus. Zool. Univ. Mich. no. 338 1936 pp. 1-2.
- 523.—Howell, A. H. Descriptions of three new Red Squirrels (*Tamiasciurus*) from North America. Proc. biol. Soc. Washington 47 1936 pp. 133-136.
- 524.—Huestis, R. R. and Barto, E. Flexed-tailed *Peromyscus*. J. Hered. Wash. 27 1936 pp. 73-75 2 figs.
- 525.—Huey, L. M. Some habits of a Gray Shrew in captivity. J. Mammal. Baltimore 17 1936 pp. 143-145.
- 526.—Huey, L. M. Notes on the Moles of Lower California, Mexico. J. Mammal. Baltimore 17 1936 pp. 166-167.
- 527.—Huey, L. M. Desert Pallid Bats caught in mouse traps. J. Mammal. Baltimore 17 1936 pp. 285-286.
- 528.—Hürzeler, J. Das Labyrinth und das Gehirn von *Caenotherium*. Verh. schweiz. naturf. Ges. 116 1935 p. 339.
- 529.—Huxley, J. S. The growth of the infant Chimpanzee born in the Society's Gardens and a comparison with that of a Chimpanzee born in Florida. Proc. zool. Soc. London 1936 pp. 587-589 1 fig.
- 530.—Hykes, D. V. and Diakov, F. A. The influence of organic and inorganic iodine upon the metabolism as well as growth and health of animals. Biol. Spisy Acad. Veterin. Brno 14 no. 186 1935 pp. 1-12. [Czech, with English rés.]
- Ibsen, H. L. *vide* White.
- 531.—Iftikhar Ali Khan and others. Horn growth as observed in Black Buck and Nilgai. J. Bombay nat. Hist. Soc. 39 1936 pp. 170-172.
- Imogawa, M. *vide* Koikegami.
- 532.—Ingebrigtsen, O. En kapita norsk hjort. Bergens Mus. Aarb. 1935 no. 5 1936 pp. 1-7 2 figs.
- 533.—Ingram, W. R. and Fisher, C. The relation of the posterior pituitary to water exchange in the Cat. Anat. Rec. Philadelphia 66 1936 pp. 271-293 2 pls.
- 534.—Irving, L. [and others]. The respiratory metabolism of the Seal and its adjustment to diving. J. cell. comp. Physiol. 7 1935 pp. 137-151 4 figs.
- 535.—Ivanenko, I. Materials for the study of biocenoses of steppe reservation Ascania Nova. Proc. Zool.-Biol. Inst. Scient. Res. Charkov 1 1936 pp. 217-229 2 figs. [Russian only.]
- 536.—Iversen, J. Fund af Vildhest (*Equus caballus*) fra Overgangen mellem Sen- og Postglacialtid i Danmark. Medd. dansk. geol. Foren. 8 1934 pp. 327-340 5 figs. [With a German rés.]
- 537.—Izquierdo, J. Nouvelle interprétation embryologique de l'os sacrum. Arch. Anat. Hist. Embryol. Strasbourg 26 1936 pp. 1-14 5 figs.
- Jepsen, G. L. *vide* Scott.

538.—Joleaud, L. La faune des Vertébrés et le peuplement humain de la côte occidentale d'Afrique aux temps de l'antiquité classique. Bull. Com. Etud. sci. A.O.F. **19** 1936 pp. 96-112.

539.—Joleaud, L. Gisements de Vertébrés quaternaires du Sahara. Bull. Soc. Hist. nat. Alger **26 bis** 1935 pp. 23-39.

540.—Joleaud, L. Évolution géographique de la faune des mammifères du Sahara central pendant la période actuelle de dessèchement. C.R. Soc. Biogéographie Paris **13** no. 108 1936 pp. 21-23.

541.—Joleaud, L. Les Ruminants cervicornes d'Afrique. Mém. Inst. Egypte **27** 1935 pp. 1-85 40 figs.

542.—Joleaud, L. Singes anthropoïdes fossiles. Découvertes d'espèces nouvelles en Asie et en Afrique. Nature Paris **1936** no. 2975 pp. 347-350 4 figs.

543.—Joleaud, L. Essai stratigraphique sur les faunes de Mammifères quaternaires et leur relations avec les Hommes fossiles du Sahara. Rep. xvi int. Geol. Congr. U.S.A. vol. **2** 1936 pp. 789-797.

544.—Jolly, J. et Férester-Tadié, M. Recherches sur l'oeuf du Rat et de la Souris. Arch. Anat. micr. Paris **32** 1936 pp. 323-390 66 figs.

545.—Jolly, J. et Lieure, C. Sur la culture des oeufs chez les mammifères. C.R. Soc. Biol. Paris **122** 1936 pp. 723-726 3 figs.

546.—Jones, R. L. On the preparation of microscopical sections for making fiber counts of nerves containing unmyelinated fibers. Anat. Rec. Philadelphia **65** 1936 pp. 247-254 2 figs.

547.—Julianelle, L. A. and Bishop, G. H. The formation and development of blood vessels in the sensitized cornea. Amer. J. Anat. **58** 1936 pp. 109-125 2 pls.

548.—Junge, G. C. A. De Butskop (*Hyperoodon rostratus* Mull.) van Egmond. Levende Nat. Amsterdam **41** 1936 pp. 16-20 3 photos.

549.—Junge, G. C. A. Bones of a Whale from the Wieringermeer, Zuider Zee. Nature London **138** 1936 p. 78.

550.—Jurgenson, P. The Ermines of the Far East. Bull. Soc. Nat. Moscou Sect. Biol. **45** 1936 pp. 239-242. [Russian with English rés.]

551.—Kadic, O. [and others]. Fossil Man and contemporary faunas. Preliminary report on the results of excavations in the Subalyuk cave, near Cserépfalu, Hungary. Rep. xvi Int. Geol. Congress U.S.A. vol. **2** 1936 pp. 783-787 6 pls.

552.—Kalabuchov, N. I and Rodionov, W. M. Changes in blood of animals with age. (Studies on the biology of senescence.) Changes in blood during the period of growth. Wiss. Ber. moskauer Staats Univ. **4** 1935 pp. 23-36 7 figs. [Russian, with English rés.]

553.—Kalabuchov, N. I. and Rodionov, W. M. Haemoglobin content and number of erythrocytes in the blood of forest mice of the plains and mountains, belonging to the same subspecies (*Apodemus sylvaticus ciscaucasicus* Ogn.) and the alternation of these indicators when the habitat changes to a different altitude. Bull. Soc. Nat. Moscou Sect. Biol. **45** 1 1936 pp. 22-35 [Russian, with English rés.]

Kano, T. *vide* Tokuda.

Kao, Y. *vide* Boring.

554.—Kappers, C. U. A. The endocranial casts of the Ehringsdorf and *Homo soloensis* skulls. J. Anat. London **71** 1936 pp. 61-76 6 figs.

555.—Kardymowicz, M. K. Medium of vagina in relation to the sex of offspring in Sheep. Biol. Zh. Moscow **5** 1936 pp. 915-926 3 figs. [Russian, with English rés.]

556.—Kariya, K. Experimentelle Untersuchung über die corticalen extrapyramidalen Fasern aus dem sog. motorischen Rindernzentrum (Area 4 und 6) der Katze. Folia anat. japon. **14** 1936 pp. 241-297 6 pls. 33 text-figs.

557.—Kashkarov, D. and Korovin, A. [An excursion to the Talas Alatan, found by the Chief Central Asiatic Museum in the summer of 1923 and the Mammal-fauna of W. Tian Shan.] Izv. Sredne Aziatsk. Kometata po detam Tashkent **1** 1926 pp. 200-246 8 photos. map. [Russian, with English rés. N.V.]

553.—Kato, K. Experimental studies on the agglutination of Mammalian spermatozoa with special reference to its bearing on fertilization. Mem. Fac. Sci. Taihoku Imp. Univ. Formosa 19 1936 pp. 1-73 3 pls.

Kato, K. *vide* Yamane.

559.—Katz, D. Animal intelligence. J. Roy. Soc. Arts 84 1936 p. 281-292.

560.—Katz, D. and R. Some problems concerning the feeding behaviour of Monkeys. Proc. zool. Soc. London 1936 pp. 579-582.

561.—Kazeeff, W. N. Le sauvegarde du Bison d'Europe. Nature Paris 1936 no. 2970 pp. 127-128 5 photos.

562.—Keeler, C. E. and Goodale, H. D. A second occurrence of head-dot spotting in the House Mouse. J. Mammal. Baltimore 17 1936 pp. 263-265 1 fig.

Keerd, M. *vide* Tehver.

563.—Kellogg, R. Mammals from a native village site on Kodiak Island. Proc. biol. Soc. Washington 49 1936 pp. 37-38.

564.—Kerr, T. On the primitive streak and associated structures in the Marsupial *Bettongia cuniculus*. Quart. J. micr. Sci. London 78 1936 pp. 687-715 2 pls. 18 text-figs.

565.—Khomenko, J. Neue Ergebnisse über die Familie der Desmostylidae. Mém. Soc. russe Mineral. 57 1928 pp. 140-147 2 pls. [In German.]

Kilby, J. D. *vide* Blair.

566.—King, H. D. A waltzing mutation in the White Rat. J. Mammal. Baltimore 17 1936 pp. 157-163.

567.—Kingsbury, B. F. On the Mam-malian thymus, particularly thymus IV: the development in the Calf. Amer. J. Anat. 60 1936 pp. 149-183 4 pls. 2 text-figs.

568.—Kitching, G. C. The Manatee of St. Helena. Nature London 138 1936 pp. 33-34.

569.—Klaus, K. Gliastrukturen der Grosshirnrinde. Verh. anat. Ges. Jena 43 1936 pp. 212-215.

570.—Klein, M. Recherches sur le rôle du placenta dans arrête des manifestations du cycle ovarien au cours de la grossesse. Arch. Anat. micr. Paris 31 1935 pp. 397-416 10 figs.

571.—Knese, K. H. Das Kopfgelenk der aquatilen Säugetiere. Gegenbaurs morph. Jahrb. Leipzig 78 1936 pp. 314-376 46 figs.

572.—Knisely, M. H. Spleen studies. Anat. Rec. Philadelphia 65 1936 pp. 23-50 pp. 131-148 8 figs.

573.—Knobloch, D. von. Das sub-fornikale Organ des dritten Hirnventrikels in seinen embryonalen und postembryonalen Entwicklung beim Haus-schwein (*Sus scrofa domestica*). Z. Anat. Entw.-ges. 106 1936 pp. 379-397 9 figs.

Knobloch, D. von *vide* Cohrs.

574.—Koenigswald, G. H. R. von. Zur Stratigraphie des javanischen Pleistocän. De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijnen-genieur." 1 no. 11 1934 pp. 185-201 2 pls. map.

575.—Koenigswald, G. H. R. von. Bemerkungen zur fossilen Säugetier-fauna Javas. De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijnen-genieur" 2 1935 no. 7 pp. 67-70 4 text-figs. no. 10 pp. 85-88 1 pl. 3 text-figs.

576.—Koenigswald, G. H. R. von. Ein fossiler Hominide aus dem altpleistocän Ostjawas. De Ingenieur Ned.-Indië IV Mijnbouw en Geologie "De Mijnen-genieur" 3 no. 8 1936 pp. 149-157 1 pl. 5 text-figs.

577.—Koenigswald, G. H. R. von. Erste Mitteilung über einen fossilen Hominiden aus dem Altpleistocän Ost-jawas. Proc. K. Akad. Wet. Amsterdam 39 1936 pp. 1000-1009 1 pl. 1 map.

578.—Koepecke, H. W. Ein zweiter Fund von *Mesopiodon bidens* (Sow.) an der deutschen Ostseeküste. Zool. Anz. Leipzig 113 1936 pp. 157-158.

Kohl-Larsen, L. *vide* Reck.

579.—Kohts, N. [Infant Ape and Human Child (Instincts, emotions, play, habits).] Pp. xvi + 596, 145 pls. Moscow 1935 [in Russian: see R. P. Yerkes. Science 83 1936 pp. 466-467.]

580.—Koiwegami, H. und Imogawa, M. Ueber die Fasern, insbesondere die kortikalen extrapyramidalen aus Area 19a der Grosshirnrinde bei Affen. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 587-604 9 figs.

581.—Kolesnik, N. N. The origin and the geographical distribution of Cattle. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 375–414 28 figs. [Russian, with English rés.]

582.—Kolesnikov, I. I. *Meriones erythrourus* Bogd. Materials in biology, ecological significance and means of extermination of the red-tailed sandy Rat. Acta Univ. Asiae Med. Tashkent. (8a Zool.) no. 19 1935 pp. 3–26 2 pls. 6 text-figs. [Russian, with English rés.]

583.—Koljuschew, I. I. Die Säugetiere des äussersten Nordens von West- und Mittelsiberien. Trav. Inst. Scient. Biol. Tomsk 2 1936 pp. 229–327 2 pls. [Russian, with German rés.]

584.—Koller, O. Die Rassen des westafrikanischen Rotbüffels. SitzBer. Akad. Wiss. Wien Abt. I 144 1935 pp. 419–453 7 figs.

585.—Koller, P. C. The genetical and mechanical properties of the sex-chromosomes. II. Marsupials. J. Genet. London 32 1936 pp. 451–472 17 figs.

586.—Koller, P. C. Cytological studies of the reproductive organs. Chromosome behaviour in the male Grey Squirrel (*Sciurus carolinensis leucotus*). Proc. roy. Soc. Edinb. 56 1936 pp. 196–208 12 figs.

587.—Koller, P. C. Chromosome behaviour in the male Ferret and Mole during anoestrous. Proc. roy. Soc. London 121B 1936 pp. 192–206 2 pls. 11 figs.

588.—Kollmann, M. Notes anatomiques sur les Cétacés. (Larynx-amygdales.) Ann. Fac. Sci. Marseille (2) 9 1935 pp. 1–19 11 figs.

589.—Kolossow, A. M. Notizen über die Fauna der Säugetiere des Unterlaufes des Flusses Emba. Bull. Soc. Nat. Moscou Sect. Biol. 44 1935 pp. 374–385. [Russian, with German rés.]

590.—Kolossow, W. G. and Polykarpowa, G. A. Versuch einer experimentell-morphologischen Analyse des Nervenapparats der Prostata. Z. Anat. Entwges. 106 1936 pp. 98–106 8 figs.

591.—[Kolyushev, I. I.] [Description of new races—*Sorex*, *Microtus*, *Myopus*.] Animadv. syst. Mus. Zool. Inst. Biol. Univ. Tomskensis No. 1 1935 pp. 1–2. [Russian only.]

592.—Kononova, E. J. Zur Frage der Biologie des *Spermophilopsis lept-*

dactylus Lals-Schädling der Irrigationesbauten turkmeniens. Bull. Univ. Tachkent 21 1935 pp. 93–104 3 figs. [Russian, and German rés.]

Kooman, A. vide de Burlet.

Kooyman, D. vide Bierans de H.

593.—Kormos, T. Vorläufiger Bericht über die Revision der Kleinsäugenreste von Hundsheim. Anz. Akad. Wiss. Wien 72 1935 pp. 112–113.

Korovin, A. vide Kashkarov.

594.—Korteweg, R. Method for comparing the differences of the rate of disposition to cancer in specimens of different strains of Mice, pp. 337–349; On the manner in which the disposition to carcinoma of the mammary gland is inherited in Mice, pp. 350–371. Genetica's Gravenhage 18 1936.

595.—Korvenkontio, V. A. Mikroskopische Untersuchungen an Nagerincisuren unter Hinweis auf die Schmelzstruktur der Backenzähne. Ann. Zool. Soc. zool.-bot. fenn. Vanamo Helsinki 2 1934 pp. 1–280 47 pls. 15 text-figs. 3 append.

596.—Kostorz, R. Ueber die Lappchenabgrenzung in der Leber der Säugetiere. Anat. Anz. Jena 83 1936 pp. 121–149 9 figs.

597.—Krasovskaja, O. V. Cytological study of the heterogeneous fertilization of the egg of the Rabbit outside the organism. Acta zool. Stockholm 16 1935 pp. 449–459 2 pls.

598.—Krassowskaja, O. W. Beobachtungen an lebenden Kanincheneiern während der Befruchtung und Forschung ausserhalb des Organismus. Acta zool. Stockholm 17 1936 pp. 367–389 43 figs.

599.—Krassawzeff, B. A. Ein neuer Feind der Bisamspitzmaus (*Desmana moschata* L.). Arch. Hydrobiol. Stuttgart 30 1936 pp. 161–162.

600.—Kreht, H. Zur Architektonik der Brocaschen Region beim Schimpansen und Orang-Utan. Z. Anat. Entwges. 105 1936 pp. 654–677 28 figs.

601.—Kreht, H. Zur Volumengrösse der architektonischen Felder 55–66 einiger menschlicher Gehirne im Vergleich zu der des Schimpansen und Orang-Utan. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 409–414.

602.—**Kreiner, G.** Die Commissura anterior der weissen Ratte. 'Z. Anat. Entw.ges. 106 1936 pp. 663-677 4 figs.

603.—**Krikunow, M. und Molotkowa, T.** Zur Frage über die Innervation der Mm. intercostales bei den Haussäugetieren. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 692-697 2 figs.

Křiženecký, J. *vide* Diakov.

604.—**Kronfeld, E. M.** Die erste Giraffe in Schönbrunn. Zool. Garten Leipzig 8 1936 pp. 214-220 4 photos.

605.—**Kröning, F. und Engelmann, C.** Penetranz, Expressivität und Asymmetrie der Ueberziehen des Meer-schweinschens und die Abhängigkeit ihrer Realisation von Aussenfaktoren. Nach. Ges. Wiss. Göttingen. VI N.F. 1 8 1934 pp. 123-141.

606.—**Krompecher, S.** Experimentelle Beeinflussung der Art der regenerativen Knochenbildung durch mechanische Einwirkungen. Verh. anat. Ges. Jena 43 1936 pp. 138-148 9 figs.

Krumbiegel, I. *vide* Schneider.

607.—**Kubacska, A.** Pathologische Untersuchungen an ungarländischen Versteinerungen. VI. Verletzungen an Schädeln pliozöner Räubtiere. Palaeont. Z. Berlin 18 1936 pp. 95-108 3 pls. 2 text-figs.

608.—**Kuhl, W.** Richtungskörperbildung und Forschung des Eies sowie das Verhalten des Trophoblasten der weissen Maus. Verh. Deutsch. zool. Ges. Leipzig 38 1936 pp. 187-195 14 figs.

609.—**Kuhn, E.** Die Fauna des Pfahlbaues Obermeilen am Zürichsee. Vjschr. naturf. Ges. Zurich 80 1935 pp. 241-330.

610.—**Kummerlöwe, H.** Bemerkungen über einen Zebrahengst mit einer Wirbelverletzung. Zool. Garten Leipzig 8 1936 pp. 222-223 2 figs.

611.—**Küpfer, M.** Beiträge zur Erforschung der baulichen Struktur der Backenzähne des Hausrindes (*Bos taurus* L.). Denks. Schweiz. naturf. Ges. 70 1 1935 pp. ix + 218 many plates and text-figs.

612.—**Kupfer, M.** The early stages of body-form development in Cattle. "Farming in South Africa" 11 1936 pp. 184-188-15 figs.

613.—**Küpfer, M.** Die Backenzahnentwicklung und Molarstruktur bei Huftieren. Verh. schweiz. naturf. Ges. 117 1936 pp. 331-332.

614.—**Kuroda, N.** Two new additions to the lists of Formosan Birds and Mammals. Zool. Mag. Tokyo 48 1936 pp. 465-468 2 figs. [Japanese, with English rés.]

615.—**Kushner, H.** Selectional significance of weight of calves at birth and factors conditioning it. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 449-464 4 figs. [Russian, with English rés.]

616.—**Kusjakin, A. P.** Neue Angaben über Systematik und geographische Verbreitung der Fledermäuse (Chiroptera) der U.d.S.S.R. Bull. Soc. Nat. Moscou Sect. Biol. 44 1935 pp. 428-438. [Russian, with German rés.]

617.—**Kusnetzoff, B.** Ueber einige Gesetzmässigkeiten der Säugetierverbreitung im europäischen Teil des U.d.S.S.R. Zool. J. Moscow 15 1936 pp. 96-127 7 maps. [Russian only.]

618.—**Kutscheruk, W.** [and others]. Quelques données sur la multiplication en masse des rongeurs (campagnols et souris) dans la région de Moscou en 1934. Bull. Soc. Nat. Moscou Sect. Biol. 44 1935 pp. 414-427 6 figs. [Russian, with French rés.]

619.—**Lafon, M.** The action of Hanson's thymus extract on the Mouse. J. exp. Biol. Cambridge 13 1936 pp. 140-144.

619A.—**Langer, W. F.** Die Ausbreitung des Hamsters in den sächsischen Amtshauptmannschaften Auerbach Oelnitz und Plauen, in den Jahren 1914 bis mit 1935. SitzBer. Isis Dresden für 1935 1936 pp. 161-166 map.

620.—**Langworthy, O. R.** A physiological study of the cerebral motor cortex and the control of posture in the Sloth. J. comp. Neurol. 62 1935 pp. 333-347 5 figs.

621.—**Larsell, O. and Dow, R. S.** The development of the cerebellum in the Bat (*Corynorhinus* sp.) and certain other Mammals. J. comp. Neurol. 62 1935 pp. 443-468 5 pls. 8 text-figs.

622.—**Larsen, A.** Lidt om Bornholms Pattedyr. Flora og Fauna Kjøbenh. 42 1936 pp. 135-136.

Laryn, N. *vide* Andrianov.

623.—Latimer, H. B. Weights and linear measurements of the adult Cat. Amer. J. Anat. 58 1936 pp. 329-347.

624.—Laudermilk, J. D. and Munz, P. A. Plants in the dung of *Nothotherium* from Gypsum cave, Nevada. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) no. 453 1934 pp. 29-37 11 pls.

625.—Laurent, P. Contribution à la connaissance de la faune des Vertébrés du Maroc. (Batraciens, Reptiles, Mammifères.) Bull. Soc. Hist. nat. Alger 26 1935 pp. 344-359.

626.—Laurent, P. Sur la présence au Maroc de Rat Noir (*Rattus rattus* Linné *ater* Millais). Bull. Soc. Hist. nat. Alger 27 1936 pp. 165-172.

627.—Laurent, P. Le Campagnol des Champs (*Microtus arvalis* Pallas) existe-t-il en Abyssinie? Bull. Soc. Hist. nat. Alger 27 1936 pp. 384-386.

628. — Laurent, P. Une forme saharienne du genre *Plecotus*, *P. arutilus saharæ* subsp. nov. Bull. Soc. Hist. nat. Alger 27 1936 pp. 408-412 1 pl. 2 text-figs.

629.—Laurie, A. H. The stock of antarctic Blue Whales. Nature London 138 1936 p. 33.

Law, L. W. *vide* Castle.

630.—Lawless, J. J. Castration of the Rat with or without removal of epididymides. Anat. Rec. Philadelphia 66 1936 pp. 455-473.

Lawrence, B. *vide* Allen.

631.—Lawrence, B. and Washburn, S. L. A new eastern race of *Galago demidovii*. Occ. Pap. Boston Soc. nat. Hist. 8 1936 pp. 255-266.

632.—Lawroff, N. D. Sur la biologie du putois ordinaire (*Putorius putorius* L.). Bull. Soc. Nat. Moscou Sect. Biol. 44 1935 pp. 362-373. [Russian, with French rés.]

633.—Leakey, L. S. B. A new fossil skull from Eyassi, East Africa. Nature London 138 1936 pp. 1082-1084 3 photos.

634.—Lebedinskaja, S. J. und Rosenthal, J. S. Beiträge zur Physiologie des Subcortex beim Hunde nach versuchen mit der Hündin "Angarka." Verh. Akad. Wet. Amsterdam (2) 35 no. 1 1936 pp. 1-30 20 figs.

Lee, R. C. *vide* Benedict.

635.—Leonardi, P. *Elephas (Palaeoloxodon) antiquus* Falc. di Cittanova nell' Istria. Atti Mus. Stor. nat. Trieste 12 1934 pp. 153-166 4 pls. 3 text-figs.

Leraas, H. J. *vide* Dice.

Le Souef, A. S. *vide* Troughton.

636.—Lewis, G. E. A new species of *Sugriviapithecus*. Amer. J. Sci. New Haven (5) 31 1936 pp. 450-452 1 fig.

Licent, E. *vide* Teilhard de C.

Lieure, C. *vide* Jolly.

Linsdale, J. M. *vide* Grinnell.

637.—Lipschütz, A. Préhypophase et ovaire chez le Cobaye avec troubles expérimentaux du cycle sexuel. Arch. biol. Liège 47 1936 pp. 181-204 1 pl.

Little, C. C. *vide* Cloudman.

Lloyd, H. *vide* Elton & Swynnerton.

638.—Loeb, L. and Smith, M. G. The effect of hysterectomy on the duration of life and retrogression of the corpora lutea and on the secondary sex organs in the Rabbit. Amer. J. Anat. 58 1936 pp. 1-25.

639. — Loguinoff, W. W. Nouvelles notions concernant la biologie du Sanglier du Caucase (*Sus scrofa attila* Thomas). Bull. Soc. Nat. Moscou Sect. Biol. 45 1936 pp. 10-21 3 figs. [Russian, with French rés.]

640.—Löhr, H. Beitrag zur Säugetierfauna des Federseegebietes. Veröff. Natursch. Stuttgart 11 1935 pp. 103-104.

641.—Löhr, H. Der Winterschlaf von *Nyctalus noctula* Schreb. auf Grund von Beobachtungen am Winterschlafplatz. Z. Morph. Ökol. Tiere Berlin 32 1936 pp. 47-66 3 figs.

642.—Löhr, H. Ein neuer Fundort der Alpenspitzmaus (*Sorex alpinus* Schinz) und Bemerkungen über die Systematik der Art. Zool. Anz. Leipzig 114 1936 pp. 221-223.

643.—Lönnerberg, E. Några ord om halvspäckhuggaren *Pseudorca crassidens* Owen. Fauna och Flora Uppsala 1936 pp. 87-92 photo.

644. — Lönnerberg, E. Bidrag till Järvens [*Gulo gulo*] historia i Sverige. Skr. Naturskydds. Stockholm no. 32 1936 pp. 1-38 1 fig.

645.—Loomis, F. B. Three new Miocene Dogs and their phylogeny. *J. Paleont. Menasha* 10 1936 pp. 44–52 6 figs.

646.—Loomis, F. B. The skeleton of a new fossil Camel from Wyoming. *Univ. Wyoming Pub. Sci.* 2 1936 pp. 59–64 4 figs.

Lopatin, I. A. *vide* Bowden.

647.—Loreti, F. Morfologia e significato morfologico del muscolo ascellare (del Langer) nell' uomo. *Monit. zool. ital. Firenze* 47 1936 pp. 147–159 4 figs.

648.—Lossen, H. und Wegner, R. N. Die Knochenkerne der Scapula röntgenologisch und vergleichend-anatomisch betrachtet. *Fortschr. Geb. Röntgenstr.* 53 1936 pp. 443–458 13 figs.

649.—Lossen, H. und Wegner, R. N. Röntgenstudien zur vergleichenden Anatomie der Lufträume des Schädels. *Fortschr. Geb. Röntgenstr.* 54 1936 pp. 1–3 [sep. pag. ?].

650.—Lossen, H. und Wegner, R. N. Ueber Lufträume des Schädels, röntgenologisch und vergleichend-anatomisch betrachtet. *Fortschr. Geb. Röntgenstr.* 54 1936 pp. 541–559 20 figs.

651.—Loukashkin, A. S. The Post-Tertiary fauna of northern Manchuria contemporary with primitive Man. *Rep. xvi Int. Geol. Congress U.S.A. vol. 2* 1936 pp. 799–805 map.

652.—Luard, L. D. The Horse. Its action and anatomy, by an artist. Pp. xiii + 122 14 pls. and many text-figs. London (Faber) 1935 8vo.

Lubnow, E. *vide* Danneel.

653.—Lucinescu, E. Funktionelle Strukturen experimenteller Herkunft. Gegenbaurs morph. Jahrb. Leipzig 78 1936 pp. 234–252 13 figs.

654.—Luther, W. Beobachtungen an einer gefangenen Wasserspitzmaus (*Neomys fodiens* [Schreber]). *Zool. Garten Leipzig* 8 1936 pp. 303–307.

655.—Luttermoser, G. W. J. A helminthological survey of Baltimore House Rats (*Rattus norvegicus*). *Amer. J. Hyg.* 24 1936 pp. 350–360 1 fig.

656.—Lyon, M. W. Mammals of Indiana. *Amer. Midl. Nat. Notre Dame* 17 no. 1 1936 pp. 1–384 125 figs. 85 maps.

657.—Lyon, R. A. and Allen, W. M. Survival of duciduomata in the unilaterally pregnant Rat. *Anat. Rec. Philadelphia* 65 1936 pp. 351–356 4 figs.

658.—Macarovici, G. N. Restes de Mammifères fossiles de la Bessarabie méridionale. *Ann. Sci. Univ. Jassy* 22 1936 pp. 349–367 5 pls.

659.—MacInnes, D. G. A new genus of fossil deer from the Miocene of Africa. *J. Linn. Soc. London* 39 1936 pp. 521–530 5 figs.

660.—MacInnes, D. G. A new genus of fossil Deer from the Miocene of Africa. *Proc. Linn. Soc. London* 1935–36 1936 p. 131.

McLachlin, A. D. *vide* Franklin.

661.—MacLulich, D. A. Mammals of the Wanapitei Provincial Forest, Sudbury district, Ontario. *Canad. Field Nat.* 50 1936 pp. 56–58.

662.—MacLulich, D. A. Running speed of Skunk and European Hare. *Canad. Field Nat.* 50 1936 p. 92.

663.—MacLulich, D. A. Fluctuations in numbers of Varying Hares. *Science* 83 1936 p. 162.

664.—Madsen, V. C. Report of the Commission on Fossil Man. [A series of papers by various authors on Fossil and Prehistoric Man in various countries in the World.] *Rep. xvi Int. Geol. Congr. U.S.A. vol. 2* 1936 pp. 1147–1342.

665.—Magne de la Croix, P. Apuntes sobres los andares transitorios e irregulares. *An. Soc. cient. argent. Buenos Aires* 121 1936 pp. 271–280 8 figs.

666.—Magne de la Croix, P. The evolution of locomotion in Mammals. *J. Mammal. Baltimore* 17 1936 pp. 51–54 12 figs.

667.—Maier, N. R. F. and Schneirla, T. C. Principles of Animal Psychology. Pp. xiii + 529 107 illustr. New York (McGraw-Hill) 1935 8vo.

668.—Maignon, F. Tonicité parasymphatique et sensibilité aux parasymphatomimétiques chez quelques espèces de mammifères. *Bull. Soc. philom. Paris* 118 1936 pp. 67–68.

669.—Mail, G. A. and Mills, H. B. Heat radiation of domestic animals during severe cold weather. *J. Mammal. Baltimore* 17 1936 pp. 282–283.

670.—Maison, G. L. Determination of the visual power of each eye in animals. *Science* **84** 1936 p. 463.

671.—Makiyama, J. *Sinanodelphis izumidaensis*, a new Miocene Dolphin of Japan. *Mem. Coll. Sci. Kyoto. (B)* **11** 1936 pp. 115-134 3 pls. 2 text-figs.

672.—Maksudowa, M. A. Zur Frage über das morphologische Substrat der funktionellen Verbindung der autonomen Vagusfasern mit den intramuralen Ganglionzellen des Herzens. *Anat. Anz. Jena* **83** 1936 pp. 19-25 4 figs.

673.—Malbrant, R. Note au sujet de la classification des Buffles africains. *Bull. Mus. Hist. nat. Paris* **7** 1935 pp. 320-332 2 figs.

674.—Malm, E. N. and Trotskaya, K. T. Some data concerning the development of *Delphinus delphis* L. *Trav. Sta. biol. Sébastopol* **5** 1936 pp. 273-286 5 figs.

675.—Marelli, C. A. Bibliographia euristica de los mamíferos, de caza y caza marítima. Contribuciones al estudio de la fauna argentina. Pp. 1-189 La Plata 1936 8yo.

Margolin, S. *vide* Abramson.

676.—Maritano, C. Ricerche comparative sull' orecchio esterno di mammiferi. *Atti Soc. ital. Milano* **75** 1936 pp. 95-128 10 figs.

677.—Markee, J. E. and Hinsey, J. C. Observation on ovulation in the Rabbit. *Anat. Rec. Philadelphia* **64** 1936 pp. 309-319 2 pls.

678.—Markee, J. E. [and others]. Studies on uterine growth. iii. A local factor in the Rabbit uterus. *Anat. Rec. Philadelphia* **64** 1936 pp. 221-230.

679.—Markee, J. E. [and others]. Uterine bleeding in spinal Monkeys. *Anat. Rec. Philadelphia* **64** 1936 pp. 231-245.

680.—Markee, J. E. [and others]. Growth of intraocular endometrial transplants in spinal Rabbits. *Anat. Rec. Philadelphia* **64** 1936 pp. 247-253 1 fig.

681.—Marshak, A. Growth differences in reciprocal hybrids and cytoplasmic influence on growth in Mice. *J. exp. Zool. Philadelphia* **72** 1936 pp. 497-510 10 figs.

682.—Marshall, C. The functions of the pyramidal tracts. *Quart. Rev. Biol. Baltimore* **11** 1936 pp. 35-56 7 figs.

683.—Marshall, F. H. A. and Bowden, F. P. The further effects of irradiation on the oestrous cycle of the Ferret. *J. exp. Biol. London* **13** 1936 pp. 383-386.

684.—Marshall, W. H. A study of the winter activities of the Mink. *J. Mammal. Baltimore* **17** 1936 pp. 382-392 3 figs.

Martin de Frutos, J. *vide* Ranquini.

685.—Marx, L. Vaginal occlusion, an abnormality in Mice. *Anat. Rec. Philadelphia* **66** 1936 pp. 449-454 2 figs.

686.—Mason, M. Notes on Natural History in: W. B. K. Shaw, An Expedition to the southern Libyan desert. *Geogr. J. London* **87** 1936 pp. 216-217.

687.—Masui, K. The sex ratio and sex determination in Mammals. *Botany & Zool. Tokyo* **4** 1936 pp. 83-88, 421-426, 569-576. [Japanese only.]

Mather, K. *vide* Fisher.

Mathias, P. *vide* Didier.

688.—Mathis, J. und Eglitis, J. Ueber besondere Einrichtungen an Schlagadern zur Regelung des Blutstromes. *Anat. Anz. Jena* **83** 1936 pp. 40-44 2 figs.

689.—Matsumoto, H. Upper Miocene Vertebrates from Kumanodô, Natori district, Prov. of Rikuzen. *Zool. Mag. Tokyo* **48** 1936 pp. 475-480 5 figs. [Japanese, with English rés.]

Matsumoto, K. *vide* Aoki.

690.—Matsuura, Y. Studies on the Right Whale (*Balaena glacialis* Bonnatere) in the adjacent waters of Japan. *Botany & Zool. Tokyo* **4** 1936 pp. 696-702 3 maps. [Japanese only.]

691.—Matsuura, Y. The distribution and habits of the Humpback Whales in the adjacent waters of Japan. *Nihon Suisan Gakkwai Si* **4** 1935 pp. 159-170. [Abstract in *Japan. J. Zool.* **6** 1936 p. (82).]

692.—Matsuura, Y. On the Lesser Rorqual found in the adjacent waters of Japan. *Nihon Suisan Gakkwai Si* **4** 1936 pp. 325-330. [Abstract in *Japan. J. Zool.* **6** 1936 p. (83).]

693.—Matsuura, Y. Breeding habits of the Sperm-Whale in the adjacent waters of Japan. Zool. Mag. Tokyo 48 1936 pp. 260-266 4 maps and diagr. [Japanese. with English rés.]

694.—Matthews, L. H. The pelage and ear pinna of a newly-born Common Seal (*Phoca vitulina* L.). Proc. zool. Soc London 1936 pp. 315-316 1 pl. 1 text-fig.

695.—Matthey, R. Le problème des heterochromosomes chez les Mammifères. Arch. biol. Liège 47 1936 pp. 319-383 5 pls. 9 text-figs.

696.—Matthey, R. La formule chromosomiale chez les *Apodemus*. Bull. Soc. vaud. Sci. nat. 59 1936 pp. 119-121.

697.—Matthey, R. La formule sexuelle chez *Apodemus agrarius* (Pallas). C.R. Soc. Biol. Paris 121 1936 pp. 1035-1036.

698.—Matthey, R. et Renaud, P. Les chromosomes des Myoxidés. C.R. Soc. Biol. Paris 121 1936 pp. 1034-1035.

699.—Maximenko, A. Zur Phylogene des *M. serratus dorsalis caudalis* der Säugetiere. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 666-691 12 figs.

700.—May, R. M. La durée des greffes brérophlastiques sous-cutanées de thyroïde chez le Rat. C.R. Acad. Sci. Paris 202 1936 pp. 347-349 2 figs.

701.—Maynard, L. A. [and others]. Food preferences and requirements of the White-tailed Deer in New York State. Pp. 1-35 4 figs. Albany 1935 8vo.

702.—Meinertz, T. Die Hautmuskulatur der Säugetiere. Untersuchungen über die Hautmuskulatur der Säugetiere mit besonderer Rücksicht auf das superfizielle Facialisgebiet. II. Das Kaninchen. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 124-178 21 figs.

703.—Meinertz, T. Die Hautmuskulatur der Säugetiere. Untersuchungen über die Hautmuskulatur der Säugetiere mit besondere Rücksicht auf das superfizielle Facialisgebiet. III. Der Hase mit dem Kaninchen verglichen. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 400-418 8 figs.

704.—Meklenburtzew, R. N. Zur Ökologie und Verbreitung einiger Nage-

tiere im Ebene-teil des Zerawschantales. Acta Univ. Asiae Med. Tashkent. (8a Zool.) no. 17 1935 pp. 3-30 5 figs. [Russian, with German rés.]

705.—Meklenburzev, R. Biological notes on Tashkent and Chimkent bats (Middle Asia). Bull. Univ. Tachkent. 21 1935 pp. 105-114. [Russian, with English rés.]

706.—Mendonça, B. de. O Megatherium do Museu Nacional. Bol. Mus. nac. Rio 10 1934 pp. 95-98 photo.

707.—Mertens, R. Die Säugetiere der Inseln Bali, Lombok, Sumbawa und Flores. Zool. Jahrb. Jena (Syst.) 68 1936 pp. 273-324 2 pls.

708.—Metivier, H. V. M. Paralytic relics in Livestock. J. comp. Path. Edinb. 48 1935 pp. 245-260 7 figs.

709.—Mettler, F. A. Corticifugal fiber connections of the cortex of *Macaca mulatta*. The parietal region. J. comp. Neurol. 62 1935 pp. 263-291 14 figs.

710.—Migouline, A. A. Les souris (Muridae) de la partie nord-est de l'Ukraine (ancien gouvernement de Kharkow). Trav. Soc. Nat. Charkow 50 no. 2 1927 pp. 16-44. [Russian only.]

711.—Miguline, A. A. Les spermophiles tachées de l'Ukraine. Trav. Soc. Nat. Charkow 50 no. 2 1927 pp. 45-48. [Russian only.]

712.—Miljutin, N. G. Materialien zur Fauna der Säugetiere des Dnjepropetrowschen Kreises. Trav. Soc. Nat. Kharkov 55 1930 pp. 77-111 8 figs. [Russian, with German rés.]

713.—Miller, A. H. An isolated colony of the Gray-headed Pika in Nevada. J. Mammal. Baltimore 17 1936 pp. 174-175.

714.—Miller, G. S. A new Flying Squirrel from West Virginia. Proc. biol. Soc. Washington 49 1936 pp. 143-144.

715.—Miller, G. S. The status of *Delphinus bairdii* Dall. Proc. biol. Soc. Washington 49 1936 pp. 145-146.

716.—Mills, H. B. Observations on Yellowstone Elk [*Cervus canadensis*]. J. Mammal. Baltimore 17 1936 pp. 250-253.

Mills, H. B. *vide* Mail.

717.—Miranda-Ribeiro, A. de. On some foetal and post-foetal characters of Mammals and Birds: concerning scales, hairs and feathers. *Proc. zool. Soc. London* for 1935 1936 pp. 741-772 5 pls.

718.—Miyosi, Y. On the masseter muscle of the *Rattus norvegicus* and *Rattus rattus alexandrinus*. *Trans. nat. Hist. Soc. Formosa* 26 1936 pp. 440-445 2 figs. [Japanese only.]

719.—Mizelle, J. D. Muskrat habitations of Marsh Island, Louisiana. *Amer. Midl. Nat. Notre Dame* 17 1936 pp. 661-663.

720.—Modén, O. Subfossil Storsäl. *Medd. Värml. nat. För. Karlstad* 9 1935 pp. 3-5.

721.—Mohr, C. E. The seasonal distribution of Bats in Pennsylvania. *Proc. Penn. Acad. Sci.* 6 1932 pp. 189-194.

722.—Mohr, C. E. Pennsylvania Bats of the genus *Myotis*. *Proc. Penn. Acad. Sci.* 7 1933 pp. 39-43.

723.—Mohr, C. E. Marking Bats for later recognition. *Proc. Penn. Acad. Sci.* 8 1934 pp. 26-36.

724.—Mohr, C. O and W. P. Abundance and digging rate of Pocket Gophers, *Geomys bursarius*. *Ecology Brooklyn* 17 1936 pp. 325-327.

725.—Mohr, E. Paa Musejagt i Thy. *Flora og Fauna Kjøbenh.* 42 1936 pp. 73-81 map 6 photos also H. Degerbøl, pp. 142-144.

726.—Mohr, E. Säugetiere i der Landschaft Thy (Jütland). *Schr. naturw. Ver. Schl.-Holst.* 21 1936 pp. 427-436 map 6 photos.

727.—Mohr, E. Osteuropäischer und Wanderigel i Gefangenschaft. *Z. Säugetierk. Berlin* 11 1936 pp. 242-246 1 pl.

728.—Mohr, E. Die äussere Nase bei Igel und Maulwurf. *Zool. Anz. Leipzig* 113 1936 pp. 93-95 4 figs.

729.—Mohr, E. Biologische Beobachtungen an *Solenodon paradoxus* Brandt in Gefangenschaft. *Zool. Anz. Leipzig* 113 1936 pp. 177-188 17 photos also 116 1936 pp. 65-76 18 photos.

730.—Mohr, E. Weiteres vom Kambing-oetan (*Capricornis sumatren-*

sis Bechst.). *Zool. Garten Leipzig* 8 1936 pp. 291-295 9 photos.

731.—Mohr, W. P. and C. O. Recent Jack Rabbit populations at Rapidan, Minnesota. *J. Mammal. Baltimore* 17 1936 pp. 112-114 1 fig.

Molotkowa, T. *vide* Krikunow.

732.—Mönnig, H. O. and Quin, J. I. Studies on the alimentary tract of the Merino Sheep in South Africa. II. Investigations on the physiology of deglutition. Onderstepoort J. Pretoria 5 1935 pp. 485-499; see also Besselaar, H. J. and Quin, J. I. pp. 501-514 1 fig.

733.—Moore, A. W. Improvements in live trapping. *J. Mammal. Baltimore* 17 1936 pp. 372-374.

Moore, C. R. *vide* Wells.

734.—Moore, R. L. Adaptation of the transparent chamber technique to the ear of the Dog. *Anat. Rec. Philadelphia* 64 1936 pp. 387-403 1 pl. 4 text-figs.

735.—Morosan, N. N. Dinotheridés de Bessarabie. Contribution à l'étude de la dentition et de la distribution paléogéographique des Dinotheridés de Roumanie. *Ann. sci. Univ. Jassy* 22 1936 pp. 256-279 3 pls. map photo.

736.—Morosan, N. M. Les molaires de *Dinotherium* provenant de Scandnavie (?) au Musée de Kichineff (Bessarabie). *Bull. Soc. géol. Fr. (5)* 6 1936 pp. 109-112 1 pl.

737.—Morris, R. C. Further records of the distribution of the Cheetah (*Acinonyx jubatus* Erxl.) in South India. *J. Bombay nat. Hist. Soc.* 38 1936 p. 610

738.—Motohashi, H. Two cases of facial malformation in Swine, which were obtained in Hainan Island. *Trans. Tottori Soc. Agr. Sci.* 5 1935 pp. 309-316 10 figs. [Japanese, with English rés.]

739.—Mottl, M. Ueber die Fauna der Mussolini-Höhle im Bükkgebirge. *Festschrift f. Embrik Strand Riga* 2 1936 pp. 75-80 1 fig.

740.—Mottl, M. Wisentskelett im Museum der Kgl. Ung. Geologischen Anstalt. *Földt. Közlöny, Budapest* 65 1935 pp. 363-364 1 fig. [Magyar, with German rés.]

741.—Moulthrop, P. N. *Myotis volans interior* in South Dakota. J. Mammal. Baltimore 17 1936 pp. 413–414.

Müller, F. *vide* Van.

Munz, P. A. *vide* Lauder milk.

742.—Myers, H. I. [and others]. Graafian follicle development throughout the reproductive cycle in the Guinea Pig, with special reference to changes during oestrous (sexual receptivity). Anat. Rec. Philadelphia 65 1936 pp. 381–401 3 pls. 1 text-fig.

743.—Nachtsheim, H. Vom Wildtier zum Haustier. Pp. 100 Berlin (Metzner) 1936 8vo. [N.V.]

744–5.—Nageotte, J. Trameet cellules dans le tendon. Arch. Biol. Liège 47 1836 pp. 605–629 1 pl. 4 text-figs.

746.—Nagy, D. Kranimetrische Untersuchungen über die Pferde der Ungarn zur Zeit der Landnahme. Math. term. Ert. Budapest 54 1936 pp. 991–1045 5 pls. [Magyar, with German rés.]

Nascimbene, A. *vide* Borghese.

747.—Nasimovich, A. A. Notes on the biology of the Snow Mice (*Chionomys nivalis nenjukovi* Formos.) in the western Caucasus. Bull. Soc. Nat. Moscou Sect. Biol. 44 1935 pp. 386–390. [Russian; with English rés.]

748. — Nassimovitch, A. A. Sur quelques régularités de la propagation hivernale des Ongulés dans les montagnes du Caucase Occidental. Bull. Soc. Nat. Moscou Biol. 45 1926 pp. 3–9 [Russian, with French rés.]

749.—Naumov, N. P. Multiplication and mortality in the Common Vole (*Microtus arvalis* Pall.). Abs. Works zool. Inst. Moscow State Univ. 3 1936 pp. 144–170 5 graphs. [Russian, with English rés.]

Naville-Trollet, I. *vide* Guyénot.

750.—Nelson, W. O. [and others]. Studies in the physiology of lactation. Anat. Rec. Philadelphia 66 1936 pp. 201–215 2 pls.

751. — Neuhäuser, G. Diagnosen neuer kleinasiatischen Mäuse. Z. Säugetierk. Berlin 11 1936 pp. 159–160.

752.—Neuhäuser, G. Die Muriden von Kleinasien. Z. Säugetierk. Berlin 11 1936 pp. 163–236 map.

753.—Neuville, H. Le pancréas des Cétacés et les theories “insulaires.” in: Bouvier. Livre Jubilaire pp. 19–23 1 pl. Paris 1936.

754.—Neuville, H. L'urètre glandaire des Girafes. Bull. Mus. Hist. nat. Paris 7 1935 pp. 333–339 2 figs.

755.—Neuville, H. Remarques complémentaires sur l'organe femelle de l'*Hyaena crocuta*. Bull. Mus. Hist. nat. Paris 8 1936 pp. 54–60 4 figs.

756.—Neuville, H. Ectopies dentaires de Gorille et d'Orang-outan. Bull. Mus. Hist. nat. Paris 8 1936 pp. 225–232 4 figs.

757.—Neuville, H. Sur le mimétisme sexuel de l'*Hyaena crocuta*. Mammalia 1 1936 pp. 49–58 1 fig.

758.—Newton, T. C. Distribution of the Senegal Hartebeest and Senegal Gazelle. Nigerian Field 5 1936 pp. 84–85.

759.—Niezabitowski, E. de L. Revue de la faune des mammifères en Pologne. Bull. Soc. Amis Sci. Poznań (B) 6 1934 pp. 3–13. [In French.]

760.—Niezabitowski, E. L. Un crâne de *Cervus euryceros* Aldr. à cornes irrégulières trouvé à Barycz sur San. Prace Kom. mat.-prz. pozn. Tow. Przyj. Nauk. (B.) 7 no. 3 1935 pp. 1–5 1 fig. [Polish, with French rés.]

761.—Nishi, S. Pri la vejnoj de mano de simioj. Folia anat. japon. 12 1935 pp. 407–416 3 figs. [In Esperanto.]

762. — Nishida, K. Über die zyklischen Veränderungen der Bindegewebszellen in der Uterusschleimhaut der Ratte. Folia anat. japon. 14 1936 pp. 435–443 1 pl. 4 text-figs.

763.—Niwa, H. Some observations on the parturition season of *Pipistrellus abramus* (Temminck) and the form of its young. Botany & Zool. Tokyo 4 1936 pp. 1561–1570 7 figs. [Japanese only.]

764. — Nobre, A. Descrição dos mamíferos marinhos de Portugal in: Fauna Marinha de Portugal 1 Vertebrados pp. 1–21 5 figs. Pôrto 1935 8vo.

765.—Nonidez, J. F. The nervous "terminal reticulum." A critique. I. Observations on the innervation of blood vessels. *Anat. Anz. Jena* **82** 1936 pp. 348-366 8 figs.

766.—Nonidez, J. F. Observations on the blood supply and the innervation of the aortic paraganglion of the Cat. *J. Anat. London* **70** 1936 pp. 215-224 2 pls. 2 text-figs.

767.—Novikov, L. L. Chromosomes in the spermatogenesis of interspecific hybrids of the European Mouflon and the Domesticated Sheep (Merino). *C.R. Acad. Sci. Moscou* **1935** vol. **4** pp. 93-94 2 figs. [In English.]

768.—O'Day, K. A preliminary note on the presence of double cones and oil droplets in the retina of Marsupials. *J. Anat. London* **70** 1936 pp. 465-467 1 pl. 1 text-fig.

769.—Ogalde, C. V. Sobre la anatomía microscópica de las crestas palatinas en el hombre y en algunos mamíferos. *Arch. chilenos Morf. Santiago* **1** no. **2** 1935 pp. 429-433 10 figs.

770.—Ogawa, T. Studien über die Zahnwale in Japan. *Botany & Zool. Tokyo* **4** 1936 pp. 1159-1171, 1337-1344, 1495-1504, 1685-1694, 1837-1844, 2017-2021 38 figs. [Japanese only.]

771.—Ognev, S. I. A systematical review of the genus *Myospalax*. *Abs. Works zool. Inst. Moscow State Univ.* **3** 1936 pp. 81-82.

772.—Ognev, S. I. Review of the Chipmunks inhabiting the U.S.S.R. *Wiss. Ber. moskauer Staats Univ.* **4** 1935 pp. 91-95. [Russian, with English rés.]

772.—Ognev, S. I. and Stroganov, S. U. A new subspecies of the Black Rat (*Rattus rattus* L.) *Abs. Works zool. Inst. Moscow State Univ.* **3** 1936 pp. 82-84.

773.—Ognev, S. I. and Stroganov, S. U. A new form of Dormouse (*Eliomys quercinus*). *Abs. Works zool. Inst. Moscow State Univ.* **3** 1936 pp. 84-85.

774.—Ognev, S. J. and Turov, S. S. Review of the Dormice of the genus *Dromys* of Russian fauna. *Wiss. Ber. moskauer Staats Univ.* **4** 1935 pp. 96-105. [Russian, with English rés.]

775.—Okada, Y. A study of Japanese Dephinidae. *Sci. Rep. Tokyo Bun. Daig. (B)* **3** no. **44** 1936 pp. 1-16 5 pls. 8 text-figs.

776.—Okamura, C. Zahlreiche Ganglien innerhalb der Muskulatur der Zunge und des Zwerchfelles. *Z. mikr. anat. Forsch. Leipzig* **39** 1936 pp. 68-78 11 figs.

777.—Okamura, C. Die drei Arten der Muskelspindeln. *Z. mikr. anat. Forsch. Leipzig* **39** 1936 pp. 394-408 12 figs.

778.—Okelberry, A. N. Efferent nerve fibers in the lumbar dorsal roots of the Dog. *J. comp. Neurol* **62** 1935 pp. 1-12 1 pl.

779.—Okkels, H. La cytologie thyroïdienne dans diverses espèces d'animaux. *Bull. Histol. appl. Lyon* **13** 1936 pp. 57-61 1 fig.

780.—Oldham, C. Food of the Grey Squirrel (*Sciurus carolinensis*). *Trans. Herts. nat. Hist. Soc.* **20** pt. **2** 1936 pp. 86-87.

Olschwang, N. A. *vide* Durymanova-Savik.

Olsvhvang, N. A. *vide* Danini.

781.—Osborn, H. F. Proboscidea. A monograph of the discovery, evolution, migration and extinction of the Mastodonts and the Elephants of the World. Vol. I. Moeritherioidea, Deinotherioidea, Mastodontoidea. Pp. xi + 802 12 pls. 680 text-figs. New York (American Mus. Press) 1936 4to.

782.—Osborn, H. F. *Amynodon mongoliensis* from the Upper Eocene of Mongolia. *Amer. Mus. Nov.* no. **859** 1936 pp. 1-5 6 figs.

783.—Oschkaderow, W. I. Beiträge zur Frage der Abflusswege der cerebrospinalen Flüssigkeit des Gehirns und des Rückenmarks. *Anat. Anz. Jena* **82** 1936 pp. 441-472 11 figs.

784.—Osgood, W. H. New and imperfectly known small Mammals from Africa. *Field Mus. Pub. Chicago Zool.* **20** 1936 pp. 217-256.

785.—Ottaviani, G. Contributo al sistema linfatico dei roditori. Parte seconda: *Sciurus italicus*—*Arctomys marmotta*. *Atti Ist. veneto* **94** 1935 pp. 895-991 20 pls.

786.—Ottaviani, G. e Debiasi, E. L'endotelio linfatico e l'epitelio sieroso dell' utero durante la gravidanza e il puerprio. *Monit. zool. ital. Firenze* 47 1936 pp. 219-230 8 figs.

787.—Pairo, M. C. La colección paleontologica del Museo de Sabadell. *Reseñ. cient. Soc. esp. Hist. nat.* 10 1935 pp. 131-133.

788.—Pantazis, G. [Distribution of Rats in Athens.] *Prak. Akad. Athens* 7 1932 pp. 96-100 2 figs. [Greek, with German rés.]

789.—Papalaszewski, G. M. Kunstliche Auslösung von Mutationen bei landwirtschaftlichen Tieren. V. Die Resistenz der Spermien und das Problem des genetischen Effekts der Röntgenstrahlen beim Kaninchen. *J. Biol. Moscou* 4 1935 pp. 929-932. [Russian, with German rés.]

Parkes, A. S. *vide* Rowlands.

Parkes, A. S. *vide* Zuckerman.

790.—Passantino, G. Distribuzione delle valvole parietale in alcune vene degli equini. *Monit. zool. ital. Firenze* 47 1936 pp. 128-138 3 figs.

791.—Passantino, G. Lo sbocco del condotto di Stenone nel *Sus scrofa domestica*. *Monit. zool. ital. Firenze* 47 1936 pp. 174-187.

792.—Patay, R. Deux cas d'intersexualité chez la Chèvre. *Bull. Soc. sci. Bretagne* 11 1935 pp. 108-110 2 figs.

793.—Patte, E. Anomalies dentaires de quelques Ongulés fossiles; remarques sur le cingulum et le tubercule de Caraballi. *Bull. Soc. géol. Fr. (5)* 4 1935 pp. 777-796 1 pl.

794.—Păucă, M. Les Mammifères pléistocènes de la Plaine roumaine. *Bul. Soc. Nat. România București* no. 8 1936 pp. 14-20. [Roumanian, with French rés.]

795.—Pawan, J. L. Rabies in the Vampire Bat of Trinidad, with special reference to the clinical course and the latency of infection. *Ann. Trop. Med. Parasit. L'pool.* 30 1936 pp. 401-422.

796.—Pawan, J. L. The transmission of paralytic rabies in Trinidad by the Vampire Bat (*Desmodus rotundus murinus* Wagner 1840). *Ann. Trop. Med. Parasit. L'pool.* 30 1936 pp. 101-130 1 pl. 2 maps.

797.—Pchakadze, G. M. A new data about the chromosome number in domestic Sheep. *C.R. Acad. Sci. Moscou* 1936 vol. 3 pp. 333-334 1 fig. [In English.]

798.—Peacock, A. D. [and others]. The False Killer Whales stranded in the Tay estuary. *Scot. Nat. Edinb.* 1936 pp. 93-104 photo and 4 figs.

799.—Pearson, J. The Whales and Dolphins of Tasmania. Part I. External characters and habits. *Pap. roy. Soc. Tasm.* 1935 1936 pp. 163-192 15 figs.

800.—Pedersen, A. Der Grönländische Moschusochse, *Ovibos moschatus wardi* Lydekker. *Medd. Grönland* 93 no. 7 1936 pp. 1-82 19 figs.

801.—Pennington, M. S. Visual cells of a nocturnal animal. *Trans. Illinois Acad. Sci.* 23 1936 pp. 259-260 1 fig.

Peter, H. *vide* Hoepke.

802.—Petrén, T. and Sylvén, B. Der Einfluss den Gravidität auf die Kapillarenanzahl in der Herzmuskulatur. *Gegenbaurs morph. Jahrb. Leipzig* 78 1936 pp. 643-648.

803.—Petzsch, H. Beiträge zur Biologie insbesondere Fortpflanzungsbiologie des Hamsters (*Cricetus cricetus* L.). Ergebnisse und Probleme. Kleintier u. Pelztier Leipzig 12 Hft. 1 1936 pp. 1-83 map 9 figs.

804.—Petzsch, H. Bemerkungen zur Melanismus- und Farbspielfrage beim Hamster. *Z. Säugetierk. Berlin* 11 1936 pp. 279-280.

805.—Pfeiffer, C. A. Sexual differences of the hypophysis and their determination by the gonads. *Amer. J. Anat.* 53 1936 pp. 195-225 2 pls. 14 text-figs.

806.—Pfeiffer, C. A. Effect of ovarian transplants upon the development and maintenance of the seminal vesicle and prostate gland of the albino Rat. *Anat. Rec. Philadelphia* 65 1936 pp. 213-237 2 pls.

807.—Phillips, R. W. and Andrews, F. N. The development of the testes and serotum of the Ram, Bull and Boar. *Bull. Massachusetts Agr. Exp. Sta.* no. 331 1936 pp. 1-16 28 figs.

808.—Phillips, W. W. A. Survey of the distribution of Mammals in Ceylon. *Spolia zeylan. Colombo* 19 1936 pp. 315-329.

809.—Phillips, W. W. A. The Mole-rats (*Gunomys*) of Ceylon; with the description of a new race from Jaffna Peninsula. *Spolia zeylan.* Colombo 20 1936 pp. 93-97.

810.—Pickard, J. N. A black-blue Dutch Rabbit. *J. Genet.* Cambridge 33 1936 pp. 337-341.

811.—Pidoplitskha, I. G. Massentod von Feldmäusen während der Schneesturme in Jahre 1931. *Trav. Mus. Zool.* Kiev 15 1935 pp. 40-46 1 fig. [Russian, with German rés.]

812.—Pidoplitskha, I. G. Die Fauna der quaternären Säugetiere der Ukraine. *Ukrainische Akad. Wiss. "Die Quaternärperiode"* Lief. 4 1932 pp. 69-77 map. [German only.]

813.—Pincus, G. The eggs of Mammals. Pp. ix + 160 New York (Macmillan Coy.) 1936. [Notice Nature 139 p. 455. N.V.]

814.—Pincus, G. and Enzmann, E. V. The comparative behavior of Mammalian eggs in vivo and in vitro. II. Activation of the tubal eggs of the Rabbit. *J. exp. Zool.* Philadelphia 73 1936 pp. 195-208 2 figs.

815.—Pinkley, G. The significance of Wadjak Man. A fossil *Homo sapiens* from Java. *Peking nat. Hist. Bull.* 10 1936 pp. 183-200 3 pls.

816.—Pitman, C. R. S. A report on the faunal survey of Northern Rhodesia. *J. Soc. Preserv. Faun. Empire* London 28 1936 pp. 24-30.

817.—Pitt, F. The status of the Polecat and the Pine Marten in Britain. *J. Soc. Preserv. Faun. Empire* London 29 1936 pp. 15-17 photo.

818.—Pittard, E. et J. J. Étude sur le développement craniofacial des Gorilles, des Orangs et des Chimpanzés. Recherches comparatives sur la capacité crânienne, les poids crâniens et mandibulaires et les surfaces tritantes des groupes molaires. Rapports des surfaces tritantes aux développements encéphaliques. *Rev. suisse Zool.* Genève 43 1936 pp. 551-595.

819.—Pittard, J. J. Le poids du crâne et de la mandibule et l'indice cranio-mandibulaire des Anthropoïdes (Gorilles, Orangs, Chimpanzés). *Verh. schweiz. naturf. Ges.* 116 1935 pp. 350-351.

820.—Piveteau, J. Mammifères du Pontien de l'Irak. *Bull. Soc. géol. Fr.* (5) 5 1936 pp. 468-470.

821.—Plaut, A. Investigations on the pars intermedia of the hypophysis in Anthropoid Apes and Man. *J. Anat.* London 70 1936 pp. 242-249.

822.—Pocock, R. I. Mammalia in: *Regan's Natural History* pp. 605-880 many illustr. London (Ward Lock) 1936 8vo.

823.—Pocock, R. I. The Foxes of British India. *J. Bombay nat. Hist. Soc.* 39 1936 pp. 36-57 3 figs.

824.—Pocock, R. I. The external characters of a female Red Colobus Monkey (*Procolobus badius waldroni*). *Proc. zool. Soc.* for 1935 1936 pp. 939-944 2 text-figs.

825.—Pocock, R. I. The Asiatic Wild Dog or Dhole (*Cuon javanicus*). *Proc. zool. Soc.* 1936 pp. 33-55 1 fig.

826.—Pocock, R. I. The Oriental Yellow-throated Marten (*Lamprogale*). *Proc. zool. Soc. London* 1936 pp. 531-553 2 figs.

827.—Pocock, R. I. Preliminary note on a new point in the structure of the feet of the Okapi. *Proc. zool. Soc. London* 1936 pp. 583-589 2 figs.

828.—Pocock, R. I. The Polecats of the genera *Putorius* and *Vormela* in the British Museum. *Proc. zool. Soc. London* 1936 pp. 691-723 2 pls. 2 text-figs.

Pocock, R. I. *vide* Hayman.

829.—Poe, F. E. [and others]. The effect of vitamin B-complex deficiency upon the acquisition and retention of the maze habit in White Rats. *Univ. Colo. Stud.* 23 1936 pp. 147-157.

830.—Pohle, H. Ueber die Verbreitung der Hufelsennasen in Deutschland. *Z. Säugetierk.* Berlin 11 1936 pp. 280-285 map.

Polykarpowa, G. A. *vide* Kolossow.

831.—Ponder, E. On the spherical form of the Mammalian erythrocyte. Part ii. Spherical forms produced by lecithin and photo-dynamic dyes. *J. exp. Biol.* Cambridge 13 1936 pp. 298-308.

832.—Poole, A. J. The number of forms of recent Mammals. *J. Mammal.* Baltimore 17 1936 p. 282.

833.—Poole, E. L. Notes on the young of the Alleghany Wood Rat. *J. Mammal.* Baltimore **17** 1936 pp. 22–26 3 photos.

834.—Poole, E. L. Relative wing ratios of Bats and Birds. *J. Mammal.* Baltimore **17** 1936 pp. 412–413.

835.—Poplewski, R. Biomechanik des Carpus bei Equiden. *Anat. Anz.* Jena **81** 1936 pp. 333–341 7 figs.

836.—Popowa, N. W. Ueber die Vitalfärbung des Erythrozyten der Säugetiere. *J. biol. Moscow* **4** 1936 pp. 1087–1096. [Russian, with German rés.]

837.—Porsch, O. Säugetiere als Blumenausbeuter und die Frage der Säugetierblume III. *Biol. Generalis* Wien **12** 1936 pp. 1–21 1 fig.

838.—Porsild, E. The Reindeer industry and the Canadian Eskimo. *Geogr. J.* London **88** 1936 pp. 1–19.

839.—Portland, Duke of. The Red Deer of Langwell and Braemore, 1880–1934. Pp. ix + 174 5 col. 8 uncol. pls. London (Blackie) **1935** 8vo.

840.—Powers, W. E. Geological setting of the Aurora Mastodon remains. *Trans. Illinois Acad. Sci.* **28** no. 2 1936 pp. 193–194.

841.—Prag, J. J. An abnormal Baboon sacrum found at Lindeques drift. *S. Afr. J. Sci.* Cape Town **32** 1935 pp. 356–359 1 fig.

842.—Prater, S. H. Description of a Blue Bear (*Ursus arctos pruinosis* Blyth) from Tibet. *J. Bombay nat. Hist. Soc.* **38** 1936 pp. 610–611.

843.—Prawochenski, R. T. A case of lethal genes in the Horse. *Nature* London **137** 1936 p. 869.

844.—Preble, N. A. Notes on New Hampshire Chipmunks. *J. Mamm.* Baltimore **17** 1936 pp. 288–289.

845.—Price, D. Normal development of the prostate and seminal vesicles of the Rat with a study of experimental post-natal modifications. *Amer. J. Anat.* **60** 1936 pp. 79–125 1 pl. 7 text-figs.

846.—Primrose, C. The preparation of specimens of Bats. *J. Darjeeling nat. Hist. Soc.* **10** 1936 pp. 146–161 8 figs.

847.—Puisségur, C. Recherches sur le Desman des Pyrénées. *Bull. Soc.*

Hist. nat. Toulouse **67** 1935 pp. 163–225 map 2 pls. 104 text-figs.

848.—Punnett, R. C. The experiments of T. H. Riches concerning the production of monsters in Cattle. *J. Genet. Cambridge* **32** 1936 pp. 65–72.

849.—Pusching, R. Der "Lindwurmschädel" von Klagenfurt. *Carinthia* **125** 1935 pp. 65–85.

850.—Pusching, R. In Karnten erlegte Sumpfbiber pp. 103–105. Ueberfall von Wölfen zu Klagenfurt in Jahre 1556 pp. 105–107. *Carinthia* **125** 1935.

851.—Quenstedt, W. et A. Homi-nidae fossiles in: *Fossilium Catalogus* Part 74 pp. 1–456 's-Gravenhage (Junk) 1936 8vo.

Quin, J. I. *vide* Mönnig.

Quisenberry, J. H. *vide* Roberts.

852.—Racey, K. Notes on some Mammals of the Chilcotin, British Columbia. *Canad. Field Nat.* **50** 1936 pp. 15–21.

853.—Racey, K. and Cowan, J. M. Mammals of the Alta Lake region of south-western British Columbia. *Rep. Prov. Mus. Nat. Hist. Victoria B.C.* **1935** 1936 pp. 15–29 11 photos.

Rafn, A. M. *vide* Schultz.

854.—Rall, G. M. Character of the propagation of certain Rodents as a factor in their number in Nature. *C.R. Acad. Sci. Moscow N.S.* **1936** vol. 4 pp. 93–96 4 figs. [In English.]

855.—Rall, G. M. The character of movements of mouse-like Rodents over small areas. *Zool. J. Moscow* **15** 1936 pp. 472–482 4 figs. [Russian, with English rés.]

856.—Ramaccioni, G. Scheletro di *Elephas planifrons* rinvenuto nel Pliocene della Val d'Era. *Rend. Acc. Lincei* (6) **22** 1935 pp. 534–539 1 fig.

857.—Ranft, W. H. Die feineren anatomischen Merkmale der Zehenknochen, speziell der Klauenbeine, des Rind. *Gegenbaurs morph. Jahrb.* Leipzig **78** 1936 pp. 377–420 12 figs.

858.—Ranquini, J. H. y Cuenca, C. L. de. Investigación de las causas modificadoras del glutathion en sangre. *Trab. Inst. Biol. Anim. Madrid* **3** 1935 pp. 16–39 see also **4** 1936 pp. 202–213.

859.—Ranquini, J. H. y Martin de Frutos, J. Estudio cromosómico del mulo. Trab. Inst. Biol. Anim. Madrid 3 1935 pp. 7-15 4 figs.

860.—Raven, H. C. Comparative anatomy of the sole of the foot. Amer. Mus. Nov. no. 871 1936 pp. 1-9 6 figs.

861.—Raven, H. C. Notes on the anatomy of the viscera of the Giant Panda (*Ailuropoda melanoleuca*). Amer. Mus. Nov. no. 877 1936 pp. 1-23 15 figs.

862.—Raynaud, A. Les hétérochromosomes du Mulot [*Apodemus*]. C.R. Acad. Sci. Paris 202 1936 pp. 1942-1944 8 figs.

863.—Rebrina, Z. A. [Gene of dancing in guinea pigs.] J. Biol. Exp. Moscou 7 5-6 1936 pp. 616-624 7 figs. [Russian only.]

864.—Reck, H. und Kohl-Larsen, L. Erster Ueberblick über die jungdiluvialen Tier- und Menschenfunde Dr. Kohl-Larsen's im nordöstlichen Teil des Njarasa-Grabens (Ostafrika). Geol. Rdsch. Leipzig 27 1936 pp. 421-441 13 figs.

865.—Reed, S. C. Harelip in the House Mouse. Genetics Menasha 21 1936 pp. 339-374.

Reed, S. C. *vide* Castle.

866.—Regnier, R. La lutte contre les Rats et la deuxième conférence internationale (Paris 7-12 Oct. 1931). Bull. Soc. Sci. nat. Rouen (7) 68-69 1934 pp. 7-13.

867.—Regnier, R. Capture d'un Ondatra en Seine-Inférieure. Bull. Soc. Sci. nat. Rouen (7) 68-69 1934 pp. 97-99.

868.—Reider, N. The Primate colon. Proc. zool. Soc. London 1936 pp. 433-453 10 pls.

Reineke, E. P. *vide* Turner.

Renaud, P. *vide* Matthey.

869.—Rensch, B. Studien über klimatische Parallelität der Merkmalsausprägung bei Vögel und Säugern. Arch. Naturgesch. Leipzig 5 1936 pp. 317-363.

870.—Reynolds, T. E. Two new Insectivores from the Lower Paleocene of New Mexico. J. Paleont. Menasha 10 1936 pp. 202-209 1 pl.

871.—Riabinin, A. Note sur des castors fossiles des dépôts post-tertiaires de l'Oural, du Timan et de la région de la Volga moyenne. Mém. Soc. russe Mineral 59 pt. 2 1930 pp. 187-195 1 pl. 1 text-fig. [Russian, with German res.]

872.—Richard, J. Documents sur les Cétacés et Pinnipèdes provenant des Campagnes du Prince Albert 1^{er} de Monaco. Res. Camp. sci. Monaco no. 94 1936 pp. 1-71 8 pls.

873.—Richard, M. Remarques sur le genre *Pseudaelurus* Gervais. Bull. Soc. géol. Fr. (5) 5 1936 pp. 479-482 4 figs.

874.—Riese, W. Ueber die Entwicklung des Walhirsns. Proc. K. Akad. Wet. Amsterdam 39 1936 pp. 97-109 9 figs.

875.—Riggs, E. S. Occurrence of the extinct Moose *Cervalces* in Indiana and in Illinois. Amer. Midl. Nat. Notre Dame 17 1936 p. 664.

876.—Riggs, E. S. Skeleton of huge *Megatherium*, greatest of Ground Sloths, exhibited. Field Museum News 6 no. 8 1935 p. 1 1 fig.

877.—Robb, R. C. A study of mutations in evolution. III. The evolution of the Equine foot. J. Genet. Cambridge 33 1936 pp. 267-273 2 figs.

878.—Roberts, A. Report upon a survey of the higher Vertebrates of north-eastern Rhodesia. Ann. Transv. Mus. 18 1936 pp. 163-177 and 222-251 12 pls. map.

879.—Roberts, A. New South African Mammals [*Chlorotalpa*, *Myonax*, *Dasymys*]. Ann. Transv. Mus. 18 1936 pp. 253-254.

880.—Roberts, A. Mammals concerned in the bubonic plague and rabies problems in South Africa. S. Afr. J. Sci. Cape Town 32 1935 pp. 414-460.

881.—Roberts, E. and Quisenberry, J. H. Linkage studies in the Rat. Amer. Nat. 70 1936 pp. 395-399 2 figs.

Robertson, E. M. *vide* Hain.

882.—Robinson, A. E. The Camel in antiquity. Sudan Notes 19 1936 pp. 47-69.

883.—Robson, J. M. The action of oestrin on the Bitch. Proc. roy. Soc. London 120B 1936 pp. 1-14 3 pls.

884.—Rode, K. Untersuchungen über das Gebiss der Bären. Monog. Geol. Palaeont. Berlin (2) Hft. 7 1935 pp. 1-162 8 pls. 25 text-figs.

885.—Rode, P. Mammalia en: Mission Scientifique de l'Omo. Paris 2 1395 pp. 167-183 4 pls. 8 text-figs.

886.—Rode, P. Sur quelques caractères différentiels de la tête osseuse des Cercopithèques et des Cercocèbes. Mammalia 1 1936 pp. 59-64 1 pl. 1 text-fig.

887.—Rodger, Sir A. Notes on the fauna of Burma. Game preservation in Burma. J. Soc. Preserv. Faun. Empire London 29 1936 pp. 17-33.

Rodionov, N. M. *vide* Kalabuchov.

888.—Rodionov, Z. Effect of surrounding conditions on the burrows of Rodents. Bull. Soc. Nat. Moscou Sect. Biol. 45 1936 pp. 256-262. [Russian, with English rés.]

889.—Rodrigues dos Santos, J. Um caso de macrodontismo num *Oryctolagus cuniculus algeris* (Loche). An. Fac. Sciênc. Porto 16 1930 pp. 80-84 2 photos. 1 text-fig.

890.—Rogoziński, F. et Główczyński, Z. L'irradiation et la croissance. Bull. int. Acad. Cracovie B II 1935 pp. 123-136 1 pl.

891.—Röhlich, K. Beitrag zur Kenntnis der Kapillarröhren der Milz. Verh. anat. Ges. Jena 43 1936 pp. 240-248 8 figs.

892.—Rokizky, P. T. [and others]. Künstliche Auslösung von Mutationen bei landwirtschaftlichen Tieren. Mitt. IV. Ueber den Einfluss von Röntgenstrahlen verschiedener Härte auf die Befruchtungsfähigkeit der Spermien und die erste Generation bei Kaninchen. J. Biol. Moscou 4 1935 pp. 653-658. [Russian, with German rés.]

893.—Rolshoven, E. Ueber Strömungsfiguren in den Hodenkanälchen einiger Säuger. Verh. anat. Ges. Jena 43 1936 pp. 219-228 5 figs.

894.—Rolshoven, E. Ursachen und Bedeutung der intratubulären Sekretströmung in Säugetierhoden. Z. Anat. Entwges. 105 1936 pp. 374-408 17 figs.

895.—Roman, F. Sur un gisement de Mammifères du Pliocène ancien à

Melias (comm. des Assions, Ardèche.). Bull. Soc. géol. Fr. (5) 4 1935 pp. 603-608.

896.—Roman, F. et Boucher, J. Les mammifères stampiens du Bassin de Roanne (Loire). I. *Anthracotherium bumbachense*. Trav. Lab. Géol. Lyon fasc. 29 mém. 24 1936 pp. 1-41 4 pls. 13 text-figs.

897.—Romanova, V. Spread of Ground Squirrels in the steppes of Ciscaucasus. Summary Sci. Res. Work Inst. Plant Protect. Leningrad for 1935 1936 pp. 43-45 map.

898.—Rondinini, R. U. Modalità di accrescimento delle cellule nervose dei gangli spinali e nei mammiferi, prima e' dopo la nascita (*Mus musculus*). Arch. ital. Anat. 36 1936 pp. 145-172 4 figs.

899.—Röpke, W. Ein Bisonschädel aus dem II. Interglazial von Unterrissdorf bei Eisleben. Z. naturw. Halle 89 1931 pp. 94-103 figs.

Rosenthal, J. S. *vide* Lebedinskaja.

900.—Rosevaar, D. R. The Hyaenas of Nigeria pp. 10-11 2 photos. The Foxes and Jackals of Nigeria pp. 57-59 3 photos. The Weasels and Otters of Nigeria pp. 111-113, 3 photos. Nigerian Field 5 1936.

901.—Rossem, A. J. van. The type locality of *Sciurus apache* Allen. J. Mammal. Baltimore 17 1936 pp. 416-417.

902.—Rothschild, Lord and Dollman, G. The genus *Dendrolagus*. Trans. Zool. Soc. 21 1936 pp. 477-548 23 pls.

Rowlands, I. W. *vide* Brambell.

Rowlands, I. W. *vide* Deanesly.

903.—Rowlands, I. W. and Parkes, A. S. The reproductive processes of certain Mammals.—VIII. Reproduction in Foxes (*Vulpes* spp.). Proc. zool. Soc. London for 1935 1936 pp. 823-841 6 pls. 2 text-figs.

Rowntree, L. G. *vide* Einhorn.

904.—Rumjahcev, B. F. Origin of the Domestic Horse. Bull. Acad. Sci. U.R.S.S. (Ser. Biol.) 1936 pp. 415-448 21 figs. [Russian, with English rés.]

905.—Rümmler, H. Die Formen der papuanischen Muridengattung *Melomys*. Z. Säugetierk. 11 1936 pp. 247-257.

906.—Rusconi, C. Anomalías en las cornamentas del Huemul. [*Hippocamelus bisulcus*.] An. Soc. cient. argent. Buenos Aires 122 1936 pp. 288–296 8 figs.

907.—Rusconi, C. La supuesta afinidad de *Argyrolagus* con los *Typotheria*, pp. 173–182 12 figs. Distribución de los vertebrados fósiles del piso ensenadense pp. 183–215. Bol. Acad. Cienc. Córdoba 33 1936.

908.—Rusconi, C. Restos de mamíferos terciarios de San Luis. Bol. paleont. B Aires 6 1936 pp. 1–4 2 figs.

909.—Rusconi, C. El Carpincho, mas grande del mundo. Rev. geogr. americana B. Aires 1936 pp. 1–4 3 figs.

910.—Russell, E. S. Valence and attention in animal behaviour. Acta Biotheor. Leiden 1 1935 pp. 91–99.

911.—Russell, E. S. Playing with a dog. Quart. Rev. Biol. Baltimore 11 1936 pp. 1–15.

912.—Russell, L. S. New and interesting mammalian fossils from western Canada. Trans. roy. Soc. Can. (3) 30 sect. iv 1936 pp. 75–80 1 pl.

913.—Ruth, E. B. Metamorphosis of the pubic symphysis. II. The Guinea Pig. Anat. Rec. Philad. 67 1936 pp. 69–79 2 pls.

914.—Rzásnicki, A. Versuch einer Rasseneinteilung der Gorillas. Ann. Mus. zool. polon. 11 1936 pp. 295–326 2 maps 5 figs. [German, with Polish rés.]

915.—Rzásnicki, A. Zur Kenntnis und zur Entdeckungsgeschichte des Grévy-Zebras. Zool. Garten Leipzig 8 1936 pp. 283–291 map 6 figs.

916.—St. Leger, J. Mammals of Angola, including a new species of *Claviglis* and a new race of *Zelotomys*, Ann. Mag. N.H. (10) 17 1936 pp. 464–472.

917.—St. Leger, J. Dr. Karl Jordan's expedition to South-West Africa and Angola: Mammals. Novit. zool. Tring 40 1936 pp. 75–81.

918.—St. Leger, J. A key to the species and subspecies of the genus *Cephalophus*. Proc. zool. Soc. London 1936 pp. 209–228.

919.—Saito, M. Studies on Mongolian Sheep Wool. I. Rep. Inst. sci. Res.

Manchoukuo 1 1936 pp. 29–62 and 13–17 many figs. [Japanese, with English rés.]

920.—Sälzle, K. Untersuchungen über das Farbsehvermögen von Opossum, Waldmäusen, Rötelmäusen und Eichhörnchen. Z. Säugetierk. Berlin 11 1936 pp. 106–148 10 pls. 28 text-figs.

921.—Sanabria, T. Recherches sur la différenciation du tissu nodal et connecteur du coeur des Mammifères. Arch. Biol. Liège 47 1936 pp. 1–70 3 pls. 10 text-figs.

922.—Sanborn, C. C. Records and measurements of Neotropical Bats. Field Mus. Pub. Chicago Zool. 20 1936 pp. 93–106.

923.—Sanborn, C. C. Descriptions and records of African Bats. Field Mus. Pub. Chicago Zool. 20 1936 pp. 107–114.

924.—Sawaya, P. Alguns aspectos do biologia dos "Saguís" *Hapale jacchus*. Bol. biol. S. Paulo 2 1936 pp. 141–149 3 figs. [English rés.]

925.—Sawyer, E. L. The cytology of the hypophysis cerebri of the Bat. J. Morph. Philadelphia 60 1936 pp. 127–157 3 pl. 2 text-figs.

926.—Saxton, J. A. [and others]. Autogenous transplantations of pigmented and unpigmented ear skin in Guinea Pigs. Biol. Bull. Woods Hole 71 1936 pp. 453–461.

927.—Sclerkunow, S. Beiträge zur Frage des Baues der Blutgefäße unter normalen und experimentellen Bedingungen. V. Ueber die Intima der Aortenwand der Katze. Z. Anat. Entw.ges. 106 1936 pp. 20–39 4 figs.

928.—Scevola, D. Ulteriori contributi alla conoscenza dell'innervazione della dura madre. II. Anat. Anz. Jena 83 1936 pp. 205–209 3 figs.

929.—Schaefer, H. "In dem Karpaten gibt es keine Murmeltiere mehr" —eine Entgegnung. Zool. Anz. Leipzig 113 1936 p. 334.

930.—Schäfer, E. Ueber das osttibetische Argalischaf (*Ovis ammon* subsp. ?). Zool. Garten Leipzig 8 1936 pp. 253–258 5 photos.

931.—Scharf, D. W. A Miocene Mammalian fauna from Sucker Creek, south-eastern Oregon. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) no. 453 1935 pp. 97–118 2 pls. 11 text-figs.

932.—Scharrer, E. Das Zentralnervensystem: Säugetiere: in Bronns Klassen u. Ordnungen des Tierreichs Bd. 6 Abt. 5 Buch 3 Teil 1 pp. 1–169 73 figs. Leipzig 1936 8vo.

933.—Schaub, S. Die Hamster vom Roten Berg bei Saalfeld (Thüringen). Verh. schweiz. naturf. Ges. 116 1935 pp. 338–339.

934.—Schaub, S. Ein neuer Muride von Timor. Verh. schweiz. naturf. Ges. 117 1936 pp. 302–303.

935.—Schaub, S. Ueber einen neuen Fund von *Megatherium* (? *Paramegatherium*) *rusconii* Schaub aus Venezuela. Verh. schweiz. naturf. Ges. 117 1936 p. 303.

936.—Schaub, S. Ueber das Genus *Megalotis* und seinen Nachweis in Ostasien. Verh. schweiz. naturf. Ges. 117 1936 pp. 304–305.

937.—Scheffer, T. H. Aestivation and hibernation period of the smaller Ground Squirrels in the Pasco-Kennecook County, eastern Washington. Murrelet, Seattle 17 1936 pp. 17–18.

938.—Scheffer, T. H. and Garlough, F. E. Rodents and Moles as pests in bulb plantings. Circ. U.S. Dept. Agr. Washington no. 381 1936 pp. 1–16 9 figs.

939.—Schertz, E. Zur Unterscheidung von *Bison priscus* Boj. und *Bos primigenius* Boj. an Metapodien und Astragalus, nebst Bemerkungen über einige diluviale Fundstellen. Senckenbergiana Frankfurt 18 1936 pp. 37–71 16 figs.

940.—Scheunert, A. und Schmidt-Hoensdorf, F. Zur Kenntnis der Avitaminosen junger Raubtiere. Zool. Garten Leipzig 8 1936 pp. 113–116.

941.—Schimert, J. Der Nervus intermedius und das Ganglion geniculi nervi facialis. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 35–44 2 figs.

942.—Schirmeissen, K. Tierreste aus Kulturschichten des Nikolsberger Gebeit. Verh. naturf. Ver. Brünn 67 1936 pp. 134–137.

943.—Schmid, B. Zur Psychologie der Canidae. Wolf-Hund-Fuchs. Kleintier u. Pelztier. Leipzig 12 Hft. 6 1936 pp. 1–77 26 figs.

944.—Schmidt, E. C. H. A comparative study of the spinal musculature of the Domestic Cat and the Rhesus Monkey. Proc. Penn. Acad. Sci. 9 1935 pp. 63–65.

945.—Schmidt, I. G. The excretion of theelin in the urine of Guinea Pigs with irradiated ovaries. Anat. Rec. Philadelphia 64 1936 pp. 255–266.

Schmidt-Hoensdorf, F. *vide* Scheunert.

946.—Schneider, K. M. Zur Fortpflanzung, Aufzucht und Jugendentwicklung des Schabrackentapirs. Zool. Garten Leipzig 8 1936 pp. 83–96 13 figs. also I. Krumbiegel pp. 96–99 6 figs.

Schneider, K. M. *vide* Cohrs.

Schneirla, T. C. *vide* Maier.

947.—Schoonmaker, W. J. Size and weight of Adirondack Deer. J. Mammal Baltimore 17 1936 pp. 67–68.

948.—Schottler, W. Neue Anthrakotherienfunde aus dem Mainzer Becken. Notizbl. Ver. Erdk. Darmstadt (5) 16 1935 pp. 36–39.

949.—Schour, I. Changes in the incisor of the Thirteen-lined Ground Squirrel (*Citellus tridecemlineatus*) following bilateral gonadectomy. Anat. Rec. Philadelphia 65 1936 pp. 177–197 2 pls. 1 text-fig.

950.—Schouteden, H. L'Okapi sur la rive gauche du Congo. Le Chimpanzé de la rive gauche du Fleuve et ct. Rev. Zool. Bot. afr. Suppl. Bull. Cercle 13 1936 pp. (15)–(17).

951.—Schreiber, H. Die Extrembewegungen der Schimpansenhand. 2. Mitt. zu: zur Morphologie der Primatenhand. Gegenbaurs morph. Jahrb. Leipzig 77 1936 pp. 22–60 11 figs.

952.—Schreuder, A. *Hypolagus* from the Tegelen Clay; with a note on recent *Nesolagus*. Arch. neerl. Zool. 2 1936 pp. 225–239 1 pl. 7 text-figs.

953.—Schreuder, A. Palaentologische bedenkingen tegen de ijstijdstheorie. Vakbl. Biol. Helder 17 1936 pp. 81–91.

954.—Schreuder, A. Fossil Voles and a *Lemmus* out of well-borings in the Netherlands. Verh. Acad. Wet. Amsterdam (2) 35 no. 3 1936 pp 1-24 11 figs.

Schröder, J. *vide* Broili.

955.—Schröder, V. Die physikalisch chemische Analyse der Spermienphysiologie. VI. Mitt. Ueber die Natur der elektrischen Ladung der Kaninchenspermien. Biol. Zhurnal Moscou 5 1936 pp. 690-722 5 figs. [Russian, with German rés.]

Schtamm, M. G. *vide* Averin.

956.—Schultz, A. H. Characters common to higher Primates and characters specific for Man. Quart. Rev. Biol. Baltimore 11 1936 pp. 259-283 425-455 21 figs.

957.—Schulz, L. P. and Rafn, A. M. Stomach contents of Fur Seals taken off the coast of Washington. J. Mammal. Baltimore 17 1936 pp. 13-15.

958.—Schulze, P. Sind Säugetiere die ursprünglichen Zeckenwirte? Zool. Anz. Leipzig 115 1936 pp. 19-24.

959.—Schumacher, S. Die sogenannten Ballen an den Pfoten der Hasen. Anat. Anz. Jena 82 1936 pp. 102-112 6 figs.

960.—Schumacher, S. Das Stirnorgan des Rehbockes (*Capreolus capreolus capreolus* L.) ein bisher unbekanntes Duftorgan. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 215-230 6 figs.

961.—Schütze, H. Vergleichende Untersuchungen an Marder und Iltis. Zool. Anz. Leipzig 116 1936 pp. 113-129.

Schwabe, E. L. *vide* Emery.

962.—Schwangart, F. Der Manul, *Otocolobus manul* (Pallas) im System der Feliden. Zbl. Kleintier u. Pelztierk. 12 1936 pp. 19-67 21 figs.

963.—Schwarz, E. Note on *Cercopithecus picturatus* Santos. Bull. Soc. portug. Sci. nat. 12 no. 5 1935 pp. 27-28.

964.—Schwarz, E. The Sterckfontein Ape. Nature London 138 1936 p. 969.

965.—Schwarz, E. A propos du *Lemur macaco* Linnaeus. Mammalia 1 1936 pp. 24-25.

966.—Schwarz, E. The colour of the face and skin in Upper Guinea Chimpanzee. Proc. zool. Soc. London 1936 p. 333.

967.—Schwarz, H. G. The meningeal relations of the hypophysis cerebri. Anat. Rec. Philad. 67 1936 pp. 35-51 3 pls. 2 text-figs.

968.—Schwidetzky, G. Rasse und Sprache 3. Pogonisch, Urdinarisch, Indo-germanisch. Schr. Deutsch. Ges. Tier- u. Ursprachrfors. Leipzig no. 7 1936 pp. 1-32 14 illustr.

969.—Scott, W. B. and Jepsen, G. L. The Mammalian fauna of the White river Oligocene.—Part i. Insectivora and Carnivora. Trans. Amer. phil. Soc. Philad. 23 1936 pp. 1-153 22 pls. 7 text-figs.

970.—Seifert, B. Bericht über die Obduktion eines Seelöwen (*Eumetopias californianus* Less.). Zool. Garten Leipzig 8 1936 p. 309 1 fig.

971.—Selevin, V. A. Faunistical data. Betpak-dala, Turkestan. Acta Univ. Asiae Med. Tashkent (8a Zool.) no. 21 1935 pp. 3-23 2 figs. [Russian with English rés.]

972.—Selous, E. M. and Banks, E. The Clouded Leopard in Sarawak. Sarawak Mus. J. 4 1935 pp. 263-266 2 photos.

973.—Sera, G. L. Il significato dell'anello timpanico libero nella bolla acustica di alcuni Limuri e di Tupaiidae. Riv. ital. Palaeont. Pavia 42 1936 58-68 4 figs.

974.—Serpa-Pinto, R. de. Sobre *Elephas meridionalis* cfr. *antiquus* do Casal do Torquato (Alenquer). An. Fac. Ciênc. Porto 17 1932 pp. 104-106 1 fig.

975.—Seth-Smith, D. The Okapi. J. Soc. Preserv. Faun. Empire London 27 1936 pp. 14-15 photo.

976.—Sgonina, K. Ueber das Farben- und Helligkeitssehen des Meerschweinchens. Z. wiss. Zool. Leipzig 148 1936 pp. 350-363 2 figs.

977.—Sgonina, K. Ueber das Lernen von Meerschweinchen (*Cavia cobaya* und *Cavia apera*) und Igeln (*Erinaceus europaeus*). Zool. Anz. Leipzig 114 1936 pp. 168-173 1 fig.

- 978.—Shadle, A. R. The attrition and extrusive growth of the four major incisor teeth of domestic Rabbits. J. Mammal. Baltimore 17 1936 pp. 15-21.
- 979.—Shadle, A. R. [and others]. The extrusive growth and attrition of the incisors in albino and hybrid *Rattus norvegicus* (Erxleben). Anat. Rec. Philadelphia 64 1936 pp. 321-325.
- 980.—Shadowsky, A. E. Sur le problème des plantes fourragères consommées par les animaux sauvages. Bull. Soc. Nat. Moscou Sect. Biol. 44 1935 pp. 407-413. [Russian, with French rés.]
- 981.—Shaw, T. H. Dermatoglyphics in Yellow-throated Martin, *Charonia flavigula borealis* (Radde). Bull. Fan Memorial Inst. Biol. Peiping 6 1935 pp. 145-148 4 figs.
- 982.—Shaw, W. T. Moisture and its relation to the cone-storing habit of the Western Pine Squirrel. J. Mammal. Baltimore 17 1936 pp. 337-349 7 figs.
- 983.—Shea, S. Observations on the structure of the pulmonary alveolar wall in the adult Rat, Guinea Pig and Rabbit. Proc. R. Irish Acad. 43B 1936 pp. 73-81 1 pl.
- 984.—Shedenov, W. N. Das arterielle system der Ohrspeicheldrüse beim Rinde. Norm und Variabilität. Anat. Anz. Jena 81 1936 pp. 256-265 2 figs.
- 985.—Sheldon, C. The Mammals of Lake Kedgeinakooe and vicinity, Nova Scotia. J. Mammal. Baltimore 17 1936 pp. 207-215 map.
- 986.—Shikama, T. Note on *Parastegodon akashiensis* Takai from the Akasi District. Proc. Imp. Acad. Tokyo 12 1936 pp. 22-24 4 figs.
- 987.—Shikama, T. *Depéretia*, a new subgenus of *Cervus*, with a note on a new species from the Pleistocene of Japan. Proc. Imp. Acad. Tokyo 12 1936 pp. 251-254 2 figs.
- 988.—Shikama, T. The first discovery of *Pentalophodon* from Japan. Proc. Imp. Acad. Tokyo 12 1936 pp. 292-295 4 figs.
- 989.—Shitkov, B. Zur Terminologie der Katzenarten. Bull. Soc. Nat. Moscou Sect. Biol. 45 1936 pp. 225-232. [Russian, with German rés.]
- 990.—Shitkov, B. M. Ueber den Elch in U.S.S.R. Z. Säugetierk. Berlin 11 1936 pp. 16-19 1 fig.
- 991.—Shortridge, G. C. Field notes (hitherto unpublished) on Western Australian Mammals south of the Tropic of Capricorn (exclusive of Marsupialia and Monotremata, and records of specimens collected during the Balston expeditions (November 1904-June 1907)). Proc. zool. Soc. 1936 pp. 743-749 1 fig.
- Shumacker, H. B. vide Wintrobe.
- 992.—Sickenberg, O. Ueber *Samo-tragus crassicornis* nov. gen. et spec. aus dem Unterpliozän von Samos. Palaeont. Z. Berlin 18 1936 pp. 90-94 1 pl. 1 text-fig.
- 993.—Sieber, R. Ergebnisse paläontologischer Untersuchungen an west-europäischen Anthracotherien. Anz. Akad. Wiss. Wien 72 1935 pp. 215-218.
- 994.—Silvestroni, E. Il comportamento delle grandezze nucleari del glomo corotico in seguito a surrenalectomia bilaterale. Monit. zool. ital. Firenze 47 1936 pp. 1-9 2 figs.
- 995.—Silvestroni, E. Effetti della surrenalectomia mono- o bilaterale sulle grandezze nucleari di alcuni organi endocrini. Rend. Acc. Lincei (6) 22 1935 pp. 540-544.
- 996.—Simionescu, I. Les Vertébrés pliocènes de Berești. Bul. Soc. Române Geol. 1 1932 pp. 215-228 18 figs.
- 997.—Simionescu, I. Sur quelques cerveaux fossiles du Neogène de Roumanie. Bul. Soc. Române Géol. 2 1935 pp. 163-173 8 figs.
- 998.—Simpson, G. G. *Carsiioptychus* new name for *Plagioptychus* Matthew nec Matheron. Amer. J. Sci. New Haven (5) 32 1936 p. 234.
- 999.—Simpson, G. G. Structure of a primitive Notoungulate cranium. Amer. Mus. Nov. 824 1936 pp. 1-31 11 figs.
- 1000.—Simpson, G. G. A specimen of the Upper Cretaceous Multituberculata *Meniscoessus*. Amer. Mus. Nov. no. 825 1936 pp. 1-4 2 figs.
- 1001.—Simpson, G. G. Skeletal remains and restoration of the Eocene Entelonychia from Patagonia. Amer. Mus. Nov. no. 826 1936 pp. 1-12 2 figs.

1002.—Simpson, G. G. Census of Paleocene Mammals. Amer. Mus. Nov. no. 848 1936 pp. 1-15.

1003.—Simpson, G. G. Addition to the Puerco fauna Lower Paleocene. Amer. Mus. Nov. no. 849 1936 pp. 1-11 6 figs.

1004.—Simpson, G. G. A new fauna from the Fort Union of Montana. Amer. Mus. Nov. no. 873 1936 pp. 1-27 16 figs.

1005.—Simpson, G. G. Studies in the earliest Mammalian dentitions. Dental Cosmos 1936 pp. 1-24 (sep. pag.) 10 figs.

1006.—Simpson, G. G. Data on the relationships of local and continental Mammalian faunas. J. Paleont. Menasha 10 1936 pp. 410-414 2 figs.

1007.—Simpson, G. G. Misconstructing a Mastodon. Nat. Hist. New York 37 1936 pp. 170-172 figs.

1008.—Skedenow, W. und Bikow, S. Das arterielle System des Kopfes beim braunen Bären (*Ursus arctos*). Anat. Anz. Jena 82 1936 pp. 36-40.

1009.—Skinner, M. P. Browsing of the Olympic Peninsula Elk in early winter. J. Mammal. Baltimore 17 1936 pp. 253-256.

1010.—Skinner, M. P. The Roosevelt Elk of Olympic Peninsula. Murrelet Seattle 17 1936 pp. 31-35 photo.

1011.—Slipper, E. J. Die Cetaceen. Vergleichend-anatomisch und systematisch. Ein Beitrag zur vergleichenden Anatomie des Blutgefäß; Nerven- und Muskelsystems, sowie des Rumpfskelettes der Säugetiere, mit Studien über die theorie des Aussterbens und der Foetalisation. Capita zool. The Hague 7 1936 pt. 1 pp. 1-304 139 figs. pt. 2 pp. 305-590 117 figs.

Smith, A. *vide* Harman.

1012.—Smith, C. F. Notes on the habits of the Long-tailed Harvest Mouse. J. Mammal. Baltimore 17 1936 pp. 274-278.

Smith, M. G. *vide* Loeb.

1013.—Smith, W. E. Mastodon and other finds at Aurora. Trans. Illinois Acad. Sci. 28 2 1936 pp. 195-196.

1014.—Sody, H. J. V. A new Flying Squirrel from Sumatra. Natuurk. Tijdschr. Ned.-Ind. 96 1936 pp. 146-147.

1015.—Sody, H. J. V. A new race of *Callosciurus notatus* from north Sumatra. Natuurk. Tijdschr. Ned.-Ind. 96 1936 pp. 217-218.

1016.—Soergel, W. *Hyaena brevirostris* Aymard und *Hyaena ex aff. crocotta* Erxl. Aus den kiesen von Süssenborn. Z. deuts. geol. Ges. Berlin 88 1936 pp. 525-539 4 pls.

1017.—Sousa, O. M. de. A proposito do "os bregmaticum" nos Brady-podidae. Bol. biol. S. Paulo 2 1936 pp. 135-140 2 figs. [French rés.]

1018.—Sowerby, A. de C. The Chinese Lion. China J. Shanghai 24 1936 pp. 63-68 photos.

1019.—Sowerby, A. de C. Animals in Chinese art. China J. Shanghai 24 1936 pp. 188-201 many photos.

1020.—Sowerby, A. de C. The Dugong in Chinese waters. China J. Shanghai 25 1936 pp. 41-42.

1021.—Sowerby, A. de C. Ivory producing animals. China J. Shanghai 25 1936 pp. 160-169 many illustr.

1022.—Sowerby, A. de C. Big Game Animals of the Chinese-Tibetan borderlands. China J. Shanghai 25 1936 pp. 285-296 many photos.

1023.—Sowerby, A. de C. A baby Panda comes to town. China J. Shanghai 25 1936 pp. 335-339 photos.

Stanley, G. M. *vide* Case.

1024.—Starks, E. C. and Cutter, R. D. The dissection of the Rat. Stanford Lab. Guides Biol. Ser. (Stanford Univ. Press) [no. 5] 1931 pp. 1-45.

Startseva, F. V. *vide* Durymanova-Savik.

1025.—Stchekounoff, I. L'intima des petites artères et des veines et le mésenchyme vasculaire. Arch. Anat. micros. Paris 32 1936 pp. 139-194 24 figs.

1026.—Stead, D. G. The Rabbit in Australia; History, life story, habits, effect upon Australian primary production and best means of extermination. Pp. 1-108 Watson's Bay, N.S.W. (author) 1935 [see Nature 137 p. 806].

1027.—Stead, E. F. The Maori Rat. Trans. Proc. Roy. Soc. N.Z. 66 1936 pp. 178-181.

- 1028.—Stead, E. F. Notes on the Short-tailed Bat (*Mystacops tuberculatus*). Trans. Proc. Roy. Soc. N.Z. 77 1936 pp. 188-191.
- 1029.—Stefanelli, A. La innervazione somatica ed autonoma dei pelli a corpo cavernoso. Riv. Biol. Firenze 21 1936 pp. 401-407 1 pl.
- 1030.—Stehlik, A. Die fossilen Säugetiere von Strânská skála bei Brno. Acta Soc. Sci. nat. moraviae 9 no. 6 1934 pp. 1-94 6 pls. 6 text-figs. [Czech, with German rés.]
- 1031.—Stehlin, H. G. Eine Gazelle aus dem schweizerischen Vindobonien. Verh. schweiz. naturf. Ges. 117 1936 pp. 301-302.
- 1032.—Stehlin, H. G. et Graziosi, P. Ricerche sugli Asinidi fossili d'Europa. Abh. schweiz. paläont. Ges. 56 Mem. 3 1935 pp. 1-73 10 pls. 14 text-figs.
- 1033.—Stein, M. R. The myth of the Lemur's comb. Amer. Nat. 70 1936 pp. 19-28 7 figs.
- 1034.—Steven, G. A. Seals (*Hali-choerus grypus*) of Cornwall coasts. J. Mar. Biol. Ass. Plymouth 20 1936 pp. 493-506 6 figs.
- 1035.—Stewart, T. D. The musculature of the Anthropoids. Amer. J. phys. Anthrop. Philad. 21 1936 pp. 141-204 9 figs.
- 1036.—Stirton, R. A. Succession of North American continental Pliocene Mammalian faunas. Amer. J. Sci. New Haven (5) 32 1936 pp. 161-206.
- 1037.—Stirton, R. A. A new Beaver from the Pliocene of Arizona with notes on the species of *Dipoides*. J. Mammal. Baltimore 17 1936 pp. 279-281 2 figs.
- 1038.—Stirton, R. A. A new Ruminant from the Hemphill Middle Pliocene of Texas. J. Paleont. Menasha 10 1936 pp. 644-647 1 fig.
- 1039.—Stock, C. Sespe Eocene Didelphids. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 122-124 2 figs.
- 1040.—Stock, C. *Hesperomeryx* a new Artiodactyl from the Sespe Eocene, California. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 177-182 1 fig.
- 1041.—Stock, C. Perissodactyla of the Sespe Eocene, California. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 260-265 4 figs.
- 1042.—Stock, C. Titanotheres from the Titus Canyon Formation, California. Proc. Nat. Acad. Sci. Washington 22 1936 pp. 656-661 2 pls.
- 1043.—Stock, C. Artiodactyla from the Sespe of the Las Posas Hills, California. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) no. 453 1935 pp. 119-126 1 pl.
- 1044.—Stock, C. and Bode, F. D. The occurrence of flints and extinct animals in pluvial deposits near Clovis, New Mexico. Part iii. Geology and Vertebrate Paleontology of the late Quaternary near Clovis, New Mexico. Proc. Acad. nat. Sci. Philad. 88 1936 pp. 219-241 6 pls. 6 text-figs.
- 1045.—Storlazzi, G. G. Osservazioni su uno scheletro anormale di balenottera dell' Istituto di Zoologica e Anatomia comparata di Pisa. Mem. Soc. tosc. Sci. nat. 45 1935 pp. 192-224 1 pl. 12 text-figs.
- 1046.—Storlazzi, G. G. Osservazioni su un cranio fossile di *Cervus* trovato nella Val d'Era. Mem. Soc. tosc. Sci. nat. 45 1935 pp. 225-234 1 pl. 6 text-figs.
- 1047.—Stovall, J. W. A recent Grizzly Bear skull found fossil in Oklahoma. Amer. Midl. Nat. Notre Dame 17 1936 pp. 781-783 2 figs.
- 1048.—Stovall, J. W. and Strain, W. S. A hitherto undescribed coprolite from the White River Badlands of South Dakota. J. Mammal. Baltimore 17 1936 pp. 27-28.
- Strain, W. S. *vide* Stovall.
- 1049.—Strand, E. Miscellanea nomenclatorica zoologica et palaeontologica. IX. Folia zool. hydrobiol. Riga 9 1936 pp. 167-170.
- 1050.—Straus, W. L. Electrical excitation of the cerebrum of the Kangaroo Rat. J. Mammal. Baltimore 17 1936 pp. 374-382 2 figs.
- 1051.—Straus, W. L. The thoracic and abdominal viscera of Primates, with special reference to the Orang-Utan. Proc. Amer. Phil. Soc. Philad. 76 1936 pp. 1-85 16 figs.

1052.—Stroganov, S. U. Die taxonomische Stellung von *Rattus rattus* L. und seine Verbreitung in der Ud.S.S.R. Abs. Works Zool. Inst. Moscow State Univ. 3 1936 pp. 108–110. [Russian only.]

1053.—Stroganov, S. U. Neue Angaben zur Systematik mancher Nagetiere [*Microtus*, *Pteromys*]. Abs. Works zool. Inst. Moscow State Univ. 3 1936 pp. 110–114. [Russian, with German rés.]

1054.—Stroganov, S. U. Die Säugerfauna der Waldai-Hochebene. Zool. J. Moscow 15 1936 pp. 128–142, 520–559 3 maps. [Russian, with German rés.]

Stroganov, S. U. *vide* Ognev.

1055.—Strong, L. C. The establishment of the "A" strain of inbred mice. J. Hered. Wash. 27 1936 pp. 21–24.

1056.—Subko, J. P. Materialien zur Fauna der Säugetiere des Poltawa-kreises. Trav. Soc. Nat. Kharkov 55 1930 pp. 21–52 5 figs. [Russian only.]

1057.—Suzuki, N. The diencephalic and some other systems in *Xantharpyia amplexicaudata* ii. Proc. K. Acad. Wet. Amsterdam 39 1936 pp. 881–887.

1058.—Svihla, A. The occurrence of albino and spotted Rats under feral conditions. Amer. Nat. 70 1936 pp. 403–404.

1059.—Svihla, A. Development and growth of *Peromyscus maniculatus oreas*. J. Mammal. Baltimore 17 1936 pp. 132–137 2 figs.

1060.—Svihla, A. Notes on hibernation of a Western Chipmunk. J. Mamm. Baltimore 17 1936 pp. 289–290.

1061.—Svihla, A. The Hawaiian Rat. Murrelet Seattle 17 1936 pp. 3–14 photo. 1 text-fig.

1062.—Svihla, R. D. Breeding and young of the Grasshopper Mouse (*Onychomys leucogaster fuscogriseus*). J. Mammal. Baltimore 17 1936 pp. 172–173.

1063.—Sviridenko, P. A. [Notes on *Sylvaemus*.] Abs. Works zool. Inst. Moscow State Univ. 3 1936 pp. 96–107 2 figs. [Russian only.]

1064.—Sviridenko, P. Study of laws concerning the mass outbreaks of murine Rodents. Summary Sci. Res. Work Inst. Plant Protect. Leningrad for 1935 1936 p. 74. [Russian only.]

1065.—Sviridenko, P. A. Factors limiting the numbers of Muriforme Rodents. Wiss. Ber. Moskauer Staats Univ. 4 1935 pp. 44–69. [Russian, with English rés.]

1066.—Sviridenko, P. A. *Mus musculus* L. of the Caucasus and its distribution according to climatic zones. Wiss. Ber. Moskauer Staats Univ. 4. 1935 pp. 70–90. (Engl. summ. p. 87.)

1067.—Swanson, G. and Evans, C. The hibernation of certain Bats in southern Minnesota. J. Mammal. Baltimore 17 1936 pp. 39–43.

1068.—Swarth, H. S. Mammals of the Atlin region, northwestern British Columbia. J. Mammal. Baltimore 17 1936 pp. 398–405.

1069.—Swarth, H. S. Origins of the fauna of the Sitkan district, Alaska. Proc. Calif. Acad. Sci. (4) 23 1936 pp. 59–78 map.

Swynnerton, G. *vide* Elton.

Sylvén, B. *vide* Petréon.

1070.—Szymonowicz, W. . Vergleichende Untersuchungen über die Innervation der Sinushaare bei den Säugen. I, II. Z. Anat. Entwicklges. 105 1936 pp. 459–490 23 figs. 106 1936 pp. 85–97 11 figs.

1071.—Tacke, H. G. Zum Problem der "schwanzlosen" Katzen. Z. Anat. Entwges. 106 1936 pp. 343–369 11 figs.

1072.—Tagani, M. A new locality of *Desmostylus*. J. Geol. Soc. Japan 43 1936 pp. 47–48 2 figs. [Japanese only.]

1073.—Takagi, J. Ueber die Bedeutung des Volums eines Neurons. Verh. anat. Ges. Jena 43 1936 pp. 206–212.

1074.—Takai, F. On a new fossil Elephant from Okubo-mura, Akashigun, Hyogo Prefecture, Japan. Proc. Imp. Acad. Tokyo 12 1936 pp. 19–21 fig.

1075.—Takebe, K. Notes on the application of inutero experiments upon Mammalian embryos. Botany & Zool. Tokyo 4 1936 pp. 773–776.

- 1076.—Tanaka, R. On a form of *Eothenomys melanogaster* (Milne-Edwards) from Taiwan, Japan. Trans. nat. Hist. Soc. Formosa **26** 1936 pp. 305-309 3 figs. [Japanese, with English rés.]
- 1077.—Tanaka, R. On the insectivorous fauna in Taiwan, Japan. Trans. nat. Hist. Soc. Formosa **26** 1936 pp. 310-313. [Japanese, with English rés.]
- 1078.—Tarkhan, A. A. Ein experimenteller Beitrag zur Kenntnis der proprioceptiven Innervation der Zunge. Z. Anat. Entwges. **105** 1936 pp. 349-358 6 figs.
- 1079.—Tate, G. H. H. Some Muridae of the Indo-Australian Region. Bull. Amer. Mus. N.H. **72** 1936 pp. 501-728 32 figs.
- 1080.—Tate, G. H. H. Nomenclature of South American Hystricoid Rodents. J. Mammal. Baltimore **17** 1936 p. 174.
- 1081.—Tate, G. H. H. and Archbold, R. Results of the Archbold Expeditions. No. 8. Four apparently new Polyprotodont Marsupials from New Guinea. Amer. Mus. Nov. no. **823** 1936 pp. 1-4.
- 1082.—Tate, G. H. H. and Archbold, R. Results of the Archbold Expeditions. No. 9. A new race of *Hyo-sciurus*. Amer. Mus. Nov. no. **846** 1936 p. 1
- 1083.—Tateishi, S. The chromosomes of the Formosan Hare *Lepus formosus* and of the Rabbit, *Lepus cuniculus*. Zool. Mag. Tokyo **48** 1936 pp. 617-625 1 pl. 2 text-figs. [Japanese with English rés.]
- 1084.—Taylor, E. H. Philippine Land Mammals. Pp. 1-548 25 pls. 25 maps Manila (Bureau of Science) 1934 8vo.
- 1085.—Tegge, M. S. Length of life of a Rabbit. Science **84** 1936 p. 575.
- 1086.—Tehver, J. and Keerd, M. The number of ribs in the Ox and Pig. Acta Comm. Univ. Tartu **27** 1934 no. 5 pp. 1-11 4 figs.
- 1087.—Teilhard de Chardin, P. and Licent, E. New remains of *Postschizotherium* from S.E. Shansi. Bull. Geol. Soc. China Peking **15** 1936 pp. 421-427 2 figs.
- 1088.—Teilhard de Chardin, P. and Young, C. C. A Mongolian Amblypod in the Red Beds of Ichang (Hupeh). Bull. geol. Soc. China, Peking **15** 1936 pp. 217-223 3 figs.
- 1089.—Teilhard de Chardin, P. and Young, C. C. On the Mammalian remains from the archaeological site of Anyang. Palaeont. sinica. **12** c fasc. 1 1936 pp. 1-78 8 pls. 26 text-figs.
- 1090.—Tetley, H. Greenland Seal in British waters. Nature London **137** 1936 p. 192.
- Théobald, N. *vide* Gillet.
- 1091.—Thom, W. S. The Malay Tapir (*Tapirus indicus*). J. Bombay nat. Hist. Soc. **38** 1936 pp. 479-483 2 photos.
- 1092.—Thomas, I. M. Diastase in Rabbit saliva. Nature London **138** 1936 pp. 1015-1016.
- Thoyer-Rozat, P. *vide* Didier.
- 1093.—Tindale, N. B. [and others]. Mammal bone beds of probable Pleistocene age, Rocky river, Kangaroo Island. Trans. Roy. Soc. S. Aust. **59** 1935 pp. 103-106 3 figs.
- 1094.—Tobien, H. Mitteilungen über Wirbeltierreste aus dem Mittelpliocän des Natrontales (Aegypten). Suidae. Z. deuts. geol. Ges. Berlin **88** 1936 pp. 42-53 2 pls.
- 1095.—Tokuda, M. and Kano, T. A Bat and a new Shrew from Kôto-shô (Botel-Tobago). Annot. zool. jap. **15** 1936 pp. 427-432 2 figs.
- 1096.—Tokunaga, S. A new fossil Elephant found in Shikoku, Japan. Proc. Imp. Acad. Tokyo **11** 1935 pp. 432-434 2 figs.
- 1097.—Tokunaga, S. Fossil land Mammals from the Riukiu Islands. Proc. Imp. Acad. Tokyo **12** 1936 pp. 255-257 map.
- 1098.—Tomilin, A. G. Maternal instinct and sexual attachment in Whales. Bull. Soc. Nat. Moscou Sect. Biol. **44** 1935 pp. 351-361. [Russian, with English rés.]
- 1099.—Tomilin, A. G. Der Pottwal des Kamtschatka-Meeres. Zool. J. Moscow **15** 1936 pp. 483-519 3 figs. [Russian, with German rés.]
- 1100.—Tomilin, M. I. Length of gestation period and menstrual cycle in the Chimpanzee. Nature London **137** 1936 pp. 318 319.

1101.—Tomilin, M. I. Death of the oldest Chimpanzee in captivity. *Science* **83** 1936 pp. 103–104.

1102.—Torcelli, A. J. Obras completas y correspondencia científica de Florentino Ameghino. Vols. xix–xxi 1935 vol. xxii 1936. [Reprint of Ameghino's published works.]

1103.—Toschi, A. Ricerche sul cranio e sulla dentatura di alcune specie di Antilopi africane. *Arch. zool.* Torino **23** 1936 pp. 121–190 2 pls. 2 text-figs.

1104.—Townsend, M. T. Studies on some of the Small Mammals of central New York [State]. *Roosevelt Wild Life Ann.* Syracuse **4** no. 1 1935 pp. 1–120 8 pls. 4 maps 22 photos.

Trotzkaya, K. T. *vide* Malm.

1105.—Troughton, E. Le G. Descriptions of new Rats and Mice from Queensland. *Mem. Qd. Mus.* Brisbane **11** 1936 pp. 14–22.

1106.—Troughton, E. Le G. A redescription of *Solomys* (*Mus*) *salamonis* Ramsay. *Proc. Linn. Soc. N.S.W.* **61** 1936 pp. 128–130.

1107.—Troughton, E. Le G. The Mammalian fauna of Bougainville Island, Solomons Group. *Rec. Austr. Mus.* Sydney **19** 1936 pp. 341–353.

1108.—Troughton, E. Le G. A new Tree-Kangaroo from south-eastern Papua. *Rec. Austr. Mus.* Sydney **19** 1936 pp. 388–390.

1109.—Troughton, E. L. and Le Souef, A. S. Two new Tree Kangaroos from Papua, with notes on allied forms. *Austr. Zool.* Sydney **8** 1936 pp. 193–197.

1110.—Turkewitsch, B. G. Ein Versuch zur Systematik der Vögel und Säugetiere auf Grund der anatomischen Struktur ihres knöchernen Labyrinths. *Arch. zool.* Torino **22** 1936 pp. 79–122 1 pl.

1111.—Turkevitsch, B. G. Structure anatomique du labyrinthe osseuse chez les oiseaux et les mammifères comme un des caractères systématiques. *Trav. Inst. zool. Acad. Sci. U.R.S.S.* **4** 1936 pp. 447–482 3 pls. [Russian only.]

1112.—Turkewitsch, B. G. Das knöcherne innere Ohr des Hausesels (*Equus asinus* L.) *Z. Säugetierk.* Berlin **11** 1936 pp. 1–16 2 pls.

1113.—Turkewitsch, B. G. Das knöcherne innere Ohr des Kamels (*Camelus bactrianus*). *Zool. Jahrb.* Jena (*Anat.*) **61** 1936 pp. 107–120 1 pl.

1114.—Turkewitsch, N. Die Entwicklung der Sylvius'schen Wasserleitung beim Rind (*Bos taurus* L.). *Anat. Anz.* Jena **82** 1936 pp. 335–348 4 figs.

1115.—Turkewitsch, N. Die Entwicklung der Zirbeldrüse beim Rind (*Bos taurus* L.). *Gegenbaurs morph. Jahrb.* Leipzig **77** 1936 pp. 326–356 14 figs.

1116.—Turkewitsch, N. Die Entwicklung des subkommissuralen Organs beim Rind (*Bos taurus* L.). *Gegenbaurs morph. Jahrb.* Leipzig **77** 1936 pp. 573–586 10 figs.

1117.—Turner, C. W. The causes of the growth and function of the udder of the Cattle, no. **339** 1934 pp. 1–20 17 figs. The structure of the Cow's udder, no. **344** 1935 pp. 1–16 19 figs. *Bull. Agr. Exp. Sta. Univ. Missouri.*

1118.—Turner, C. W. The secretion of milk and milking process. *Bull. Agr. Exp. Sta. Univ. Missouri* no. **346** 1935 pp. 1–18 7 figs.

Turner, C. W. *vide* Garrison.

1119.—Turner, C. W. and Reineke, E. P. A study of the involution of the mammary gland of the Goat. *Res. Bull. Agr. Exp. Sta. Univ. Missouri* no. **235** pp. 1–22 3 pls.

Turov, S. S. *vide* Ognev.

1120.—Ugarov, A. A. Ein Fall der Asymmetrie des Schädels bei der Springmaus. *Bull. Univ. Tachkent* **21** 1935 pp. 137–146 9 figs. [Russian, with German rés.]

1121.—Ugriumy, M. F. Biology of the burrowing Rodent *Ellobius talpinus* Pall. in: *Problems of Ecol. & Biocenol.* Moscow 1934 pp. 115–137 8 figs. [Russian, with English rés.]

1122.—Urbain, A. [and others]. Sur le nombre d'hématies de quelques Ongulés, pp. 1208–1210. Teneur de glutathion réduit du sang de quelques Ongulés, pp. 1210–1211. *C.R. Soc. Biol.* Paris **122** 1936.

Urich, F. W. *vide* Verteuil.

1123.—Valch, B. S. Une nouvelle espèce de souris [*Mus sergii*]. Trav. Soc. Nat. Charkow 50 no. 2 1927 pp. 49–50. [Russian only.]

1124.—Välikangas, I. Ein neuer Fund des Gartenschlähfers, *Elomys quercinus* (L.) in Finnland. Ann. Zool. Soc. zool.-bot. fenn. Vanamo Helsinki 2 No. 2 1935 pp. 20–24 map.

1125.—Valsö, J. Die Hypophyse des Blauwals (*Balaenoptera sibbaldii*) Makroskopische und mikroskopische Anatomie. Z. Anat. Entwges. 105 1936 pp. 715–719 5 figs.

1126.—Vanderhoof, V. L. Notes on the type of *Borophagus diversidens* Cope. J. Mammal. Baltimore 17 1936 pp. 415–416 fig

1127.—Vau, E. Ueber den Fortbestand des Meniscus im kongruent gewordener Kiefergelenk des Dachsches (*Meles meles* L.). Anat. Anz. Jena 83 1936 pp. 51–55 3 figs.

1128.—Vau, E und Müller, F. Ueber den Meatus temporalis und andere Besonderheiten der Schläfengegend des Schweines. Z. Anat. Entwges. 106 p. 575–585 4 figs.

1129.—Verrier, L. et Pannier, R. Recherches sur la nature de paupre rétiniens. C.R. Soc. Biol. Paris. 122 1936 pp. 600–602.

1130.—Verteul, E. de and Urich, F. W. The study and control of paralytic rabies transmitted by Bats in Trinidad, British West Indies. Trans. Soc. trop. Med. Hyg. Lond. 29 1936 pp. 317–347 20 figs. maps and photos.

1131.—Vesey-Fitzgerald, D. Trinidad Mammals. Trop. Agric. Trinidad 13 1936 pp. 161–165 2 photos.

1132.—Vinogradov, B. S. [and others]. Rodents of Central Asiatic part of U.S.S.R. Pp. 1–228 46 figs. Moscow & Leningrad (Acad. Sci.) 1936 8vo. [Russian only.]

1133.—Voigt, E. Weichteile an Säugetieren aus der eozänen Braunkohle des Geiseltales. Nova Acta Leop. Carol. Halle 4 1936 pp. 301–310 2 pls.

1134.—Voigt, E. Ueber das Haarleid einiger Säugetiere aus der mittlereozänen Braunkohle des Geiseltales. Nova Acta Leop. Carol. Halle 4 1936 pp. 317–334.

1135.—Volcanekzii, J. B. Der Steppen-Iltis als Objekt der Wildzucht. Sci. Mem. Saratov State Univ. 13 no. 2 1935 pp. 91–110. [Russian only.]

1136.—Voss, H. Ein besonders reichliches Vorkommen von Muskelspindeln in der tiefen Portion des M. masseter des Menschen und Anthropoiden. Anat. Anz. Jena 81 1936 pp. 290–292 1 fig.

1137.—Waddington, C. H. Organizers in mammalian development. Nature London 133 1936 p. 125.

1138.—Wagenen, G. van. The coagulating function of the cranial lobe of the prostate gland in the Monkey. Anat. Rec. Philadelphia 66 1936 pp. 411–421 5 figs.

1139.—Wagner, H. Geburt und Jugendentwicklung beim Seehund (*Phoca vitulina* L.). Zool. Garten Leipzig 8 1936 pp. 258–265 2 photos.

1140.—Wagstaffe, R. and Clegg, J. Mammals in; A prelim. list of the non-marine Vertebrate fauna of Southport and district. Rep. Southport Sci. Soc. 30 1936 pp. 139–141.

1141.—Walker, A. E. The retrograde cell-degeneration in the thalamus of *Macacus rhesus* following hemidecortication. J. comp. Neurol. 62 1935 pp. 407–419 4 figs.

1142.—Walker, A. E. and Fulton, J. F. The external configuration of the cerebral hemispheres of the Chimpanzee. J. Anat. London 71 1936 pp. 105–116 5 pls.

1143.—Wallart, J. Sur l'innervation de l'Epoophoron. Arch. Biol. Liège 47 1936 pp. 87–90 1 pl.

1144.—Wallis, R. A. The growth of embryo bones transplanted whole in the Rat's brain. Proc. roy. Soc. London 120B 1936 pp. 496–498 1 pl.

1145.—Wallisch, W. Das Kiefergelenk und die Verbindung der Unterkieferäste. Anat. Anz. Jena 81 1936 pp. 349–353.

Warner, E. A. vide Craft.

1146.—Warren, E. R. The Marmots of Colorado. J. Mammal. Baltimore 17 1936 pp. 392–398 map.

1147.—Warren, E. R. Mountain road casualties among animals in Colorado. Science 83 1936 p. 14; 84 1936 p. 485.

1148.—Warwick, T. Methods of detecting Muskrats. Ann. Appl. Biol. Cambridge 23 1936 pp. 165–174 2 figs.

1149.—Warwick, T. The parasites of the Muskrat (*Ondatra zibethica* L.) in the British Isles. Parasitology Cambridge 28 1936 pp. 395–402.

Washburn, S. L. *vide* Lawrence.

1150.—Waterman, A. J. Developmental capacities of transplanted hepatic, pancreatic and lung tissues of the Rabbit embryo. Amer. J. Anat. 58 1936 pp. 27–57 1 pl.

1151.—Waterman, A. J. Heteroplastic transplantation of embryonic tissues of Rabbit and Rat. Amer. J. Anat. 60 1936 pp. 1–25.

1152.—Watzka, M. Ueber Gefasssperrern und arteriovenöse Anastomosen Z. Mikr. anat. Forsch. Leipzig 39 1936 pp. 521–544 14 figs.

1153.—Wedemeyer, K. O. Zahl der Schwanzringe bei *Apodemus sylvaticus* L. und *flavicollis* Melchior als Artmerkmal. Zool. Anz. Leipzig 113 1936 pp. 206–207.

1154.—Wegner, R. N. Sonderbildungen der Kieferhöhle bei Anthropoiden. Anat. Anz. Jena 83 1936 pp. 161–193 10 figs.

Wegner, R. N. *vide* Lossen.

1155.—Wehner, G. Zur Anatomie der Backen-, Masseter- und Parotisgegend des Hausschafes (*Ovis aries* L.). Anat. Anz. Jena 83 1936 pp. 65–84 2 figs.

1156.—Wehrli, H. Die diluvialen Murmeltiere Deutschlands. Paläont. Z. Berlin 17 1935 pp. 204–243 5 pls. 7 text-figs.

1157.—Weidenreich, F. Ueber das phylogenetische Wachstum des Hominidengehirns. Kaibôgahn Zasshi Tokyo 9 Hft. 5 1936 pp. 1–14 [sep. pag.] 14 figs.

1158.—Weidenreich, F. *Sinanthropus pekinensis* and its position in the line of human evolution. Peking nat. Hist. Bull. 10 1936 pp. 281–290 15 figs.

1159.—Weigelt, J. *Lophiodon* in der oberen Kohle des Geiseltales. Ein biostratonomischer Bericht über Grabungen in den Jahren 1934 und 1935. Nova Acta Leop. Carol. Halle 3 1935 pp. 369–402 6 pls. 31 text-figs.

1160.—Weinert, H. Der Urmenschen Schädel von Steinheim. Z. Morph. Anthrop. Stuttgart 35 1936 pp. 463–518 6 pls. 18 text-figs.

1161.—Weissenfluh, H. v. Ueber Sekretionsvorgänge in den Unterzungendrüssen von Katze und Hund. Z. mikr. anat. Forsch. Leipzig 39 1936 pp. 79–99 12 figs.

1162.—Weller, D. [and others]. The effect of estrin on the prostate gland of the albino Rat and Mouse. Anat. Rec. Philadelphia 65 1936 pp. 149–163 1 pl.

1163.—Wells, L. J. Effects of oestrin injections on accessory reproductive organs of the male Ground Squirrel (*Citellus tridecemlineatus*). Anat. Rec. Philadelphia 64 1936 pp. 475–497 3 pls.

1164.—Wells, L. J. and Moore, C. R. Hormonal stimulation of spermatogenesis in the testis of the Ground Squirrel. Anat. Rec. Philadelphia 66 1936 pp. 181–200.

1165.—Wentsler, N. E. Microscopic study of the superficial cerebral vessels of the Rabbit by means of a permanently installed transparent cranial chamber. Anat. Rec. Philadelphia 66 1936 pp. 423–435 6 figs.

1166.—Wepner, A. Zur Frage der subspezifischen Abtrennung des Westhamsters. Z. Säugetierk. 11 1936 pp. 254–256.

1167.—Werner, C. Mesozoic plant foods and mammalian evolution. Washington Univ. Stud. St. Louis 9 1936 pp. 81–90.

1168.—Wetmore, A. Hibernation of the Brown Bat. J. Mammal. Baltimore 17 1936 pp. 130–131.

1169.—Whitaker, W. L. Effect of light on reproductive cycle of *Peromyscus leucopus noveboracensis*. Proc. Soc. exp. Biol. 34 1936 pp. 329–330 1 fig.

1170.—White, W. T. and Ibsen, H. L. Horn inheritance in Galloway-Holstein cattle crosses. J. Genet. Cambridge 32 1936 pp. 33–49 1 fig.

1171.—Whitehead, R. Variations in the cortical lipid of the Rabbit suprarenal with sex and age. J. Anat. London 70 1936 pp. 380–385 1 pl.

1172.—Wilford, B. H. and J. F. Skunk mortality on the highway. Science 84 1936 p. 421.

1173.—Willard, D. M. The innervation of the adrenal glands of Mammals. a contribution to the study of nerve-endings. Quart. J. micr. Sci. London 78 1936 pp. 475-485 1 pl.

1174.—Williams, A. B. The composition and dynamics of a Beech-Maple climax community. Ecol. Monogr. Durham N.C. 6 1936 Mamm. pp. 359-373.

1175.—W[ilson], J. T. Sir Grafton Elliot Smith. A biographical sketch of his earlier career. J. Anat. London 71 1936 pp. 1-6 portr.

1176.—Wilson, L. E. Marine Mammals from the Miocene of the Bakersfield region, California. Bull. Peabody Mus. Nat. Hist. New Haven no. 4 1935 pp. 1-143 1 pl. 22 figs.

1177.—Wilson, R. W. A new Pleistocene Deer-Mouse from Santa Rosa Island, California. J. Mammal. Baltimore 17 1936 pp. 408-410 1 fig.

1178.—Wilson, R. W. Two Rodents and a Lagomorph from the Sespe of the Las Posas Hills, California. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) no. 453 1934 pp. 11-17 1 pl. 1 text-fig.

1179.—Wilson, R. W. A new species of *Dipoides* from the Pliocene of eastern Oregon. Pub. Carnegie Instn. Washington (Contrib. Palaeont.) no. 453 1934 pp. 19-28 1 pl. 1 text-fig.

Wilson, R. W. *vide* Wood.

1180.—Wilson, W. K. A tame-wild Rabbit cross. J. Hered. Wash. 27 1936 pp. 127-131.

1181.—Winckler, G. Le muscle ileo-costal. Étude de sa structure et de sa morphologie en fonction des courbures du rachis. Étude d'anatomie comparée. Arch. Anat. Hist. Embryol. Strasbourg 21 1936 pp. 143-251 21 figs.

1182.—Winiwarter, H. de. Recherches sur quelques problèmes d'histologie thyroïdienne. Mem. Mus. Hist. nat. Belg. (2) 3 1936 pp. 335-348 10 figs.

1183.—Winter, C. A. and Emery, F. E. Compensatory adrenal hypertrophy in the Rat as influenced by sex, castration, time and thyroidectomy. Anat. Rec. Philadelphia 66 1936 pp. 401-409 2 figs.

1184.—Wintrobe, M. M. and Shumacker, H. B. Erythrocyte studies in the Mammalian fetus and newborn. Amer. J. Anat. 58 1936 pp. 313-328 8 figs.

1185.—Wirén, E. Anteckningar om skogslammeln, *Myopus schisticolor*. Fauna och Flora, Uppsala 1936 pp. 97-106 2 photos.

1186.—Wislocki, G. B. and Geiling, E. M. K. The anatomy of the hypophysis of Whales. Anat. Rec. Philadelphia 66 1936 pp. 17-41 3 pls. 4 text-figs.

Wohlfart, G. *vide* Aurell.

Wohlfart, G. *vide* Björkman.

1187.—Wokken, H. Ueber die Ausgangspunkte der Verknöcherung des ersten und zweiten Zehngliedes beim Hauspferd. Z. Anat. Entwickes. 106 1936 pp. 370-378 11 figs.

1188.—Wood, A. E. A new subfamily of Heteromyid Rodents from the Miocene of western United States. Amer. J. Sci. New Haven (5) 31 1936 pp. 41-49 7 figs.

1189.—Wood, A. E. Fossil Heteromyid Rodents in the collections of the University of California. Amer. J. Sci. New Haven (5) 32 1936 pp. 112-119 10 figs.

1190.—Wood, A. E. The Cricetid Rodents described by Leidy and Cope from the Tertiary of North America. Amer. Mus. Nov. no. 822 1936 pp. 1-8 5 figs.

1191.—Wood, A. E. Two new Rodents from the Miocene of Mongolia. Amer. Mus. Nov. no. 865 1936 pp. 1-7 1 fig.

1192.—Wood, A. E. Geomyid Rodents from the Middle Tertiary. Amer. Mus. Nov. no. 866 1936 pp. 1-31 33 figs.

1193.—Wood, A. E. A new Rodent from the Pliocene of Kansas. J. Paleont. Menasha 10 1936 pp. 392-394 2 figs.

1194.—Wood, A. E. and Wilson, R. W. A suggested nomenclature for the cusps of the cheek teeth of Rodents. J. Paleont. Menasha 10 1936 pp. 388-391 2 figs.

1195.—Wood, H. E. Do Rat molars grow, dianthetically, after eruption? J. dental. Res. 15 1935 pp. 9-15.

- 1196.—Wood, H. S. A description of the Tsine and its habitat and shikar. *J. Darjeeling nat. Hist. Soc.* **10** 1936 pp. 123-130 11 pp. 8-18.
- 1197.—Wood, H. S. Observation on the Gaur and its shikar. *J. Darjeeling Nat. Hist. Soc.* **11** 1936 pp. 48-57.
- 1198.—Woodward, Sir A. S. Recent progress in study of early Man. *Pan-Amer. Geol.* **65** 1936 pp. 1-18.
- 1199.—Wooster, L. D. Notes on the effects of drought on animal population in western Kansas. *Trans. Kans. Acad. Sci.* **38** 1935 pp. 351-352.
- 1200.—Wörner, R. Ueber die Leistungsgrenze beim Auffassen figurale Gestalten durch Mäuse. *Biol. Zbl. Leipzig* **56** 1936 pp. 2-27 11 figs.
- 1201.—Woronoff, A. G. Quelques observations sur l'action du campagnol vivant en sociétés (*Microtus socialis* Pall.) sur les paturages situées au pied des montagnes du Daghestan. *Bull. Soc. Nat. Moscou Sect. Biol.* **44** 1935 pp. 391-406. [Russian, with French rés.]
- 1202.—Wright, S. and Chase, H. B. On the genetics of the spotted pattern of the Guinea Pig. *Genetics Menasha* **21** 1936 pp. 758-787 2 figs.
- 1203.—Wright, W. B. Quaternary Mammals in: *The Quaternary Ice Age*. 2nd ed. pp. 238-265 3 pls. 7 figs. London (Macmillan) 1937 8vo.
- 1204.—Wu, K. S. On the growth of the dendrites of the cerebral cortical cells of the albino Mouse from birth to one year. *Chinese J. Zool.* **1** 1935 pp. 75-86 5 figs.
- 1205.—Yamane, J. und Kato, K. Ueber die Abstammung des ostasiatischen Hausrinder auf Grund der vergleichenden Morphologie der Brustwirbel bei den Boviden. *Zool. Mag. Tokyo* **48** 1936 pp. 705-716 2 pl. 6 text-figs. [Japanese, with German rés.]
- 1206.—Yeager, L. E. Winter daytime habits of Opossums. *J. Mammal. Baltimore* **17** 1936 pp. 410-411.
- 1207.—Yepes, J. Mamíferos coleccionados en la parte central y occidental de la Provincia de la Rioja. *Physis B. Aires* **12** 1936 pp. 31-42 map 6 photos.
- 1208.—Yepes, J. Epitome de la sistemática de los roedores argentinos. *Rev. Inst. Bact. Buenos Aires* **7** 1935 pp. 213-269 12 pls.
- Yerkes, R. M. *vide* Elder.
- 1209.—Yerkes, R. M. and Elder, J. H. The sexual and reproductive cycles of Chimpanzee. *Proc. Nat. Acad. Sci. Washington* **22** 1936 pp. 276-283.
- 1210.—Yoffey, J. M. Variation in lymphocyte production. *J. Anat. London* **70** 1936 pp. 507-514.
- Young, C. C. *vide* Teilhard de Chardin, P.
- 1211.—Young, P. T. Motivation of behavior: the fundamental determinants of human and animal activity. Pp. xviii + 562 85 figs. New York (Wiley) 1936 8vo. [See *Nature* **138** p. 166.]
- 1212.—Young, W. C. and Blandau, R. J. Ovum age and the course of gestation in the Guinea Pig. *Science* **84** 1936 p. 270.
- 1213.—Yusupova, E. A. Effect of arsenic and fluorine upon the gut-tube of *Citellus rufescens* and *Cricetulus evermanni*. *Sci. Mem. M. Gorky Sta. Univ. Perm.* **1** no. 4 1936 pp. 77-104 1 pl. [Russian, with English rés.]
- 1214.—Zalesky, M. Effects of prepuberal gonadectomy on the adrenal gland of the Guinea Pig. *Anat. Rec. Philadelphia* **65** 1936 pp. 467-483 1 pl. 1 text-figs.
- 1215.—Ziegler, H. Zur Morphologie gemischter Hauptstücke in sublingualen Speicheldrüsen von Haustieren. *Z. mikr. anat. Forsch. Leipzig* **39** 1936 pp. 100-104 1 fig.
- 1216.—Zimmermann, A. Zur vergleichenden Anatomie der Kehlkopfknorpel beim Schaf. *Allat. Közlem. Budapest* **33** 1936 pp. 36-43 1 fig. [Magyar, with German rés.]
- 1217.—Zimmermann, G. Beiträge zur vergleichenden Anatomie des Os Carpi Centrale. *Math. term. Ért. Budapest* **54** 1936 pp. 597-625 6 figs. [Magyar, with German rés.]
- 1218.—Zimmermann, G. Ueber die Dura mater encephali und die Sinus der Schädelhöhle des Hundes. *Z. Anat. Entw.-ges.* **106** 1936 pp. 107-137 9 figs.

1219. — Zimmermann, K. Zur Kenntnis der europäischen Waldmäuse (*Sylviaemus sylvaticus* L. und *S. flavicollis* Melch.). Arch. Naturgesch. Leipzig 5 1936 pp. 116–133 map and photos.

1220. — Zintel, H. A. A new transparent chamber for exteriorizing a loop of intestine and its mesentery. Anat. Rec. Philadelphia 66 1936 pp. 437–447 3 figs.

1221. — Zlabek, K. Note sur le masseter des Catarhiniens et des Platyrrhiniens. Bull. Mus. Hist. nat. Paris 8 1936 pp. 118–124 3 figs.

1222. — Zuckerman, S. Hormones and evolution. An examination of certain views on the part played by the endocrine glands in human evolution. Man 36 1936 pp. 129–135.

1223. — Zuckerman, S. and Parkes, A. S. The effects of oestrone on the prostate and uterus masculinus of various species of Primate. J. Anat. London 70 1936 pp. 323–330 2 pls.

1224. — Zuitin, A. I. On the chromosomes of the Yak (*Poephagus grunniens* L.) C.R. Acad. Sci. Moscou 1935 vol. 4 pp. 81–83 1 fig. [In English.]

GREGORY, 414; Sir G. Elliot Smith, WILSON, 1175; K. W. Zimmermann, HINTZSCHE, 503.

Bibliography.—Works of F. Ameghino, TORCELLI, 1102; Of K. W. Zimmermann, HINTZSCHE, 503; Argentine Mammals, MARELLI, 675; Fossil Man, QUENSTEDT, 851; Paleocene Mammals, SIMPSON, 1002.

Museums and Institutions.—Types in Brit. Columbia Museum, COWAN, 224; Osteological collection in Trentino Mus., CAMILLO, 165; Palaeontological collection in Sabadell Mus., Spain, PAIRO, 787; Collection of live Equines in Vienna Zool. Gardens, ANTONIUS, 26.

Economics; Fur and Farming.—Structure of Sheep's wool, SAITO, 919; Reindeer farming in Canadian Arctic, PORSILD, 838.

Economics; Pests and their Control.—Vermin, DOLLMAN, 274; Rabbit in Australia, STEAD, 1026; Rabbit in England and Australia, DOLLMAN, 273; Rat destruction, REGNIER, 866; Rodents and bulb-growing, SCHAEFFER & GARLOUGH, 938; Pest control by parasites, WARWICK, 1149; Rodent pests in Russia, DURYMANOVA-SAVIK, 287; FALKENSTEIN, 321; KONOVALOVA, 592; KUTCHERUK & OTHERS 618; SHADOWSKY, 980; WOBONOFF, 1201.

Economics; Miscellaneous.—Mammals and disease in S. Africa, ROBERTS, 880; *Desmodus* a vector of rabies, VERTEUIL & ULRICH, 1130; Ivory in China, SOWERBY, 1021; Marine Mammals of the N. Pacific, DOROFEEV & FREIMANN, 277.

Methods; General.—Live Trapping, MOORE, 733; Skinning Bats, PRIMROSE, 846; Keeping Bats in captivity, GATES, 369; Marking or tagging Bats, MOHR, 723; Detecting presence of Muskrats, WARWICK, 1148.

Methods; for Laboratory Work.—Vascular injection, CHILLINGWORTH, 196; Transparent window methods, WENTSLEH, 1165, ZINTEL, 1220; For Binocular vision, MAISON, 670; Nerve fibre investigation, JONES, 546; Construction of graphs, DICE & LERAAS, 267.

II.—SUBJECT INDEX.

N.B.—The numbers refer to the number of the authors under Titles.

COMPREHENSIVE AND GENERAL.

General Works.—General Natural History, POCOCK, 822; North African Mammals, HEIM DE B., 475; Larger animals of Africa, GROMIER, 422; Rodents of Central Asia, VINOGRADOV, 1132; Mammals of the Philippine Is. [many new spp. descr.], TAYLOR, 1084; Mammals of Indiana, U.S.A., LYON, 656; Monograph of the Proboscidea, OSBORN, 781; Textbook of Psychology, MATER & SCHNEIERLA, 667; Painting and Anatomy, CALDERON, 162.

Biography and Obituaries.—G. Grimpe, DATHE, 245; H. F. Osborn,

History.—Vermine destruction in Bedfordshire, ELLIOTT, 308; Wolf in Berwickshire, CARR, 173; Extinct fauna of Auvergne, CHARVILHAT, 192; Survival of the larger Mammals in N.E. America, GOODWIN, 394; Goethe and the Jena anatomy Museum, BÖKER, 107; The Klagenfurt Dragon, PUSCHING, 849; Animals in Chinese Art, SOWERBY, 1018, 1019; Scoresby and British Whaling, GRAY, 403; The Camel as a domestic animal, ROBINSON, 882.

Naturalization.—Reindeer in Canadian Arctic, PORSILD, 838.

Conservation.—Tsetse fly problem in Tanganyika Territory, HARRISON, 462; In Burma, RODGER, 887; European Bison, AHRENS, 8; KAZEETF, 561; Ibex in Switzerland, BÄCHLER, 45.

STRUCTURE.

General Anatomy of Special Forms.—Cetacea SLIJPER, 1011; Proboscidea, OSBORN, 781; *Equus*, LUARD, 652; Bovine Free-Martin, BUYSE, 155; *Poephagus*, DRUŽININ, 281; *Rattus* STARKS & CUTTER, 1024; *Ailuropus*, RAVEN, 861; GREGORY, 413; *Prodelphinus*, OKADA, 775; *Lipotes*, HINTON, 502; *Myogale*, PUISSÉGUR, 847; Lorisoid Lemurs, W. C. O. HILL, 495; Specific characters of Man, SCHULTZ, 956.

Growth and Allied Problems.—HUXLEY, 529; KUSHNER, 615; LATIMER, 623; MARSHAK, 681; SVIHLA, 1059; DEANESLY & ROWLANDS, 252; ELLIOTT, 307.

External and Tegumentary.—Scales and hairs, MIRANDA-RIBEIRO, 717; Hair whorls, CRAFT & WARNER, 229; Hair follicles, SZYMONOWICZ, 1070; Sheep's wool, SAITO, 919; Pelage and ear pinna *Phoca*, MATTHEWS, 694; Hair of *Nothrotherium*, HAUSMAN, 468; Antlers, *Hippocamelus*, RUSCONI, 906; Claw and nail in Primates, CLARK, 208; Scent-gland *Capreolus*, SCHUMACHER, 960; Foot-glands, *Okapia*, POCKOCK, 827; Foods-pads *Lepus*, SCHUMACHER, 959; Anthropoid hand, SCHREIBER, 951; Human foot, FRECHKOP, 345; Sole of foot, RAVEN, 860; Mammary gland, *Bos*, TURNER, 1117; External anatomy, *Charronia*, SHAW, 981; *Procolobus*, POCKOCK, 824; Snout and nostrils, Insectivora, MOHR, 728.

Histology.—Conjunctive tissue, NAGAEOTTE, 744; Muscle spindles, OKAMURA, 777; Uterine epithelium, OTTAVIANI & DEBIASI, 786.

Cytology.—Reticular structure in epithelium, BORGHESE, 114; Cervical ganglia, Bats, CELESTINO D. C., 183; Dendrites in brain, WU, 1204; Cristallids in mammary glands, GRYNFELT, 430; Centrifuged adrenal gland, DORN-FELD, 275; Pronuclei in Ferret ova, HAMILTON, 454; Sertoli cells of testis, FRORIER, 359; Ovarian histiocytes, DESATVE, 262; Ear by the transparent chamber method, MOORE, 734.

Cytology; Chromosome investigations.—BUTARIN, 151; HALDANE, 443; KOLLER, 585, 586, 587; MATTHEY, 695, 696, 697; MATTHEY & RENAUD, 698; NOVIKOV, 767; PCHAKADZE, 797; RANQUINI & MARTIN DE F., 859; TATEISHI, 1083; ZUITAN, 1224.

Dentition and Tooth Structure; Recent and Fossil.—General, COLYER, 215; FRIANT, 351; 352; Phylogeny of dentition in early Mammals, SIMPSON, 1005; Oligocene Carnivora and Insectivora, SCOTT & JEPSEN, 969; *Tritylodon*, BROILI & SCHRÖDER, 131; *Ziphius*, FRASER, 342; *Palaeotragus*, COLBERT, 213; *Lamdotherium*, BONILLAS, 109; *Equus*, STEHLIN & GRAZIONI, 1032; *Eohippus*, FRIANT, 350; *Merychippus*, BODE, 94; Incisors, Cervidae, EIDMANN, 297; Molars, Ungulata, KÜFFER, 611, 613; Dentition in Rodents, FRIANT, 355; FRECHKOP, 343; HARMAN & SMITH, 460; KORVENKONTIO, 595; SCHREUDER, 952; SHADLE, 978; SHADLE & others, 979; WOOD & WILSON, 1194; WOOD, 1105; Ursidae, HELPING, 481; RODE, 884; *Hyaena*, EHRENBURG, 294; Dentition problems, Primates, FRIANT, 348, 353; NEUVILLE, 756; *Australopithecus*, BENNEJEANT, 71; BROOM, 134.

Nervous System; Brain.—General, SCHARRE, 932; Cerebral hemispheres, KARIYA, 556; KLAUS, 569; KOIKEGAMI & IMOGAWA, 580; Brain of Primates, MEITLER, 709; BUCY, 142; CONNOLLY, 217; Anthropoids, KREHT, 600, 601; WALKER & FULTON, 1142; Thalamus and temporal lobe, CLARK, 206, 207; Diencephalon, BARRIS & others, 57; Subformical organ, COHRS & v. KNOBLACH, 210; v. KNOBLACH,

573; Neopallium, ANTHONY & GRZYBOWSKI, 25; Geniculate body, *Didelphys*, BODIAN, 96; Anterior commissure, KREINER, 602; Posterior column fibres, FERRARO & BARRERA, 325; Hypophysis, PLAUT, 821; SAWYER, 925; SCHWARZ, 967; VALSÖ, 1125; WISLOCKI & GEILING, 1186; Cerebrospinal fluids, OSCHKADEROW, 783.

Brain of Special Forms.—Fossil Ungulates, SIMIONESCU, 997; *Sus*, HERRE, 487; *Macrorhinus*, FRIANT, 347; *Xanthopygia*, SUZUKI, 1057; Endocranial cast, *Homo soloensis*, KAPPERS, 554.

Nervous System: Spinal Cord and Nerves.—Spinal cord, HAGGQVIST, 441; Sheath of nerve fibres, HOERR, 507; Growth of nerve cells, RONDININI, 898; Volume of the neuron, TAHAGI, 1073; Oculo-motor nerve, BJÖRKMAN & WOHLFART, 84; Phrenic nerve, FAWORSKI, 322; Facial nerve, SCHMERT, 941; Vagus in *Bradypus*, BAPTISTA, 53; Vagus and heart ganglia, MAKSDOWA, 672; Vagal paranganglia, GOORMAGHTIGH, 395; Lumbar nerves, OKELBERRY, 778; Nerve endings in blood vessels, NONIDIZ, 765; Ganglia of tongue and diaphragm, OKAMURA, 776.

Nervous System: Innervation Details.—Dura mater, SCHEVOLA, 928; Aortic paranganglia, NONIDIZ, 766; Orbit, CHRISTENSEN, 193; Iris, BOEKE, 88; Cornea, BOEKE, 87; Teeth, BERKELBACH, v. D. S., 78; Tongue, BARRON, 58; TARKHAN, 1078; Intercostal muscles, KRIKUNOW & MALOTKOWA, 603; Adrenals, WILLARD, 1173; Bladder, v. CAMPENHOUT & GRENADE, 169; Prostate gland, KOLOSSOW & POLYKARPOWA, 590; Corpus cavernosum, STEFANELLI, 1029; Epoochoron, WALLART, 1143.

Sense Organs.—Eye, *Didelphys*, SÄZLE, 920; Retina in nocturnal animals, PENNINGTON, 801; Retina, Marsupials, O'DAY, 768; Eyeball, Cervidae, BAYER, 61; Internal ear, FIEANDT & SAXÉN, 328; External ear, MARITANO, 676.

Myology.—Phylogenetic aspect, HOWELL, 519; Striped muscle, AURELL & WOHLFART, 41; Muscle spindles, OKAMURA, 777; General in Anthro-

poids, STEWART, 1035; Facial muscles, Rabbit, MEINERTZ, 702, 703; *Ovis*, WEHNER, 1155; Jaw muscles, *Macropus*, DUBECQ, 283; Masseter, VOSS, 1136; ZLABEK, 1221; Hump of African Cattle, CURSON & BISSCHOP, 231; Pectoral limb, HOWELL, 520; B. CAMPBELL, 166; In *Platypus* HOWELL, 518; Axillary muscles, LORETTI, 647; Spinal muscles, SCHMIDT, 944; Ileo-costal muscles, WINCKLER, 1181; Caudal muscles, MAXIMENKO, 699; Muscles of bladder, GRÄNING, 400.

Osteology; General.—Age variation in skeleton, ASTANIN, 36; Skull investigation with Röntgen rays, LOSSEN & WEGNER, 649, 650.

Osteology, Special Forms.—*Equus*, *asinus*, Bourdelle, 119; Coendidae, FRIANT, 355.

Osteology; Skull.—Skull roof, APOR, 31; AUGIER, 40; Temporal region, VAU & MÜLLER, 1128; Parietal sutures, GALLI, 364; Bregma bone, DE SOUSA, 1017; Sinus system, *Canis*, ZIMMERMANN, 1218; Lower jaw joint, WALLISCH, 1145; Larynx, *Ovis*, ZIMMERMANN, 1216; *Manatus*, HIRSCHFELDER, 504; African Antelopes; TOSCHI, 1103; Craniometry, *Equus*, NAGY, 746; *Lepus*, GUREEV, 436; Felidae, HALTENORTH, 450; *Meles*, VAU, 1127; Studies, Anthropoid skulls, PITTARD, 818, 819; RZĄSICKI, 917; WEGNER, 1154; Steinheim Man, WEINERT, 1160.

Osteology; Bony Ear.—TURKEWITSCH, 1110; 1111, 1112, 1113; Heim de B., 475, p. 376; SERA, 973.

Osteology; Vertebrae and Limbs.—Vertebrae, Anthropoids, FICK, 327; Neck joint in Marine Animals, KNESE, 571; Ribs, TEHRER & KEERD, 1086; Sternum, YAMANE & KATO, 1205; Scapula, LOSSEN & WEGNER, 648; Sacrum, IZQUIERDO, 537; Pubic symphysis, RUTH, 913; Limb bones, ANDREEVA, 22; HOPWOOD, 514; SCHERTZ, 939; Elbow joint, DRUŽININ, 280; Bones of feet, BOGDASCHEW, 103; DAHR, 235; DIETRICH, 271; FRIANT, 354; ZIMMERMANN, 1217; WOKKEN, 1187; RANFT, 857; Penis bone, Rodents, HILL, 496; BURT, 149.

Osteology and Dentition of Fossil Forms.—Miocene Marine Mammals,

WILSON, 1176; *Sinanodelphis*, MAKIYAMA, 671; *Notoungulata*, SIMPSON, 999; *Entelonychia*, SIMPSON, 1001; *Taeniodonta*, GAZIN, 372; *Postschizotherium*, TEILHARD & LICENT, 1087; *Baluchitherium*, GRANGER & GREGORY, 399; *Plesippus*, GAZIN, 373; Pontian Antelopes, BOHLIN, 105; Miocene Mustelids, HELBIG, 478; *Pseudailurus*, RICHARD, 873; Oligocene Carnivora and Insectivora, SCOTT & JEPSEN, 969; Extinct Madagascar Lemurs, CARLETON, 172.

Alimentary System.—Tonsils, FLORENTIN, 334; Palate ridges, CID, 199; OGALDE, 769; Stomach, AOKI & MATSUMOTO, 30; GEHRKE, 374; Esophageal and gastric mucosa, BORGESE & NASCIMBENE, 116; BORGESE, 115; Intestine, ESCH, 320; REIDER, 868; Liver, KOSTORZ, 596; Pancreas, Cetacea, NEUVILLE, 753; Viscera, Orang, STRAUSS, 1051.

Circulatory Organs.—Heart valves, *Delphinus*, CHIOLDI, 197; Purkinje fibres, ABRAMSON & MARGOLIN, 2; Valves in blood vessels, PASSANTINO, 790; WATZKA, 1152; Lining of aorta SÖELKUNOW, 927; Lining of veins, STCHELKOUNOFF, 1025; Control mechanism of arteries, MATHIS & EGLITTO, 688; Moderator band, DOBYNS, 272; Pregnancy and heart capillaries, PETRÉN & SYLVÉN, 802; Arteries of Chimpanzee, GLIDDEN & DE GARIS, 384; Two venae cavae sup. in Dog, BOGDASCHIEW, 102; Cerebral blood vessels, WENTSLER, 1165; Blood-vessels, head of *Ursus*, SKEDENOW & BIKOW, 1008; Face of *Ovis*, WEHNER, 1155; Limb, *Lagothrix*, BANG, 51; Hand, Primates, NISHI, 761; Cardiac Artery Elephant, CAVE, 182; Coronary artery, Elephant, HILL, 493; Circulation in spleen, KNISELY, 572; Blood supply, lymphatic glands, DABELOW, 234; to uterus walls, DARON, 243; FRANKLIN & McLACHLIN, 340; Lymphatic, Sciuridae, OTTAVIANI, 785.

Blood.—Haematology, Ungulata, URBAIN & others, 1122; Age changes in blood, KALABUCHOV & RODIONOV, 552; Foetal erythrocytes, WINTROBE & SHUMACKER, 1184; Erythrocytes, Monotremes, BRIGGS, 127; Lymphocytes, YOFFEY, 1210.

Respiratory System.—Pulmonary alveoli, BELTRANI, 65; CLARA, 200;

SHEA, 983; Larynx, *Tursiops*, KOLLMANN, 588.

Endocrine and other Glands.—Thymus, KINGSBURY, 567; Thyroid, OKKELS, 779; WINIWARTER, 1182; Spleen, HERRATH, 486; RÖHLICH, 891; Suprarenals, WHITEHEAD, 1171; Lingual and other salivary glands, DANNER, 240; PASSANTINO, 791; SHEDENOW, 984; WEISSENFLUH, 1161; In *Platypus*, BROOM, 135; Mammary gland, HOOFT, 510.

Excretory System.—Glomerulus of Kidney, CLARA, 200; DEFRISE, 255; Urethra and its sinus, K. HALL, 449; NEUVILLE, 754.

Organs of Reproduction.—Female genitals, *Hyaena*, NEUVILLE, 755, 757; Genitals, Stoat, DEANESLY, 251; Cyclical changes, *Papio*, GILLMAN, 382; Spermatozoa Murids, FRIEND, 357; Testis, GUTZSCHEBAUCH, 437; ROLSHOVEN, 893, 894; Prostate, v. WAGENEN, 1138; Placenta, GROSSER, 425; KLEIN, 570; Uterus, MARKEE & others, 678; NISHIDA, 762; Corpora lutea Rhesus, CORNER & others, 219.

PHYSIOLOGY.

Nervous System and Sense Organs.—Brain of Dog, LEBEDINSKAJA & ROSENTHAL, 634; Brain *Dipodomys*, STRAUS, 1050; Function pyramidal tracts, MARSHALL, 682; Vagus and spinal accessory, DU BOIS & FOLEY, 284; Nervous sensibility, MAIGNON, 668; Colour of iris, SÄLZLE, 920; SGONINA, 976.

Epidermal Organs.—Sexual skin reactions in *Macacus*, BACHMAN & others, 46.

Muscles, Bones and Locomotion.—General, MAGNE D. L. C., 665, 666; Joints and muscles of limbs, LUCINESCU, 653; Lower jaw joint, WALLISCH, 1145; Neck joint of marine forms, KNESE, 571; Of Chimpanzee, SCHREIBER, 951; Elbow joint, DRUZININ, 280; Equine carpus, POPLEWSKI, 835; Bone regeneration, KROMPECHER, 606.

Nutrition and Digestion.—General, HONIGMANN, 509; Salt ration, DANILOV, 236; Iodine effects, HYKES & DICKOW, 530; Protein and amino acids, BOORSOOK, 111; Avitamosis

experiments, SCHEUNERT & SCHMIDT-HOENSDORF, 940; Salivary glands, THOMAS, 1092; WEISSENFLUH, 1161; ZIEGLER, 1215; Metabolism in Chimpanzee, BENEDICT & BRUHN, 67; in Sheep, MONNIG & others, 732.

Circulation.—Heart beat, Elephant, BENEDICT & LEE, 68; Vital staining methods for blood study, POPOWA, 836.

Respiration and Temperature.—In diving Seals, IRVING & others, 534; In Chimpanzee, BRUHN & BENEDICT, 137; Heat radiation from body, MAIL & MILLS, 669; Temperatures in C. American Mammals, ENDERS & DAVIS, 315; In *Elephas*, BENEDICT & LEE, 69.

Excretion.—Haemoglobin by renal excretion, GERSH, 378.

Endocrines.—Hypophysis, CHADWICK, 184; GUYENOT, 439; INGRAM & FISHER, 533; Spleen, HERRATH, 486; Adrenals, GROLLMAN, 421; WINTER & EMERY, 1183.

Reproduction.—Sex physiology and oestrous, BRAMBELL & ROWLANDS, 124; F. H. CLARK, 201, 202; CUTRIGHT, 232; DEANESLY, 251; ELDER & YERKES, 305; 306; EMERY & SCHWABE, 311; GILLMAN, 382; HAWKINS & DARLOW, 469; MARSHALL & BOWDEN, 683; MYERS & others, 742; ROBSON, 883; ROWLANDS & PARKES, 903; YERKES & ELDER, 1209; Gestation period, BROWN, 136; YOUNG & BLANDAUI, 1212; Uterus, LYON & ALLEN, 657; MARKEE & others, 679; TAKEBE, 1075; Corpora lutea, ALLEN & HECKEL, 17; Placenta, KLEIN, 570; Vaginal secretions and sex of offspring, KARDY-MOWICZ, 555; Sperm agglutination, KATO, 558; Function of prostate, v. WAGENEN, 1138.

Artificial Insemination.—GUNN, 435; KRASOVSKAJA, 597, 598; PINCUS & ENZMANN, 814.

Lactation.—GARRISON & TURNER, 367; NELSON & others, 750; TURNER, 1117, 1118; TURNER & REINECKE, 1119.

Hibernation Problems.—FRIEDMAN & ARMOUR, 356; HOEPKE & PETER, 506.

Miscellaneous.—Posture of Sloth, LANGWORTHY, 620.

Experimental Physiology; Transplants and Grafts.—BUTCHER, 152; BUXTON, 153; EINHORN & ROWNTREE, 298; LIPSCHÜTZ, 637; MARKEE, 680; MAX, 700; PFEIFFER, 806; SAXTON & others, 926; WALLIS, 1144; WATERMAN, 1151.

Experimental Physiology; Effects of Light and other Radiations.—Light, BISSONNETTE & BAILEY, 83; MARSHALL & BOWDEN, 683; WHITAKER, 1169; Electricity, SCHRÖDER, 955; Rontgen and other rays, DANNEEL & LUBNOW, 239; GULBEKIAN, 434; PAPALASCHWILI, 789; ROGOZIŃSKI & GLOWCZYŃSKI, 890; ROKIZKY, 892; SCHMIDT, 945.

Experimental Physiology; Effects of various Injections.—BURROWS, 148; COURRIER & GROS, 222; GUYENOT & NAVILLE-TROLLET, 438; LAFON, 619; PONDER, 831; ROBSON, 883; SILVESTRI, 994; WELLER & others, 1162; WELLS, 1163; YUSUPOVA, 1213; ZUCKERMAN & PARKES, 1223.

Experimental Physiology; Hormones.—DANTCHAKOFF, 241, 242; DIAKOW & KŘIŽENEČKÝ, 264; GREEP & others, 412.

Experimental Physiology; Extirpation and Castration.—Skull parts, GREEN, 411; Hemidecortication, WALKER, 1141; Spleenectomy, HORN, 516; Adrenalectomy, SILVESTRONI, 995; Hysterectomy, LOEB & SMITH, 638; Hypophysectomy, CUTULY, 233; HILL & others, 492; Gonadectomy, LAWLESS, 630; SCHOUR, 949; ZALESKY, 1214.

Miscellaneous.—Artificial egg culture in Rat, JOLLY & LÉURE, 545.

Biochemistry.—Pigments, FOX, 337; Visual purple, VERRIER & PANNIER, 1129; Glutathion, RANQUINI & CUENCA, 858; Genital tract of *Macacus*, v. DYKE & CHI'EN, 239; Fat of *Mar-mota*, FRANK-KAMENEZKI, 339.

Bio-mechanics.—Striped muscle, CAREY, 171; Effects of pressure on skull, GREEN, 409; Carpus of Equines, POPLEWSKI, 835; Bat flight, EISEN-TRAUT, 303; Dolphin locomotion, GRAY, 402.

DEVELOPMENT.

Early Stages.—Parthenogenetic segmentation, HARMAN, 459; Early stages, *Mus*, JOLLY & FÉRESTIER-TADIÉ, 544; KUHLE, 608; *Bettongia*, KERR, 564.

Nervous System and Sense Organs.—Brain of Cetacea, RIESE, 874; Subcommisural organ, TURKEWITSCH, 1116; Cerebellum, BAT, LARSELL & DOW, 621; Pineal gland, TURKEWITSCH, 1115; Aqueduct of Sylvius, TURKEWITSCH, 1114; Cranial nerve ganglia, v. CAMPENHOUT, 168; Olfactory nerve, v. CAMPENHOUT, 167; Internal ear, DE BURLET & KOOMAN, 147; FIEANDT & SAXÉN, 328.

Bone, Teeth, Muscle, etc.—Articular cartilage, ELLIOTT, 307; Skull, *Ornithorhynchus*, DE BEER & FELL, 63; Manatee, HIRSCHFELDER, 504; *Odocoileus*, CAHALANE, 159; Notochord, ENCISO, 313; Tooth germs, GLASSSTONE, 383; Molars, *Bos*, KUPFER, 611; Rodent dentition, GULAT, 433; HARMAN & SMITH, 460; 461.

Reproductive Organs.—Ova general, PINCUS, 813; Genitals in Ungulata, PHILLIPS & ANDREWS, 837; Ovulation in Rabbit, MARKEE & HINSEY, 677; Placenta, *Centetes*, GOETZ, 386; Prostate and seminal vesicles, PRICE, 845; Spermatogenesis, RAYNAUD, 862; WELLS & MOORE, 1164.

Heart and Circulation.—Blood-supply of heart, BENNETT, 72; Bundles of His, SANABRIA, 921; Corneal blood vessels, JULIANELLE & BISHOP, 547.

Alimentary System. — Stomach, GEHRKE, 374.

Excretory System.—Urethral sinus, K. HALL, 449.

Endocrines and other Glands.—Thymus, EMMART, 312; Thyroid, GODWIN, 385; Spleen, HOLYOKE, 508; Suprarenals, ENGSTRÖM, 318; Mammary glands, DEAKIN, 250.

Experimental Embryology. — Transplantation experiments, WATERMAN, 1150.

Miscellaneous. — Organizers, WADDINGTON, 1137.

Embryology of Special Forms.—Cetacea, SLIJPER, 1011; *Delphinus*, MALM & TROTZKAYA, 674; *Bos*, KUPFER, 612.

ETHOLOGY.

Regional Field-notes.—Ungulates in Caucasus, NASSIMOVITCH, 748; Turkestan Rodents, MEKLENBURTZEV, 704; KOLESNIKOV, 582; Turkestan Bats, MEKLENBURZEV, 705; African big game, GROMIER, 422; Natal, COWLES, 227; Zululand, ROBERTS, 878; Uganda and Kenya, ALLEN & LAWRENCE, 16; Western Australia, SHORTRIDGE, 991; Arizona, BAILEY, 47; New York State, TOWNSEND, 1104; Nova Scotia, SHEDDEN, 985; Brit. Columbia, RACEY, 852.

Habits of Special Forms.—*Physeter*, TOMLIN, 1099; *Tapirus*, THOM, 1091; *Rhinochoerus*, SCHNEIDER, 946; *Bos banteng*, WOOD, 1196; *Lepus*, HENDRICKSON, 485; *Sylvilagus*, BLAIR, 87; *Cricetus*, DIDIER & MATHIAS, 269; PETZSCH, 803; *Peromyscus*, BEHNEY, 64; HAYNE, 473; *Chionomys*, NASSIMOVICH, 747; *Reithrodontomys*, C. F. SMITH, 1012; *Ondatra*, MIZELLE, 719; *Tamias*, CHONDRIN, 216; PREBLE, 844; *Citellus*, BURT, 150; *Glaucomyss*, COWAN, 225; *Ursus piscator*, BERGMAN, 77; *Procyon*, HAMILTON, 457; *Mustela*, MARSHALL, 684; *Kolonocus*, FETISOFF, 326; *Putorius*, LAWROFF, 632; *Meles*, DAVIES, 246; *Otaria*, HAMILTON, 453; *Notiosorex*, HUEY, 525; *Myogale*, PUISSÉGUR, 847; *Erinaceus*, MOHR, 727; *Scalops*, ARLTON, 33; *Solenodon*, MOHR, 729; *Myotis*, DYMOND, 290; Lemurids, DECHAMBRE, 253; STEIN, 1033; *Hapale*, SAWAYA, 924.

Psychology.—General works, KATZ, 559; MAIER & SCHNEIRLA, 667; YOUNG, 1211; Valance in behaviour, RUSSELL, 910; Experiments with Rodents, CHANG, 186; CLARK, 204; POE & others, 829; SGONINA, 977; WÖRMER, 1200; Dogs, BIERENS DE H., 81; RUSSELL, 911; SCHMID, 943; Cats, GARBOWSKI, 365, 366; Monkeys, BIERANS DE H. & KOOYMAN, 80; FISCHER, 331; KATZ, 560; KOHLS, 579.

Food Habits.—Geophagy, CAIUS & CHHAPGAR, 161; Arctic animals,

COTTAM, 220; *Nothotherium*, LAUDERMILK & MUNZ, 624; *Cervus*, MAYNARD & others, 701; SKINNER, 1009; *Sciurus* SHAW, 982; *Mephitis*, HAMILTON, 456; Monkeys, KATZ, 560.

Breeding, Courting and Maternal Habits.—*Setonix*, FLEAY, 333; Cetacea, TOMILIN, 1098; *Mus*, BUXTON, 154; *Castor*, BENSON, 74; Phocidae, DOROFEEV, 276; Bats, EISENTRAUT, 302; BAKER & BIRD, 50; Chimpanzee, ELDER & YERKES, 306; TOMILIN, 1100.

Miscellaneous.—Rodent burrows, RODIONOV, 888; Flight of Bats, EISENTRAUT, 303.

Moult.—GREEN, 407.

Ecology and Effects of External Conditions.—Studies in Russia, IVANKO, 535; Russian Rodents, DANINI & OLSHVANG, 238; Turkestan Rodents, MEKLENBURTZEV, 704; KOLESNIKOV, 582; In N. Africa, HEIM DE B., 475; California, GRINNELL & LINSDALE, 420; Ohio forests, WILLIAMS, 1174. *Citellus*, BIRULA, 82; Effects of glacial age, SCHREUDER, 953; Climatic effects on coat-colour, RENSCH, 869; Elevation and blood-counts, KALABUCHOW & RODIONOV, 553; Drought, WOOSTER, 1199; Effects of tsetse campaign in Tanganyika, HARRISON, 462; Island habitat and growth, BOETTGER, 99; Coal Mine habitat effect, ELTON, 309; Cavernicolous effects, BRUNNER, 140, 141; HILZHEIMER, 499, 501; DOVER, 279.

Population Studies.—Fluctuation in Rodent populations, RALL, 854, 855; SVIRIDENKO, 1064, 1065; NAUMOV, 749; *Geomys*, MOHR, 724; *Lepus*, COX, 228; MACLULICH, 663; MOHR, 731; ELTON & SWYNNERTON, 310; Studies in New York State, TOWNSEND, 1104; Census of N. Rhodesia Game, PITMAN, 816.

Migration.—Russian Murids, RALL, 855; Bats from banding methods, GRIFFIN, 416; EISENTRAUT, 300, 301.

Hibernation.—*Marmota*, FRIEDMANN & ARMOUR, 356; Bats, SWANSON & EVANS, 1067; LÖHRL, 641.

Polinization.—PORSCH, 837.

Pathology.—In London Zool. Gardens, HAMERTON, 452; Dental pathology, COLYER, 215; Scurvy,

BABUDIERI, 44; Wound-healing, BENTLEY, 76; Paralytic rabies, METIVIER, 708; Rabies and Vampire Bats, PAWAN, 795, 796; Diseases of Cervidae, MILLS, 716; Injury to vertebrae, Zebra, KUMMERLÖWE, 610.

Palaeopathology.—KUBACSKA, 607.

Parasitism.—Mammals as hosts of Mites, SCHULZE, 958; Parasites of *Mus*, LUTTERMOSER, 655.

Duration of Life.—*Lepus*, TEGGE, 1085.

Mortality and Destruction.—By automobiles, WARREN, 1147; WILFORD, 1172; Accidents to human life through animals, HABERNOLL, 440.

Footprints.—Brit. Mammals, CHARD, 190.

VARIATION AND AETIOLOGY.

General Evolution.—Critical note on Lamarckism, CREW, 230; Adaptation of skeleton, GREGORY, 415; Evolution and the endocrines, ZUCKERMAN, 1222; Evolution of Mesozoic Mammals and their food habits, WERNER, 1167.

Teratology.—Artificial monster *Mus*, PUNNETT, 848; Monocephalic deraelphes, DIDIER & THOYER-ROZAT, 270; Thoracopagus tribrachius, GREEN, 404; Polymastic Chimpanzee, ELDER, 304; Manx Cats, TACKE, 1071; Skulls of domestic dogs, GEORGI, 376; Ear vesicles, BONNEVIE, 110; Abnormal sacrum, PRAG, 841; Polydactyle *Cavia*, KRÖNING & ENGELMANN, 605; Cerebral atrophy, GREEN, 410; Facial malformations, MOTOHASHI, 738; Renal anomalies, HAIN & ROBERTSON, 442; Cryptorchism, COHRS & SCHNEIDER, 211; Vaginal occlusion, MARX, 685.

Sex Problems (see also under Physiology p. 57).—Ratios and determination, MASUI, 687; Sexual distinctions in hypophyses, PREIFFER, 805; Masculination by injections, GUYÉNOT & NAVILLE-TROLLET, 438.

Hybrids.—Panther and Puma, HALTENORTH, 451; *Semnopithecus* × *Kasi*, HILL, 498.

Intersex.—Bovine Free martins, BUYSE, 155; *Sorex*, BRAMBELL & HALL, 123; *Capra*, BORNIG & KAO, 117; PATAY, 792.

Regeneration.—KROMPECHER, 606.

Variation.—With age, *Peromyscus*, DICE, 266; Albino and Spotted Hawaiian Rats, SVIHLA, 1058.

Genetics; General Problems.—Inheritance and training, CREW, 230; Growth inheritance, MARSHAK, 681.

Genetics; Researches and Problems of Mus.—BURHOE, 146; CASTLE, 176; 180; 181; CHESLEY & DUNN, 195; F. H. CLARK, 205; CLOUDMAN & LITTLE, 209; DUNN, 286; FELDMANN, 323; FISHER & MATHER, 332; GORER, 396; GOWEN, 398; GREEN, 405, 406; GRÜNEBERG, 426, 427, 428, 429; KEELER & GOODALE, 562; KING, 566; KORTEWEG, 594; REED, 865; ROBERTS & QUISENBERRY, 881; STRONG, 1055.

Genetics; Other than Mus.—Cattle, PUNNETT, 848; WHITE & IBSEN, 1170; Horse, PRAWOCHENSKI, 843; Sheep, BUTARIN, 151; Dry, 282; EHRRICH, 296; Rabbits, CASTLE, 177; CASTLE & LAW, 178; CASTLE & REED, 179; PICKARD, 810; WILSON, 1180; *Cavia*, REBRINA, 863; WRIGHT & CHASE, 1202; *Peromyscus*, H. F. CLARK, 203; FELDMAN, 324; HUESTIS & BARTO, 524; Chimpanzee, ELDER, 304; Man, HALDANE, 443.

Phylogeny; General.—Domestic Animals, BOGOLIUBSKIJ, 104; NACHTSHEIM, 743; Locomotion, MAGNE D. L. C., 666; Scales and hairs, MIRANDA-RIBEIRO, 717; Teeth, FRIANT, 351; Muscular system, HOWELL, 519, 520; Caudal muscles, MAXIMENKO, 699; Placenta, GROSSER, 425; Adrenals, BOURNE, 120.

Phylogeny; Man and Primates.—WEIDENREICH, 1158; Claws and nails, CLARK, 208; Dentition, SIMPSON, 1005; Brain, WEIDENREICH, 1157; Spleen, SCHWIDETZKY, 968.

Phylogeny; Other Groups.—Cetacea, SLUJPER, 1011; Proboscidea, OSBORN, 781; Equidae, d'ANDRADE, 19, 20; V. BENMEL, 66; FRIANT, 350; HANKO, 458; ROBB, 877; RUMJAHCEV, 904; Artiodactyles, ANTHONY & FRIANT, 24; KOLESNIK, 581; Rodents, KORVENKONTIO, 595; Miocene Dogs, LOOMIS, 645.

Taxonomy and Classification.—Based on bony labyrinth, TURKEWITSCH,

1110; Proboscidea, OSBORN, 781; Ungulata, FRECHKOP, 344; Equidae, ANDRADE, 20; Antelopes, TOSCHI, 1103; Rodents, KORVENKONTIO, 595; Lorissoids and Lemurs, W. C. O. HILL, 495.

Number of Described Species.—POOLE, 832.

Nomenclature.—Changes and corrections, STRAND, 1049; TATE, 1080; Vernacular names, SHITKOV, 989.

Miscellaneous Palaeontological Papers.—Reprint of F. Ameghino's works, TORCELLI, 1102; Mesozoic Mammal food-plants, WERNER, 1167; Oligocene coprolites, STOVALL & STRAIN, 1048; Miocene Dogs, LOOMIS, 645; Fossil Proboscidea, OSBORN, 781.

GEOGRAPHY AND FAUNAS.

Zoogeographical Problems.—Ice Age faunas, HOPWOOD, 515; N. African problems, HEIM DE B., 475; JOLEAUD, 541; Critical notes on Wallace's Line, BRONGERSMA, 129; Lesser Sunda Is., MERTENS, 707; Origin of Australian fauna, ANDERSON, 21; Pliocene American succession, STIRTON, 1036; Arizona life-zones, BAILEY, 47; Florida and New Mexican faunas, SIMPSON, 1006.

PALAEARCTIC REGION.

General.—POCOCK, 828.

British Isles.—PITT, 817; Bedfordshire, ELLIOTT, 308; Devonshire, BLACKMORE, 86; Cornwall, STEVEN, 1034; Lancashire, WAGSTAFFE & CLEGG, 1140; Denbigh, DAVIES, 246.

Scandinavia.—Denmark, MOHR, 725, 726; Bornholm, LARSEN, 622; Ertholmene I., Baltic, BERNSTRÖM, 79; Sweden, LONNBERG, 644; WIRÉN, 1185; Finland, VÄLIKANGAS, 1124.

France.—ASTRE, 37; PUISSEGUR, 847; Auvergne, CHARVILHAT, 192; Seine-Inf., REGNIER, 867; Vendée, BADOUIN, 60.

Spain.—AGACINO, 6.

Germany.—POHLE, 830; Brandenburg, HERTER, 488; Greifswalder-Oie, Baltic, HERTER, 489; Saxony Langer 619A; Baden, LÖHRL, 642; Württemberg, LÖHRL, 640.

Switzerland.—BÄCHLER, 45.

Balkan States.—Bulgaria, v. BOET-
TICHER, 100; HEINRICH, 477; Euro-
pean Turkey, BARCLAY, 55; Greece,
PANTAZIS, 788.

Poland.—NIEZABITOWSKI, 759.

Russia. — European and Asiatic,
HILZHEIMER, 500; KUSJAKIN, 616;
OGNEV, 771, 772; OGNEV & STROGANOV,
773; OGNEV & TUROV, 774; Dani-
lowitsch, 237; European, DURY-
MANOVA-SAVIK, 287; FALKENSTEIN,
321; KUSNETZOFF, 617; RALL, 854;
ROMANOVA, 897; STROGANOV, 1054;
SUBKO, 1056; Ukraine, AVERIN &
SCHTAMM, 42; MIGOULINE, 710, 711;
MILJUTIN, 712; VALCH, 1123; Caucasus,
SVIRIDENKO, 1066.

North Africa.—HEIM DE B., 475;
Morocco, JOLEAUD, 538; LAURENT,
625, 626; Algeria, LAURENT, 628;
Sahara, HEIM DE B., 476; JOLEAUD,
540; Lybian Desert, MASON, 686.

Western Asia.—Asia Minor, NEU-
HÄUSER, 751, 752.

Russian Asia.—Siberia, EGORIN, 292,
293; KOLJUSCHEW, 583; Turkestan;
ARGIROPULO, 32; KOLESIKOV, 582;
KOLOSISOV, 589; MEKLENBURZEV, 704,
705; SELEVIN, 971; Vinogradov &
others, 1132; Tian Shan, KASHKAROV
& KOROVIN, 557; Kamchatka, GOLD-
MAN, 387; Karaginski I., Behring Sea,
JURGENSON, 550.

Central Asia.—Tibet, BATTYE, 59.

Eastern Asia.—Corea, ABE, 1;
Honan, FU, 360; Shensi, HO, 505.

Japan.—TAGAMI, 1072.

ETHIOPIAN REGION.

General.—CABRERA, 156; GROMIER,
422; OSGOOD, 784; ST. LEGER, 918;
SANBORN, 923.

West Africa.—KOLLER, 584; Gold
Coast, HAYMAN, 472; Nigeria, NEW-
TON, 758; ROSEVAAR, 900; French
Equatorial Africa, BLANCOU, 92;
COOLIDGE, 218; Cameroon, G. M.
ALLEN, 13; Belgian Congo, HATT,
465; SCHOUTEDEN, 950; N. Rhodesia,
PITMAN, 816; Angola, ST. LEGER, 916,
917.

South Africa.—ROBERTS, 878, 879,
880; S.W. Africa, ST. LEGER, 917;
Natal, COWLES, 227.

Central and East Africa.—Tangan-
yika Territory, HARRISON, 462; LAW-
RENCE & WASHBURN, 631; Kenya,
RODE, 885; Kenya and Uganda,
ALLEN & LAWRENCE, 16.

Northeastern Africa. — Abyssinia,
LAURENT, 627.

St. Helena.—KITCHING, 568.

INDIAN REGION.

General.—BECHTHOLD, 62; POCKOCK,
823, 825, 826.

India.—Burma, ALLEN, 15; RODGER,
887; Maldives, ALLEN, 15; Ceylon,
HILL, 497; 498; PHILLIPS, 808,
809.

China and Dependent Islands.—
Szechuan, SOWERBY, 1022; Formosa,
KURODA, 614; TANAKA, 1076, 1077;
Kô-tô-shô I., off Botel Tobago, TOKUDA
& KANO 1095.

Malaysia.—TATE, 1079; Malay Penin-
sula, CHASEN, 193, 194; DOVER, 279;
SUMATRA, BRONGERSMA, 130; SODY,
1014, 1015; Sarawak, BANKS, 52;
SELOUS & BANKS, 972; Celebes, TATE
& ARCHBOLD, 1082; Philippine Is.,
TAYLOR, 1084.

AUSTRALIAN REGION.

Australia.—Queensland, TROUGHTON,
1105; Victoria, FINLAYSON, 329;
Tasmania, PEARSON, 799; South
Australia, FINLAYSON, 330; Western
Australia, SHORTRIDGE, 991; Melville
I., N. Terr., HAYMAN, 470.

Austro-Malayan Islands. — TATE;
1079; Bali-Sumbawa, MERTENS, 707,
New Guinea, ROTHSCHILD & DOLLMAN,
902; RUMMLER, 905; TATE & ARCH-
BOLD, 1081; TROUGHTON, 1108;
TROUGHTON & LE SOUEF, 1109.

New Zealand.—STEAD, 1027, 1028.

Pacific Islands.—New Hebrides,
BAKER & BIRD, 50; Solomon Is.,
TROUGHTON, 1107; Hawaiian Is.,
SVIHILA, 1061.

NEOTROPICAL REGION.

General.—SANBORN, 922.

South America.—Argentina, BORDAS, 113; MARELLI, 675; YEPES, 1207, 1208; Uruguay, DEVINCENZI, 263; Chile, GIGOUX, 379.

Central America.—Panama, ENDERS, 314; Honduras, GOLDMAN, 388; GOODWIN, 392.

West Indies.—Trinidad, VESEY-FITZGERALD, 1131.

NEARCTIC REGION.

General.—ENGELS, 316; GOLDMAN, 389; HOWELL, 521, 523.

Mexico, DEL CAMPO, 170; GOLDMAN, 390.

Western U.S.A.—California, GRINNELL, 417; GRINNELL & HILL, 418, 419; GRINNELL & LINSDALE, 420; Oregon, BAILEY, 47; GRINNELL, 417; Washington, SKINNER, 1010; Nevada, HALL, 447; MILLER, 713; Arizona, BENSON, 73; GRINNELL & HILL, 418; Utah, BENSON, 75; BOLE, 108; Colorado, WARREN, 1146; New Mexico, E. R. HALL, 444; HATFIELD, 464.

Middle U.S.A.—S. Dakota, MOULTHROP, 741; Michigan, HOWELL, 522; Indiana, LYON, 656; Kansas, HIBBEARD, 491; Oklahoma, BLAIR, 88; Arkansas, BLACK, 85; Texas, GOLDMAN, 391.

Eastern U.S.A.—Florida, BARBOUR, 54; W. Virginia, MILLER, 714; Pennsylvania, MOHR, 722, 723; New York, TOWNSEND, 1104; Connecticut, GOODWIN, 393.

Canada.—Nova Scotia, GOULD, 397; SHELDON, 985; Ontario, MACLULICH, 661; Manitoba, GREEN, 408; Bt. Columbia, COWAN, 224, 226; HALL, 445, 446; RACEY, 852; RACEY & COWAN, 853; SWARTH, 1068.

Arctic America.—Alaska, COWAN, 226; SWARTH, 1069; Kodiak I., Alaska, KELLOGG, 563; Akpatok I., Hudson Str., DAVIS, 248; Greenland, DEGERBOL, 256, 257, 258; PEDERSEN, 800.

OCEANS AND SEAS.

British seas, TETLEY, 1090; KOEPCKE, 578; Portuguese waters, NOBRE, 764; Kara Sea, CHAPSKY, 189; N. Pacific, DOROFEEV & FREIMANN, 277; Japanese seas, MATSUURA, 691, 692, 693; OGAWA, 770; Tasmanian seas, PEARSON, 799.

GEOGRAPHY FOSSIL FAUNAS.

Trias.—South Africa, BROILI & SCHRÖDER, 131.

Cretaceous.—Alberta, RUSSELL, 912.

Eocene.—General, SIMPSON, 1002; Germany, HELLER, 484; VOIGHT, 1133, 1134; WEIGELT, 1159; Mongolia, OSBORN, 782; Hupeh, China, TEIHARD & YOUNG, 1088; California, STOCK, 1039, 1040, 1041, 1043; New Mexico, REYNOLDS, 870; SIMPSON, 1003; Montana, SIMPSON, 1004.

Oligocene.—France, ADDÉ-LACOMME, 5; GILLET & THÉOBALD, 381; ROMAN & BOUCHER, 896; New Zealand, BENHAM, 70; California, STOCK, 1042, 1043; WILSON, 1178; S. Dakota, SCOTT & JEPSSEN, 969; STOVALL & STRAIN, 1048; WOOD, 1192; Saskatchewan, RUSSELL, 912.

Miocene.—Germany, HAUPT, 466; HELBIG, 478; Spain, PAIRO, 787; Russia, ANDRIANOV & LARYN, 23; BOGATCHEFF, 101; Mongolia, COLBERT, 212, 213; WOOD, 1191; Japan, MAKIYAMA, 671; MATSUMOTO, 689; Belgian Congo, DARTEVILLE, 244; Kenya, MACINNES, 659; Argentina, RUSCONI, 908; California, BODE, 94, 95; WILSON, 1176; WOOD, 1189; Nevada, FURLONG, 362; Oregon, SCHARF, 931; A. E. WOOD, 1188, 1192; Wyoming, LOMIS, 646; A. E. WOOD, 1188; S. Dakota, LOOMIS, 645; A. E. WOOD, 1192; Nebraska, GAZIN, 371; LOOMIS, 645.

Pliocene. — France, ROMAN, 895; Holland, SCHREUDER, 952; Germany, BENTZ, 58A; HELLER, 483; Spain, CARVAJAL, 174; Italy, RAMACCIONI, 856; STORLAZZI, 1046; Roumania, MOROSAN, 735; SIMIONESCU, 996; Bulgaria, BAKALOV, 48, 49; Samos, SICKENBERG, 992; Egypt, TOBIEN, 1094; Irak, PIVETEAU, 820; Mongolia, FRIANT, 249; China, BOHLIN, 106;

Japan, SHIKAMA, 936, 983; TAKAI, 1074; TOKUNAGA, 1096; India, LEWIS, 636; Ceylon, DERANIYAGALA, 261; Java, v. KOENIGSWALD, 575; Argentina, RUSCONI, 907; N. Amer., STIRTON, 1036; California, WOOD, 1189; Oregon, WILSON, 1179; Arizona, STIRTON, 1037; Idaho, GAZIN, 373; Kansas, WOOD, 1193; Texas, STIRTON, 1038.

Pleistocene to Recent; Europe.—General, SCHREUDER, 953; WRIGHT, 1203; France, DELAFOSSE, 259; DUTERTRE, 288; Belgium, EHRENBURG, 295; HASSE, 463; Holland, JUNGE, 549; SCHREUDER, 954; Denmark, IVERSEN, 536; Germany, BRUNNER, 138, 139, 140, 141; FRENZEL, 346; HAUPT, 467; HELLER, 482; HILZHEIMER, 499, 501; RODE, 884; RÖPKE, 899; SCHAUB, 933; SOERGEL, 1016; WEHRLI, 1153; Switzerland, GAGNEBIN, 363; GERBER, 377; HELBIG, 480; KUHN, 609; Czechoslovakia, SCHIRMEISES, 942; STEHLÍK, 1030; Austria, KORMOS, 593; Hungary, MOTTI, 739; Yugoslavia, LEONARDI, 635; Roumania, PAUCA, 794; Russia, BURCHAK-ABRAMOVICH, 143, 144; GROMOVA, 423; GROMOV, 424; PIDOPLITSHKA, 812; Portugal, SERPA-PINTO, 974; Italy, BLANC, 90, 91.

Pleistocene to Recent; Extra-European.—Algeria, JOLEAUD, 539; W. Siberia, RIABININ, 871; China, TEILHARD & YOUNG, 1089; Japan, SHIKAMA, 987; Riukiu Is., TOKUNAGA, 1097; E. Africa, HOPWOOD, 513; Indochina, FROMAGET, 358; Java, CALLENFELS, 164; v. KOENIGSWALD, 574, 575, 576, 577; Timor, SCHAUB, 934; S. Australia, TINDALE & others, 1093; Argentina, CABRERA, 157; California, WILSON, 1177; New Mexico, STOCK & BODE, 1044; Illinois, POWERS, 840; W. E. SMITH, 1013; Texas, AYER, 43.

Tertiary; General and Undefined.—OSBORN, 781; Roumania, MACAROVICI, 658; Transvaal, BROOM, 132; Madagascar, CARLETON, 172; Argentina, CABRERA, 158; U.S.A., WOOD, 1190; Indiana, LYON, 656.

III.—SYSTEMATIC.

The arrangement of the families has been altered to correspond with the

other portions of the Record, and they are ranged in order from the lowest and most generalized to the Primates which now come at the end. The classification follows as before Trouessart's Catalogue, with some exceptions. The numerals in heavy type refer to the "Titles," those in smaller Clarendon type to volume number of the references.

Census and bibliography of Paleocene Mammals, SIMPSON, 1002.

ORDER MULTITUBERCULATA.

†*Cimolomys major* sp. n. Cretaceous Alberta, RUSSELL Trans. roy. Soc. Can. 30 sect. IV p. 75 figs.

†*Ectypodus hunteri* sp. n. Paleocene Montana, SIMPSON Amer. Mus. Nov. 873 p. 6 figs.

†*Kimbetohia* gen. n. p. 2 for genotype *K. campi* sp. n. p. 3 Paleocene New Mexico, SIMPSON Amer. Mus. Nov. no. 849 fig.

†*Meniscoessus*, teeth and jaws, descr. figs., SIMPSON 1000.

†*Tritylodon longaevus* a new discovery in Orange Free State, exact age and additional information on dentition, BROILI & SCHRÖDER, 131.

ORDER MONOTREMATA.

The red blood corpuscles of the Monotremata, BRIGGS 127.

Echidna aculeata, climbing and hibernation habits observed in captivity, COLEMAN 214.

Ornithorhynchus anatinus, development of skull, DE BEER & FELL 63; Structure of snout-salivary glands and teeth, BROOM 135; Myology of fore-limb, HOWELL 518.

ORDER MARSUPIALIA.

The sex-chromosomes of Marsupials, KOLLER 585.

Structure of retina, O'DAY 768.

INCERT. SEDIS.

†*Argyrolagus*, affinities Rodent or Marsupial? RUSCONI 907.

DIDELPHYIDAE.

Didelphys virginiana, the geniculate body of the brain, BODIAN, 96; The winter daytime dens in Mississippi, YEAGER 1206.

†*Peratherium giselnense* sp. n. Mid. Eocene nr. Halle, HALLER Nov. Acta Leop. Carol. 4 p. 316 figs.—*P. californicum* sp. n. p. 123, *P. sp. ?* p. 124 from Sepse Eocene, California, STOCK Proc. Nat Acad. Wash. 22.

DASYURIDAE.

Phascogale rona p. 2, *P. tafa* p. 3 spp. n. *P. (Phascosorex) dorsalis whartoni* p. 4 subsp. n. all Papua, TATE & ARCHDALE Amer. Mus. Nov. no. 823.

PERAMELIDAE.

Echymipera oriono sp. n. Papua, TATE & ARCHBOLD Amer. Mus. Nov. no. 823 p. 1.

Thalacomys minor var. *mizelius*, T. *lagotis sagitta* descr. skull teeth and external features, FINLAYSON 330.

MACROFIDAE.

The movements and attitudes of Kangaroos, DECHAMBRE 254.

Bettongia cuniculus, primitive streak and early stages of development, KERR 564.

Dendrolagus review of the genus with keys descr. and col. pls. p. 477, *D. matchei xanthotis* p. 483, *D. goodfellowi shawmeyer* p. 486, subsp. n. *D. dorianus aureus* form. n. p. 490 all New Guinea, ROTHCHILD & DOLLMAN Trans. Zool. Soc. 21.—*D. dorianus profugus* subsp. n. Papua, TROUGHTON Rec. Austr. Mus. 19 p. 389.—*D. spadix* p. 194, *D. deltae* p. 195 spp. n. Papua, TROUGHTON & LE SOUEF Aust. Zool. Sydney 8.

Macropus giganteus, jaw-muscles, DUBECQ, 283.

Potorous tridactylus status habits, etc. p. 221, FINLAYSON 329.

Setonix brachyurus, birth habits as observed in captivity, FLEAY, 333.

PHALANGERIDAE.

Phalanger orientalis breviceps on Bougainville I. taxonomic note p. 342, TROUGHTON 1107.

Phascolarctos cinereus, local variations and other notes p. 223, FINLAYSON 329.

Pseudochirus lanuginosus variation and other notes p. 222, FINLAYSON 329.

ORDER EDENTATA.

MANIDAE.

Manis javanica habits in captivity, GÄRTNER 368.

DASYPODIDAE.

Dasyus novemcinctus texanus in N.E. Oklahoma, BLAIR 88.

†*Peltephilus* and allied genera, review of the species chiefly Ameghino's, BORDAS 112.

MEGATHERIIDAE.

†*Glossotherium* revision and other taxonomic notes, CABRERA 157.

†*Megatherium americanum*, a large skeleton in the Field Museum, fig., RIGGS 876; Note and photo. of examples in Rio Museum, MENDONÇA 706.—*M. rusconii* again found in Venezuela, SCHAUB 935.

†*Nothotherium shastense* dung in a Texas cave identified p. 616, AYER, 43; Analysis of dung and suggestion as to food habits, LAUDERMILK & MUNZ 624; Further study of hairs figs., HAUSMAN 468.

BRADYPODIDAE.

The bregma bone of the skull in the Sloths, DE SOUSA 1017.

Physiology of posture in the Sloth, LANGWORTHY 620.

Bradypus tridactylus structure and course of the vagus, BAPTISTA 53.

[STYLINODONTIA INCERT. SEDIS.]

†*Ectoganus gliriformis* descr. of complete skull with note on affinities and nomenclature, GAZIN 372.

ORDER CETACEA.

A general work on the anatomy, embryology and phylogeny of the Cetacea, SLIJPER 1011.

Development of the brain of the Whale, RIESE 874.

Structure of the hypophysis of Whales, WISLOCKI & GELLING 1186.

The pancreas of the Cetacea and its histological structure, NEUVILLE 753.

Reports (mostly reprints) on the Cetacea obtained during the scientific cruises of Prince Albert of Monaco, RICHARD 872.

The Cetacea of the coast of Portugal NOBRE 764.

Japanese Dolphins and Toothed Whales (in Japanese), OGAWA 770.

Review of the Cetacea of Tasmanian waters. External characters and habits, PEARSON 799.

Miocene marine Cetacea from California, WILSON 1176.

Maternal instinct and sexual attachment in N. Pacific Whales, TOMLIN 1098.

BALAENIDAE.

Balaena mystacetus history from Scoresby's notes, GRAY 403.—*B. glacialis* in Japanese waters, MATSUURA 690.

Balaenoptera musculus present status and numbers in Antarctic waters, LAURIE 629; An abnormal skeleton in Pisa Museum, STORLAZZI 1045.—*B. acuto-rostrata* and other spp. distr., status and habits in Japanese seas, MATSUURA 691, 692.—*B. sibbaldii*, structure of hypophysis of brain, VALSÖ 1125.

Cetotheriidae gen. et sp. indet. p. 125 L. E. WILSON 1176.

†*Rhachianectes glaucus* bones in diluvial beds in Holland, JUNGE 549.

SQUALODONTIDAE.

†*Microcetus hectori* sp. n. and description of jaw and teeth from Oligocene New Zealand, BENHAM Trans. Proc. Roy Soc. N.Z. 65 p. 239 figs.

PHYSETERIDAE.

Hyperoodon rostratus stranded on Dutch coast photos., JUNGE 548.

Mesoplodon bidens stranded on the S. Baltic coast, KOEPEKE 578.

Physeter macrocephalus habits and movements in the north Pacific, TOMLIN 1099; Breeding habits in Japanese Seas, MATSUURA 693.

Ziphius cavirostris rudimentary teeth in examples stranded on Scottish coast, FRASER 342.

DELPHINIDAE.

Delphinapterus leucas economics, age recognition, chemical composition of oil, etc., DOROFFEW & FREIMAN pp. 1-154 277.

Delphinus delphis biophysics of locomotion, GRAY 402; Valves of heart, CHIODI 197; Breeding habits and development of Black Sea form, MALM & TROTZKAYA 674.—*D. d. bairdi* must be recognized as a distinct Pacific race, MILLER 715.

Prodelphinus caeruleoalbus descr. extern. anat. and osteology figs., OKADA 775.

Pseudorca crassidens general account, LÖNNBERG 643; 41 examples stranded in Tay estuary, dimensions, dentition, etc., PEACOCK & others 798; recent strandings on east coast of England and Scotland, FRASER 341.

Tursiops tursio structure of the larynx and tonsils, KOLLMANN 588.

PLANTANISTERIDAE.

†*Acrodelphis bakersfieldensis* sp. n. Miocene, California, L. E. WILSON Bull. Peabody Mus. no. 4 p. 58 figs.

†*Allodelphis* gen. n. p. 13 for genotype *A. pratti* sp. n. p. 14 Miocene California, L. E. WILSON Bull. Peabody Mus. no. 4 figs.

†*Dolodelphis* gen. n. for *D. littleri* sp. n. Miocene California, L. E. WILSON Bull. Peabody Mus. no. 4 p. 97 figs.

†*Eurhinodelphis extensus* sp. n. Miocene California, L. E. WILSON Bull. Peabody Mus. no. 4 p. 104 figs.

Lipotes note on anatomy and relationships, HINTON 502.

†*Macrodelphinus* gen. n. p. 27 for *M. kelloggi* sp. n. p. 28 Miocene California, L. E. WILSON Bull. Peabody Mus. no. 4 figs.

†*Miodelphis* gen. n. for *M. californicus* sp. n. Miocene California, L. E. WILSON Bull. Peabody Mus. no. 4 p. 76 figs.

†*Sinanodelphis izumidaensis* gen. et sp. n. Miocene Japan, osteology etc. MAKIYAMA Mem. Coll. Sci. Kyoto 11 p. 115 figs.

ORDER SIRENIA.

Structures and affinities of the Desmostylidae, KHOMENKO, 565.

†*Desmostylus* a new locality in Japan, TAGAMI 1072.

Halicore dugong question of occurrence in Chinese waters, SOWERBY 1020.

†*Halitherium schinzi* in Oligocene of Alsace, p. 69 GILLET & THÉOBALD 381.

Manatus (= *Trichechus*) *latirostris* development of skull, HIRSCHFELDER 504; Supposed former occurrence at St. Helena, KITCHING 568.

ORDER UNGULATA.

Evolution of the molars of Artiodactyles, ANTHONY & FRIANT 24.

Structure and development of the molars of Ungulata, KÜPPER 613.

A census of the large Game of N. Rhodesia and suggestions for conservation, PITMAN 816.

Winter habits and movements of the wild Ungulates of western Caucasus, NASSIMOVITCH 748.

Ivory producing animals and ivory in China, SOWERBY 1021.

SUBORDER HYRACOIDEA.

The Hyraxes of the Belgian Congo with notes on skull variation and other characters, HATT 465.

Dendrohyrax dorsalis sylvestris race on the Gold Coast p. 937, HAYMAN 472.—*D. d. emini* descr. skulls pelage p. 127 HATT 465.

Heterohyrax chapini addt. descr. figs. p. 132 HATT 465.

SUBORDER NOTOUNGULATA.

†*Oldfieldthomasia* structure and morphology of skull figs., SIMPSON 999.

†*Pleurostylodon* mastoid region figs. p. 28, SIMPSON 999.

SUBORDER TYPOTHERIA.

†*Acrotypotherium* gen. n. for *A. tapiai* sp. n. Miocene? Argentina, RUSCONI Bol. Paleont. B. Aires no. 6 p. 11 fig.

SUBORDER TOXODONTIA.

A review of the Toxodontia with descriptions of new genera and species printed in 1887 now published for the first time see note on p. 2, AMEGHINO 18.

†*Stereotoxodon tehuelche guinazui* subsp. n. Miocene? Argentina, RUSCONI Bol. paleont. B. Aires no. 6 p. 3 figs.

SUBORDER ENTELONYCHIA.

†*Thomashuxleya* on the skeleton and an attempted restoration figs., SIMPSON 1001.

SUBORDER CONDYLATHRA.

†*Carsoptychus* gen. nom. nov. pro *Plagiptychus* Simpson ex Matth. M.S. 1936 nec Matheron 1843 (*Periptychidae*-*Condylarthra*), SIMPSON Amer. J. Sci. (5) 32 p. 234.

†*Litolestes notissimus* sp. n. Paleocene Montana, SIMPSON Amer. Mus. Nov. 873 p. 23 figs.

†*Plagiptychus* gen. n. (ex Matthew M.S.) for genotype *Periptychus coarctatus* Cope also *P. matthewi* sp. n. Paleocene New Mexico, SIMPSON Amer. Mus. Nov. no. 849 p. 9 figs.

†*Tiznatzinia* gen. n. p. 7 for *T. vanderhoofi* Paleocene New Mexico p. 8, SIMPSON Amer. Mus. Nov. no. 849 figs.

SUBORDER LITOPTERNA.

†*Proheptoconus trelewense* gen. (*Litopterna*) et sp. n. Chabut Beds Argentina, BORDAS Physis 12 p. 111 figs.

SUBORDER AMBLYPODA.

†*Eudinoceras* cf. *khobchiensis* descr. skull from Ichang Eocene beds. TEILHARD & YOUNG 1088. figs.

SUBORDER PROBOSCEIDA.

A monograph of the Proboscidea with systematic description of all species and revision of the classification, taxonomy and nomenclature. Also history of discovery, evolution, phylogeny, etc. The following new families and subfamilies diagnosed—*Humboldtidae* pp. 575, 667, *Palaeomastodontinae* p. 691, *Stegolophodontinae* p. 700, *Serridentinae* p. 729, *Notiomastodontinae* p. 730, OSBORN 781.

†*Amynodon mongoliensis* sp. n. U. Eocene Mongolia, OSBORN Amer. Mus. Nov. no. 859 p. 1 figs.

†*Anancus properimensis* sp. n. Miocene Siwaliks India, OSBORN Proboscidea p. 647 figs.

Deinotherium age of the deposits in the Upper Rhine valley, BARTZ 58A; Two molars probably from N. Scandinavia figs., MOROSAN 736.—*D. giganteum* note figs. Bessarabia p. 358, MACAROVICI 658.—*D. gigantissimum* and allied races, taxonomy distr. descr. in Roumania, MOROSAN 735.—*D. hopwoodi* sp. n. Pleistocene Tanganyika Territory, OSBORN Proboscidea p. 117 fig.

Elephas, rate of heart beat, BENEDICT & LEE 68; body, urine and faeces temperature, BENEDICT & LEE 69.—*E. maximus* the cardiac arteries, CAVE 182.—*E. m. zeylanicus* anatomy of coronary blood vessels, HILL 493.

†*Elephas primigenius* a molar from near Wissau, Pas-de-Calais, DUTERTRE, 288; Finds in S.W. Switzerland, GAGNEBIN 363; Bones found near Kiev, Russia, BURCHAK-ABRAMOWITSCH 144.—*E. primigenius* and other spp. in the Quaternary beds of the dép. Moselle, DELAFOSSE 259.—*E. meridionalis* in Post-Tertiary Portugal, SERPA-PINTO 974.—*E. planifrons* in Pliocene of N. Italy, RAMACCIONI 856.—*E. (Palaeoloxodon) antiquus* descr. of remains found in Istria, LEONARDI 635.

Loxodonta cyclotis, taxonomy history range and habits in W. Africa, ALLEN 14.

†*Mastodon arvernensis* in Bessarabia descr. figs. p. 360, MACAROVICI 658.—*M. borsoni* a new find in Bulgaria, BAKELOV 49.—In the Vinnitze distr., Ukraine note fig., BURCHAK-ABRAMOVICH 143.—*M. pavlovi* Pliocene Russia p. 694 *M. acutidens* Pleistocene Indiana p. 696 spp. n. figs., OSBORN Proboscidea.—*M. americanus* historical efforts at reconstruction, SIMPSON 1007; Age and condition of remains at Aurora Ill., POWERS 840, W. E. SMITH 1013; Example found at Bloomfield Hills, Mich. descr. figs., CASE & STANLEY 175.

†*Miomastodon* ? sp. descr. fig. pre-molar p. 89, BODE 95.—*M. depereti* L. Miocene France, OSBORN Proboscidea p. 693 figs.

†*Palaeoloxodon antiquus recki* addt. notes p. 639, HOPWOOD 513.

†*Parastegodon akashiensis* sp. n. Pliocene ? Japan, TAKAI Proc. Imp.

Acad. Tokyo 12 p. 20 fig.; Further notes, SHIKAMA p. 22 4 figs.—*P. sugiyamai* sp. n. Pliocene ? Shikoku, Japan, TOKUNAGA Proc. Imp. Acad. Tokyo 11 p. 432 figs.

†*Parelephas* ? cf. *columbi* descr. figs. associated with artifacts in Quaternary N. Mexico p. 235, STOCK & BODE 1044.

†*Pentalophodon* sp. first record from Pliocene ? beds of Japan figs., SHIKAMA 988.—*P. falconeri* sp. n. U. Pliocene Siwaliks, India, OSBORN Proboscidea p. 653 figs.

†*Rhynchotherium browni* sp. n. U. Pliocene Sonora, Mexico, OSBORN Proboscidea p. 494 figs.

†*Stegodon o. shodoensis* a new locality FUJIMOTO 361.—*S. trigonocephalus praecursor* descr. figs. p. 86 v. KOENIGSWALD, 575.

†*Stegolophon lydekkeri* sp. n. Pliocene ? Borneo, OSBORN Proboscidea p. 700 figs.

†*Stegomastodon primitivus* sp. n. L. Pliocene Nebraska, OSBORN Proboscidea pp. 684, 726 figs.

†*Tetralophodon fricki* sp. n. M. Pliocene Texas, OSBORN Proboscidea p. 375 figs.

†*Trilophodonsendaicus* fig. molar Japan Miocene, MATSUMOTO 689.—*T. hasnontensis* sp. n. Pliocene (Siwaliks) India OSBORN Proboscidea p. 279 fig.

SUBORDER PERISSODACTYLA.

TITANOTHERIIDAE.

†*Lambdotherium popoagicum* dentition, BONILLAS 109.

†*Protitanops curryi* gen. et sp. n. Oligocene California, STOCK Proc. nat. Acad. Sci. Wash. 22 p. 656 figs.

RHINOCEROTIDAE.

Dental anomalies in fossil Rhinoceroses, PATTE 793.

†*Aceratherium lemanense subpyrenaicum* var. n. Oligocene Ariège, France, and full discussion of relationships, ADDE-LACOMME Bull. Soc. Hist. nat. Toulouse 67 p. 102 figs.—*A. schlosseri*, *A. incisivum* in Bessarabia descr. figs. p. 349, MACAROVICI 658.

†*Amynodontopsis bodei* addt. descr. p. 264 STOCK 1041.

†*Aphelops* ? cheek teeth descr. figs. p. 93 BODE 95.

†*Baluchitherium grangeri* osteol. relationships, restoration, list spec. figs., GRANGER & GREGORY 399.

†*Coelodonta antiquitatis*, an historical skull known as the Klagenfurt "Lindwurmshädel" or Dragon, historical and other notes, PUSCHNIG 849.

†*Triplopus*? *woodi* sp. n. Eocene California, STOCK Proc. Nat. Acad. Sci. 22 p. 260 figs.

TAPIRIDAE.

†*Dilophodon* sp. descr. fig. of molar, Eocene California p. 260, STOCK 1041.

†*Colodon occidentalis* notes figs. Oligocene Saskat. p. 77, RUSSELL 912.

†*Lophiodon* and other fossils in Geiseltal nr. Halle age and condition, WEIGELT 1159.

Rhinchoerus indicus breeding and rearing in Zool. Gardens, SCHNEIDER, 946.

Tapirus americanus myology of fore limb, B. CAMPBELL 166.—*T. indicus* field notes and habits in Burma photos., THOM 1091; In Siam, habits and Siamese names, GILES 380.

†*Tapirus* cf. *indicus* at Anyang descr. fig. skull p. 16, TEILHARD & YOUNG 1089.

EQUIDAE.

Classification of recent forms from their dentition, ANDRADE 20.

Origin and distribution of the domestic Horse and notes on the wild ancestral forms and races, RUMJAHCEV 904.

Phylogeny of the Equidae, v. BEMMEL 66.

The molars of *Eohippus* and the phylogeny of the Equidae, FRIANT 350.

Evolution of the equine foot, ROBE 877.

Biomechanics of the carpus in the Horses, POPLEWSKI 835.

On the mane of the wild horses and asses, HECK 474.

Equidae of the Vienna Zool. Gardens, ANTONIUS 26.

Equus on the history status and conservation of the primitive Horse, the Polish Tarpán, ANTONIUS 28;

Origin of the Hungarian horse and craniometric investigations, HANKO 458; NAGY 746; Origin of the Iberian race, D'ANDRADE 19; *E. caballus* ossification of the toe bones, WOKKEN 1187; Analysis of pace transition, MAGNE DE LA C. 665; Artistic anatomy, LUARD 652.

Equus asinus structure of bony inner ear, TURKEWITSCH 1112.—*E. africanus*, *E. a. somaliensis* osteological notes, BOURDELLE 119.—*E. burchellii* discussion and review of races only four acknowledged, CABRERA 156.—*E. grevyi* systematics, range and crossbreeding, RZASNICKI 915.

†*Equus* a tubercle of Carabelli on the molar of a Quaternary skull from France, PATTE 793.—*E. caballus* age, Glacial or Post-Glacial, of two individuals found in Jutland, IVERSEN 536.—*Equus hydruntinus* in Quaternary of Italy, BLANC 91; History of finds, distr., dentition, osteol. and affinities, a monograph, STEHLIN & GRAZIONI 1032.—*E. simplicatus* in a Texas cave deposit figs. p. 615, AYER 43.

†*Hipparion gracile* a brain-cast descr. p. 164, SIMIONESCU 997.

†*Merychippus brevidontus* sp. n. Miocene California and a discussion of the dentition of the genus and its variability, BODE 94.—*M. isonesus*, *M. brevidontus* molars descr. figs. p. 107 SCHARF 931.

†*Plesippus shoshonensis* skeleton and dentition from Pliocene Idaho figs., GAZIN 373.

†*Parahippus avus* cheek teeth descr. figs. p. 105, SCHARF 931.—*P. brevidens* descr. cheek teeth p. 91, BODE 95.

CHALICOTHERIDAE.

†*Chalicotherioidea* gen. et. sp. indet. astragalus from Pliocene China descr. figs. p. 330, BOHLIN 106.

†*Moropus* molar descr. fig. p. 109, SCHARF 931.

†*Nestoritherium sivalense* in Pliocene? Java descr. figs. p. 68, v. KOENIGSWALD 575.

†*Postschizotherium chardini* addt. material descr. discussion figs. Pliocene Shansi, TEILHARD DE C. & LICENT 1087.

SUBORDER ARTIODACTYLA.

ANTHRACOTHERIIDAE.

†*Anthracobunodon* sp. traces of skin and muscle descr., VOIGT 1133; of the hair covering, VOIGT 1134.

†*Anthracotherium* new find in the Main valley, SCHOTTLER 948; W. European species reviewed, SIEBER 993.—*A. bumbachense* descr. dentition and osteology in Oligocene Dep. Loire, ROMAN & BOUCHER 896.

†*Bothriodon* cf. *brachyrhynchus* jaw fragment descr. fig. p. 124, STOCK 1043.

ANOPLOTHERIIDAE.

†*Anoplotherium commune* osteology of the feet fig., DIETRICH 271.

SUIDAE.

Dicotyles the Peccaries of Barro, Colorado I., Panama Zone, CHAPMAN 188.

Hylochoerus meinertzhageni genl. notes and descr., COTTON 221.

†*Prosthennops* sp. molar descr. fig. p. 110, SCHARF 931; also figs. p. 93, BODE 95.

†*Sivachoerus giganteus* in M. Pliocene Egypt descr. figs., TOBIEN 1094.

†*Stibarus* ? *montanus* note figs. Oligocene Saskat. p. 78, RUSSELL 912.

Sus peculiarities of temporal region of the skull, VAU & MÜLLER 1128; Myology of fore limb, B. CAMPBELL 166; Opening of the Steno's duct in the mouth cavity, PASSANTINO 791.—*Sus scrofa* brain compared with domestic race, HERRE 487.—*S. scrofa domesticus* anatomy and development of the sub-fornical organ of the brain, v. KNOBLOCH 573.—*S. s. attila* habits in Caucasus region, LOGUINOFF 639.

†*Sus erymanthius* in Pontian Bulgaria note figs. p. 333, BAKALOV 48.—*S. cf. vittatus frontalis* var. n. semi-fossil Anyang, TEILHARD & YOUNG Palaeont. sinica 12C fasc. 1 p. 19 figs.—*S. coerti* sp. n. Pleistocene Java, v. KOENIGSWALD De Ingen. Ned.-Indië 1 no. 11 1934 p. 192.

HIPPOPOTAMIDAE.

Chaeropsis liberiensis myology fore limb, B. CAMPBELL 166.

†*Hippopotamus (Hexaprotodon) anti-quus* sp. n. Pleistocene Java, v. KOENIGS-

WALD De Ingen. Ned.-Indië 1 no. 11 1934 p. 192 figs.—*H. sivalensis* fossil molar from Pliocene Ceylon figs., DERANIYAGALA 261.

AGRIOCHOERIDAE

(= OREODONTIDAE).

†*Ticholeptus* jaw fragments descr. figs. p. 111, SCHARF 931.

CAENOTHERIIDAE.

†*Caenotherium* on the brain and labyrinth, HÜRZELER 528.

CAMELIDAE.

Camelus history and evolution ROBINSON 882.—*C. bactrianus* the bony ear, TURKEWITSCH 1113.

†*Dyscotylopus migrans* gen. et sp. n. (Camelidae) Oligocene California, STOCK Pub. Carnegie Instn. no. 453 p. 121 figs.

†*Gentilicamelus wyomingensis* gen. et sp. n. L. Miocene Wyoming, LOOMIS Univ. Wyo. Pub. Sci. 2 p. 60 figs.

†*Procamelus* sp. molars descr. figs. p. 93, BODE 95.

TRAGULIDAE.

Hyaemoschus aquaticus races criticized p. 937, HAYMAN 472.

HYPERTRAGULIDAE.

†*Blastomeryx (Dyscomeryx)* sp. molars descr. figs. p. 95, BODE 95.

†*Hypertragulus fontanus* sp. n. Oligocene California, STOCK Pub. Carnegie Instn. no. 453 p. 123 figs.

CERVIDAE.

A review of the Cervidae recent and extinct of N. Africa and of their distr. and migrations in present and past times JOLEAUD 541.

Structure of the incisors in the Cervidae, EIDMANN 291.

Structure and measurements of the eyeball in the Roe and Fallow-Deer, BAYER 61.

Alces alces present status in Russia and other notes, SHITKOV 990.—*A. americana* critical note of Bt. Columbian races, HALL 446.

†*Amphiprox* gen. n. for *Cervus anocerus* Kaup. and remarks on the other Tertiary Cervidae, HAUPT Notizbl. Ver. Erdk. Darmstadt (5) 16 p. 52 figs.

Capreolus c. capreolus a frontal scent gland hitherto overlooked, SCHUMACHER 960.—*C. c. whittalli* subsp. n. European Turkey, BARCLAY Ann. Mag. N.H. (10) 17 p. 405.

†*Cervalces* in recent deposits of Indiana and Illinois, RIGGS 875.

†Cervid gen. n. ined. from Miocene beds Uganda, MACINNES 660.

Cervus elaphus struct. of genitalia in cryptorchic individual, COHRS & SCHNEIDER 211; A very large pair of antlers from Norway figs. INGEBRIGTSEN 532; Photographs of heads killed in Caithness, PORTLAND 839.—*C. elaphus* and other spp. in Co. Wicklow, Ireland, DELAP 260.—*C. canadensis* diseases and parasites in Yellowstone, MILLS 716; Irregular growth of antlers in Vienna Zool. Gardens, ANTONIUS 27.—*C. c. occidentalis* feedinghabits in Washington State, SKINNER 1009; Range, characters, habits in the Olympic Peninsula, Washington Sta., SKINNER 1010.—*C. (Rucervus) schomburgki* historical notes, antler growth and present status, GÜHLER 432.—*C. virginianus* food habits and requirements for conservation in New York State, MAYNARD & others 701.

†*Cervus elaphus fossilis*? in Pliocene Italy, STORLAZZI 1046;—*C. euryceros* a malformed skull in Poland, NIEZABITOWSKI 760.—*C. somonensis* historical note on discovery and restoration, AUFRÈRE 38, 39.

†*Climacoceras* gen. n. for genotype *C. africanus* sp. n. Miocene Kenya Colony, MACINNES J. Linn. Soc. Lond. 39 p. 521 figs.

†*Dicrocerus grangeri* sp. n. Miocene Mongolia p. 15 figs. also *D. sp.*? p. 19 figs., COLBERT Amer. Mus. Nov. 854.

Dromomeryx nr. *borealis* teeth, etc., descr. figs. p. 115, SCHARF 931.

†*Dupéretia* subg. n. (Cervidae) for type *Cervus praenipponicus* Shikama p. 251 *C. (D.) maorai* sp. n. Pleistocene Japan p. 252 fig., SHIKAMA Proc. Imp. Acad. Tokyo 12.

†*Elaphurus menziesianus* descr. antlers and bones figs. p. 30, TEILHARD & YOUNG 1089.

Hesperomeryx subg. n. see *Leptoreodon*.

Hippocamelus bisulcus the antlers and their anomalies, RUSCONI 906.

†*Hydropotes inermis* note figs. p. 25 TEILHARD & YOUNG 1089.

†*Leptoreodon (Hesperomeryx subg. n.) edwardsi* sp. n. Eocene California. STOCK Proc. Nat. Acad. Sci. Wash. 22 p. 178 figs.

Muntiacus muntjak nainggolani note fig. skull p. 315 MERTENS 707.

Odocoileus review of the Pacific coast spp. variation, molt, antler growth, and tooth succession, COWAN 223.—*O. virginianus* age variation in teeth skull and antlers, CAHALANE 159.—*O. virginianus borealis* size and weight in New York State, SCHOONMAKER 947.

†*Pedimeryx* gen. n. for genotype *P. hemphillensis* sp. n. M. Pliocene Texas STIRTON J. Paleont. 10 p. 644 figs.

†*Pseudaxis hortulorum* antlers descr. figs. p. 27, TEILHARD & YOUNG 1089.

Rangifer tarandus naturalization and economics in the Canadian Arctic, PORSILD, 838.—*R. tarandus silvicola* Gouv Olenez, *R. t. transuralensis* W. Siberia p. 155 *R. t. dichotomus* nr. Orenburg p. 157 all subsp. n. HILTZEIMER Z. Säugetierk. 11.

†*Stephanocemas* nom. n. pro *Stephanoceras* preocc., COLBERT Amer. Mus. Nov. erratum to no. 854.

†*Stephanoceras* gen. n. (Cervulinae) for *S. thomsoni* sp. n. p. 1 figs. also *S. triacuminatus* p. 12 figs. both Miocene Mongolia, COLBERT Amer. Mus. Nov. no. 854.

GIRAFFIDAE.

Giraffa camelopardalis the glands of the urethra, NEUVILLE 754; Earliest living example in Vienna, historical note, KRONFELD 604.

Okapia johnstoni structure of the feet and footglands, POCOCK 827; Note on a living example in the London Zoo, SETH-SMITH 975; Note on range, SCHOUTEDEN 950. — *Ocuapia* (i.e. *Okapia*) *kibaleensis* subsp. n. N.E. Belgian Congo, GATTI in "Great Mother Forest" 1936 p. 295.

†*Palaeotragus tungurensis* sp. n. Miocene Mongolia with detail of dentition, COLBERT Amer. Mus. Nov. 874 p. 1 figs.

†*Sivatherium*, *Giraffa* notes on Pleistocene spp. in E. Africa p. 641, HORWOOD 513.

ANTILOCAPRIDAE.

†*Merycodus loxocerus* p. 4, *M. hookwayi* p. 6 spp. n. figs. Miocene Nevada FURLONG Pub. Carnegie Instn. 453 1934.—*M. cf. nevadensis* horn-core fig. p. 117, SCHARF 931.—*M. sp.* descr. figs. Miocene Saskat. p. 78, RUSSELL 912.

BOVIDAE.

Notes on some genera of Antelopes of the Pontian *Protoryx*, *Pseudotragus*, *Pachytragus*, *Palaeoryx*, *Microtragus*, BOHLIN 105.

Studies on the skull and dentition of African Antelopes, TOSCHI 1103.

The limb bones of East African Antelopes, HOPWOOD 514.

Horn replacement in some Antelopes, IFTIKHAR ALI KHAN & others 531.

Origin and evolution of the Bovinae their domestication and their distribution in past and present times, KOLESNIK 581.

Analysis of leg bone measurements in the Bovinae, ANDREEVA 22.

Development of male gonads in domestic Ungulates, PHILLIPS & ANDREWS 807.

Adenota kob thomasi on an unusual example from the Kivu distr., Belgian Congo photos., BOURDILLON 118.

Antilope cervicapra evidence of horn-shedding, J. E. HALL 448.

†*Antilope modjokertensis*, *A. saätensis* spp. n. Pleistocene Java, v. KOENIGSWALD De Ingen. Ned.-Indie 1 no. 11 1934 p. 192 figs.

Bibos gaurus general account and notes on shooting, WOOD 1197.—*B. banteng birmanicus* habitat and habits in Burma, WOOD 1196.

Bison bonasus present status and number in Germany, AHRENS 8; Preservation and present status in Poland and E. Germany, KAZEJEFF 561; Skeleton in Budapest Museum, MOTTI 740.—*B. americanus* formerly in Alabama and Florida, BOYD 122.

†*Bison priscus* in interglacial beds nr. Halle, ROPKE 899.—*B. priscus* and *B. primigenius* distinctions in the metapodials, SCHERTZ 939.

Bos, origin and structure of molar teeth, KÜPPER 611; Structure of the hump of Africander Cattle, CURSON &

BISSCHOP 231; An artificial "unicorn," DOVE, 278; Origin of the E. Asiatic races and osteology of sternum, YAMANE & KATO 1205.—*B. primigenius* an attempt to breed back to this early type, AHRENS 9.

Bovid? coprolite in S. Dakota Oligocene, STOVALL & STRAIN 1048.

Bubalis major range in Nigeria, NEWTON 758.

Bubalus caffer growth changes and systematics of races, ANTONIUS 29.—*B. nanus* review of races, distr. habits systematics, KOLLER 584.

†*Bubalus mephistopheles* descr. figs. p. 45, TEILHARD & YOUNG 1089.

†*Bularchus* gen. n. (Bovidae) p. 639 for genotype *B. arok* sp. n. Pleistocene, HOPWOOD Ann. Mag. N.H. (10) 17 p. 640.

Capra descr. of two hermaphrodites, BORING & KAO 117; Two cases of intersex, PATAY 792.—*C. ibex* present status and conservation in Switzerland, BÄCHLER 45.

Capricornis sumatrensis habits in captivity, MOHR 730.

Cephalophus revision of the species and races with keys and taxonomic notes, ST. LEGER 918.—*C. natalensis lebombo* subsp. n. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 248.

Gazella rufifrons range in Nigeria, NEWTON 758.

†*Gazella* a fossil form from the Vindobonian of Switzerland, STEHLIN 1031.—*G. deperdita* descr. skull and brain-cast figs. p. 171 SIMIONESCU 997.

Guever maxwelli races and taxonomy p. 935, HAYMAN 472.

†*Hippotragus niro* sp. n. Pleistocene Africa, HOPWOOD Ann. Mag. N.H. (10) 17 p. 640.

Kobus defassa ugandae note on racial characters p. 115, ALLEN & LAWRENCE 16.

†*Leptobos cosijni* sp. n. Pleistocene Java, v. KOENIGSWALD De Ingen. Ned.-Indie 1 no. 11 1934 p. 193 figs.

†*Megalovis* remains in E. Asia and affinities to Bovidae, SCHAUB 936.

Nesotragus livingstonianus zuluensis col. pl. p. 249, ROBERTS 878.

Ovibos moschatus wardi present and past distr. habits and races discussed PEDERSEN 800.

Ovis anatomy cheeks and face, WEHNER 1155; Structure of the larynx, ZIMMERMANN 1216; Genetics of the Wensleydale breed, DRY 282.—*O. ammon hodgsoni*? on a young example obtained in E. Tibet, SCHÄFER 930.

†*Ovis ammon* and other Ungulates in Quaternary beds of Crimea, Russia, GROMOVA 423.—*O. shangi* sp. n. sub-fossil Honan, TEILHARD & YOUNG Palaeont. sinica 120 fasc. 1 p. 38 figs.

Poephagus grunniens anatomical notes, DRUZININ 281; Chromosomes fig., ZUITAN 1224.

†*Saiga tartarica* in the Belgian Pleistocene, HASSE 463.

†*Samotragus crassicornis* gen. et sp. n. L. Pliocene Samos, SICKENBERG Palaeont. Z. 18 p. 90 figs.

Syncerus in French Chad, African races and their distr., BLANCOU 93.—*S. caffer*, *S. nanus* critical notes on taxonomy and classification, MALBRANT 673.

Tragelaphus s. sylvaticus taxonomic and other notes p. 245, ROBERTS 878.

ORDER RODENTIA.

Systematics of various Rodents, STROGANOV 1053.

Rodents of Central Asia [in Russian], VINOGRADOV & others 1132.

New and rare races of African Rodents, OSGOOD 784.

A review of the genera of Argentine Rodents, YEPES 1208.

The structure of the Rodent incisor and its bearing on classification and phylogeny, KORVENKONTIO 595.

The structure of Rodent molars especially in *Cricetus*, FRECHKOP 343.

Nomenclature for the cusps of Rodent molars, WOOD & WILSON 1194.

Rodent burrows and their types modified by surrounding conditions, RODIONOV 888.

Ecology and habits of Turkestan Rodents, MEKLENBURTZEV 704.

Ecology and habits of Rodents in the Troitsk distr. Russia, DURYMANOVA-SAVIK & others 287.

Mass increase of Rodents, SVIRIDENKO 1064.

Some corrections in nomenclature in Hystrioid Rodents, *Caviella*, *Dolichotis*, *Capromys*, TATE 1080.

INCERT. SEDIS.

†*Argyrolagus* affinities, Rodent or Marsupial? RUSCONI 907.

OCHOTONIDAE.

Ochotona ursui descr. figs. p. 223, SIMIONESCU 996.—*O. princeps schisticeps* in Nevada, MILLER 713.

†*Prolagus bilobus* sp. n. Pliocene Rheinhesse, HELLER N. Jahrb. Min. Geol. 76 p. 139 figs.

†*Hypolagus brachygnathus* descr. figs. p. 137, HELLER 483; In Tegelen Pliocene of Holland descr. figs., SCHREUDER 952.

LEPORIDAE.

Lepus cuniculus growth of incisors, SHADLE, 978; The Rabbit menace in England and Australia, DOLLMAN, 273; In Australia history and economics, STEAD 1026.—*Lepus timidus*, on the foot-pads of the fore and hind limbs, SCHUMACHER 959.—*L. timidus begitschevi* subsp. n. Taimyr Pen. Siberia, KOLJUSCHEW Trav. Inst. sci. Biol. Tomsk 2 pp. 304, 326 figs.—*L. europaeus*, *L. timidus* skulls compared and characterized, GUREEV 436.—*L. variabilis* present and past history and distr. in the Pyrenees, a glacial relict? ASTRE 37.—*L. damarensis* a subsp. of *L. capensis* not *L. zuluensis* p. 77, ST. LEGER 917.—*L. arcticus* and others revision of races 7 + 2 races recognized, HOWELL 521.—*L. americanus* fluctuation of population in Ontario, MACLULICH 663; Population fluctuations and cycles in Canada, ELTON & SWYNERTON 310; Population fluctuation studies, migrations and tick infestation, COX 228.—*L. americanus phaeonotus* food-habits, ALDOUS 10.—*L. townsendii* population discussion in Minnesota, MOHR 731.

Nesolagus netscheri note on skull and dentition figs. p. 229, SCHREUDER 952.

Oryctolagus cuniculus algirus overgrowth of incisors, RODRIGUES D. S., 889.

Pronolagus ruddi lebombo subsp. n. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 240.

Sylvilagus palustris paludicola life history, habits and local distr. in Florida, BLAIR 87.—*S. floridanus mearnsi* summer studies in Iowa, HENDRICKSON 485.—*S. bachmani* descr. of juveniles, DAVIS 249.

CAVIIDAE.

Cavia cobaya development of teeth HARMAN & SMITH 460, 461; Gestation and ovum age, YOUNG & BLANDAU 1212; Physiology of colour-vision, SGONINA 976; Experiments in training, SGONINA 977.

†*Nothydrochoerus fontanai* general notice and restoration, RUSCONI 909.

CASTEROIDIDAE.

†*Casteroides ohioensis* addt. material listed, CAHN 160.

COENDIDAE.

The dentition, osteology and affinities of the Coendidae recent and fossil, FRIANT 355.

HYSTRICIDAE.

Atherurus turneri addt. descr. notes p. 107, ALLEN & LAWRENCE 16.

Hystrix africana-australis zuluensis subsp. n. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 240.

OCTODONTIDAE.

Myocastor coypu in Carinthia, PUSCHNIG 850.

JACULIDAE (= DIPODIDAE).

Alactaga asymmetry of the skull, UGAROV 1120.

†*Protalactaga tunggurensis* sp. n. U. Miocene Mongolia, WOOD Amer. Mus. Nov. 866 p. 1 figs. molars.

Scirotopoda telum falszeini status and range in the Ukraine p. 36, CHARLEMAGNE 191.

Sicista remarks on races and other taxonomic points p. 432, MOHR 726.

BATHYERGIDAE.

Cryptomys kubangensis addt. descr. p. 472, ST. LEGER 916.

HETEROMYIDAE.

The baculum or penis bone of *Pero-*
gnathus and *Dipodomys*, BURT 149.

†*Cupidininus magnus* note and rediscovery of type p. 112 WOOD 1189.—*C. sp. n.?* Pliocene Nevada descr., CHAFFEE 185.

Dipodomys merriami frenatus subsp. n. Utah, BOLE Sci. Pub. Cleveland Mus. 5 no. 1 p. 1.—*D. heermanni berkeleyensis* status and subspecific distinctions, HOOPER 511.—*D. agilis* effects of electric stimulation of brain, STRAUS 1050.

†*Florentiamyinae* subf. n. (Heteromyidae) p. 41 for *Florentiamys* gen. n. and *F. loomisi* sp. n. L. Miocene Wyoming, p. 43 figs. also *F. lulli* sp. n. Miocene Oregon p. 48, WOOD Amer. J. Sci. (5) 31.

†*Peridiomys kelloggi* sp. n. Miocene California, WOOD Amer. J. Sci. (5) 32 p. 116 figs.

Perognathus longimembris arcus subsp. n. Utah, BENSON Univ. Cal. Pub. Zool. 40 p. 451.

†*Perognathoides halli* sp. n. Miocene California, WOOD Amer. J. Sci. (5) 32 p. 113 figs.

ISCHYROMYIDAE.

†*Kansasimys dubius* gen. et sp. n. Pliocene Kansas nearest to *Sciuravus* WOOD J. Paleont. 10 p. 392 figs.

†*Sespemys thurstoni* gen. et sp. Oligocene California, WILSON Pub. Carnegie Instn. 453 1934 p. 13 figs.

GEOMYIDAE.

†*Dikkomys matthewi* gen. (Geomyinae) et sp. n. Miocene, Z. Nebraska, WOOD Amer. Mus. Nov. 866 p. 26 figs.

†*Diprionomys minimus* (Kellogg) removed from *Entoptychus* note p. 118 fig., WOOD 1189.

†*Entoptychus* diagn. genus and descr. spp. p. 15 figs., *E. germannorum* sp. n. Miocene Oregon p. 18 figs., WOOD Amer. Mus. Nov. no. 866.

Geomys bursarius population studies in Minnesota, MOHR 724.

†*Giddeumys adspersans* gen. et sp. n. M. Oligocene S. Dakota, WOOD Amer. Mus. Nov. 866 p. 3 fig. molar.

†*Grangerinus oregonensis* gen. et sp. n. L. Miocene Oregon, WOOD Amer. Mus. Nov. 866 p. 13 figs.

†*Gregorymys* gen. n. for genotype *Entoptychus formosus* Matth. p. 9, *G. formosus*, *G. curtus* notes figs. p. 9, *G. riggsi* L. Miocene, Wyo. p. 11 *G. douglassi* L. Miocene Montana p. 12 spp. n. figs., WOOD Amer. Mus. Nov. 866.

†*Pleurolicus sulcifrons* p. 5 *P. leptophrys* p. 7 descr. figs. *P. copei* Miocene Oregon, *P. dakotensis* Miocene S. Dakota spp. n. p. 8 figs., WOOD Amer. Mus. Nov. 866.

Thomomys review of the species and races in the lower Colorado valley p. 1 *T. perpallidus depauperatus*, *T. p. riparius* p. 4 subsp. n. *T. harquahalae* sp. n. p. 7 all California and Arizona, GRINNELL & HILL J. Mammal. 17.—*T. bottae piutensis* subsp. n. Kern Co., California, GRINNELL & HILL Proc. biol. Soc. 49 p. 103.—*T. bottae detumidus* p. 405 Oregon, *T. b. silvifugus* p. 406 *T. b. acirostratus* p. 408, *T. b. agricolaris* p. 409 subsp. n. all California figs. skulls, GRINNELL Univ. Calif. Pub. Zool. 40 1935.—*T. muralis* sp. n. Arizona p. 112, *T. bottae desitus* Arizona p. 113, *T. b. hualpaiensis* Arizona p. 114, *T. b. internatus* Colorado p. 115, *T. b. howelli* Colorado, *T. b. optabilis* Colorado p. 116, *T. b. guadalupensis* Texas p. 117, *T. lachugilla limitaris* Texas p. 118, *T. b. confinalis* Texas p. 119 all subsp. n. *T. pectoralis* sp. n. New Mexico p. 120, GOLDMAN J. Wash. Acad. Sci. 26.—*T. b. alexandrinahabits*, diagn. and taxonomy p. 449, BENSON 75.—*T. b. connectens* subsp. n. New Mexico, E. R. HALL J. Wash. Acad. Sci. 26 p. 396.

SPALACIDAE.

Rhizomys sumatrensis review of the subsp. and notes on the anatomy p 137 *R. s. padangensis* subsp. n. W. Sumatra, p 154, BRONGERSMA Zool. Meded. Leiden 19 many figs.

†*Rhizomys* cf. *troglydites* semifossil S. Honan descr. figs. p. 13, TEILHARD & YOUNG 1089.

Spalax macovei note figs. p. 222, SIMIONESCU 996.

Tachyoryctes splendens and other spp. notes figs. p. 175, RODE 858.—*T. s. canicardus* p. 232, *T. cheesemani gallarum* p. 233 subsp. n. S. Abyssinia OSGOOD Field Mus. Pub. Zool. 20.

MURIDAE.

A revision of the Murinae of the Indo-Australian region with notes on classification, phylogeny and a complete list of genera and spp., TATE 1079.

The Muridae of the Ukraine, MIGOULINE 710.

The Muridae of Asia Minor with discussion and keys, NEUHÄUSER 752.

The structure of the sperm of British Murids, FRIEND 357.

Ecology of Murids of Sverdlovsk Prov. Russia, DANINI & OLSHVANG 238.

Problem of the increase and economics of Murids in the neighbourhood of Moscow, KUTCHERUK & others 618.

The population movements and dynamical density among Russian Murids, RALL 855.

Population studies in wild Murids in Russia, SVIRIDENKO 1065.

Mouse hunting in Thy, Jutland, MOHR 725.

Aethomys chrysophilus tongensis subsp. n. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 235.—*Æ. chrysophilus imago* and *Æ. namaquensis* note p. 469, ST. LEGER 916.

Apodemus agrarius no. of sex chromosomes, MATTHEY 697; Cytology of spermatogenesis, RAYNAUD 862.—*A. agrarius nikolskii* subsp. n. Ukraine, MIGOULINE Trav. Soc. Nat. Charkow 50 no. 2 1927 p. 41.—*A. a. ognevi* Johans 1923, extension of range p. 1, EGORIN, 292.—*A. sylvaticus tauricus* and other Asia Minor races descr. p. 181, NEUHÄUSER 752.—*A. s. ciscaucasicus* alterations in blood counts in lowland and highland habitats, KALABUCHOV & RODIONOV 553.—*A. sylvaticus*, *A. flavicollis* no. of tail-rings as specific characters, WEDEMEYER 1153.—*A. flavicollis* and other spp. critical remarks on taxonomy and classification and subgenera, ASTANIN 35.

†*Apodemus atavus* sp. n. Pliocene Rheinhesse, HELLER N. Jahrb. Min. Geol. 76 p. 126.

Arvicanthis abyssinicus flavicinctus subsp. n. Abyssinia p. 251, *A. lacernatus* taxonomic note p. 253, OSGOOD Field Mus. Pub. Zool. 20.—*A. rufinus*, *A. mordax* taxonomy p. 933, HAYMAN 472.

†*Arvicola* and *Microtus* teeth from Dutch well-bores notes figs. p. 11, SCHREUDER 954.

†*Arvicola abbotti* notes figs. molars p. 249, BRUNNER 139.

†*Baranomys löczyi* descr. figs. p. 127, HELLER 483.

Chionomys nivalis neujukovi habits in W. Caucasus, NASIMOVICH 747.

†*Cleithromys glareolus* note figs. molars p. 246, *C. erli* sp. n. p. 247 Post-Tertiary Bavaria, BRUNNER Cbl. Min. Geol. 6.

†*Copemys* gen. n. for genotype *Eumys lorodon* Cope 1874 descr. figs., WOOD Amer. Mus. Nov. 822 p. 5.

†*Coryphomys bühleri* sp. n. ? Quaternary of Timor, SCHAUB Verh. schweiz. naturf. Ges. 117 p. 302.

Cricetulus triton meihisienensis subsp. n. Shensi, China, Ho Abstr. Pap. Sci. Conf. Nanning 1935 p. 69.

Cricetus cricetus general habits specially in Alsace, DIDIER & MATHIAS 269; Breeding and other habits, PETZSCH 803; Melanism and albinism, PETZSCH 804; range and habits in Saxony LANGER 619A.—*C. c. canescens* validity discussed and confirmed, WEPNER 1166.

†*Cricetus cricetus* races in Pleistocene of Czechoslovakia p. 65 figs., STEHLÍK 1030.—*C. c. major* in Pleistocene of Thuringia, SCHAUB, 933.

Dasymys incomtus capensis subsp. n. Cape Prov., ROBERTS Ann. Transv. Mus. 18 p. 254.—*Dasymys incomptus griseifrons* subsp. n. Abyssinia, OSGOOD Field Mus. Pub. Zool. 20 p. 255.—*D. rufulus* recorded for Gold Coast p. 934, HAYMAN 472.

Dendromus insignis abyssinicus subsp. n. Abyssinia p. 235, *D. lunaris* Ruwenzori p. 235, *D. oreas* Mt. Cameron p. 236 spp. n. and notes on other spp., OSGOOD Field Mus. Pub. Zool. 20.

Dendromys (*Poemys*) *leucostomus* addt. descr. p. 471, ST. LEGER 916.

Dephomys dephua range and characters p. 931, HAYMAN 472.

†*Dicrostonyx henseli* note fig. p. 10, BRUNNER 138.

†*Dolomys milleri* in Holland note fig. p. 5 SCHREUDER 954.

Ellobius talpinus burrowing and other habits in C. Asia, UGRIMY 1121.

Eothenomys melanogaster characters of a form recently found in Formosa, TANAKA 1076.

†*Eumys elegans* fresh descr. fig. p. 1, WOOD 1190.

Evotomys rutilus salairicus subsp. n. Siberia, EGORIN Animadv. Syst. Mus. Tomsk no. 3 p. 2.—*E. r. lenaensis* subsp. n. Lena mouth Siberia, KOLJUSCHEW Trav. Inst. sci. Biol. Tomsk 2 pp. 292, 326.—*E. glareolus* physiology of reproduction oestrous cycle and changes in male, BRAMBELL & ROWLANDS 124.

Gerbillus dallonii sp. n. Tibesti Sahara, HEIM DE B. Mem. Acad. Sci. Paris 62 p. 43.

†*Germanomys weileri* gen. et sp. n. Pliocene Rheinhessen, HELLER N. Jahrb. Min. Geol. 76 p. 130 fig.

Gunnomys varius, *G. varillus* note on examples from Penang, CHASEN 194.—*G. kok gracilis* note p. 94 *G. k. insularis* subsp. n. N. Ceylon p. 95, PHILLIPS Spolia zeylan. 20.

Gyomys berneyi p. 15 *G. pumilus* p. 16 spp. n. Queensl., TROUGHTON Mem. Qd. Mus. 11.

Hybomys trivirgatus skull characters p. 933, HAYMAN 472.—*H. univittatus badius* subsp. n. Cameroon Mt., OSGOOD Field Mus. Publ. Zool. 20 p. 254.

Hydromys chrysogaster critical note on races p. 225, FINLAYSON 329.

Hylomyscus aeta laticeps subsp. n. Cameroon Mt., OSGOOD Field Mus. Pub. Zool. 20 p. 247.

Insulaemus gen. n. (nr. *Rattus*) p. 469 for genotype *I. calamianensis* sp. n. p. 470 Calamianes Is. P. I., TAYLOR Philippine Ld. Mam. 1934.

†*Lagurus pannonicus* note fig. p. 136, HELLER 483.

Leggadina patria note p. 18, TROUGHTON 1105.

†*Leidymys* gen. n. for genotype *Hesperomys nematodon* Cope 1879 also *Eumys lockingtonianus* Cope 1881 descr. figs., WOOD Amer. Mus. Nov. 822 p. 3.

Lophuromys flavopunctatus simensis subsp. n. p. 238, *L. brevicaudus* sp. n. p. 241, *L. aquilus chrysopus* subsp. n. p. 243 all Abyssinia, OSGOOD Field Mus. Pub. Zool. 20.—*L. aquilus* on Elgon note figs. p. 172, RODE 885.

Malacomys edwardsi key of allied spp. and races and taxonomy p. 932, HAYMAN 472.

Mastomys coucha lateralis notes p. 249, OSGOOD 784.

Melomys list of subspp.; key of subgenera, *Paramelomys* for type *M. levipes* p. 248, *Pogonomelomys* for *M. mayeri* p. 252 subsp. n., RÜMMLER Z. Säugetierk. 11 p. 247.—*M. bougainville* sp. n. Bougainville, Solomons, TROUGHTON Rec. Austr. Mus. 19 p. 344.

Meriones blackleri intraponticus subsp. n. Asia Minor, NEUHÄUSER Z. Säugetierk. 11 p. 159.—*M. erythrouros* habits and economics in Turkestan, KOLESNIKOV 582.

Mesembriomys hirsutus melvillensis subsp. n. Melville I., N. Terr. Australia, HAYMAN Ann. Mag. N.H. (10) 17 p. 366.

Microtus arvalis increase and decrease of population in Ukraine, NAUMOV 749; Destruction in the Ukraine by a snowstorm, PIDOPLITSKA 811; The question of possible occurrence in Abyssinia discussed, LAURENT 627.—*M. a. rhodopensis* subsp. n. Bulgaria, HEINRICH Bull. Inst. R. Hist. nat. Sophia 9 p. 48.—*M. a. muhlisi*, *M. a. relictus* subspp. n., Asia Minor, NEUHÄUSER Z. Säugetierk. 11 p. 195.—*M. oeconomus kjusjurenensis* subsp. n. p. 1 KOLYUSHEW 591.—*M. socialis* habits and economics in the Daghestan Republic, WORONOFF, 1201.—*M. (Stenocranius) gregalis unguiculatus* subsp. n., KOLJUSCHEW Trav. Inst. sci. Biol. Tomsk 2 pp. 298, 346.—*M. (Chionomys) nivalis abulensis* subsp. n. Avila, Spain, AGACINO Bol. Soc. esp. Nat. hist. 36 p. 151 figs.—*M. (Chionomys) nivalis olympius* p. 159, *M. (C.) gud lasistanicus*, *M. (Sumeriomys) Güntheri skevketi* p. 160 subspp. n. all Asia Minor, NEUHÄUSER Z. Säugetierk. 11.—*M. montanus* review of Nevada races, *M. m. micropus* p. 417 *M. m. undosus* p. 420, *M. m. fucosus* p. 421 subspp. n. all Nevada, HALL Univ. Calif. Pub.

Zool. 40 1935.—*M. enixus*, *M. terrae novae*, *N. fontigenus* all races of *M. pennsylvanicus*, DAVIS 247.—*M. townsendii cummingi* subsp. n. Bowen I., Br. Columbia, HALL Murrelet 17 p. 15.

†*Mimomys pliocaenicus* and other spp. notes figs. p. 131 etc., *M. hassiacus* sp. n. Pliocene Rheinhesse p. 132 figs., HELLER N. Jahrb. Min. Geol. 76.—*M. pliocaenicus*, *M. reidi* p. 3 *M. pusillus* and other spp. p. 7 notes figs., SCHREUDER 954.

Muriculus imberbis chilaloensis subsp. n. Abyssinia, OSGOOD Field Mus. Pub. Zool. 20 p. 245.

Mus musculus altitudinal range of supposed races in the Caucasus, SVIRIDENKO 1066; In a coalmine at depth of 1,800 feet, characters and habits, ELTON 309.—*M. musculus*, *M. m. hortulanus* discussion of status p. 44, HEINRICH 477.—*M. maorium* present status and habits on islands of New Zealand, STEAD 1027.—*M. sergii* sp. n. Ukraine? VALCH Trav. Soc. Nat. Charkow 50 no. 2 1927 p. 49.—*M. rattus* *M. decumanus* breeding statistics in Nigeria and other tropical countries, BUXTON 154.—*M. rattus ater* occurring in Morocco, LAURENT 626.—*M. (Leggada) proconodon* note p. 247, OSGOOD 784.

Mylomys cunninghami lowei subsp. n. Gold Coast, HAYMAN P. Z. S. for 1935 1936 p. 934.

Myopus schisticolor habits distr. in Sweden, WIRÉN 1185; Note on subspp. p. 2, KOLYUSHEW 591.

Myospalax myospalax revision of races *M. m. tarbagataicus* p. 81 *M. m. incertus* p. 82 subspp. n., OGNEV Abs. Works zool. Inst. Moscou State Univ. 3.

Neotoma lepida flava subsp. n. Arizona and review of other races in Arizona, BENSON Occ. Pap. Mus. Zool. Univ. Mich. no. 317 p. 7.—*N. albigula laplataensis* and other races in Utah discussion p. 452, BENSON 75.—*N. cinerea occidentalis* field notes Washington State, DICKS 268.—*N. pennsylvanica* habits, descr. juv. photos., POOLE 833.

Nesokia indica huttoni, *N. i. bairdardi* range taxonomy and variation in Turkestan, ARGIROPULO 32.

Ondatra zibethica methods of detecting presence of, WARWICK 1148; Suggested control by parasites, WARWICK 1149; in Seine-Inf., REGNIER 87; Description of dwellings in Louisiana, MIZELLE 719.

Onychomys leucogaster fuscogriseus breeding habits and young, SVIHLE 1062.

†*Paciculus insolitus* Cope 1879, fresh descr. figs. p. 4, WOOD 1190.

Pallasiomys meridianus karelini subsp. n. N.E. coast of Caspian Sea, KOLOSSOW Bull. Soc. Nat. Moscou Biol. 44 pp. 381, 384.

Paramelomys subgen. n. vide *Melomys*.

Peromyscus maniculatus oestrous cycle, F. H. CLARK 201; Discussion of the intermediate race found in Bowen Island, Bt. Columbia, ENGELS 317.—*P. m. gracilis* age variation, DICE 266.—*P. m. oreas* growth and development, SVIHLE 1059.—*P. maculatus bairdii* field notes in Michigan, DICE 265.—*P. leucopus noveboracensis* nocturnal activities, experimental investigations, BEHNEY 64; Effects of light on breeding season, WHITAKER 1169.—*P. sitkensis* review of races p. 429, *P. s. oceanicus* Forrester I. Alaska p. 432, *P. s. isolatus* Vancouver I. p. 434 subsp. n., COWAN Univ. Calif. Pub. Zool. 40.—*P. floridanus* inhabits burrows of Gopher Turtles, BLAIR & KILBY 89.—*P. polionotus* burrowing habits, HAYNE 473.

†*Peromyscus nesodytes* sp. n. Pleistocene California; WILSON J. Mamm. 17 p. 408 fig.

Pitymys majori fingeri subsp. n. Asia Minor, NEUHÄUSER Z. Säugetierk. 11 p. 159 also p. 192.

Pogonomelomys subgen. n. vide *Melomys*.

†*Prosiphneus lupinus* sp. n. U. Miocene, Mongolia, WOOD Amer. Mus. Nov. 865 p. 5 figs. molars.

Pseudomys minnie flavescens subsp. n. Queensl., TROUGHTON Mem. Qd. Mus. 11 p. 19.

Rattus molar growth after eruption, WOOD 1195.—*R. rattus* distr. in Russia, STROGANOV 1052.—*R. r. ruthenus* sp. n., OGNEV & STROGANOV Abs. Works zool.

Inst. Moscou State Univ. 3 p. 82.—*R. norvegicus* a waltzing mutation, KING 566; Albinos and spotted individuals in feral condition in Honolulu, SVIHLE 1058.—*R. norvegicus*, *R. r. alexandrinus* distr. in Athens and plague infestations, PANTAZIS 788; Masseter muscle, MIYOSI 718.—*Rattus t. turkestanicus* range taxonomy and description, ARGIROPULO 32.—*R. tullbergi peromyscus* note figs. p. 171, RODE 885.—*R. palawanensis* sp. n. Palawan p. 416, *R. mindanensis tablasi* subsp. n. Tablas I. p. 439, TAYLOR Philippine Ld. Mamm. 1934.—*R. r. brevicaudatus* remarks distr. Lesser Sunda Is. p. 306, MERTENS 707.—*R. lutreola* variation in coat colour p. 224, FINLAYSON 329.—*R. praetor mediocris* subsp. n. Bougainville, Solomons, TROUGHTON Rec. Austr. Mus. 19 p. 343.—*R. hawaiiensis* history range habits etc., SVIHLE 1061.

Reithrodontomys megalotis field-observations and habits, C. F. SMITH 1012.

Rhabdomys pumilio angolae note p. 468, ST. LEGER 916.

Saccostomus cricetulus sp. n. Uganda, ALLEN & LAWRENCE Bull. Mus. comp. Zool. Harvard 89 p. 100.

Sigmodon hispidus oestrous, CLARK 202.

Solomys salamonis hist. notes and redescription, TROUGHTON 1106.—*S. salebrosus* sp. n. Bougainville, Solomons, TROUGHTON Rec. Austr. Mus. 19 p. 346.

Steatomys jacksoni sp. n. Gold Coast, HAYMAN P.Z.S. for 1935 1936 p. 930.

Sylvaemus sylvaticus, *S. flavicollis* distinguishing characters range etc., ZIMMERMANN 1219.—*S. flavicollis ponticus* subsp. n. p. 103 and notes on other forms in Russian, SVIRIDENKO 1063.

Tatera minuscula sp. n. W. Somaliland, OSGOOD Field Mus. Pub. Zool. 20 p. 230.—*T. maputa* sp. n. Zululand, ROBERTS Ann. Transv. Mus. 18 p. 238.

Taterona guineae picta subsp. n. Gold Coast, HAYMAN P.Z.S. for 1935 1936 p. 930.—*T. angolae* note p. 467, ST. LEGER 916.

†*Ungaromys nanus* descr. figs. p. 128, HELLER 483.

Unicomys ponceleti addt. descr. p. 347, TROUGHTON 1107.

Zelotomys shortridgei kuvelaiensis subsp. n. Angola, ST. LEGER Ann. Mag. N.H. (10) 17 p. 470.

MYOXIDAE.

The distr. of the Muscardinidae in Russia, DANILOWITSCH 237.

Aethoglis gen. n. for genotype *Graphiurus nagtglasii* Jent. p. 292, *Æ. hueti argenteus* subsp. n. Cameroon p. 293, G. M. ALLEN J. Mammal. 17

†*Amphidyromys pusillus* gen. et sp. n. Pliocene Rheinhessen, HELLER N. Jahrb. Mir. Geol. 76 p. 125 figs.

Claviglis monardi sp. n. Angola, ST. LEGER Ann. Mag. N.H. (10) 17 p. 465.

Dyromys nitedula review of Russian subsp. p. 96, *D. n. tanaiticus* Don Prov., *D. n. dagestanicus* Daghestan, *D. n. caucasicus* N. Caucasus pp. 98, 105, *D. n. kurdistanicus* Kurdistan pp. 101, 105, *D. n. pallidus* Syr-Darya pp. 102, 105 all subsp. n., OGNEV & TUROV Wiss. Ber. moskauer Staats Univ. 4 1935.

Eliomys quercinus range and status in Finland map, VÄLIKANGAS 1124.—*E. q. superans* subsp. n., OGNEV & STROGONOV Abs. Works zool. Inst. Moscow State Univ. 3 p. 84.

APLODONTIDAE.

†*Aplodontia asiatica* Schl. is undoubtedly allied to the American forms, FRIANT 349.

CASTORIDAE.

Castor fiber on the still extant German colonies, GUEINZIUS 431.—*C. canadensis canadensis* descr. habits ecology, GREEN 408.—*C. c. michiganensis* sex ratio and breeding habits, BENSON 74.

†*Castor fiber* in Post-Tertiary deposits eastern slopes of the Urals, RIABININ 871.

†*Dipoides williamsi* sp. n. Pliocene Arizona, STIRTON J. Mammal. 17 p. 279 figs.—*D. stirtoni* sp. n. Pliocene Oregon, WILSON Pub. Carnegie Instn. 453 1934 p. 21 figs.

†*Monosaulax* sp. descr. figs. tooth p. 89, BODE 95.

†*Mylagaulus* premolar descr. fig. p. 104, SCHARF 931.

†*Steneofiber covurluensis* notes figs. p. 221, SIMIONESCU 996.

SCIURIDAE.

The Squirrels of Sung-shan, Honan, China, with descr. measurements and keys, FU 360.

The lymphatic system of the Sciuridae, *Sciurus* and *Arctomys*, OTTAVIANI 785.

The penis bone of the Ceylon Squirrels and taxonomy, HILL 496.

†*Arctomys* diluvial fossil remains from Switzerland, GERBER 377.

Calloscirus notatus nicotianae subsp. n. N. Sumatra, SODY Natuurk. Tijdschr. Ned.-Ind. 96 p. 217.

Citellus aestivation and hibernation in Washington State, SCHREFFER 937.—*C. suslicus averini*, *C. s. meridio-occidentalis* subsp. n. Ukraine, MIGOULINE Trav. Soc. Nat. Charkow 50 no. 2 1927 p. 46.—*C. pygmaeus* and other spp. distr. and economics in Russia, FALKENSTEIN 321; ROMANOVA 897; Habits, ecology and population studies in S. Russia, BIRULA 82.—*C. tridecemlineatus* effects of gonadectomy on incisor growth, SCHOUR 949; Oestrin injection effects on accessory sex organs, WELLS 1163.—*C. mohavensis* field notes and observation in California, BURT 159.

Eutamias sibericus review of Russian races, *E. s. jacutensis* subsp. n. Yakutsk, OGNEV Wiss. Ber. moskauer Staats Univ. 4 1935 p. 93.—*E. amoenensis canicaudus* hibernation notes in Washington State, SVIHLA 1060.

Glaucomys volans herreranus Vera Cruz, *G. v. madrensis* Chihuahua subsp. n., GOLDMAN J. Wash. Acad. 26 p. 463.—*G. volans underwoodi* subsp. n. Honduras, GOODWIN Amer. Mus. Nov. no. 898 p. 1.—*G. sabrinus* nesting and breeding habits, COWAN 225.—*G. sabrinus fuscus* subsp. n. W. Virginia, G. S. MILLER Proc. biol. Soc. 49 p. 143.

Hyosciurus heinrichi ileile subsp. n. Celebes, TATE & ARCHBOLD Amer. Mus. Nov. no. 846 p. 1.

Marmota marmota still existing in the Carpathians, SCHAEFER 929.—*M. sibirica* biochemistry and economics of the fat, FRANK-KAMENEZKI 339.—*M. centralis* and *M. baibacina* craniological distinctions and taxonomy, ASTANIN 34.—*M. monax* gastric secretion during hibernation, FRIEDMAN & ARMOUR 356.—*M. flaviventris* descr. range habits of the three Colorado races, WARREN 1146.

†*Marmota* review of the diluvial species found in Germany osteol. taxonomy etc., WEHRLI 1156.

Nannosciurus luncefordi sp. n. Min-danao P.I., Taylor Philippine Land Mamm. 1934 p. 373.

Petaurista bartelsi sp. n. Sumatra, Sody Natuurk. Tijdschr. Ned.-Ind. 96 p. 146.

Pteromys volans ognevi subsp. n. Gov. Twer, Russia, STROGANOV Zool. J. Moscow 15 pp. 539, 559.

Sciurus vulgaris wanderings and migrations in Siberia, FORMOZOV 336.—*S. v. balcanicus* p. 41 *S. v. rhodopensis*, *S. v. istrandjae* p. 42 subsp. n. Bulgaria, HEINRICH Bull. Inst. R. Hist. nat. Sophia 9.—*S. carolinensis* note on migration and its causes in New England, HOOVER 512.—Food habits in Hertfordshire, OLDHAM 780.—*S. c. leucotus* chromosome numbers and characters, KOLLER 586.—*S. douglasii albolimbatus* and other spp. the cone-storing habit and moisture, SHAW 982.—*S. apache* exact type locality in Sonora, Mexico, v. ROSSEM 901.

Spermophilopsis leptodactylus damage done to irrigation canal banks, KONOVALOVA 592.

Tamias striatus lysteri seasonal and sexual activities in Ohio, CHOUDRIN 216; Feeding and other habits, PREBLE 844.

Tamiasciurus hudsonicus preblei Mackenzie p. 133, *T. h. columbiensis* Bt. Columbia p. 135, *T. h. kenaiensis* Alaska p. 136 subsp. n., HOWELL Proc. biol. Soc. 47.—*T. regalis* sp. n. Isle Royale, Mich., HOWELL Occ. Pap. Mus. Univ. Mich. no. 338 p. 1.

ANOMALURIDAE.

**Anomalurus fraseri* on Mt. Elgon note fig. dentition p. 170, RODE 885.

ORDER CARNIVORA.

Physiological adaptations of the metacarpals and tarsals of the Carnivora, FRIANT 354.

HYAENODONTIDAE.

†*Hyaenodon* dentition brain skeleton list of spp. figures p. 30, SCOTT & JEPSEN 969.

URSIDAE.

Ailuropus melanoleucus visceral anatomy and affinities indicated figs., RAVEN 861; Phylogenetic relations from study of skull and dentition figs., GREGORY 413; General notes photo, BROCKLEHURST 128; General account and photos, of live juvenile, SOWERBY 1023.

†*Hyaenarctos* sp. tooth fragments Mongolia descr. fig. p. 326, BOHLIN 106.

Ursus arctos arteries of the head, SKEDENOW & BIKOW, 1008.—*U. arctos pruinosus* descr. of a specimen from Tibet, PRATER 842.—*U. piscator* field notes on habits in Kamchatka, BERGMAN 77.—*U. horribilis nelsoni* skull from Oklahoma discussed figs., STOVALL 1047.

†*Ursus* Pleistocene Bears from the Belgian cave "Troudu Sureau," EHRENBURG 295.—*U. arctos arctos* skull from Quaternary deposits of Volhynia descr. figs., BURCHAK-ABRAMOVITCH 145.—*U. a. nemoralis* skeleton from Grubenloch cave, Bavaria descr. figs. p. 55, HILZHEIMER 499, 501.—*U. priscus* and *U. spelaeus* a study of the teeth and dentition, *U. s. hercynica* var. n. p. 156 Germany, RODE Monog. Geol. Palaeont. (2) Hft. 7.

PROCYONIDAE.

Bassaricyon pauli sp. n. Chiriqui, Panama, ENDERS Proc. Acad. Philad. 88 p. 365.

Nasua narica further account of habits in Panama, CHAPMAN 187.

†*Pachynasua lutaria* sp. n. Chapadmalensian Beds, Argentina, CARRERA Notas Mus. La Plata Pal. 1 p. 304 figs.

Procyon l. lotor food and breeding habits, HAMILTON 457.

MUSTELIDAE.

The Weasels and Otters of Nigeria, ROSEVAAR 900.

Mustelidae of the Miocene Steinheim basin, HELBIG 478.

Charronia flavigula borealis structure and pads of manus and pes, SHAW 981.

†*Craterogale* gen. n. p. 199 for genotype *C. simus* sp. n. U. Miocene? Nebraska p. 200, GAZIN J. Wash. Acad. Sci. 26 figs.

†*Cyrraonyx antiqua* in the Pleistocene of Europe, HELBING 479.

Gulo gulo historical notes and present status in Sweden, LÖNNBERG 644.—*G. l. vancouverensis* addt. descr., COWAN 224.

†*Gulo gulo* skeleton from Grubenloch cave, Bavaria descr. age, figs. p. 84, HILZHEIMER 499, 501.

†*Ischyrictis (Laphictis?) mustelinus* descr. figs. p. 19, HELBING 478.

Kolonocus sibiricus feeding and other habits, FETISOFF 326.

Lamprogale revision of spp. and races, POCOCK 826.

Lutra stejnegeri sp. n. Kamchatka, GOLDMAN J. Mammal. 17 p. 164.

Lutreola vison mink food habits, HAMILTON 455.

Martes and *Putorius* differential weights and dimensions, SCHÜTZE 961.

Martes martes present status and range in Gt. Britain, PITT 817.

†*Martes* cfr. *filholi* descr. figs. p. 26, HELBING 478.

Meles meles the lower jaw joint, VAW 1127; Distr. in Denbigh and notes on breeding and other habits, DAVIES 246.

Mephitis mephitis nos. killed by autos WILFORD 1172; Running speed, MACLULICH 662.—*M. nigra* food habits in New York State, HAMILTON 456.

Mustela erminea growth and reproductive cycle, DEANESLY 251.—*M. e. karaginensis* subsp. n. Karaginski I. Behring Sea and discussion of allied far eastern races, JURGENSON Bull. Soc. Nat. Moscou Sect. Biol. 45 pp. 240, 243.—*M. lutreola* taken near Nantes, BADOIN 60.—*M. noveboracensis* winter pelage change and other habits, GREEN 407.—*M. longicauda* feeding habits, ERRINGTON 319.—*M. vison* mink winter habits in Michigan, MARSHALL 684.

†*Mustelavus priscus* gen. (Mustelidae) et sp. n. Oligocene S. Dakota, SCOTT & JEPSEN Trans. Amer. Philos. Soc. 28 p. 107 figs.

†*Paralutra jaegeri* descr. figs. p. 4, HELBING 478.

Putorius review p. 691, *P. p. furio* origin of Ferret discussed p. 692, *P. p. anglius* p. 694 Wales, *P. p. aureus* p. 703

C. Russia, *P. p. admiratus* p. 706 Chihli, N. China, all subsp. n. with key and notes on skulls of all races, POCOCK P.Z.S. 1936.—*P. putorius* present status and range in Gt. Britain, PITT 817; Habits and range in Russia etc., LAWROFF 632.—*P. evermanni* economics and breeding, VOLCANZKII 1135.

†*Trocharion albanense* descr. figs. p. 44, HELBING 478.

†*Trochotherium cyamoides* descr. figs. p. 29, HELBING 478.

Vormela characters and revision of races p. 717, *V. peregrina euzina* p. 718 Rumania, *V. p. syriaca* p. 720 Syria, *V. p. ornata* p. 721 Siberia subsp. n., POCOCK P.Z.S. 1936.—*V. peregrina* occurrence in Bulgaria critical note, v. BOETTISCHER 100.

ARCTOCYONIDAE.

†*Chriacus antiquus* sp. n. Paleocene New Mexico, SIMPSON Amer. Mus. Nov. no. 849 p. 4 figs.

†*Escatepos campi* gen. et sp. n. Paleocene New Mexico, REYNOLDS J. Paleont. 10 p. 207 figs.

†*Oxyclaenus simplex* addt. note fig. p. 3, SIMPSON 1003.

†*Protogonodon grangeri* sp. n. Paleocene New Mexico, SIMPSON Amer. Mus. Nov. no. 849 p. 5 figs.

CANIDAE.

The Foxes and Jackals of Nigeria, ROSEVEAR 900.

Phylogeny of Miocene N. American Dogs, LOOMIS 645.

Psychology of the Canidae, SCHMID 943.

†*Aelurodon* sp. descr. figs. teeth p. 87, BODE 95.

†*Amphicyon* sp. descr. figs. teeth p. 88, BODE 95.

†*Borophagus* Cope is a Canid not a Hyaenid and *Hyaenognathus* Merriam is a synonym, VANDERHOOF 1126.

†*Brachyrhynchocyon* nom. n. pro *Brachicyon* Loomis 1931, SCOTT & JEPSEN Trans. Amer. Phil. Soc. 28 p. 80.

Canis familiaris dental variation, ADAMS 4; Arctic driving dogs their types measurements and breeding, BARMASOP 56; Abnormal skulls of the smaller

domestic races, GEORGI 376.—*C. lupus* historical note, Berwickshire, CARR 173; Historical note in Auvergne, France, CHARVILHAT 192; Historical note in Carinthia in 1556, PUSCHNIG 850.—*C. lupus coreanus* a distinct race, critical note, ABE 1.—*C. hondurensis* sp. n. Honduras, GOLDMAN J. Wash. Acad. Sci. 26 p. 33.

Cuon javanicus review of races, nine recognized, p. 33, *C. j. infuscus* Moulmein Burma p. 38, *C. j. fumosus* Szechwan p. 49, *C. j. laniger* Kashmir p. 50, *C. j. jason* Altai p. 51, subspp. n., Pocock P.Z.S. 1936.

†*Daphaenodon niobrarensis* sp. n. Miocene Nebraska, LOOMIS J. Paleont. 10 p. 47 figs.

†*Daphoenus* dentition, osteology, systematic status, list of spp. figs. p. 55, SCOTT & JEPSEN 969.

†*Ictitherium robustum* and *I. orbigny* in Pontian Bulgaria notes figs. p. 331, BAKALOV 48.

Lycaon pictus lupinus field notes in Kenya p. 55, ALLEN & LAWRENCE 16.

†*Mammacyon* gen. n. for genotype *M. obtusidens* sp. n. Miocene S. Dakota, LOOMIS J. Paleont. 10 p. 44 figs.

†*Metarctos* (*Simocyon*) *diaphorus* in Pontian Bulgaria notes figs. p. 331, BAKALOV 48.

†*Parictis dakotensis* sp. n. Oligocene S. Dakota, SCOTT & JEPSEN (ex Clark Ms.), Trans. Amer. Phil. Soc. 28 p. 106 figs.

†*Pseudarctos bavaricus* on the dentition, HELBIG 481.

†*Pseudocynodictis* dent. skeleton brain relationships figs. p. 81, SCOTT & JEPSEN 969.

†*Temnocyon typicus* sp. n. Miocene Nebraska, LOOMIS J. Paleont. 10 p. 47 figs.

†*Tomarctus* sp. descr. figs. teeth p. 86, BODE 95.

Vulpes review with key of Indian species and races p. 37, Pocock 823.—*V. alopes* Blanford = *V. vulpes montana* (Pearson) p. 38, *V. leucopus* Blfd. = *V. v. pusilla* p. 45, Pocock 823.—*V. vulpes*, *V. fulva* the reproductive cycle through the year in male and female, ROWLANDS & PARKS 903.

†*Vulpes precorsac* note fig. p. 123, HELLER 483.

HYAENIDAE.

Hyaena crocuta anatomy female genitals, NEUVILLE 755, 757; *H. striata*, *H. crocuta* notes in Nigeria photos., ROSEVAAR 900.

†*Hyaena brevirostris* taxonomic status and dentition characters from diluvial gravels of Sussenborn, Germany, SOERGEL 1016.—*H. spelaea* a comparative study of the milk dentition, EHRENBERG 294.—*H. eximia* in Pontian Bulgaria notes figs. p. 332, BAKALOV 48.—*H. perrieri* descr. fig. p. 123, HELLER 483.—*H. sinensis* in Pliocene? Java p. 69, v. KOENIGSWALD 575.

VIVERRIDAE.

Atilax paludinosus pluto notes p. 928, HAYMAN 472.

Dologale dybowskii systematics, synonymy, range, HAYMAN 471.

Genetta vulgaris taken in Vendée, BADOUIN 60.—*G. maculata*, *G. tigrina thierryi* discussion of status p. 925, HAYMAN 472.

Herpestes griseus montanus Kashmir p. 149, *H. brachyurus javanensis* Java *H. urva annamensis* Annam p. 150, *H. u. formosanus* Formosa p. 151, *H. u. sinensis* Kwangtung, S. China p. 152 subspp. n., BECHTHOLD Z. Säugetierk. 11.

Mungos gambianus in Gold Coast discussion and status p. 926, HAYMAN 472.

Myonax pulverulentus basuticus subsp. n. Basutoland, ROBERTS Ann. Transv. Mus. 18 p. 253.

Paradoxurus hermaphroditus rindjanicus, *P. h. lehmanni* remarks ranges fig. skulls p. 313, MERTENS 707.

FELIDAE.

A comparative study of the skull of the larger Felidae, HALTENORTH 450.

Russian nomenclature for some of the Felidae, a correction, SHITKOV 989.

Acinonyx jubatus range in S. India, MORRIS 737.

†*Dinictis* dentition osteol. list of spp. figs. p. 110, SCOTT & JEPSEN 969.

†*Drepanodon* dentition osteol. list of spp. figs. p. 125, SCOTT & JEPSEN 969.

†*Epimachairodus moravicus* sp. n. Pleistocene Czechoslovakia, STEHLÍK Acta Soc. Sci. nat. Morav. 9 no. 6 p. 10 figs.—*E. zwierzychii* sp. n. Pleistocene Java, v. KOENIGSWALD De Ingen. Ned.-Indië 1 no. 11 1934 p. 190 figs.

†*Eusmilus dentition*, skull spp. figs. p. 141, SCOTT & JEPSEN 969.

Felis domesticus problem of the Manx or tailless Cat, TACKE 1071.—*Felis leo* cryptorchism and structure of genitalia, COHES & SCHNEIDER 211; The Lion in Chinese art, SOWERBY 1018.—*F. concolor youngi* subsp. n. Texas, GOLDMAN Proc. biol. Soc. 49 p. 137.

†*Felis tigris* semifossil in Honan skulls figs., TEILHARD & YOUNG 1089.—*F. silvestris* in the Stone Age, Sweden, DAHR 235; In Magdalenian beds of Switzerland, HELBIG 480.

Lynx rufus baileyi diet in Arizona, GRATER 401.

†*Machairodus schlosseri* in Pontian Bulgaria, note fig. p. 332, BAKALOV 48.

Neofelis nebulosa in Sarawak habits photos., SELOUS & BANKS 972.

Nimravinae subf. n. p. 146, *Nimravus bumpensis* sp. n. Oligocene S. Dakota p. 147, SCOTT & JEPSEN Trans. Amer. philos. Soc. 28.

Otocolobus manul general account distr. systematics races etc., SCHWAN-GART 962.

Panthera pardus in Tibet, BATTYE 59.—*P. pardus leopardus*, *P. p. reiche-novi* range and discussion p. 921, POCOCK under HAYMAN 472.—*P. pardus* × *Puma concolor* hybrid reared in captivity, HALTENORTH 451.

†*Pseudaelurus* note on brain cast and affinities, a Felid, RICHARD 873.

ORDER PINNIPEDIA.

The Pinnipedia of the N. Pacific economics, habits etc., DOROFFEY & FREIMANN 277.

Reports (mostly reprints) on the Pinnipedia obtained during the scientific cruises of Prince Albert of Monaco, RICHARD 872.

Miocene marine Pinnipedia from California, WILSON 1176.

Respiratory metabolism in diving Seals, IRVING & others 534.

PHOCIDAE.

Halichoerus grypus status, habits, estimated numbers on Cornish coasts, STEVEN 1034.

Histiophoca groenlandica oceanica breeding and other habits in White Sea, DOROFFEYEV 276.

Machrorhinus leoninus sylvian fissure of the brain, FRIANT 347.

Monachus albiventer note on distr. map, CALINESCU 163.

Phoca vitulina pelage and pinna of a newly born, MATTHEWS 694; Birth and rearing of young one in Bremen Zoo, WAGNER 1139.—*P. vitulina lagha pallasii natio nova* p. 177, *P. hispida krascheninikovi* subsp. n. p. 182 N. Pacific, FREIMANN Trans. Inst. Fish. Oceanogr. Moscow 3.—*P. groenlandica* an old record from the Severn, TETLEY 1090.

†*Phoca barbata* a subfossil skeleton in Sweden, MODÉN 720.—*Phoca* sp. in Miocene deposits of Caspian basin, BOGATCHEFF 101.

TRICHECHIDAE.

Odobenus rosmarus of the Kara Sea, structure, habits, range and economics, CHAPSKY 189.

OTARIIDAE.

Arctocephalus ursinus stomach contents, SCHULTZ & RAFFN 957.

Eumetopias californianus report on a dissection, SEIFERT 970.

Otaria byronia historical nomenclature, characters, bionomics and economic in Falkland Is., HAMILTON 453.

ALLODESMIDAE.

†*Allodesmus* cf. *kernensis* descr. dimensions etc., p. 138, L. E. WILSON 1176.

ORDER INSECTIVORA.

The Insectivora of Formosa, TANAKA 1077.

The tympanic ring in the skull of the Tupaiidae and *Adapis* and its significance, SERA 973.

INCERT. SEDIS.

†*Apator* gen. n. (? Insectivora incert. sed.) p. 16 for *A. asaphes* sp. n. Paleocene Montana, SIMPSON Amer. Mus. Nov. no. 873 p. 18 figs.

†*Sinclairella dakotensis* descr. figs. p. 26, SCOTT & JEPSEN 969.

LEPTICIDAE.

†*Ictops* osteol. dentition list of spp. figs. p. 13, SCOTT & JEPSEN 969.

†*Leptacodon* cf. *tener* descr. p. 8, SIMPSON 1004.

†*Metacodon* gen. n. (Lepticiidae) for *M. magnus* Oligocene S. Dakota, SCOTT & JEPSEN Trans. Amer. Phil. Soc. 23 p. 22 figs.

DELTATHERIIDAE.

†*Puercolestes simpsoni* gen. et sp. n. Paleocene New Mexico, REYNOLDS J. Paleont. 10 p. 204 figs.

MIXODECTIDAE.

†*Elpidophorus patratius* sp. n. Paleocene Montana, SIMPSON Amer. Mus. Nov. no. 873 p. 11 figs.

PANTOLESTIDAE.

†*Bessoecetor* gen. n. for *B. thomsoni* sp. n. Paleocene Montana, SIMPSON Amer. Mus. Nov. no. 873 1936 p. 9 figs.

SOLENOTONTIDAE.

Clinodon gen. n. (Solenodontidae) for *C. gracilis* sp. n. Oligocene S. Dakota, SCOTT & JEPSEN Trans. Amer. phil. Soc. 23 p. 13 figs.

Solenodon paradoxus general account, BRIDGES 126; Habits in captivity photos., MOHR 729.

CENTETIDAE.

†*Apternodus altitalonidus* sp. n. Oligocene S. Dakota, SCOTT & JEPSEN Trans. Amer. phil. Soc. 23 p. 12.

Centetes ecaudatus placentation studies, GOETZ 386.

CHRYSOCHLORIDAE.

Chlorotalpa guillarmodi sp. n. Basutoland, ROBERTS Ann. Transv. Mus. 13 p. 253.

TALPIDAE.

Desmana moschata harassed by Kites etc. in Russia, KRASSAWOZEFF 599.

Myogale pyrenaica habits, distr. anatomy, PUISSÉGUR 847.

Scalops aquaticus habits and ecology, ARLTON 33.

Scapanus anthonyi characters and range, HUEY 526.

Talpa europaea snout and nostrils structure figs., MOHR 728; Mole-hills in Brandenburg examined, EISENTRAUT 299.—*T. altaica salairica* subsp. n. Salair Mts. Tomsk Gouv. habits and range, EGORIN Trav. Inst. sci. Biol. Tomsk 2 p. 154.

SORICIDAE.

†*Beremendia fissidens* descr. figs. p. 107, HELLER 483.

Crocidura occidentalis dorianae variation range relationships p. 220, *C. zimmeri* Belgian Congo p. 223, *C. baileyi* Abyssinia p. 225 spp. n., *C. hildegardiae phaeura* Abyssinia subsp. n. and notes on other spp., OSGOOD Field Mus. Pub. Zool. 20.—*C. giffardi* coat-change and variation p. 920, HAYMAN 472.—*C. parvacauda* Mindanao p. 83, *C. palawanensis* Palawan p. 88 spp. n. TAYLOR Philippine Ld.-Mamm. 1934.—*C. tadeae* sp. n. Kôô-shô nr. Botel-Tobago, TOKUDA & KANO Annot. zool. jap. 15 p. 429 fig. teeth.

Neomys fodiens habits in captivity, LUTHER 654.

Notiosorex c. crawfordi habits in captivity, HUEY 525.

Pachyura palawanensis sp. n. Palawan, TAYLOR Philippine Ld. Mamm. 1934 p. 78.

†*Petényia hungarica* notes, fig. p. 108, HELLER 483.

Sorex minutus anatomy of an intersex and effects of male hormones, BRAMBELL & HALL 123.—*S. alpinus* in the Baden Schwarzwald with note on races, LÖHRL 642.—*S. araneus* in N. Siberia taxonomic notes and range of spp. and races pp. 249, 326, KOLJUSCHEW 583.—*S. a. jacutensis* Dukelski 1928 addt. descr., KOLYUSHEW 591.—*S. tundrensis europaeus* subsp. n. pp. 130, 140, *S. isodon ruthenus* pp. 132, 141 subspp. n. nr. Waldai, Russia, STROGANOV Zool. J. Moscow 15.—*S. leucogenys* discussion of relationships and status p. 446, BENSON 75.—*S. palustris brooksi* addt. descr. male Bt. Columbia, COWAN 224.

†*Sorex fallax* sp. n. Pliocene Hesse-Rhein, HELLER N. Jahrb. Min. Geol. 76 p. 109 figs.—*S. kennardi* in a Bavarian cave note fig. p. 9, BRUNNER 138.

Sylvisorex gemmeus, *S. mundus* taxonomy and range p. 41, ALLEN & LAWRENCE 16.—*S. suncoides* sp. n. Ruwenzori p. 217 *S. sorella phaeopus* subsp. n. Abyssinia p. 219, OSGOOD Field Mus. Pub. Zool. 20.

ERINACEIDAE.

Atelerix pruneri hindei taxonomy and field notes p. 39, ALLEN & LAWRENCE 16.

Erinaceus europaeus experiments in training, SGONINA 977.—*E. europaeus*, *E. alpinus* form of snout and nostrils figs., MOHR 723.—*E. europaeus*, *E. roumanicus* status and distr. in Brandenburg, HERTER 488; Habits in captivity, MOHR 727.—*E. albiventris* history taxonomy and type locality Senegambia, G. M. ALLEN 11.

Hemiechinus auritus in the Ukraine, AVERIN & SHTAMM 42.

ORDER CHEIROPTERA.

British Bats, HETT & DOLMAN 490.

Notes on systematics and geogr. distr. of Russian and Asiatic Russian Bats, KUSJAKIN 616.

Descr. and other notes on African Bats, SANBORN 923.

Records and measurements of Neotropical Bats, SANBORN 922.

Breeding habits of European Bats, EISENTRAUT 302.

Habits of Turkestan Bats, MEKLENBURZEV 70.

The breeding seasons of Bats in the tropical rain forests of the New Hebrides BAKER & BIRD 50.

Seasonal distribution of Pennsylvania Bats, MOHR 721.

Distribution of Bats in Devon, BLACKMORE 86.

Physiology of respiration metabolism, BRUHN & BENEDICT 137.

Cervical ganglia in embryo Bats, CELESTINO D. C. 183.

Mechanics of the flight of Bats, EISENTRAUT 303.

The ratio of wing area is higher in Bats than in Birds, POOLE 834.

Growth records of newly born Bats, HUXLEY 529.

Investigation of movements and migrations of Bats by banding, GRIFFIN 416; EISENTRAUT 300, 301.

Methods of marking or tagging Bats and results of recaptures in Pennsylvania, MOHR 723.

Methods of keeping Bats in captivity, GATES 369.

Method of skinning Bats, PRIMROSE 846.

INCERT. SEDIS.

†*Cecilionycteris prisca* remains of soft parts, skin etc. in Eocene, Brown Coal beds nr. Halle, VOIGT 1133.

PHYLLOSTOMIDAE.

Desmodus rufus habits in Trinidad and a vector of paralytic rabies, VERTEUIL & ULRICH 1130.—*D. rotundus murinus* a transmitter of rabies in Trinidad, PAWAN 795, 796.

Platallina genovensium Measurements and other notes p. 99, SANBORN 922.

Tonatia bidens, *T. amblyotis* measurements and other notes p. 96, SANBORN 922.

Vampyroides major measurements and other notes p. 101, SANBORN 922.

NOCTILIONIDAE.

Balantiopteryx io notes and measurements p. 95, SANBORN 922.

Emballonura alecto palawanensis subsp. n. Palawan, TAYLOR Philippine Ld. Mamm. 1934 p. 197.—*E. solomonis* range in the Solomons p. 352, TROUGHTON 1107.

Eumops glaucinus recorded in Florida, BARBOUR 54.

Miniopterus schreibersii inexpectatus subsp. n. Bulgaria, HEINRICH Bull. Inst. R. Hist. nat. Sophia 9 p. 34.—*Miniopterus natalensis* critical notes on races p. 110, *M. africanus* Abyssinia p. 111, *M. rufus* Belgian Congo p. 112 spp. n., SANBORN Field Mus. Pub. Zool. 20.

Mops angolensis wonderi subsp. n. French Sudan, SANBORN Field Mus. Pub. Zool. 20 p. 114.

Mystacops tuberculatus survival in some of the smaller isles around N. Zealand and habits, STEAD 1028.

Philippinopterus gen. n. for genotype *P. lanei* sp. n. Mindanao P.I., TAYLOR Philippine Ld. Mamm. 1934 p. 314.

Platymops (Sauromys) haagneri note on generic diagnosis, occurring in S.W. Afr. p. 76, St. LEGER 917.

Tadarida mexicana status in Kansas, HIBBARD 491.

VESPERTILIONIDAE.

Antrozous p. pallidus probably a ground feeder, HUEY 527.

Corynorhinus development of the cerebellum, LARSELL & DOW 621.

Eptesicus bobrinskoi sp. n. Kara Kum nr. Aral Sea, KUSJAKIN Bull. Soc. Nat. Moscou 44 p. 435, 437.—*E. fuscus* review of N. Amer. races 5 recognized, ENGELS 316.—*E. fuscus* outside temperatures during hibernation in the U.S. Nat. Mus. WETMORE 1168.—*E. fuscus* and other spp. hibernation habits in Minnesota SWANSON & EVANS 1067.

Glauconycteris albo guttatus in Nigeria note on pelage p. 110, SANBORN 923.

Harpiocephalus harpia recorded for Formosa, KURODA 614.

Leuconoe capaccinii bureschi subsp. n. Bulgaria, HEINRICH Bull. Inst. R. Hist. nat. Sophia 9 p. 38.

Myotis mystacinus bulgaricus subsp. n. Bulgaria, HEINRICH Bull. Inst. R. Hist. nat. Sophia 9 p. 38.—*M. mystacinus pamirensis* Pamirs pp. 431, 436, *M. m. aurascens* N. Caucasus pp. 432, 437, *M. nattereri tschuliensis* Kopet-Dagh pp. 434, 437 subsp. n., KUSJAKIN Bull. Soc. Nat. Moscou Biol. 44.—*M. jeannei* p. 284, *M. patriciae* p. 286 *M. browni* p. 288 all Mindanao, *M. herrei* Luzon p. 290 all spp. n., TAYLOR Philippine Ld. Mamm. 1934.—*M. l. lucifugus* habits and growth in Ontario, DYMOND 290; Cytology of hypophysis, SAWYER 925.—*M. austroriparius* and other Pennsylvanian spp. range and habits, MOHR 722.—*M. volans interior* in S. Dakota, MOULTHROP 741.—*M. subulatus melanorhinus* recorded for Bt. Columbia, COWAN 224.

†*Myotis kormosi* p. 113, *M. rapax* p. 115, *M. aemulus* p. 116, *M. gundersheimensis* p. 117, *M. praeivius* p. 118, *M.*

delicatus, *M. exilis* p. 120, *M. insignis* p. 121 all spp. n. all figs. Pliocene Rheinhesse, HELLER N. Jahrb. Min. Geol. 76.

Nyctalus noctula hibernation habits and the choice of a suitable locality, LÖHRL 641.

Pipistrellus abramus breeding season and habits in Japan, NIWA 763.—*P. ponceleti* sp. n. Bougainville Solomons TROUGHTON Rec. Austr. Mus. 19 p. 351.—*P. hesperus* revision of races with descr. keys etc. p. 257, *P. h. maximus*, *P. h. santarosae* subsp. n. p. 261 both New Mexico, HATFIELD J. Mammal. 17.

Plecotus auritus saharae subsp. n. S. Algeria, LAURENT Bull. Soc. Hist. nat. Alger 27 p. 409 figs.

Vespertilio pilosus Peter probably from China and should be placed in gen. *Rickettia* Thos., G. M. ALLEN 12.

NYCTERIDAE.

Lavia frons rex note p. 50, ALLEN & LAWRENCE 16.

Megaderma lyra recorded from Malay Pen. p. 134, CHASEN 193.

Nycteris nana tristis subsp. n. Kenya ALLEN & LAWRENCE Bull. Mus. comp. Zool. 79 p. 47.

RHINOLOPHIDAE.

Anthrops ornatus in Bougainville note p. 351, TROUGHTON 1107.

Hipposideros beatus coloration and other notes p. 919, HAYMAN 472.—*H. pendleburyi* sp. n. Peninsular Siam p. 133, *H. lylei* in Pahang Malay P. p. 134, CHASEN Bull. Raffles Mus. 12.—*H. larvatus grandis* subsp. n. Upper Burma, ALLEN Rec. Ind. Mus. 38 p. 345.—*H. wrighti* sp. n. Luzon p. 237, *H. diadema anderseni* subsp. n. Luzon p. 246, TAYLOR Philippine Ld. Mamm. 1934.—*H. cervinus* in Bougainville p. 350, TROUGHTON 1107.

Rhinolophus ferrumequinum, *R. hipposideros* distr. in Germany map, POHLE 830.—*R. eloquens* on Mt. Elgon note fig. dentition p. 168, RODE 885.—*R. alcyone alticola* subsp. n. Cameroon Mt., SANBORN Field Mus. Pub. Zool. 20 p. 108.—*R. bunkeri* sp. n. Mindanao P.I., TAYLOR Philippine Ld. Mamm. 1934 p. 228.—*R. monoceros* in Kô-tô-shô I. nr. Botel Tobago figs., TOKUDA & KANO 1095.

†*Rhinolophus neglectus* sp. n. Pliocene
Hesse-Rhein, HELLER N. Jahrb. Min.
Geol. 76 p. 110 figs.

PTEROPIDAE.

Cynopterus archipelagus sp. n. Polillo
I. P.I., TAYLOR Philippine Ld. Mamm.
1934 p. 182.

Dobsonia inermis nesea taxonomic
note p. 348, TROUGHTON 1107.

Eonycteris longicauda sp. n. Luzon,
TAYLOR Philippine Ld. Mamm. 1934
p. 131 figs.

Hypsignathus monstrosus voice and
other habits in Uganda, DUKE 285.

Macroglossus fructivorus sp. n. Min-
danao, TAYLOR Philippine Ld. Mamm.
1934 p. 125.

Megaerops wetmorei sp. n. Mindanao
P.I., TAYLOR Philippine Ld. Mamm.
1934 p. 191.

Nyctimene bougainville sp. n. Bougain-
ville Solomons, TROUGHTON Rec. Austr.
Mus. 19 p. 349.

Pteropus giganteus, roosting and other
habits in India, ACHARYA 3.—*P. hypo-*
melanus maris subsp. n. Maldives,
ALLEN Rec. Ind. Mus. 38 p. 343.—*P.*
tablasi sp. n. Tablas I. P.I., TAYLOR
Philippine Ld. Mamm. 1934 p. 169
figs.

*Rousettus lanosus kemp*i correction of
distr. p. 45, ALLEN & KEMP 16.

Xantharpygia amplexicaudata struc-
ture of brain, SUZUKI 1057.

ORDER PROSIMIAE.

A study of the limb bones and verte-
brae of the extinct Lemurs of Mada-
gascar, CARLETON 172.

Anatomical characters, affinities and
classification of Lorisoid Lemurids,
W. C. O. HILL 495.

INCERT. SEDIS.

†*Ceciliolemur* note on hair covering
and discussion of affinities, VOIGHT
1134.

†*Omomys belgicus* no. of lower incisors
and its status discussed, FRIANT 353.

ADAPIDAE.

†*Adapis* significance of the tympanic
ring of the skull, SERA 973.

CARPOLESTIDAE.

†*Carpodaptes hazelae* sp. n. Paleocene
Montana, SIMPSON Amer. Mus. Nov.
no. 873 p. 21 figs.

†*Phenacolemur frugivorus* fig. lower
jaw p. 22, SIMPSON 1004.

PLESIADAPIDAE.

†*Plesiadapis anceps* sp. n. Paleocene
Montana, SIMPSON Amer. Mus. Nov.
no. 873 p. 19 figs.

TARSIIDAE.

†*Microtarsioides voighti* descr. and
figs. of the hair-covering, VOIGHT 1134.

NYCTICEBIDAE.

Galago demidovi orinus subsp. n.
Uluguru Mts. Tang. Terr., LAWRENCE
& WASHBURN Occ. Pap. Boston Soc.
N.H. 8 p. 259.

Perodicticus p. potto note p. 918,
HAYMAN 472.—*P. potto ibeanus* habits
etc. p. 67 photos., ALLEN & LAWRENCE
16.

LEMURIDAE.

Lemur catta and other spp. habits of
captive examples, DECHAMBRE 253;
Function of the narrowed incisors, not
for combing, STEIN 1033.—*L. fulvus*
and other allied forms are races of *L.*
macaco Linn., SCHWARZ 965.

ORDER PRIMATES.

The problem of the claw in the
Primates, CLARK 208.

Fissure pattern of brain in Primates
including Lemuroids, CONNOLLY 217.

The cortex of the Primate brain,
BUCK 142; KOIKEGAMI & IMOGAWA
580.

The structure of the hypophysis in
Man and Apes, PLAUT 821.

The number of lower incisors in the
Primates, FRIANT 353.

The homologues of the premolars of
Primates, FRIANT 348.

The masseter muscle of the Catar-
rhine and Platyrrhine groups, ZLABEK
1221.

The veins of the hand in the Apes,
NISHI 761.

The structure of the colon in the Primates (including Lemuroids), REIDER 868.

The feeding behaviour of Monkeys, KATZ 560.

HAPALIDAE.

Hapale jacchus breeding and other habits in captivity note on placenta, SAWAYA 924.

CEBIDAE.

Lagothrix lagothricha limb arteries, BANG 51.

CERCOPITHECIDAE.

†*Cercocebus ado* sp. n. Pleistocene Africa, HOPWOOD Ann. Mag. N.H. (10) 17 1936 p. 638.

Cercopithecus and *Cercocebus* differential skull characters, RODE 886.

Cercopithecus picturatus Santos = *C. nictitans ascanius* Audebert type loc. and descr., SCHWARZ 963.—*C. mona lowei* descr. juv. p. 917, HAYMAN 472.

Colobus badius waldroni subsp. n. Gold Coast, HAYMAN P.Z.S. for 1935 1936 p. 915 col. pl.

Kasi anatomical and other characters and review of the species, HILL 497.—*K. vetulus* × *Semnopithecus entellus* a hybrid described and notes on breeding habits of first named, HILL 498.

Macaca mulatta corpora lutea studies, CORNER & others 219; Temporal lobe of brain, CLARK 206; Thalamus, CLARK 207; Brain cortex, METTLER 709.—*M. rhesus* blood-supply of the uterus lining, DARON 243.—*M. irus mordax* notes on range in Lesser Sunda Is. p. 317, MARTENS 707.

†*Macacus* cf. *florentinus* note fig. p. 141, HELLER 483.

Nemestrinus nemestrinus psychological experiments, BIERANS DE H. & KOOYMAN 80.

Papio microscopic examination of skin color, FORBES 335.—*P. porcarius* cyclical changes in external genital organs, GILLMAN 382; an abnormal sacrum, PRAG 841.

†*Papio spelaeus* sp. n. Transvaal loc. and age incert. and review and discussion of recent and fossil S. African forms, BROOM Ann. Transv. Mus. 18 p. 395.

Procolobus badius waldroni external anatomy, head, feet and genitalia, POCKOCK 824.

†*Simopithecus oswaldi*, *S. leakeyi* addt. notes p. 637, HOPWOOD 513.

Trachypithecus barbei descr. and taxonomy and other notes, HILL 494.

SIMIIDAE.

Recent discoveries of fossil Anthropoids in Africa and Asia, JOLEAUD 542.

Structure of the brain cortex in the Anthropoids, KREHT 600.

Skull dimensions and capacities and others studies in the Anthropoids, PITTARD 818.

Weight of skulls and mandibles in Anthropoids, PITTARD 819.

Skull foramina of the Anthropoids, WEGNER 1154.

The vertebrae of the Anthropoids, their numbers etc., FICK 327.

Dentary ectopies in the Simiidae, NEUVILLE 756.

Myology of the Anthropoids, STEWART 1035.

Speech and its origin in Anthropoids and Man, SCHWIDETZKY 968.

Psychology of young Chimpanzees and Man, KOHTS 579.

Gorilla gorilla an attempt to revise the races chiefly on cranial characters 3 only recognized, RZÁŠICKI 914; Descr. of specimens obtained on the Sanga river, French Equatorial Africa photo., COOLIDGE 218.

Pan satyrus (Chimpanzee) observations on a very old example in captivity, TOMILIN 1101; Surface markings of cerebral hemispheres, WALKER & FULTON 1142.—Structure and movements of the hand, SCHREIBER 951; Arterial System, GLIDDEN & DE GARIS 384; History of births in captivity in Florida, ELDER & YERKES 306; sexual cycle, ELDER & YERKES 305; YERKES & ELDER 1209; metabolism, BENEDICT & BRUHN 67; Gestation period and menstrual cycle, TOMILIN 1100; With accessory mammary glands, ELDER 304.—*P. satyrus paniscus* range in B. Congo p. 15, SCHOUTEDEN 950.—*P. satyrus verus* colour of face and skin, SCHWARZ 966.

Simia satyrus (Orang) the thoracic and abdominal viscera and their bearing on phylogeny & relationships, STRAUSS 1051.

†*Sugriviapithecus gregoryi* sp. n. Middle Siwalik (Pliocene) India, LEWIS Amer. J. Sci. (5) 31 p. 450 fig.

HOMINIDAE.

Early Man, general review, WOODWARD 1198.

Fossil Man, Report on the Commission. From many countries by various authors, MADSEN 664.

Fossil Man in Hungary, recent investigations, KADIO and others 551.

Fossil Man in U.R.S.S., EFIMENKO 291.

Fossil Man in N. Manchuria and contemporary fauna, LOUKASHKIN, 651.

Fossil Man in the Sahara and the contemporary fauna, JOLEAUD 543.

Pleistocene Man in S. California, BOWDEN & LOPATIN 121.

Early Man in S.-E. U.S.A. a symposium, HOWARD 517.

Phylogeny of the human brain, WEIDENREICH 1157.

Specific characters for Man, SCHULTZ 956.

A bibliography of fossil Man, QUENSTEDT 851.

†*Australopithecus transvaalensis* a new skull found near Krugersdorp, Transvaal figs., BROOM 133; Discussion of dentition, BROOM 134; further discussion, SCHWABZ 964.—*A. africanus* study of dentition, BENNEJEANT 71.

Homo description and reconstruction of the skull of the Steinheim Man, WEINERT 1160.—*H. neandertalensis* in Italy age and discussion of the Saccopastore skull, GENNA 375; On the age of the newly discovered skull from Saccopastore Cave nr. Rome, BREUIL & BLANC 125; Descr. of a child skull and notes on the older ones from Engis in Belgium, FRAIPONT 338.—*H. modjokertensis* sp. n. L. Pleistocene E. Java v. KOENIGSWALD De Ingen. Ned.-Indië 3 no. 8 1936 p. 156 figs. also v. KOENIGSWALD 577; and PINKLEY 815.—*H. soloensis* the endocranial cast, KAPPERS 554.

†*Palaeanthropus* on a newly found skull from Tanganyika Territory, LEAKY 633.—*P. njarasensis* [sp. n.] founded on three skulls found on the Kenya-Tanganyika border nr. L. Njarasa with discussion of age and affinities, RECK & KOHL-LARSEN 864.

†*Sinanthropus pekinensis* general account, AGUILERA 7; its significance in human evolution, WEIDENREICH 1158.

INDEX TO NAMES

OF

NEW GENERA AND SUBGENERA

INCLUDING NEW NAMES FOR GENERA PREVIOUSLY ESTABLISHED

RECORDED IN THIS VOLUME FOR 1936.

The total number of New Genera enumerated in this list is 2,421, an increase of 453 on that of the previous year.

In the last six years the numbers have been:—1930, 2,139; 1931, 2,377; 1932, 1,990; 1933, 2,087; 1934, 2,727; 1935, 1,968.

The list for 1936 is made up as follows:—

| | | | | | | | |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|
| Protozoa | ... | ... | ... | ... | ... | ... | 57 |
| Porifera | ... | ... | ... | ... | ... | ... | 171 |
| Coelenterata | ... | ... | ... | ... | ... | ... | 38 |
| Echinodermata | ... | ... | ... | ... | ... | ... | 30 |
| Vermes | ... | ... | ... | ... | ... | ... | 122 |
| Brachiopoda and Bryozoa | ... | ... | ... | ... | ... | ... | 71 |
| Mollusca | ... | ... | ... | ... | ... | ... | 276 |
| Crustacea | ... | ... | ... | ... | ... | ... | 141 |
| Arachnida | ... | ... | ... | ... | ... | ... | 353 |
| Insecta:— | | | | | | | |
| Coleoptera | ... | ... | ... | ... | ... | ... | 317 |
| Hymenoptera | ... | ... | ... | ... | ... | ... | 91 |
| Diptera | ... | ... | ... | ... | ... | ... | 203 |
| Lepidoptera | ... | ... | ... | ... | ... | ... | 104 |
| Other Orders | ... | ... | ... | ... | ... | ... | 231 |
| Fossil Insects | ... | ... | ... | ... | ... | ... | 22 |
| | | | | | | — | 968 |
| Prochordata | ... | ... | ... | ... | ... | ... | 1 |
| Pisces | ... | ... | ... | ... | ... | ... | 84 |
| Amphibia and Reptilia | ... | ... | ... | ... | ... | ... | 48 |
| Aves | ... | ... | ... | ... | ... | ... | 12 |
| Mammalia | ... | ... | ... | ... | ... | ... | 49 |

Total 2,421

- ✓ *Aaba de Laubenfels* Por. 8
 ✓ *Abiesgraptus Hundt* Coel. 22
 ✓ *Abnormipterus Orfila* Ins. 332
 ✓ *Aburista Roewer* Arachn. 56
 ✓ *Aburitus Roewer* Arachn. 56
 ✓ *Acaca Roewer* Arachn. 56
 ✓ *Acamasina de Laubenfels* Por. 8
 ✓ *Acanthacis Deichmann* Coel. 26
 ✓ *Acanthocnemidonia Bernhauer* Ins. 236
 ✓ *Acanthopharyngoides Chitwood* Vermes 102
 ✓ *Acaroceras Grandjean* Arachn. 62
 ✓ *Aceratus Prell* Ins. 263
 ✓ *Acerogria Borchmann* Ins. 255
 ✓ *Achatella Delo* Arachn. 34
 ✓ *Achiropsetta Norman* Pisces 88
 ✓ *Achromoporus Loomis* Arachn. 76
 ✓ *Achropodophorus Rosas Costa* Arachn. 62
 ✓ *Acritopaphia Iredale* Moll. 121
 ✓ *Acritotilpha Zerny* Ins. 350
 ✓ *Acrotytherium Rusconi* Mam. 66
 ✓ *Adalurnus Maulik* Ins. 289
 ✓ *Adamanna Roewer* Arachn. 56
 ✓ *Adamnestia Iredale* Moll. 92
 ✓ *Adapanetus Günther* Ins. 264
 ✓ *Adiplectra Enderlein* Ins. 389
 ✓ *Adolpholutzia Travassos* Vermes 112
 ✓ *Adosogria Borchmann* Ins. 255
 ✓ *Adramita Uvarov* Ins. 434
 ✓ *Aduva Bishop & Crosby* Arachn. 48
 ✓ *Aechminaria Coryell & Williamson* Crust. 57
 ✓ *Aegyptocoris China* Ins. 401
 ✓ *Aeluropetrus Arnold* Ins. 302
 ✓ *Aemylurgis Meyrick* Ins. 350
 ✓ *Aetapcus Scott* Pisces 87
 ✓ *Aethoglis G. M. Allen* Mam. 78
 ✓ *Afghanprosodes Schuster* Ins. 253
 ✓ *Afrabothris Théry* Ins. 248
 ✓ *Afrectopius Heinrich* Ins. 312
 ✓ *Africogomphus Fraser* Ins. 427
 ✓ *Afroditropis Bequaert & Clench* Moll. 76
 ✓ *Afroparresys Haas* Moll. 115
 ✓ *Afropavo Chapin* Aves 75
 ✓ *Afrophytosephus Hustache* Ins. 264
 ✓ *Afropompilus Arnold* Ins. 303
 ✓ *Afrozenia Kemner* Ins. 382
 ✓ *Agalaxis Scott* Pisces 70
 ✓ *Agalmia Enderlein* Ins. 386
 ✓ *Agastoplax Enderlein* Ins. 380
 ✓ *Agehana Matsumura* Ins. 330
 ✓ *Agersborgia Strand* Arachn. 44
 ✓ *Agniohammus Breuning* Ins. 280
 ✓ *Agniopsis Breuning* Ins. 280
 ✓ *Aixopsis Delacour* Aves 81
 ✓ *Aka de Laubenfels* Por. 8
 ✓ *Akantharges Phleger* Arachn. 34
 ✓ *Akiefferella Thienemann* Ins. 368
 ✓ *Akrochelys Bergounioux* Rept. 41
 ✓ *Alafia Maulik* Ins. 286
 ✓ *Alanella Bouček* Crust. 57
 ✓ *Alasia Enderlein* Ins. 390
 ✓ *Albertoceras Ulrich & Foerste* Moll. 128
 ✓ *Alcimbolus Loomis* Arachn. 77
 ✓ *Aldrichocoptera Townsend* Ins. 384
 ✓ *Aleucoschema Semenov-Tian-Shanski* Ins. 262
 ✓ *Allocotesia Wehrli* Ins. 340
 ✓ *Allodelphis L. E. Wilson* Mam. 65
 ✓ *Allodiaptomus Kiefer* Crust. 50
 ✓ *Allodiastylus Hale* Crust. 40
 ✓ *Allogalumna Grandjean* Arachn. 62
 ✓ *Allolimnesia Viets* Arachn. 71
 ✓ *Allonitis Janssens* Ins. 260
 ✓ *Allonuria Claassen* Ins. 423
 ✓ *Allophallus Hubbs* Pisces 77
 ✓ *Allopiloceras Ulrich & Foerste* Moll. 128
 ✓ *Allopodops Harris & Johnston* Ins. 399
 ✓ *Allygianus Ball* Ins. 406
 ✓ *Aloceuxesta Hendel* Ins. 392
 ✓ *Alopeucroceras Lindner* Ins. 376
 ✓ *Alveolophragmium Stschedrina* Prot. 84
 ✓ *Amalorhinoncus Wagner* Ins. 272
 ✓ *Ambasiella Schellenberg* Crust. 46
 ✓ *Amblyzancle Turner* Ins. 334
 ✓ *Ambuscintilla Iredale* Moll. 115
 ✓ *Amesioeclea Villeneuve* Ins. 384
 ✓ *Ameura Weller* Arachn. 34
 ✓ *Amleanus Marshall* Ins. 264
 ✓ *Ammobaenetes Hubbell* Ins. 433
 ✓ *Amolopsa Strand* Ins. 223
 ✓ *Amphekes Collette* Ins. 338
 ✓ *Amphiblestrum Schrammen* Por. 5
 ✓ *Amphidromys Heller* Mam. 78
 ✓ *Amphiprox Haupt* Mam. 69
 ✓ *Amphoroceras Ulrich & Foerste* Moll. 128
 ✓ *Anadimonia Ogloblin* Ins. 286
 ✓ *Anafossarus Iredale* Moll. 81
 ✓ *Anascopeus Marshall* Ins. 264
 ✓ *Anaspyroceras Shimizu & Obata* Moll. 29, 141
 ✓ *Anassamia Roewer* Arachn. 56
 ✓ *Anastena Maulik* Ins. p. 286
 ✓ *Anatipopecten Hertlein* Moll. 111
 ✓ *Anatrum Reikhardt* Ins. 252
 ✓ *Anchiopsis Delo* Arachn. 34
 ✓ *Anchitelus Van Dyke* Ins. 264
 ✓ *Anchovicypris Fowler* Pisces 74
 ✓ *Anacillista Iredale* Moll. 88
 ✓ *Andrewsiella Izzard* Ins. 405
 ✓ *Anelaphus Linsley* Ins. 277
 ✓ *Anetoceras Schindewolf* Moll. 129
 ✓ *Aneureta Turati & Krüger* Ins. 335
 ✓ *Angitulina Enderlein* Ins. 392
 ✓ *Anglicornus Flower & Caster* Moll. 129
 ✓ *Anguinoides Chitwood* Vermes 103
 ✓ *Angustidentus Cooper* Pisces 68
 ✓ *Anillidris Santschi* Ins. 305
 ✓ *Annametra Clark* Echin. 26
 ✓ *Annaperenna Iredale* Moll. 83

- ✓ *Anningia L. R. Cox* Moll. 107
 ✓ *Annulococcus James* Ins. 412
 ✓ *Anomalonyx Denier* Ins. 258
 ✓ *Anomalorthis Ulrich & Cooper* Brach. 15
 ✓ *Anomalothrombium André* Arachn. 62
 ✓ *Anomiapteryx Gussakovskii* Ins. 298
 ✓ *Anomozancla Turner* Ins. 350
 ✓ *Anomutilla Mickel* Ins. 301
 ✓ *Anophthalmodonia Bernhauer* Ins. 236
 ✓ *Anoplodonta James* Ins. 376
 ✓ *Anopliomorpha Linsley* Ins. 277
 ✓ *Anoptichthys Hubbs & Innes* Pisces 72
 ✓ *Anorina Whitehouse* Arachn. 34
 ✓ *Anostylostroma Parks* Coel. 16
 ✓ *Anotoma Borchmann* Ins. 255
 ✓ *Antagmus Resser* Arachn. 34
 ✓ *Antibythocypris Jennings* Crust. 57
 ✓ *Anticonops Kröber* Ins. 384
 ✓ *Antromysis Creaser* Crust. 40
 ✓ *Antrosemnites Scheerpeltz* Ins. 231
 ✓ *Apatalina Enderlein* Ins. 384
 ✓ *Apataniana Mosely* Ins. 357
 ✓ *Apatelina Martynov* Ins. 357
 ✓ *Apator Simpson* Mam. 83
 ✓ *Aphanonyx Marshall* Ins. 264
 ✓ *Apheoërthis Ulrich & Cooper* Brach. 14
 ✓ *Apiliorheithrus Mosely* Ins. 357
 ✓ *Aplopodesmus Loomis* Arachn. 77
 ✓ *Aplysinofibria Bolkhovitinova* Por. 13
 ✓ *Apocolotois Wehrli* Ins. 340
 ✓ *Apopetelia Wehrli* Ins. 340
 ✓ *Aporcelainus Kriess* Vermes 104
 ✓ *Aporthophyla Ulrich & Cooper* Brach. 21
 ✓ *Appalachia Rehn* Ins. 435
 ✓ *Apsidocnemus Alluvud* Ins. 223
 ✓ *Arapahoia Miller* Arachn. 34
 ✓ *Arbasus Roever* Arachn. 56
 ✓ *Arbiblatta Chopard* Ins. 430
 ✓ *Archaeopharetra Bedford & Bedford* Por. 13
 ✓ *Archiclaviger Heller* Ins. 236
 ✓ *Archicythereis Howe* Crust. 57
 ✓ *Archileucogeorgia Lohmander* Arachn. 77
 ✓ *Archimetzneria Amsel* Ins. 350
 ✓ *Archiphytalmia Enderlein* Ins. 392
 ✓ *Arctinuroides Phleger* Arachn. 34
 ✓ *Arctohedra Cooper* Brach. 14
 ✓ *Aretaeonius Liebke* Ins. 226
 ✓ *Aretascetis Meyrick* Ins. 350
 ✓ *Argennina Gertsch & Mulaik* Arachn. 47
 ✓ *Argobba Roever* Arachn. 56
 ✓ *Argyrolacia Keifer* Ins. 350
 ✓ *Aristocleidus Mueller* Vermes 78
 ✓ *Arizelostoma Iredale* Moll. 90
 ✓ *Armeniobrachiulus Lohmander* Arachn. 77
 ✓ *Arndtanchora de Laubenfels* Por. 8
 ✓ *Arrhetopista Meyrick* Ins. 350
 ✓ *Arugella Pirlot* Crust. 46
 ✓ *Asbolistis Meyrick* Ins. 351
 ✓ *Asemopterus Prell* Ins. 263
 ✓ *Asiphytodecta Strand* Ins. 285
 ✓ *Aspidagnostus Whitehouse* Arachn. 34
 ✓ *Aspidolella Prell* Ins. 263
 ✓ *Aspidotheca Dahmer* Moll. 85
 ✓ *Astaropola Meyrick* Ins. 351
 ✓ *Astegania Djakonov* Ins. 340
 ✓ *Astenophylina Mosely* Ins. 357
 ✓ *Astenophylodes Mosely* Ins. 357
 ✓ *Asteraspis Kobayashi* Arachn. 34
 ✓ *Asthenica Turner* Ins. 351
 ✓ *Astratodina Mosely* Ins. 357
 ✓ *Astrocottus Bolin* Pisces 87
 ✓ *Asymmetricostrongylus Nagaty* Vermes 112
 ✓ *Asyneda Richards* Ins. 336
 ✓ *Atanatolica Mosely* Ins. 358
 ✓ *Athnacama de Laubenfels* Por. 8
 ✓ *Atissina Enderlein* Ins. 394
 ✓ *Atomyiella Tsuda* Ins. 358
 ✓ *Atopocottus Bolin* Pisces 87
 ✓ *Atopomima Meyrick* Ins. 355
 ✓ *Atractidella Lundblad* Arachn. 69
 ✓ *Atractidopsis Lundblad* Arachn. 69
 ✓ *Atractoceros Meyrick* Ins. 351
 ✓ *Atriplectides Mosely* Ins. 358
 ✓ *Attatheta Scheerpeltz* Ins. 231
 ✓ *Attalia Uvarov* Ins. 431
 ✓ *Attemsocypheus Verhoeff* Arachn. 82
 ✓ *Attenosaurus Aldrich & Jones* Rept. 47
 ✓ *Atubaria Sato* Protoch. 5
 ✓ *Aulagromyza Enderlein* Ins. 395
 ✓ *Aulodomus Schrammen* Por. 5
 ✓ *Aulomyza Enderlein* Ins. 395
 ✓ *Aulonoccephalus Chandler* Vermes 107
 ✓ *Australaphia Whitley* Pisces 84
 ✓ *Austroagalloides Evans* Ins. 406
 ✓ *Austroastacus Clark* Crust. 36
 ✓ *Austrodrops Blanchard* Ins. 312
 ✓ *Austrogallia Evans* Ins. 406
 ✓ *Austrokelloggia Carriker* Ins. 418
 ✓ *Austroperca Hubbs* Pisces 79
 ✓ *Autenriethia Oudemans* Arachn. 62
 ✓ *Autoloxolichas Phleger* Arachn. 34
 ✓ *Avinasa Maulik* Ins. 287
 ✓ *Axinomimus de Laubenfels* Por. 8
 ✓ *Axocielita de Laubenfels* Por. 8
 ✓ *Axylosius Liebke* Ins. 226
 ✓ *Ayeshella Horváth* Ins. 399
 ✓ *Bactrianothrips Bagnall* Ins. 415
 ✓ *Badyorygma Uchida* Ins. 312
 ✓ *Baharijodon Kühn* Rept. 39
 ✓ *Bailiaspis Resser* Arachn. 35
 ✓ *Bainidiplosis Mani* Ins. 365
 ✓ *Bairdites Coryell & Malkin* Crust. 58
 ✓ *Ballana DeLong* Ins. 407
 ✓ *Balnissa Roever* Arachn. 56
 ✓ *Bambesa Arnold* Ins. 302

- ✓ *Banarciopsis Ward* Crust. 33
 ✓ *Banksiana Claassen* Ins. 423
 ✓ *Barbarodina Stauffer* Vermes 135
 ✓ *Barellea Oudemans* Arachn. 62
 ✓ *Barygenys Parker* Amph. 37
 ✓ *Basilometra Clark* Echin. 26
 ✓ *Basseaster Lambert* Echin. 14
 ✓ *Basslerella Bouček* Crust. 58
 ✓ *Bassleroceras Ulrich & Foerste* Moll. 129
 ✓ *Bathyonchus Kreis* Vermes 104
 ✓ *Bdalsidotherips Priesner* Ins. 417
 ✓ *Becheria Ohshima* Echin. 12
 ✓ *Bechsteinia Oudemans* Arachn. 62
 ✓ *Beckerinella Enderlein* Ins. 389
 ✓ *Bedfordia Fahrenholz* Ins. 418
 ✓ *Beekmanoceras Ulrich & Foerste* Moll. 129
 ✓ *Beirabarbatus Herre* Pisces 74
 ✓ *Bekkerella Reed* Brach. 20
 ✓ *Belesodon von Huene* Rept. 37
 ✓ *Beltanacyathus Bedford & Bedford* Por. 14
 ✓ *Benthastelene Iredale* Moll. 73
 ✓ *Bentheogennema Burkenroad* Crust. 39
 ✓ *Benthindsia Iredale* Moll. 86
 ✓ *Benthofascis Iredale* Moll. 90
 ✓ *Bequartia Fahringer* Ins. 317
 ✓ *Berounella Bouček* Crust. 58
 ✓ *Besseloceras Shimizu & Obata* Moll. 130
 ✓ *Bessoecetor Simpson* Mam. 83
 ✓ *Bethia de Laubenfels* Por. 8
 ✓ *Bibundina Roewer* Arachn. 56
 ✓ *Bicavernosa Gaede* Ins. 344
 ✓ *Biceropsis Roewer* Arachn. 61
 ✓ *Biconisoma Roewer* Arachn. 60
 ✓ *Biezankoia Strand* Ins. 346
 ✓ *Bifarinella Cushman & Hanzawa* Prot. 85
 ✓ *Bijukta Maulik* Ins. 287
 ✓ *Bilabria Schmidt* Pisces 86
 ✓ *Billiemia Gregorio* Moll. 82
 ✓ *Billingsaria Okulitch* Coel. 31
 ✓ *Bindercola Roewer* Arachn. 56
 ✓ *Binderella Roewer* Arachn. 56
 ✓ *Binderia Roewer* Arachn. 56
 ✓ *Bipedes Aldrich & Jones* Rept. 47
 ✓ *Bitauinioceras Shimizu & Obata* Moll. 130
 ✓ *Bittacopanorpa Zalessky* Ins. 442
 ✓ *Blabe White* Pisces 79
 ✓ *Blastoceras Flower & Caster* Moll. 130
 ✓ *Blepharopoda Enderlein* Ins. 389
 ✓ *Bleta Gregorio* Moll. 113
 ✓ *Boleometra Clark* Echin. 26
 ✓ *Bonnaspis Resser* Arachn. 35
 ✓ *Bordus Navás* Ins. 362
 ✓ *Bornargiolestes Kimmins* Ins. 427
 ✓ *Boryzops Richards* Ins. 335
 ✓ *Bothrionota Borchmann* Ins. 255
 ✓ *Bothriostira Borchmann* Ins. 255
 ✓ *Bothrolemma Schrammen* Por. 7
 ✓ *Bothrostira Enderlein* Ins. 386
 ✓ *Brachyaspidion Miller* Arachn. 35
 ✓ *Brachyaspis Miller* Arachn. 35
 ✓ *Brachycallionymus Herre* Pisces 85
 ✓ *Brachypteraspis Brotzen* Pisces 64
 ✓ *Brachyrhynchocyon Scott & Jepsen* Mam. 80.
 ✓ *Brachyzancla Turner* Ins. 351
 ✓ *Bracotritoma Csiki* Ins. 318
 ✓ *Bradfordoceras Flower & Caster* Moll. 130
 ✓ *Bredana Gertsch* Arachn. 53
 ✓ *Breuningiana Strand* Ins. 280
 ✓ *Brigestus Roewer* Arachn. 55
 ✓ *Brignus Gregorio* Coel. 31
 ✓ *Brimidius Breuning* Ins. 280
 ✓ *Bronchocyathus Bedford & Bedford* Por. 14
 ✓ *Brüelia Kéler* Ins. 418
 ✓ *Bryochoerus Marcus* Arachn. 74
 ✓ *Brysuma Roewer* Arachn. 56
 ✓ *Budnianella Bouček* Crust. 58
 ✓ *Buembra Roewer* Arachn. 56
 ✓ *Bufina Coryell & Malkin* Crust. 58
 ✓ *Bukowina Roewer* Arachn. 55
 ✓ *Bularchus Hopwood* Mam. 71
 ✓ *Bulgarialeurodes Corbett* Ins. 411
 ✓ *Bullalvolina Reichel* Prot. 85
 ✓ *Bulobana Roewer* Arachn. 56
 ✓ *Bunoderina Miller* Vermes 83
 ✓ *Buntonia Howe & Chambers* Crust. 58
 ✓ *Bureschias Heinrich* Ins. 313
 ✓ *Burtonanchora de Laubenfels* Por. 8
 ✓ *Burtonispongia de Laubenfels* Por. 9
 ✓ *Buthoscorpio Werner* Arachn. 43
 ✓ *Byssobornia Iredale* Moll. 115
 ✓ *Cabestanimorpha Iredale* Moll. 83
 ✓ *Caciella Breuning* Ins. 280
 ✓ *Cacoceria Hull* Ins. 383
 ✓ *Caduceia Kirby* Prot. 93
 ✓ *Caenaphodius Balhasar* Ins. 261
 ✓ *Caenocryptoides Uchida* Ins. 313
 ✓ *Caesarellum de Laubenfels* Por. 9
 ✓ *Calamocetor Sclater* Aves 94
 ✓ *Calana DeLong* Ins. 407
 ✓ *Calandrella Farsor* Ins. 265
 ✓ *Calciorgia Broch* Coel. 27
 ✓ *Caliacis Deichmann* Coel. 27
 ✓ *Callidosoma Womersley* Arachn. 62
 ✓ *Calliops Delo* Arachn. 35
 ✓ *Callitrichia Fage & Simon* Arachn. 50
 ✓ *Callonetta Delacour* Aves 82
 ✓ *Calloristus Roewer* Arachn. 57
 ✓ *Calodiaptomus Kiefer* Crust. 51
 ✓ *Calodipoea Gertsch & Davis* Arachn. 47
 ✓ *Calonistes Lesne* Ins. 243
 ✓ *Calyxadocia de Laubenfels* Por. 9
 ✓ *Camaraphorinella Licharew* Brach. 18
 ✓ *Cameronium Koch* Ins. 232
 ✓ *Camerotrombidium Thor* Arachn. 63

- ✓ *Camorta Barnard* Crust. 44
 ✓ *Campbelloceras Ulrich & Foerste* Moll. 130
 ✓ *Camptozoa Enderlein* Ins. 365
 ✓ *Canuellopsis Lang* Crust. 51
 ✓ *Capillimya Crickmay* Moll. 126
 ✓ *Carcinellus Gregorio* Crust. 48
 ✓ *Cardiocrepis Enderlein* Ins. 367
 ✓ *Carditellona Iredale* Moll. 116
 ✓ *Carditellopsis Iredale* Moll. 116
 ✓ *Cardwellia Roewer* Arachn. 57
 ✓ *Carloceras Flower & Caster* Moll. 130
 ✓ *Carsoptychus Simpson* Mam. 66
 ✓ *Caryometra Clark* Echin. 26
 ✓ *Carystoterpa Lallemand* Ins. 405
 ✓ *Cassinoceras Ulrich & Foerste* Moll. 130
 ✓ *Castanilla Caporiacco* Arachn. 53
 ✓ *Casteroceras Flower* Moll. 130
 ✓ *Catabrachmia Rebel* Ins. 351 *Shimo*
 ✓ *Cataphryx Nierstrasz & Brenda* Crust. 43
 ✓ *Catopochrotides Kizeritzki & Reikhardt* Ins. 237
 ✓ *Catoraphiceras Ulrich & Foerste* Moll. 130
 ✓ *Cavilaelaps Fonseca* Arachn. 63? *deh*
 ✓ *Cebidicola Bedford* Ins. 418 - 35 or 36
 ✓ *Cecidocharella Hendel* Ins. 391
 ✓ *Cedarvilleocera Shimizu & Obata* Moll. 130
 ✓ *Celebophlebia Lieftinck* Ins. 427
 ✓ *Celetostola Meyrick* Ins. 347
 ✓ *Cenomanocarcinus v. Straelen* Crust. 35
 ✓ *Centrapala Cotton* Moll. 76
 ✓ *Centrotarphyceras Ulrich & Foerste* Moll. 130
 ✓ *Cephaloderma Hoffer* Ins. 300
 ✓ *Cephalosaperda Pic* Ins. 280
 ✓ *Cephalosphaera Enderlein* Ins. 382
 ✓ *Cerachipteria Grandjean* Arachn. 63
 ✓ *Ceratochondria Yü* Crust. 51
 ✓ *Cerdorhinus Broom* Rept. 37
 ✓ *Cerdosuchoides Broom* Rept. 37
 ✓ *Cerdosuchus Broom* Rept. 37
 ✓ *Cereatta Roewer* Arachn. 57
 ✓ *Cereipes Roewer* Arachn. 57
 ✓ *Cerelpemma de Laubenfels* Por. 13
 ✓ *Cerelpsamma de Laubenfels* Por. 13
 ✓ *Cereoides Roewer* Arachn. 57
 ✓ *Cerodiscia Enderlein* Ins. 389
 ✓ *Cervosoma Verhoeff* Arachn. 81
 ✓ *Cervothrips Bagnall* Ins. 415
 ✓ *Ceylonoxenia Schmitz* Ins. 382
 ✓ *Ceylonpeltis Verhoeff* Arachn. 80
 ✓ *Chabrieria Oudemans* Arachn. 63
 ✓ *Chaetamenia Enderlein* Ins. 386
 ✓ *Chaetochilosia Enderlein* Ins. 383
 ✓ *Chaetocyptera Enderlein* Ins. 384
 ✓ *Chaetophaenicia Enderlein* Ins. 386
 ✓ *Chaetopollenia Enderlein* Ins. 386
 ✓ *Chaetosphyria Enderlein* Ins. 381
 ✓ *Chajnus Speijer* Arachn. 44
 ✓ *Changkiuoceras Shimizu & Obata* Moll. 131
 ✓ *Chankgenesia Buldovskii* Ins. 425
 ✓ *Chasmocryptus Uchida* Ins. 313
 ✓ *Chattonella Biecheler* Prot. 93
 ✓ *Chebabiis Roewer* Arachn. 61
 ✓ *Cheirgaster Bergounioux* Rept. 40
 ✓ *Chelocnetha Enderlein* Ins. 366
 ✓ *Chilenolagria Pic* Ins. 255
 ✓ *Chinaella Evans* Ins. 407
 ✓ *Chiniquodon von Huene* Rept. 37
 ✓ *Chirotopica Sjöstedt* Ins. 435
 ✓ *Chitinofeuthis Müller-Stol* Moll. 131
 ✓ *Chitobalanus Gregorio* Crust. 65
 ✓ *Chitonodytes Remane* Vermes 119
 ✓ *Chloropelix Lindberg* Ins. 407
 ✓ *Chondrillina de Laubenfels* Por. 7
 ✓ *Chondrotropis Loomis* Arachn. 77
 ✓ *Choneilobarges Phleger* Arachn. 35
 ✓ *Chonellopsis Schrammen* Por. 7
 ✓ *Choreotyphis Iredale* Moll. 86
 ✓ *Chromoceras Enderlein* Ins. 386
 ✓ *Chrysochiton Lutz & de Oliveira* Ins. 377
 ✓ *Chuangiella Kobayashi* Arachn. 36
 ✓ *Cincosaurus Aldrich & Jones* Rept. 47
 ✓ *Ciocalapata de Laubenfels* Por. 9
 ✓ *Cionanchora de Laubenfels* Por. 9
 ✓ *Circulifer Zachvatkin* Ins. 407
 ✓ *Cirriformia Hartman* Vermes 129.
 ✓ *Cirrispa Uhlmann* Ins. 289
 ✓ *Cissepis Franclemont* Ins. 332
 ✓ *Cissodicaesticus Hustache* Ins. 265
 ✓ *Cladorbicella Yabe & Ehara* Coel. 34
 ✓ *Claraxis Iredale* Moll. 74
 ✓ *Clarazia Peyer* Rept. 40
 ✓ *Clathrosperechon Lundblad* Arachn. 69
 ✓ *Clavadoce Hartman* Vermes 126
 ✓ *Climacoceras MacInnes* Mam. 70
 ✓ *Clinocardium Keen* Moll. 123
 ✓ *Clinodon Scott & Jepsen* Mam. 83
 ✓ *Cliopisa Enderlein* Ins. 366
 ✓ *Cliotrypa Bassler* Bry. 35
 ✓ *Clitendoceras Ulrich & Foerste* Moll. 131
 ✓ *Clithrocytheridea Stephenson* Crust. 60
 ✓ *Clypeobarbus Fowler* Pisces 74
 ✓ *Cnemonax Brodtkorb* Aves 89
 ✓ *Cneoranella Maulik* Ins. 287
 ✓ *Cnephasiella Adamczewski* Ins. 355
 ✓ *Cnismorectis Meyrick* Ins. 351
 ✓ *Cobboldus Raw* Arachn. 35
 ✓ *Coccoelasma Loomis* Arachn. 77
 ✓ *Cochlidionostenus Uchida* Ins. 313
 ✓ *Codium Enderlein* Ins. 386
 ✓ *Coelectys Topsent* Por. 9
 ✓ *Coelonella Stewart* Crust. 59
 ✓ *Coffearhynchus Risbec* Ins. 265
 ✓ *Coieblemmus Chopard* Ins. 432
 ✓ *Colchiobrachiylus Lohmander* Arachn. 77

- ✓ *Colladonus Ball* Ins. 407
 ✓ *Collartiella Goetghebuer* Ins. 368
 ✓ *Colobothris Thérý* Ins. 249
 ✓ *Colpites Knight* Moll. 82
 ✓ *Colymbinetes Falkenström* Ins. 230
 ✓ *Cometacarus Zachvatkine* Arachn. 63
 ✓ *Conchoprimitia Opik* Crust. 59
 ✓ *Concinnum Bhalerao* Vermes 87
 ✓ *Condyllocuna Iredale* Moll. 116
 ✓ *Congoleon Navás* Ins. 362
 ✓ *Congolla Roewer* Arachn. 57
 ✓ *Congonella Roewer* Arachn. 57
 ✓ *Congonia Roewer* Arachn. 57
 ✓ *Coniogenes Meyrick* Ins. 351
 ✓ *Coniophthalma Kangas* Ins. 238
 ✓ *Conocerina Ulrich & Foerste* Moll. 131
 ✓ *Conodiscus Ulrich & Cooper* Brach. 14
 ✓ *Conodonus Ball* Ins. 407
 ✓ *Conoesucus Mosely* Ins. 358
 ✓ *Conorbina Brotzen* Prot. 85
 ✓ *Conspicuum Bhalerao* Vermes 87
 ✓ *Contortiocorpa Bhatia & Setna* Prot. 94
 ✓ *Convivister Reichensperger* Ins. 237
 ✓ *Copemys Wood* Mam. 75
 ✓ *Coraeophos Makiyama* Moll. 86
 ✓ *Coreobagrus Mori* Pisces 76
 ✓ *Coreoleuciscus Mori* Pisces 74
 ✓ *Coreospira Saito* Moll. 92
 ✓ *Coreozelia Enderlein* Ins. 373
 ✓ *Corioxenos Blair* Ins. 260
 ✓ *Corissa Farran* Crust. 51
 ✓ *Cornulina Coryell & Williamson* Crust. 59
 ✓ *Corobalanus Gregorio* Crust. 66
 ✓ *Corofolius Gregorio* Coel. 34
 ✓ *Corosaurus Case* Rept. 38
 ✓ *Corticacarus Lundblad* Arachn. 69
 ✓ *Corystoderes Bolívar* Ins. 435
 ✓ *Coscinoacaulus Schrammen* Por. 5
 ✓ *Coscinocephalus Prell* Ins. 263
 ✓ *Coscinodiscus Schrammen* Por. 7
 ✓ *Cossyphodister Reichensperger* Ins. 237
 ✓ *Costora Mosely* Ins. 358
 ✓ *Cotalognostus Whitehouse* Arachn. 36
 ✓ *Cotteroceras Ulrich & Foerste* Moll. 131
 ✓ *Cottodesmus Verhoeff* Arachn. 77
 ✓ *Craspedomyoschiston Precht* Prot. 98
 ✓ *Craspedophrya Rieder* Prot. 99
 ✓ *Craspedoprion Verhoeff* Arachn. 78
 ✓ *Craspedopyga Skorikov* Ins. 301
 ✓ *Craspedothricha Enderlein* Ins. 384
 ✓ *Crassicutis Manter* Vermer 83
 ✓ *Craterogale Gazin* Mam. 79
 ✓ *Creagrosoma Verhoeff* Arachn. 78
 ✓ *Crellancistra de Laubenfels* Por. 9
 ✓ *Crellinspira de Laubenfels* Por. 9
 ✓ *Crematogasterobius Hustache & Bruch* Ins. 266
 ✓ *Crenuliscala Iredale* Mol. 84
 ✓ *Cribrogloborotalia Cushman & Bermúdez* Prot. 85
 ✓ *Criconemoides Taylor* Vermes 106
 ✓ *Crinocidaris Gregorio* Echin. 14
 ✓ *Crockeridius Clark* Pisces 85
 ✓ *Crucihammus Breuning* Ins. 281
 ✓ *Cryphaeoides Delo* Arachn. 36
 ✓ *Cryptectemnia Enderlein* Ins. 366
 ✓ *Cryptochiderma Schrammen* Por. 5
 ✓ *Cryptocyprus Coryell & Williamson* Crust. 59
 ✓ *Cryptolepidus Van Dyke* Ins. 266
 ✓ *Cryptoluta Ward* Crust. 34
 ✓ *Cryptoscena Enderlein* Ins. 367
 ✓ *Cryptosternum Heller* Ins. 266
 ✓ *Cteatus Liebke* Ins. 224
 ✓ *Ctenempis Frey* Ins. 380
 ✓ *Ctenerpeton Aldrich & Jones* Rept. 47
 ✓ *Ctenocaloides Fahringer* Ins. 313
 ✓ *Ctenothyas Lundblad* Arachn. 69
 ✓ *Cubanina Palmer* Prot. 86
 ✓ *Cuclotocephalus Carriker* Ins. 418
 ✓ *Cuclotogaster Carriker* Ins. 418
 ✓ *Cucumophrya Kunz* Prot. 99
 ✓ *Cunanax Iredale* Moll. 116
 ✓ *Cunula Pallary* Moll. 99
 ✓ *Cyanomastix Lackey* Prot. 93
 ✓ *Cyathocotyloides Szidat* Vermes 82
 ✓ *Cyathodinioides Cunha & Freitas* Prot. 97
 ✓ *Cybstira Borchmann* Ins. 256
 ✓ *Cyclolabus Heinrich* Ins. 313
 ✓ *Cyclopinopsis Smirnov* Crust. 51
 ✓ *Cyclommatellus Nagel* Ins. 260
 ✓ *Cyclothea Teichert* Moll. 85
 ✓ *Cylindrosora Borchmann* Ins. 255
 ✓ *Cylindrostira Borchmann* Ins. 255
 ✓ *Cylindrotomicus Eggers* Ins. 273
 ✓ *Cymatelasma Hill & Butler* Coel. 35
 ✓ *Cynatilesta Iredale* Moll. 83
 ✓ *Cynodiplostomum Dubois* Vermes 80
 ✓ *Cyperana DeLong* Ins. 407
 ✓ *Cypholichas Phleger* Arachn. 36
 ✓ *Cyphotendana Verhoeff* Crust. 44
 ✓ *Cyphotylus Loomis* Arachn. 78
 ✓ *Cypraeopsis Schilder* Moll. 83
 ✓ *Cyprichthys Whitley* Pisces 90
 ✓ *Cyptendoceras Ulrich & Foerste* Moll. 132
 ✓ *Cyrtonyboceras Shimizu & Obata* Moll. 143
 ✓ *Cystodiplostomum Dubois* Vermes 80
 ✓ *Dactylodiptomus Kiefer* Crust. 52
 ✓ *Dactylodiscia Enderlein* Ins. 381
 ✓ *Dactylorhipis Enderlein* Ins. 381
 ✓ *Dagys Günther* Ins. 431
 ✓ *Dahlehornia Kéler* Ins. 418
 ✓ *Daihihiella Hubbell* Ins. 433
 ✓ *Dallonia de Bergevin* Ins. 399

- ✓ *Dalmanitoides Delo* Arachn. 36
 ✓ *Dalpiazia Checchia-Rispoli* Pisces 66
 ✓ *Damonilla de Laubenfels* Por. 9
 ✓ *Damoseni de Laubenfels* Por. 9
 ✓ *Dannevigena Iredale* Moll. 84
 ✓ *Dartonaspid Miller* Arachn. 36
 ✓ *Dasometopus Resser* Arachn. 36
 ✓ *Dasychilosia Enderlein* Ins. 383
 ✓ *Dasylonchaea Enderlein* Ins. 391
 ✓ *Dasynemoides Chitwood* Vermes 103
 ✓ *Dasyodontus Loomis* Arachn. 78
 ✓ *Dasyopstrongylus Travassos* Vermes 112
 ✓ *Dasytingis Drake & Poor* Ins. 401
 ✓ *Daugra Seyrig* Ins. 313
 ✓ *Dawnabius Roewer* Arachn. 57
 ✓ *Decispella Uhmman* Ins. 289
 ✓ *Dekanoscia Verhoeff* Crust. 44
 ✓ *Delectona de Laubenfels* Por. 9
 ✓ *Delicata Travassos* Vermes p. 112
 ✓ *Deltops Seyrig* Ins. 313
 ✓ *Dendopecten Hertlein* Moll. 111
 ✓ *Dentrotrombidum Thor* Arachn. 63
 ✓ *Denticolletes Noskiewicz* Ins. 294
 ✓ *Depastromorpha Carlgren* Coel. 25
 ✓ *Depressarites Rebel* Ins. 442
 ✓ *Dercetisoma Maulik* Ins. 287
 ✓ *Derectaotus Chopard* Ins. 432
 ✓ *Derotropis Mitchell* Ins. 295
 ✓ *Desmoderma Schrammen* Por. 6.
 ✓ *Desmorthis Ulrich & Cooper* Brach. 15
 ✓ *Destacar Iredale* Moll. 106
 ✓ *Dexiotrix Villeneuve* Ins. 385
 ✓ *Diagoceras Flower* Moll. 132
 ✓ *Diambonia Cooper & Kindle* Brach. 19
 ✓ *Diaphelamsa Ulrich & Cooper* Brach. 17
 ✓ *Diaprepes Wehrli* Ins. 341
 ✓ *Diatinoza Enderlein* Ins. 389
 ✓ *Dicathais Iredale* Moll. 86
 ✓ *Dicraeinus Enderlein* Ins. 393
 ✓ *Dicranella Myers* Vermes 119
 ✓ *Dicranoclonella Schrammen* Por. 8
 ✓ *Dicranopeltoides Phleger* Arachn. 36
 ✓ *Dicrostolis Enderlein* Ins. 366
 ✓ *Dicryptoscena Enderlein* Ins. 368
 ✓ *Dictydaster Mercier* Echin. 23
 ✓ *Dictyocoscineus Bedford & Bedford* Por. 14
 ✓ *Dictyssonina Ball* Ins. 405
 ✓ *Diffalaba Iredale* Moll. 77
 ✓ *Digitium Gregorio* Coel. 35
 ✓ *Dikkomys Wood* Mam. 73
 ✓ *Diloa Cheesman* Ins. 313
 ✓ *Dimyarina Iredale* Moll. 111
 ✓ *Diniatyis Iredale* Moll. 92
 ✓ *Dinogorgon Broom* Rept. 38
 ✓ *Dinopolus Broom* Rept. 38
 ✓ *Dinosuchus Broom* Rept. 38
 ✓ *Dioptopsis Enderlein* Ins. 367
 ✓ *Diorhynchina Borchmann* Ins. 256
 ✓ *Diparelasma Ulrich & Cooper* Brach. 15
 ✓ *Diplogyra Eguchi* Coel. 35
 ✓ *Diplokoenikea Lundblad* Arachn. 70
 ✓ *Dipolichas Phleger* Arachn. 37
 ✓ *Dipseudopsodes Lestage* Ins. 358
 ✓ *Diraeus Marshall* Ins. 266
 ✓ *Discocorpus Carriker* Ins. 419
 ✓ *Discoderoides Théry* Ins. 250
 ✓ *Discotreta Ulrich & Cooper* Brach. 14
 ✓ *Discosiphonella Inai* Por. 8
 ✓ *Disculiceps Joyeux & Baer* Vermes 90
 ✓ *Dissopalina Iredale* Moll. 84
 ✓ *Dissurus Verma* Vermes 84
 ✓ *Distichodomicroura Fowler* Pisces 73
 ✓ *Distichodura Fowler* Pisces 73
 ✓ *Distugonia Iredale* Moll. 124
 ✓ *Ditylenchus Filipjev* Vermes 106
 ✓ *Divalucina Iredale* Moll. 116
 ✓ *Dixina Enderlein* Ins. 372
 ✓ *Djemia Roewer* Arachn. 57
 ✓ *Docophorocotes Carriker* Ins. 419
 ✓ *Dolamara Reikhardt* Ins. 252
 ✓ *Doleranus Ball* Ins. 407
 ✓ *Doleschallius Enderlein* Ins. 387
 ✓ *Dolichonotus Buchanan* Ins. 270
 ✓ *Doliodelphis L. E. Wilson* Mam. 65
 ✓ *Doloressus Roewer* Arachn. 57
 ✓ *Donaciocrioceris Pic* Ins. 284
 ✓ *Donacoceras Foerste* Moll. 132
 ✓ *Donbrachyiulus Lohmander* Arachn. 77
 ✓ *Donotella de Laubenfels* Por. 9
 ✓ *Donovanius Enderlein* Ins. 387
 ✓ *Donsiella Stephensen* Crust. 52
 ✓ *Dorylamoides Thorne & Swanger* Vermes 104
 ✓ *Drassyllochemmis Gertsch & Davis* Arachn. 53
 ✓ *Drepania Gregorio* Moll. 82
 ✓ *Drepanocassis Spaeth* Ins. 290
 ✓ *Drepanomacrothrix Brehm* Crust. 49
 ✓ *Drepanomela Borchmann* Ins. 255
 ✓ *Dryanassa Meyrick* Ins. 351
 ✓ *Drymobatoides Jacot* Arachn. 63
 ✓ *Dryopomorphus Hinton* Ins. 240
 ✓ *Dubiella Evans* Ins. 331
 ✓ *Duboisia Szidat* Vermes 82
 ✓ *Duckeia da Costa Lima* Ins. 304
 ✓ *Dulitellus Roewer* Arachn. 57
 ✓ *Dulmius Gregorio* Por. 13
 ✓ *Dupéretia Shikama* Mam. 70
 ✓ *Dwightoceras Ulrich & Foerste* Moll. 133
 ✓ *Dyofrondicularia Asano* Prot. 86
 ✓ *Dysapura Turner* Ins. 335
 ✓ *Dyscineta Spaeth* Ins. 290
 ✓ *Dyscotylopus Stock* Mam. 69
 ✓ *Dyscritoceras Ulrich & Foerste* Moll. 133
 ✓ *Dysodera Borchmann* Ins. 256
 ✓ *Dysopinus Borchmann* Ins. 256
 ✓ *Dziriblatta Chopard* Ins. 430
 ✓ *Dzugesia Wehrli* Ins. 341
 ✓ *Earoctenis Meyrick* Ins. 347
 ✓ *Earoxyptera Djakonov* Ins. 341

- ✓ *Ebiicha Seyrig* Ins. 313
 ✓ *Eccrita Turner* Ins. 352
 ✓ *Echinocletodes Lang* Crust. 52
 ✓ *Echinococcus Balachowsky* Ins. 413
 ✓ *Echinotus Marwick* Moll. 108
 ✓ *Echinovelleda Breuning* Ins. 281
 ✓ *Echotropis Jordan* Ins. 276
 ✓ *Ecitotropis Borgmeier* Ins. 232
 ✓ *Ecnocera Borchmann* Ins. 256
 ✓ *Ecnomia Turner* Ins. 336
 ✓ *Ecprepia Jordan* Ins. 276
 ✓ *Ectenolites Ulrich & Foerste* Moll. 133
 ✓ *Ectocyloceras Ulrich & Foerste* Moll. 133
 ✓ *Ectonoceras Ulrich & Foerste* Moll. 133
 ✓ *Ectoprimitia Bouček* Crust. 62
 ✓ *Egereia Gábor* Moll. 88
 ✓ *Egriodes Marshall* Ins. 267
 ✓ *Egyptechinus Lambert* Echin. 22
 ✓ *Eidmannotherium Scheerpeltz* Ins. 232
 ✓ *Eirgos Bere* Crust. 52
 ✓ *Elaphernis Meyrick* Ins. 347
 ✓ *Elaphidionopsis Linsley* Ins. 277
 ✓ *Elaphromorpha Turner* Ins. 352
 ✓ *Elicius Günther* Ins. 431
 ✓ *Elophilus Labbé* Moll. 93
 ✓ *Elphidiella Parker & Jones* Prot. 86
 ✓ *Elymana DeLong* Ins. 407
 ✓ *Elysoceraphron Szelényi* Ins. 308
 ✓ *Embasaurus Riabinin* Rept. 39
 ✓ *Embolocassis Spaeth* Ins. 290
 ✓ *Embrakillium Obenberger* Ins. 250
 ✓ *Empriononyx Wehrli* Ins. 341
 ✓ *Enetagnostus Whitehouse* Arachn. 37
 ✓ *Ensia Gregorio* Moll. 124
 ✓ *Entamoebophaga Ivanič* Prot. 83
 ✓ *Entepherus Bere* Crust. 52
 ✓ *Entomonotis Marwick* Moll. 108
 ✓ *Eoasaphus Kobayashi* Arachn. 37
 ✓ *Eocathartes Lambrecht* Aves 83
 ✓ *Eocoptostira Borchmann* Ins. 256
 ✓ *Eocryptaulina Foerste* Moll. 73
 ✓ *Eodinia Eisenack* Prot. 93
 ✓ *Eohydnochora Yabe & Eguchi* Coel. 36
 ✓ *Eometra Clark* Echin. 27
 ✓ *Eomonorachus Delo* Arachn. 37
 ✓ *Eomortoniellus Zeuner* Ins. 444
 ✓ *Eoromus Loomis* Arachn. 78
 ✓ *Eosactoceras Shimizu & Obata* Moll. 133
 ✓ *Eospyroceras Shimizu & Obata* Moll. 133
 ✓ *Eostrophia Ulrich & Cooper* Brach. 17
 ✓ *Epaphroditus Schrammen* Por. 6
 ✓ *Ephalaenia Wehrli* Ins. 341
 ✓ *Epigrypodes Turner* Ins. 336
 ✓ *Epikastea Liebke* Ins. 225
 ✓ *Epilohmannoides Jacot* Arachn. 63
 ✓ *Epinomeuta Rebel* Ins. 442
 ✓ *Epipallasiceras Spath* Moll. 133
 ✓ *Epipolasis de Laubenfels* Por. 9
 ✓ *Episioptera Hartig* Ins. 344
 ✓ *Episetodes Martynov* Ins. 358
 ✓ *Epistromatopora Yabe & Sugiyama* Coel. 18
 ✓ *Epitetranychus Zacher* Arachn. 67
 ✓ *Erecella Roewer* Arachn. 57
 ✓ *Erecula Roewer* Arachn. 57
 ✓ *Eremanepsia Turner* Ins. 345
 ✓ *Erepocassis Spaeth* Ins. 290
 ✓ *Ereunum Schrammen* Por. 6
 ✓ *Erynephala Blake* Ins. 287
 ✓ *Erythridea Ribaut* Ins. 408
 ✓ *Erythroprosopon Verhoeff* Arachn. 78
 ✓ *Escatepos Reynolds* Mam. 80
 ✓ *Estrandia Blauvelt* Arachn. 48
 ✓ *Etelea Csiki* Ins. 237
 ✓ *Ethira Andrewes* Ins. 225
 ✓ *Euagnostus Whitehouse* Arachn. 37
 ✓ *Euanerota Karny* Ins. 433
 ✓ *Euastacus Clark* Crust. 37
 ✓ *Eubias Günther* Ins. 431
 ✓ *Eubrandella Deichmann* Coel. 27
 ✓ *Eucephalobus Steiner* Vermes 107
 ✓ *Euceratothrips Hood* Ins. 415
 ✓ *Eucompsa Enderlein* Ins. 387
 ✓ *Eudampetrus Roewer* Arachn. 57
 ✓ *Eudolatites Delo* Arachn. 37
 ✓ *Euestelia Enderlein* Ins. 395
 ✓ *Euglyptobracon Telenga* Ins. 318
 ✓ *Eugymnanthea Palombi* Coel. 18
 ✓ *Euhuronia Shimizu & Obata* Moll. 133
 ✓ *Euleraphe Schrammen* Por. 13
 ✓ *Eulinderina Barker & Grimsdale* Prot. 86
 ✓ *Euliroëtis Ogloblin* Ins. 287
 ✓ *Euloxilobus Sjöstedt* Ins. 338
 ✓ *Eumetriopectera Miram* Ins. 433
 ✓ *Euparixoides Hinton* Ins. 261
 ✓ *Euphionella Monro* Vermes 127
 ✓ *Eupsephus Fleutiaux* Ins. 247
 ✓ *Eupteroxylon Eggers* Ins. 274
 ✓ *Eurasiatioeceras Shimizu & Obata* Moll. 133
 ✓ *Eurhizococcus Silvestri* Ins. 413
 ✓ *Eurygnathella Strand* Ins. 225
 ✓ *Eurylophella Tiensuu* Ins. 425
 ✓ *Eurymetopellus van Emden* Ins. 267
 ✓ *Eurymetopinus van Emden* Ins. 267
 ✓ *Eurythoracana Strand* Ins. 225
 ✓ *Eusceletaula Meyrick* Ins. 352
 ✓ *Eushantungoceras Shimizu & Obata* Moll. 134, 143
 ✓ *Eusthenimorpha Yang* Ins. 400
 ✓ *Eutactus Schrammen* Por. 6
 ✓ *Euthyrisella Bassler* Bry. 36
 ✓ *Euxinotulus Lohmander* Arachn. 79
 ✓ *Evermanniana Taranetz* Pisces 87
 ✓ *Evomerula de Laubenfels* Por. 9
 ✓ *Exaxinara de Laubenfels* Por. 9
 ✓ *Exangerona Wehrli* Ins. 341
 ✓ *Excavatomeloë Pliginskii* Ins. 258
 ✓ *Exobothrus Sjöstedt* Ins. 436

- ✓ *Exochops Weller* Arachn. 37
 ✓ *Exoribatula Jacot* Arachn. 64
 ✓ *Fähræusia Obenberger* Ins. 250
 ✓ *Falsocryptorhopalum Pic* Ins. 240
 ✓ *Fardenia Cooper & Kindle* Brach. 19
 ✓ *Farula Milne* Ins. 358
 ✓ *Fasubera de Laubenfels* Por. 9
 ✓ *Feifelina Schrammen* Por. 6
 ✓ *Feltomyia Alexander* Ins. 365
 ✓ *Ferminia Oudemans* Arachn. 64
 ✓ *Ferrerhernandezia de Laubenfels* Por. 9
 ✓ *Filimanus Myers* Pisces 87
 ✓ *Filistatinella Gertsch & Ivie* Arachn. 45
 ✓ *Fimbriariella Wolffhügel* Vermes 91
 ✓ *Fisherispongia de Laubenfels* Por. 9
 ✓ *Flabellomesothes Pic* Ins. 243
 ✓ *Flagellotrema Ozaki* Vermes 88
 ✓ *Flavomala Iredale* Moll. 124
 ✓ *Flemingella Knight* Moll. 74
 ✓ *Flexicalymene Shirley* Arachn. 37
 ✓ *Florentiamys Wood* Mam. 73
 ✓ *Florisarka Iredale* Moll. 124
 ✓ *Flura Milne* Ins. 358
 ✓ *Fodifoa Whitley* Pisces 79
 ✓ *Foersteoceras Shimizu & Obata* Moll. 134
 ✓ *Folitispa de Laubenfels* Por. 9
 ✓ *Folliculinopsis Fauré-Fremiet* Prot. 97
 ✓ *Forcipata DeLong & Caldwell* Ins. 408
 ✓ *Formosiomima Enderlein* Ins. 387
 ✓ *Formosoglyphius Verhoeff* Arachn. 78
 ✓ *Forsebia Richards* Ins. 336
 ✓ *Fortscottella Gunnell* Pisces 91
 ✓ *Fractolatirus Iredale* Moll. 89
 ✓ *Franckomyia Alexander* Ins. 373
 ✓ *Freila Gregorio* Moll. 120
 ✓ *Friscananus Ball* Ins. 408
 ✓ *Galerotella Maulik* Ins. 287
 ✓ *Galerupipla Maulik* Ins. 287
 ✓ *Gammarosphaera Bazikalova* Crust. 46
 ✓ *Ganopristis Arambourg* Pisces 66
 ✓ *Gapoda de Laubenfels* Por. 9
 ✓ *Gapotus Roewer* Arachn. 57
 ✓ *Garmanella Hubbs* Pisces 77
 ✓ *Gasconsoceras Foerste* Moll. 134
 ✓ *Gaspocyrtoceras Foerste* Moll. 134
 ✓ *Gastrogonatocerus Ogloblin* Ins. 311
 ✓ *Gastrotaphrus Buchanan* Ins. 267
 ✓ *Gaudichaudia Rathbun* Crust. 33
 ✓ *Geayella Lundblad* Arachn. 70
 ✓ *Geinula Ogloblin* Ins. 287
 ✓ *Geisloceros Lambrecht* Aves 86
 ✓ *Geisina Johnson* Crust. 61
 ✓ *Gemelliopirina Bassler* Bry. 37
 ✓ *Geminataxum Iredale* Moll. 79
 ✓ *Genaemirum Heinrich* Ins. 314
 ✓ *Gentilicamelus Loomis* Mam. 69
 ✓ *Geocharax Clark* Crust. 37
 ✓ *Geomyzella Enderlein* Ins. 395
 ✓ *Geotettix Hubbell* Ins. 433
 ✓ *Gephyrocuma Hale* Crust. 41
 ✓ *Gerlus Gregorio* Moll. 105
 ✓ *Germanomys Heller* Mam. 75
 ✓ *Gibboconcha Gregorio* Moll. 121
 ✓ *Gidleumys Wood* Mam. 73
 ✓ *Gingillum Gregorio* Moll. 108
 ✓ *Ginosigma Speijer* Arachn. 44
 ✓ *Giraultiola Nowicki* Ins. 311
 ✓ *Girtyspira Knight* Moll. 103
 ✓ *Glauconometta Iredale* Moll. 121
 ✓ *Glauertia Rothschild* Ins. 398
 ✓ *Gloridonus Ball* Ins. 408
 ✓ *Glumebra Iredale* Moll. 125
 ✓ *Glyphidoceros Enderlein* Ins. 381
 ✓ *Glyphidomarpis Meyrick* Ins. 348
 ✓ *Glyptagnostus Whitehouse* Arachn. 37
 ✓ *Glyptoporus Macy* Vermes 87
 ✓ *Glyptotrophia Ulrich & Cooper* Brach. 17
 ✓ *Gnathosaristis Meyrick* Ins. 352
 ✓ *Gomezyta Roewer* Arachn. 57
 ✓ *Gomphides Jordan* Ins. 276
 ✓ *Gomphonotus Chace* Crust. 38
 ✓ *Goniocotacanthus Guimarães* Ins. 419
 ✓ *Goniogryllus Chopard* Ins. 432
 ✓ *Goniotrema Ulrich & Cooper* Brach. 19
 ✓ *Gongromastix Enderlein* Ins. 365
 ✓ *Goodrichia Moy-Thomas* Pisces 66
 ✓ *Gorbyoceras Shimizu & Obata* Moll. 134, 141
 ✓ *Gotocotyla Ishii* Vermes 79
 ✓ *Goyasanum Pic* Ins. 244
 ✓ *Grabauoceras Shimizu & Obata* Moll. 134
 ✓ *Graminella DeLong* Ins. 408
 ✓ *Grandia Goidanich* Ins. 318
 ✓ *Grandopronotalia Horn* Ins. 222
 ✓ *Graelia Harant & Vernières* Vermes 134
 ✓ *Grangerinus Wood* Mam. 73
 ✓ *Gravicalymene Shirley* Arachn. 37
 ✓ *Grayax de Laubenfels* Por. 9
 ✓ *Greenlandoceras Shimizu & Obata* Moll. 134
 ✓ *Greenops Delo* Arachn. 37
 ✓ *Gregarella Chatton & Brachon* Prot. 94
 ✓ *Gregorymys Wood* Mam. 74
 ✓ *Grella de Laubenfels* Por. 9
 ✓ *Grossopterus Störmer* Arachn. 42
 ✓ *Grusiniulus Lohmander* Arachn. 79
 ✓ *Gryllomimus Chopard* Ins. 432
 ✓ *Gulufia Roewer* Arachn. 58
 ✓ *Gymnioniscus Berg* Pisces 67
 ✓ *Gymnophytomyza Hendel* Ins. 395
 ✓ *Gynandrotaenia Fuhrmann* Vermes 91
 ✓ *Gynecaptera Skorikov* Ins. 301
 ✓ *Gyrophthalminus Frey* Ins. 378
 ✓ *Habrota Enderlein* Ins. 387
 ✓ *Hadrorachus Delo* Arachn. 37

- ✓ Hadziana *Roewer* Arachn. 56
 ✓ Haemangela *Meyrick* Ins. 352
 ✓ Haitiana *Dozier* Ins. 405
 ✓ Hakata *Mitono & Nishimura* Ins. 278
 ✓ Halinastra *de Laubenfels* Por. 7
 ✓ Halipeurus *Thompson* Ins. 419
 ✓ Halmathrips *Hood* Ins. 416
 ✓ Halocryphoea *Caporiacco* Arachn. 45
 ✓ Halotapada *Iredale* Moll. 86
 ✓ Haltidytes *Remane* Vermes 119
 ✓ Hamatus *Branson* Pisces 65
 ✓ Hambletonia *Compere* Ins. 310
 ✓ Hamiltonia *Stewart* Crust. 61
 ✓ Hammatopelma *Enderlein* Ins. 392
 ✓ Hammeloceras *Shimizu & Obata* Moll. 135
 ✓ Haplocaulus *Precht* Prot. 98
 ✓ Haplocytheridea *Stephenson* Crust. 60
 ✓ Haplotrypa *Bassler* Bry. 35
 ✓ Harpeuna *Roewer* Arachn. 58
 ✓ Harpicostia *Wehrli* Ins. 342
 ✓ Harsadia *Roewer* Arachn. 58
 ✓ Hartites *Howell & Knight* Moll. 72
 ✓ Hashtaresia *Wehrli* Ins. 342
 ✓ Hastaephorus *Köler* Ins. 419
 ✓ Hebdomostilba *Enderlein* Ins. 389
 ✓ Hebediscus *Whitehouse* Arachn. 37
 ✓ Hedinia *Navás* Ins. 423
 ✓ Hega *Enderlein* Ins. 387
 ✓ Heliobracon *Telenga* Ins. 318
 ✓ Heliocephalus *Delo* Arachn. 37
 ✓ Helminthophyllum *Schrammen* Por. 13
 ✓ Helocostegina *Barker & Grimsdale* Prot. 87
 ✓ Helopsallecula *Pic* Ins. 254
 ✓ Heloraphinia *Schrammen* Por. 8
 ✓ Hemicletodes *Lang* Crust. 53
 ✓ Hemipiloceras *Shimizu & Obata* Moll. 135
 ✓ Hemisira *Enderlein* Ins. 391
 ✓ Heniocera *Jordan* Ins. 276
 ✓ Henodus *von Huene* Rept. 38
 ✓ Henrardia *Goetghebuer* Ins. 369
 ✓ Heptagoniodes *Carriker* Ins. 419
 ✓ Heptapsogaster *Carriker* Ins. 419
 ✓ Heptapsus *Carriker* Ins. 419
 ✓ Heptarthrogaster *Carriker* Ins. 419
 ✓ Hercophyllum *Jones* Coel. 37
 ✓ Hermipella *Lessert* Arachn. 46
 ✓ Herpetodiplostomum *Dubois* Vermes 80
 ✓ Herpidia *Bryk* Ins. 346
 ✓ Herperomeryx *Stock* Mam. 70
 ✓ Hesperomorpha *Ogloblin* Ins. 287
 ✓ Hesperonomia *Ulrich & Cooper* Brach. 15
 ✓ Hesperonomiella *Ulrich & Cooper* Brach. 15
 ✓ Hesperotrophia *Ulrich & Cooper* Brach. 18
 ✓ Heterocepon *Shiino* Crust. 43
 ✓ Heterochondria *Yu* Crust. 53
 ✓ Heterodiplostomum *Dubois* Vermes 80
 ✓ Heterognathus *Stauffer* Vermes 135
 ✓ Heterogoniodes *Carriker* Ins. 419
 ✓ Heteromyrus *Pietschmann* Pisces 71
 ✓ Heteropachyiulus *Lohmander* Arachn. 77
 ✓ Heterophytobius *Wagner* Ins. 267
 ✓ Heteroplopomus *Tomiyana* Pisces 84
 ✓ Heterospira *Umbgrove* Prot. 88
 ✓ Hexomyza *Enderlein* Ins. 395
 ✓ Hiata *Zetek & McLean* Moll. 126
 ✓ Hicetes *Clarke* Vermes 130
 ✓ Hiltonus *de Laubenfels* Por. 10
 ✓ Hinatara *Benson* Ins. 320
 ✓ Hippiospongia *de Laubenfels* Por. 13
 ✓ Hippopetratiella *Stach* Bry. 37
 ✓ Hirnantia *Lamont* Brach. 19
 ✓ Hirtiligia *Van Name* Crust. 44
 ✓ Histodermopsis *de Laubenfels* Por. 10
 ✓ Hoernesiella *Gugenberger* Moll. 108
 ✓ Hogmochilina *Solle* Crust. 62
 ✓ Holmesella *Gunnell* Pisces 91
 ✓ Holonodus *Chabanaud* Pisces 89
 ✓ Holoplocamia *de Laubenfels* Por. 10
 ✓ Holostephanus *Szidat* Vermes 82
 ✓ Holvedahlina *Solle* Crust. 62
 ✓ Homalodonia *Bernhauer* Ins. 236
 ✓ Homoeometamelus *Hustache* Ins. 267
 ✓ Hoplasomedia *Maulik* Ins. 287
 ✓ Hoplodactylella *Strand* Ins. 226
 ✓ Hoplochoides *Phleger* Arachn. 38
 ✓ Hozawaia *de Laubenfels* Por. 5
 ✓ Hrabea *Yamaguchi* Vermes 131
 ✓ Hubbsiella *Breder* Pisces 87
 ✓ Hudsonema *Mosely* Ins. 358
 ✓ Hulstaertiella *Goetghebuer* Ins. 369
 ✓ Humbea *Roewer* Arachn. 58
 ✓ Humilogriffithides *Inai* Arachn. 38
 ✓ Hummelia *Forsslund* Ins. 358
 ✓ Hungaroiulus *Lohmander* Arachn. 79
 ✓ Hungioides *Kobayashi* Arachn. 38
 ✓ Hydatoria *Iredale* Moll. 93
 ✓ Hydrochasma *Hendel* Ins. 394
 ✓ Hydromeda *Aldrich & Jones* Rept. 47
 ✓ Hydrobatides *Lundblad* Arachn. 70
 ✓ Hylodesina *Bernhauer* Ins. 233
 ✓ Hypocreadium *Ozaki* Vermes 83
 ✓ Hypocryptus *Carriker* Ins. 419
 ✓ Hypophysaria *Gaede* Ins. 344
 ✓ Hypospyroceras *Shimizu & Obata* Moll. 135
 ✓ Hypsoleon *Navás* Ins. 363
 ✓ Maria *Cheesman* Ins. 314
 ✓ Abornia *Seyrig* Ins. 314
 ✓ Ichthyoptila *Meyrick* Ins. 348
 ✓ Acoospermus *Jordan* Ins. 276
 ✓ Adania *Enderlein* Ins. 387
 ✓ Idiocranium *Parker* Amph. 34
 ✓ Idiidiaptomus *Kiefer* Crust. 53
 ✓ Idiodonon *Ball* Ins. 408

- ✓ *Idiognathodus Gunnell* Pisces 91
- ✓ *Idiostrophia Ulrich & Cooper* Brach. 18
- ✓ *Idiozancla Turner* Ins. 352
- ✓ *Iheringascaris Pereira* Vermes 110
- ✓ *Illis Jordan* Ins. 276
- ✓ *Indocrunoecia Martynov* Ins. 359
- ✓ *Indodinarthrum Martynov* Ins. 358
- ✓ *Indomanta Whitley* Pisces 67
- ✓ *Indoxen'a Schmitz* Ins. 382
- ✓ *Insulaemus P. I. Taylor* Mam. 75
- ✓ *Inyoaster Phleger* Echin 25
- ✓ *Iotaota de Laubenfels* Por. 10
- ✓ *Iotroata de Laubenfels* Por. 10
- ✓ *Iranophyllum Douglas* Coel. 37
- ✓ *Irnia Roever* Arachn. 58
- ✓ *Irvingelloides Kobayashi* Arachn. 38
- ✓ *Ischnobrotus Hustache* Ins. 268
- ✓ *Ischnolaelaps Fonseca* Arachn. 64
- ✓ *Ischnophanes Turner* Ins. 352
- ✓ *Ismardis Leigh-Sharpe* Crust. 53
- ✓ *Ismene Bogachev* Pisces 77
- ✓ *Isochiton Ashby & Cotton* Moll. 72
- ✓ *Isosargus James* Ins. 376
- ✓ *Isomecoenemis Cowley* Ins. 428
- ✓ *Isopedhispa Spaeth* Ins. 289
- ✓ *Isothoracodonia Bernhauer* Ins. 236
- ✓ *Ispharina Vjalov & Solun* Moll. 81
- ✓ *Itolia Wilcox* Ins. 379
- ✓ *Jacentkovskya Enderlein* Ins. 387
- ✓ *Jacksonechinus Lambert* Echin. 17
- ✓ *Jacobella Mercier* Echin. 23
- ✓ *Jacobsonia Cameron* Ins. 233
- ✓ *Janetina Coryell & Malkin* Crust. 62
- ✓ *Janulum de Laubenfels* Por. 10
- ✓ *Jassidophaga Enderlein* Ins. 383
- ✓ *Jaundea Roever* Arachn. 58
- ✓ *Jeana Tindale* Ins. 356
- ✓ *Jeanneliusa Bernhauer* Ins. 233
- ✓ *Jelissima de Laubenfels* Por. 10
- ✓ *Jenningsina Coryell & Malkin* Crust. 62
- ✓ *Jenortha Milne* Ins. 359
- ✓ *Jones de Laubenfels* Por. 10
- ✓ *Jonespeltis Verhoeff* Arachn. 79
- ✓ *Josephinella Haas* Moll. 100
- ✓ *Judolidia Plavilstshikov* Ins. 278
- ✓ *Jujuyaspis Kobayashi* Arachn. 38
- ✓ *Julavis de Laubenfels* Por. 10
- ✓ *Kaira de Laubenfels* Por. 10
- ✓ *Kalliphenga Haas* Moll. 117
- ✓ *Kamoica Hatai* Brach. 28
- ✓ *Kaneharaia Makiyama* Moll. 121
- ✓ *Kansasimys Wood* Mam. 73
- ✓ *Karlsteinella Bouček* Crust. 62
- ✓ *Kaskia Weller* Arachn. 38
- ✓ *Katascaphius Verhoeff* Crust. 44
- ✓ *Kaurma Chatterji* Vermes 83
- ✓ *Kayserops Delo* Arachn. 38
- ✓ *Kelettina Swartz* Crust. 62
- ✓ *Kerakephalichas Phleger* Arachn. 38
- ✓ *Keratylum de Laubenfels* Por. 10
- ✓ *Ketosus de Laubenfels* Por. 10
- ✓ *Kiambura China* Ins. 403
- ✓ *Kidodia L. R. Cox* Moll. 117
- ✓ *Kilianina Pfender* Prot. 88
- ✓ *Kimberia Cotton & Woods* Moll. 81
- ✓ *Kimbetohia Simpson* Mam. 63
- ✓ *Kirkbyites Johnson* Crust. 62
- ✓ *Kirkoceras Ulrich & Foerste* Moll. 135
- ✓ *Kistinaia Haas* Moll. 115, 117
- ✓ *Klapalekia Claassen* Ins. 423
- ✓ *Klinoptera Dienst* Moll. 109
- ✓ *Knablia Roubal* Ins. 243
- ✓ *Kochina Spath* Moll. 136
- ✓ *Koenikella Lundblad* Arachn. 70
- ✓ *Kogenoceras Shimizu & Obata* Moll. 133, 136
- ✓ *Korotnewia Kožov* Moll. 77
- ✓ *Kotimea de Laubenfels* Por. 10
- ✓ *Kratochviliola Roever* Arachn. 56
- ✓ *Krishnieriella Mani* Ins. 310
- ✓ *Kubaniulus Lohmmander* Arachn. 79
- ✓ *Kulinga Navás* Ins. 363
- ✓ *Kyphocephalus Miller* Arachn. 38
- ✓ *Kyphohygrobatella Lundblad* Arachn. 71
- ✓ *Labacea de Laubenfels* Por. 10
- ✓ *Labidoculex Reichensperger* Ins. 233
- ✓ *Labiduncula Borgmeier* Ins. 381
- ✓ *Labisophlita de Laubenfels* Por. 10
- ✓ *Labradoria Resser* Arachn. 38
- ✓ *Labrifer Yamaguti* Vermes 83
- ✓ *Laccura Enderlein* Ins. 387
- ✓ *Laevipeneroplis Sulc* Prot. 88
- ✓ *Lambertella Mercier* Echin. 23
- ✓ *Lamitema Lea* Ins. 268
- ✓ *Lampetiopus Lindner* Ins. 376
- ✓ *Lamprothrips Moulton* Ins. 416
- ✓ *Lamprocorpus Carriker* Ins. 420
- ✓ *Lampropogonus Lučnik* Ins. 228
- ✓ *Lanceabarbous Fowler* Pisces 74
- ✓ *Laponcea Roever* Arachn. 55
- ✓ *Lasiambia Enderlein* Ins. 393
- ✓ *Lasiolonchaea Enderlein* Ins. 391
- ✓ *Lasiopsila Curran* Ins. 393
- ✓ *Laterana DeLong* Ins. 407
- ✓ *Lathraeolis Turner* Ins. 336
- ✓ *Latiginella Villeneuve* Ins. 385
- ✓ *Laucites Spath* Moll. 136
- ✓ *Lawrenciola Roever* Arachn. 58
- ✓ *Lawrencoppia Jacot* Arachn. 64
- ✓ *Leguminocythereis Howe* Crust. 62
- ✓ *Leidymys Wood* Mam. 75
- ✓ *Leiocricus Loomis* Arachn. 79
- ✓ *Leiommelus Ander* Ins. 434
- ✓ *Lembeichthys Herre* Pisces 85
- ✓ *Lemmatophoropsis Zalesky* Ins. 444
- ✓ *Lemosia Pessôa & Ayrosa Galvão* Ins. 396

- ✓ *Lepicerinus Hinton* Ins. 274
 ✓ *Lepidoglyphus Zachvatkine* Arachn. 64
 ✓ *Lepidopterites Piton* Ins. 442
 ✓ *Lepidopus Van Dyke* Ins. 268
 ✓ *Leptidothenea de Laubenfels* Por. 8
 ✓ *Lepinannocharax Fowler* Pisces 73
 ✓ *Lepocreadioides Yamaguti* Vermes 83
 ✓ *Leptepistomion Wehrli* Ins. p. 342
 ✓ *Leptellina Ulrich & Cooper* Brach. 19
 ✓ *Leptideella Strand* Ins. 278
 ✓ *Leptinostethus Borchmann* Ins. 256
 ✓ *Leptocerodes Lestage* Ins. 359
 ✓ *Leptochelastra de Laubenfels* Por. 10
 ✓ *Leptocleidus Mueller* Vermes 78
 ✓ *Leptocreadium Ozaki* Vermes 83
 ✓ *Leptodromiella Tuomikoski* Ins. 380
 ✓ *Leptogamasus Trägårdh* Arachn. 64
 ✓ *Leptolacis Schrammen* Por. 6
 ✓ *Leptoptygma Knight* Moll. 103
 ✓ *Leptosora Borchmann* Ins. 256
 ✓ *Lernanthropodes Bere* Crust. 54
 ✓ *Lesneoclerus Corporaal* Ins. 244
 Leucolasium Semenov-Tian-Shanski
 Ins. 262
 ✓ *Leucoschema Semenov-Tian-Shanski*
 Ins. 262
 ✓ *Leucoschesis Semenov-Tian-Shanski*
 Ins. 262
 ✓ *Liatungoceras Shimizu & Obata* Moll. 136
 ✓ *Libyastus Jordan* Ins. 398
 Ligrota de Laubenfels Por. 10
 ✓ *Limnastinus Schatzmayr* Ins. 226
 ✓ *Limnesides Lundblad* Arachn. 71
 ✓ *Limnosaurus Aldrich & Jones* Rept. 47
 ✓ *Limulatys Iredale* Moll. 93
 ✓ *Lindholmia Kožov* Moll. 77
 ✓ *Lindholmomneme Haas* Moll. 100
 ✓ *Lindsayella Coryell & Williamson* Crust. 63
 ✓ *Lingora Mosely* Ins. 359
 ✓ *Lingucephalichas Phleger* Arachn. 38
 ✓ *Linguimaera Pirlot* Crust. 47
 ✓ *Linio Mader* Ins. 255
 ✓ *Linochone Schrammen* Por. 8
 ✓ *Linosoma Schrammen* Por. 6
 ✓ *Liodrassus Chamberlin* Arachn. 51
 ✓ *Liomyzina Enderlein* Ins. 396
 ✓ *Lioptilesia Wehrli* Ins. 342
 ✓ *Liostiria Enderlein* Ins. 387
 ✓ *Liostrophia Cooper & Kindle* Brach. 18
 ✓ *Liotaxis Iredale* Moll. 74
 ✓ *Lithostrobilus Schrammen* Por. 8
 ✓ *Lixagasa Scott* Pisces 70
 ✓ *Lizettea Herre* Pisces 84
 ✓ *Loandalia Monro* Vermes 127
 ✓ *Lobodesmus Loomis* Arachn. 79
 ✓ *Lobosoma Buchanan* Ins. 268
 ✓ *Lobotornoceras Schindewolf* Moll. 136
 ✓ *Loilemia Reed* Brach. 24
 ✓ *Lomachaeta Mickel* Ins. 301
 ✓ *Lomanetia Whitley* Pisces 87
 ✓ *Lophacanthus Redikorzev* Arachn. 61
 ✓ *Lophocyclus Loomis* Arachn. 79
 ✓ *Lophosicyadiplostomum Dubois* Vermes 80
 ✓ *Lorio Cheesman* Ins. 315
 ✓ *Loriscicola Bedford* Ins. 420
 ✓ *Lorona Borchmann* Ins. 256
 ✓ *Lorophleps Enderlein* Ins. 393
 ✓ *Lotagnostus Whitehouse* Arachn. 39
 ✓ *Loticana Mosely* Ins. 359
 ✓ *Louricia Ferrière* Ins. 310
 ✓ *Lubens Bhalerao* Vermes 87
 ✓ *Lucasella Stewart* Crust. 63
 ✓ *Lucassa Roewer* Arachn. 55
 ✓ *Lucerapex Iredale* Moll. 91
 ✓ *Lupinocolus Van Dyke* Ins. 268
 ✓ *Lychniscaulus Schrammen* Por. 6
 ✓ *Lyczoarces Popov* Pisces 86
 ✓ *Lymantica Collenette* Ins. 338
 ✓ *Maccabeesa Roewer* Arachn. 58
 ✓ *Maciella Travassos* Vermes 113
 ✓ *Macrodelphinus L. E. Wilson* Mam. 65
 ✓ *Macrodonogobius Herre* Pisces 84
 ✓ *Macrogryon Nixon* Ins. 308
 ✓ *Macronomeutis Meyrick* Ins. 348
 ✓ *Madagascara Lindner* Ins. 376
 ✓ *Madagassophora Verhoeff* Arachn. 76
 ✓ *Maizaniella Bequaert & Clench* Moll. 77
 ✓ *Makromuktis Phleger* Arachn. 39
 ✓ *Mallogria Borchmann* Ins. 256
 ✓ *Mallopelmus Alluand* Ins. 226
 ✓ *Malvernina Delo* Arachn. 39
 ✓ *Mammaeyon Loomis* Mam. 81
 ✓ *Manchurichthys Saito* Pisces 69
 ✓ *Mandaria Roewer* Arachn. 58
 ✓ *Mantonella Vincent* Prot. 95
 ✓ *Marckgrafia Weiler* Pisces 66
 ✓ *Marcusoldia de Laubenfels* Por. 11
 ✓ *Marikellia Iredale* Moll. 117
 ✓ *Marsipograptus Ruedemann* Coel. 24
 ✓ *Marstoniopsis Altana* Moll. 77
 ✓ *Martellia Wirth* Brach. 16
 ✓ *Marua Roewer* Arachn. 58
 ✓ *Mastaster Mercier* Echin. 23
 ✓ *Matanzia Palmer* Prot. 88
 ✓ *Matasia Mosely* Ins. 359
 ✓ *Mavandia Seyrig* Ins. 315
 ✓ *Mavandiella Seyrig* Ins. 315
 ✓ *Maxilliopsylla Schreiter & Shannon* Ins. 398
 ✓ *Mazastele Iredale* Moll. 74
 ✓ *Mazescala Iredale* Moll. 84
 ✓ *Mcqueenoceras Ulrich & Foerste* Moll. 136
 ✓ *Meachina Enderlein* Ins. 392
 ✓ *Meandroloculina Bogdanovič* Prot. 88
 ✓ *Mecobaris Marshall* Ins. 268
 ✓ *Mecutina Roewer* Arachn. 58
 ✓ *Medicelinus Bolin* Pisces 88

- Mediogonimus Woodhead & Malewitz Vermes* 86
Megachatina Bequaert & Clench Moll. 103
Megachatinopsis Bequaert & Clench Moll. 103
Megacucullaea Rennie Moll. 106
Megadiaptomus Kiefer Crust. 54
Meganinus Carriker Ins. 420
Megapella Lundblad Arachn. 71
Megapeostus Carriker Ins. 420
Megaphthalmoides Ringdahl Ins. 390
Megapoides Lundblad Arachn. 71
Megasemum Maneval Ins. 444
Megninetta Jacot Arachn. 65
Meisenia Makiyama Moll. 122
Melanameletus Tiensuu Ins. 426
Melitoides Gurjanova Crust. 47
Melosidula Iredale Moll. 96
Menatacridium Piton Ins. 444
Menevillea Enderlein Ins. 387
Menoeidina Stewart Crust. 63
Menonia George Ins. 440
Meristoblemmus Jones & Chopard Ins. 432
Merriamium de Laubenfels Por. 11
Merucola Roewer Arachn. 58
Mesafra Haas Moll. 117
Mesatractosoma Verhoeff Arachn. 77
Mesitolabus Voss Ins. 269
Mesochrysa Navás Ins. 363
Mesodiplectra Enderlein Ins. 389
Mesodiplostomum Dubois Vermes 80
Mesoforicula Ping Ins. 443
Mesonetopsis Ping Ins. 444
Mesonomia Ulrich & Cooper Brach. 17
Mesophorodiplostomum Dubois Vermes 80
Mesorgerius Kuznetsov Ins. 404
Metabelba Grandjean Arachn. 65
Metacodon Scott & Jepsen Mam. 83
Metaenderleinia Lallemant Ins. 405
Metamachilis Silvestri Ins. 440
Metaphorura Bagnall Ins. 439
Metaraeolaimoides De Coninck Vermes 103
Metoligotoma Davis Ins. 423
Metonyx Chitwood Vermes 103
Metopodicha Draudt Ins. 336
Metopomyza Enderlein Ins. 396
Metriothrips Hood Ins. 416
Meunieria Piton Ins. 443
Mexicaspis Spaeth Ins. 290
Micantapex Iredale Moll. 91
Micracanthorhynchina Strand Vermes 117
Micrasemodes Lestage Ins. 359
Microbaicalia Kozov Moll. 78
Microbiplices Arkell Moll. 136
Microchilina Bouček Crust. 63
Microcesmodes Strand Ins. 226
Microlypesthes Pic Ins. 285
Micromandibularia Pic Ins. 282
Micronitellia Enderlein Ins. 387
Microptecticus Lindner Ins. 376
Microspicularia Macfadyen Coel. 28
Microtheledon Broom Rept. 37
Milleratia Swartz Crust. 63
Milligaretta Iredale Moll. 125
Miloderoides Van Dyke Inst. 269
Mimagitocera Maulik Ins. 288
Mimasea Komohara Pisces 83
Mimemala Strand Ins. 441
Mimodrylix Zachvatkin Ins. 409
Mimoenispia Pic Ins. 282
Mimothestus Pic Ins. 282
Minbosius Speijer Arachn. 44
Minurophilus Voss Ins. 269
Minutostrongylus Leroux Vermes 113
Miocardiopsis Glibert Moll. 109
Miodasia Enderlein Ins. 366
Miodelphis L. E. Wilson Mam. 65
Miopentagonaster Mercier Echin. 24
Miorrhinus Marshall Ins. 269
Miraxona Lundblad Arachn. 71
Miraxonella Lundblad Arachn. 71
Miroceros de Toledo Ins. 431
Mixaleyrodes Takahashi Ins. 412
Mixochalcis Blanchard Ins. 309
Miyakopora Eguchi Coel. 38
Miyakosmia Eguchi Coel. 38
Mizoleon Navás Ins. 363
Moennigia Travassos Vermes 113
Monacanthella James Ins. 376
Monatrum Reikhardt Ins. 253
Monobryozoon Remane Bry. 34
Monocletodes Lang Crust. 54
Monognathus Bertin Pisces 71
Monosirhapis Jordan Ins. 276
Monotria de Laubenfels Por. 7
Mopsella Hanitsch Ins. 430
Moritasgus Günther Ins. 431
Mormotomyia Austen Ins. 390
Mortites Günther Ins. 431
Moschorhynchus Broom Rept. 38
Mucropetraliella Stach Bry. 37
Mullerister de Cooman Ins. 237
Multicalyx Faust & Tang Vermes 79
Mustelavus Scott & Jepsen Mam. 80
Mweruella Haas Moll. 118
Mycalecarmia de Laubenfels Por. 11
Myersinella Wisniewski Vermes 120
Mylothrus Günther Ins. 431
Myocephalus Broom Rept. 37
Myodalis Fage & Simon Arachn. 44
Myona Kobayashi Arachn. 42
Myoschiston Precht Prot. 98
Myrmekiocellio Verhoeff Crust. 44
Myrmeleonostenus Uchida Ins. 315
Mysolaclaps Fonseca Arachn. 65
Mysorca Roewer Arachn. 58
Mysticoceras Ulrich & Foerste Moll. 137

- ✓ *Mystrium Schrammen* Por. 6
 ✓ *Myxichela de Laubenfels* Por. 11
 ✓ *Myxophyllum Raabe* Prot. 97
 ✓ *Najax de Laubenfels* Por. 11
 ✓ *Nannictosaurus Broom* Rept. 38
 ✓ *Nannictosuchus Broom* Rept. 38
 ✓ *Nannocampichthys Hora & Mukerji* Pisces 78
 ✓ *Nannocyrtopogon Wilcox & Martin* Ins. 379
 ✓ *Nannonemertes Wheeler* Vermes 92
 ✓ *Nanoblaps Semenov-Tian-Shanski & Bogatshev* Ins. 252
 ✓ *Nanoparia Broom* Rept. 37
 ✓ *Nanorthis Ulrich & Cooper* Brach. 15
 ✓ *Narvaliscala Iredale* Moll. 85
 ✓ *Navasius Esben-Petersen* Ins. 363
 ✓ *Navodon Whitley* Pisces 89
 ✓ *Neasasmia Roewer* Arachn. 58
 ✓ *Neatocnemis Prell* Ins. 263
 ✓ *Nebriogabus Guignot* Ins. 230
 ✓ *Nebrodensia Gregorio* Bry. 36
 ✓ *Nebulosicus Gregorio* Echin. 26
 ✓ *Necolio Cheesman* Ins. 315
 ✓ *Necydalisca Pavilstshikov* Ins. 278
 ✓ *Negombata de Laubenfels* Por. 11
 ✓ *Nellacarus Grandjean* Arachn. 65
 ✓ *Nelneja Navás* Ins. 364
 ✓ *Nelus Whitley* Pisces 90
 ✓ *Nemastomella Mello-Leitão* Arachn. 61
 ✓ *Nemocestes Van Dyke* Ins. 269
 ✓ *Nemostiropsis Borchmann* Ins. 257
 ✓ *Nemotelinus Enderlein* Ins. 376
 ✓ *Nemurinus Navás* Ins. 364
 ✓ *Nealbia Lundblad* Arachn. 72
 ✓ *Neoanagraphis Gertsch & Mulaik* Arachn. 51
 ✓ *Neoparchites Bouček* Crust. 57
 ✓ *Neoaxona Lundblad* Arachn. 72
 ✓ *Neobapta Djakonov* Ins. 342
 ✓ *Neobothynus Prell* Ins. 263
 ✓ *Neocapniella Claassen* Ins. 424
 ✓ *Neocarpenteria Cushman & Bermúdez* Prot. 88
 ✓ *Neocepheus Willmann* Arachn. 65
 ✓ *Neochalcodectus Masi* Ins. 310
 ✓ *Neocoenia Hackemesser* Coel. 39
 ✓ *Neocyloceras Flower & Caster* Moll. 137
 ✓ *Neodeuteromma Mitono* Ins. 278
 ✓ *Necephimeropus Hustache* Ins. 269
 ✓ *Neoeumetopiella Hendel* Ins. 392
 ✓ *Neoeuryplax Claassen* Ins. 424
 ✓ *Neofulla Claassen* Ins. 424
 ✓ *Neohadromerus Hustache* Ins. 267
 ✓ *Neohecyra Breuning* Ins. 282
 ✓ *Neokoenukeia Lundblad* Arachn. 70
 ✓ *Neolimnesia Lundblad* Arachn. 71
 ✓ *Neomahutia Laboissière* Ins. 288
 ✓ *Neomanticoceras Schindewolf* Moll. 137
 ✓ *Neomias Hustache* Ins. 269
 ✓ *Neonella Gertsch* Arachn. 54
 ✓ *Neonirvana Oman* Ins. 409
 ✓ *Neonotaris Hustache* Ins. 269
 ✓ *Neoparalaelaps Fonseca* Arachn. 65? *det.*
 ✓ *Neopelmatopus Conde* Ins. 320
 ✓ *Neophytoscapus Hustache* Ins. 269
 ✓ *Neophytobius Wagner* Ins. 267
 ✓ *Neoplatylabus Heinrich* Ins. 315
 ✓ *Neoprocirrus Cameron* Ins. 234
 ✓ *Neopsocopsis Badonnel* Ins. 422
 ✓ *Neoradiolites Milovanović* Moll. 123
 ✓ *Neorthoceras Shimizu & Obata* Moll. 137
 ✓ *Neorutilia Malloch* Ins. 388
 ✓ *Neostrophia Ulrich & Cooper* Brach. 18
 ✓ *Neothraupis Hallmayr* Aves 99
 ✓ *Neotorrenticola Lundblad* Arachn. 72
 ✓ *Neotrepes China* Ins. 404
 ✓ *Neotropioniscus Arcangeli* Crust. 44
 ✓ *Neowutinoceras Shimizu & Obata* Moll. 137
 ✓ *Nepiomorpha Pearman* Ins. 422
 ✓ *Nesarpax Alluaud* Ins. 225
 ✓ *Nesidobius Jordan* Ins. 276
 ✓ *Nesoeupetersia Blüthgen* Ins. 294
 ✓ *Nesotettix Lindberg* Ins. 409
 ✓ *Neuralla Djakonov* Ins. 342
 ✓ *Neurocaenis Navás* Ins. 426
 ✓ *Neuroleinia Lallemant* Ins. 405
 ✓ *Neutrocyclops Kiefer* Crust. 54
 ✓ *Nevermanniella Borchmann* Ins. 256
 ✓ *Nicollia Wiśniewski* Vermes 83
 ✓ *Niitakacris Tinkham* Ins. 436
 ✓ *Niphadobata Enderlein* Ins. 374
 ✓ *Niphosiecta Turner* Ins. 337
 ✓ *Nippocryptus Uchida* Ins. 315
 ✓ *Nippononysson Yasumatsu & Maidl* Ins. 299
 ✓ *Nipponosaurus Nagao* Rept. 39
 ✓ *Nirmocotes Carriker* Ins. 420
 ✓ *Nisibaris de Laubenfels* Por. 11
 ✓ *Noalda Iredale* Moll. 93
 ✓ *Nomamyrmex Borgmeier* Ins. 305
 ✓ *Notaelurodon Broom* Rept. 38
 ✓ *Notaelurops Broom* Rept. 38
 ✓ *Notalina Mosely* Ins. 359
 ✓ *Nothoasteia Malloch* Ins. 395
 ✓ *Nothocotus Carriker* Ins. 420
 ✓ *Nothosphecius Pate* Ins. 299
 ✓ *Notictosaurus Broom* Rept. 38
 ✓ *Notobryon Odhner* Moll. 93
 ✓ *Notodiaptomus Kiefer* Crust. 54
 ✓ *Notoligotoma Davis* Ins. 423
 ✓ *Notopala Cotton* Moll. 78
 ✓ *Notoplatylabus Heinrich* Ins. 315
 ✓ *Novirircuzenius Bolin* Pisces 88
 ✓ *Novophilaenus Lallemant* Ins. 405
 ✓ *Noxius Jordan* Ins. 276
 ✓ *Nudochernes Beier* Arachn. 55
 ✓ *Nyassunio Haas* Moll. 118
 ✓ *Nybyoceras Shimizu & Obata* Moll. 137

- ✓ *Nyctor Semenov-Tian-Shanski* & *Pjatakova* Ins. 247
- ✓ *Obenbergerodes Strand* Ins. 238
- ✓ *Obolopsis Saito* Brach. 13
- ✓ *Obstopalia Iredale* Moll. 85
- ✓ *Ococrinus Peck* Echin. 27
- ✓ *Oculobdella Autrum* Vermes 133
- ✓ *Ocydina Meyrick* Ins. 348
- ✓ *Odinadiplosis Mani* Ins. 365
- ✓ *Odontodiaptomus Kiefer* Crust. 55
- ✓ *Odontogria Borchman* Ins. 256
- ✓ *Oedemognathus Myers* Pisces 73
- ✓ *Oelandia Westergård* Moll. 72
- ✓ *Ohioceras Shimizu & Obata* Moll. 137
- ✓ *Okadaia de Laubenfels* Por. 11
- ✓ *Olecranopelma Enderlein* Ins. 374
- ✓ *Oligometopus Resser* Arachn. 39
- ✓ *Oligorthis Ulrich & Cooper* Brach. 15
- ✓ *Olistheroilus Lohmander* Arachn. 78
- ✓ *Ollarianus Ball* Ins. 409
- ✓ *Ommatosa de Laubenfels* Por. 11
- ✓ *Omobrachiulus Lohmander* Arachn. 77
- ✓ *Omoleon Navás* Ins. 364
- ✓ *Oncagnostus Whitehouse* Arachn. 39
- ✓ *Onchocleidus Mueller* Vermes 78
- ✓ *Oncoparia Bernhauer* Ins. 234
- ✓ *Onocera Borchmann* Ins. 256
- ✓ *Onychoceras Ulrich & Foerste* Moll. 137
- ✓ *Onychotreta Ulrich & Cooper* Brach. 19
- ✓ *Oonautes Damas* Coel. 20
- ✓ *Ootetrastichoides Kontyú* Ins. 310
- ✓ *Ophiodesia Schrammen* Por. 13
- ✓ *Ophiodiplotomum Dubois* Vermes 80
- ✓ *Ophiolella Mortensen* Echin. 25
- ✓ *Ophryoterpnomia Hendel* Ins. 392
- ✓ *Opiocysta Černosvitov* Vermes 130
- ✓ *Oranobius Verhoeff* Arachn. 76
- ✓ *Orbignyiceras Gérard & Contant* Moll. 137
- ✓ *Oreasiobia Semenov-Tian-Shanski* Ins. 429
- ✓ *Orescioiulus Lohmander* Arachn. 79
- ✓ *Organognathus Verhoeff* Arachn. 80
- ✓ *Organemiza Wehrli* Ins. 342
- ✓ *Ornithodiplostomum Dubois* Vermes 80
- ✓ *Ornytoidea Blöte* Ins. 400
- ✓ *Ornytopsis Blöte* Ins. 400
- ✓ *Oropallene Schimkewitch* Arachn. 43
- ✓ *Oroposoma Verhoeff* Arachn. 80
- ✓ *Orotava Frey* Ins. 391
- ✓ *Orphistes Reichardt* Ins. 238
- ✓ *Orphnephilina Enderlein* Ins. 372
- ✓ *Orsimonia Roewer* Arachn. 59
- ✓ *Orthanaupais Enderlein* Ins. 366
- ✓ *Orthidiella Ulrich & Cooper* Brach. 15
- ✓ *Orthochela Glassell* Crust. 36
- ✓ *Orthodonella Bhatia* Prot. 97
- ✓ *Orthonyboceras Shimizu & Obata* Moll. 137, 138
- ✓ *Osaka Kondô* Vermes 130
- ✓ *Otapiria Marwick* Moll. 110
- ✓ *Othmar Roewer* Arachn. 59
- ✓ *Otraleus Günther* Ins. 431
- ✓ *Ottweileria Guthörl* Ins. 444
- ✓ *Oudemansium Zachvatkine* Arach. 64 5
- ✓ *Ovalveolina Reichel* Prot. 89
- ✓ *Ovoceras Flower* Moll. 138
- ✓ *Oxolisa Ulrich & Cooper* Brach. 14
- ✓ *Oxyconus Jordan* Ins. 276
- ✓ *Oxyecous Chopard* Ins. 434
- ✓ *Oxyparius Jordan* Ins. 398
- ✓ *Oxyphanes Turner* Ins. 343
- ✓ *Ozakia Wisniewski* Vermes 83
- ✓ *Pachataxa de Laubenfels* Por. 7
- ✓ *Pachendoceras Ulrich & Foerste* Moll. 138
- ✓ *Pachyascus Schrammen* Por. 6
- ✓ *Pachynemertes Coe* Vermes 93
- ✓ *Paenaequina Solle* Crust. 63
- ✓ *Pagothernia Nichols & La Monte* Pisces 83
- ✓ *Pahangius Roewer* Arachn. 59
- ✓ *Paladin Weller* Arachn. 39
- ✓ *Palaeocycloceras Shimizu & Obata* Moll. 138
- ✓ *Palaeorhynchoides Smirnov* Pisces 72
- ✓ *Palaeoscomber Smirnov* Pisces 83
- ✓ *Palaeostrophia Ulrich & Cooper* Brach. 17
- ✓ *Palaeotanaia Reiff* Crust. 41
- ✓ *Palaisioscaria Günther* Ins. 438
- ✓ *Palaphyllia Sugiyama & Eguchi* Coel. 39
- ✓ *Paleosepharia Laboissière* Ins. 288
- ✓ *Palinorthis Ulrich & Cooper* Brach. 21
- ✓ *Palmeroceras Flower* Moll. 138
- ✓ *Pancala Enderlein* Ins. 387
- ✓ *Panceratothrips Bagnall* Ins. 417
- ✓ *Panchganus Roewer* Arachn. 59
- ✓ *Pancreaticum Bhalerao* Vermes 88
- ✓ *Panherpina Bryk* Ins. 346
- ✓ *Panophthalmus Buchanan* Ins. 270
- ✓ *Papillicalymene Shirley* Arachn. 39
- ✓ *Papillophus Hadži* Arachn. 61
- ✓ *Parabatozonus Yasumatsu* Ins. 302
- ✓ *Parabdelta Autrum* Vermes 133
- ✓ *Parabiobessa Breuning* Ins. 282
- ✓ *Parabolbina Swartz* Crust. 63
- ✓ *Parabrimus Breuning* Ins. 282
- ✓ *Paracanthomysis Li* Crust. 40
- ✓ *Parachanos Arambourg & Schneegans* Pisces 69
- ✓ *Paraclia Enderlein* Ins. 378
- ✓ *Paracoelopterus Normand* Ins. 240
- ✓ *Paracolurella Myers* Vermes 121
- ✓ *Paracooperia Travassos* Vermes 113
- ✓ *Paracoosia Kobayashi* Arachn. 39
- ✓ *Paracoscinus Bedford & Bedford* Por. 14
- ✓ *Paracuticularia Schrammen* Por. 6
- ✓ *Paracyathocotyle Szidat Z.* Vermes 82

- ✓ *Paracyathus Bedford & Bedford* Por. 14
✓ *Paracyclops Maneval* Ins. 308
✓ *Paracypellia Schrammen* Por. 6
✓ *Paracythereis Jennings* Crust. 64
✓ *Paradelphomyia Alexander* Ins. 372
✓ *Paraendoceras Ulrich & Foerste* Moll. 138
✓ *Parafontaria Verhoeff* Arachn. 78
✓ *Paragambrus Uchida* Ins. 315
✓ *Parageina Laboissière* Ins. 288
✓ *Paragonodontis Wehrli* Ins. 342
✓ *Parahepomidion Breuning* Ins. 282
✓ *Parakiefferiella Thienemann* Ins. 369
✓ *Parakoenikea Lundblad* Arachn. 70
✓ *Paralaelaps Fonseca* Arachn. 66
✓ *Paralepidocephalus Tchang* Pisces 75
✓ *Paraleptodema Obenberger* Ins. 251
✓ *Paralichelys Bergounioux* Rept. 40
✓ *Paraliomera Rathbun* Crust. 33
✓ *Paraluperodes Ogloblin* Ins. 288
✓ *Paramacropis Popov* Ins. 295
✓ *Paramaja Kubo* Crust. 32
✓ *Parameces Turner* Ins. 339
✓ *Paramelanauster Breuning* Ins. 282
✓ *Parameloë Denier* Ins. 259
✓ *Paramelomys Rümmler* Mam. 76
✓ *Paramesotriton Chang* Amph. 34
✓ *Parametopides Breuning* Ins. 282
✓ *Paramicroprosopa Ringdahl* Ins. 390
✓ *Paramordella Pic* Ins. 259
✓ *Paramurosternum Breuning* Ins. 282
✓ *Paranaleptes Breuning* Ins. 282
✓ *Paranannopus Lang* Crust. 55
✓ *Paranecrocarcinus v. Straelen* Crust. 35
✓ *Paranemastoma Redikorzev* Arachn. 61
✓ *Paraneurina Enderlein* Ins. 382
✓ *Paranodonta Kobayashi & Susuki* Moll. 118
✓ *Paranogmius Weiler* Pisces 69
✓ *Paranoplophrya Rohrbach* Prot. 97
✓ *Paranthracina Paramonov* Ins. 380
✓ *Parantichaeta Enderlein* Ins. 390
✓ *Parapactola Voss* Ins. 270
✓ *Parapanscopus Buchanan* Ins. 270
✓ *Parapantomorus van Emden* Ins. 270
✓ *Parapechthis Blanchard* Ins. 316
✓ *Paraphilococoncha Yamaguti* Crust. 55
✓ *Paraphytobius Wagner* Ins. 270
✓ *Paraphytomyza Enderlein* Ins. 396
✓ *Parapocera Breuning* Ins. 283
✓ *Parapolycope Klie* Crust. 64
✓ *Paraprotomyzon Pellegrin & Fang* Pisces 75
✓ *Pararmenoceras Shimizu & Obata* Moll. 138, 143
✓ *Parascaeas Meyrick* Ins. 353
✓ *Parascalida Hanitsch* Ins. 430
✓ *Paraschmidtella Swartz* Crust. 64
✓ *Paraschwagerina Dunbar & Skinner* Prot. 89
✓ *Parascioptera Hartig* Ins. 344
✓ *Parasepsisoma Hendel* Ins. 392
✓ *Parasililia Cheesman* Ins. 316
✓ *Parasitades Pruthi* Ins. 409
✓ *Paraspirura Sandground* Vermes 114
✓ *Parassamia Roewer* Arachn. 59
✓ *Parastacoides Clark* Crust. 37
✓ *Parasternus Guignot* Ins. 230
✓ *Parastilomysis Li.* Crust. 40
✓ *Parastixis Breuning* Ins. 282
✓ *Parastromatopora Yabe & Sugiyama* Coel. 20
✓ *Parathaneroclerus Pic* Ins. 244
✓ *Parathrinaxodon Parrington* Rept. 38
✓ *Paratoxophora Engel* Ins. 380
✓ *Paratylenchus Filipjev* Vermes 106
✓ *Paratyntlastes Giltay* Pisces 84
✓ *Paravelleda Breuning* Ins. 282
✓ *Paravespa Bell* Ins. 303
✓ *Parcanassa Iredale* Moll. 87
✓ *Parclioscena Enderlein* Ins. 395
✓ *Pareuchiloglanis Pellegrin* Pisces 76
✓ *Parendoceras Ulrich & Foerste* Moll. 138
✓ *Parexoristina Enderlein* Ins. 385
✓ *Parlitomosa Nagaty* Vermes 115
✓ *Paroedesiella Enderlein* Ins. 394
✓ *Parogria Borchmann* Ins. 255
✓ *Paronchocerca Peters* Vermes 115
✓ *Paroplandria Cameron* Ins. 234
✓ *Paroreoglanis Pellegrin* Pisces 76
✓ *Paroriaethus Breuning* Ins. 283
✓ *Parormoceras Shimizu & Obata* Moll. 139
✓ *Parna Benson* Ins. 321
✓ *Particymatium Iredale* Moll. 84
✓ *Partubiola Iredale* Moll. 74
✓ *Pasadenus Ball* Ins. 409
✓ *Passalacarus Pearse & Wharton* Arachn. 66
✓ *Passalocrinus Peck* Echin. 27
✓ *Pavlovskia Gussakovskii* Ins. 299
✓ *Pechota Roewer* Arachn. 59
✓ *Pediarcha Turner* Ins. 337
✓ *Pediomyx Stirton* Mam. 70
✓ *Pelmia Enderlein* Ins. 367
✓ *Peltonychia Roewer* Arachn. 56
✓ *Peltonodia Bernhauer* Ins. 236
✓ *Penicelinus Bolin* Pisces 88
✓ *Pentagonella Thor* Arachn. 66
✓ *Pentaster Döderlein* Echin. 24
✓ *Pentaporus Loomis* Arachn. 80
✓ *Pephrica Alluaud* Ins. 227
✓ *Pepsijoppa Heinrich* Ins. 316
✓ *Perampliata Arkell* Moll. 120
✓ *Perelytrana Sjöstedt* Ins. 437
✓ *Pergalumna Grandjean* Arachn. 64
✓ *Pericentropsis Günther* Ins. 431
✓ *Perigonillus Jeannel* Ins. 227
✓ *Perinetia Collenette* Ins. 338
✓ *Perineus Thompson* Ins. 420
✓ *Peripetraliella Stach.* Bry. 37
✓ *Periphlias Pirlot* Crust. 47

- ✓ *Perissocrinus Goldring* Echin. 27
 ✓ *Peritromoides Bhatia* Prot. 98
 ✓ *Perloccia Sjöstedt* Ins. 437
 ✓ *Permothrips Martynov* Ins. 444
 ✓ *Petalodiplostomum Dubois* Vermes 81
 ✓ *Pethopecten Hertlein* Moll. 113
 ✓ *Petrosites Howell & Landes* Por. 11
 ✓ *Peyeria Weiler* Pisces 66
 ✓ *Phaedogria Borchmann* Ins. 256
 ✓ *Phaeonetta Delacour* Aves 82
 ✓ *Phakettia de Laubenfels* Por. 11
 ✓ *Phalantias Heberdey* Ins. 258
 ✓ *Phaneracra Uvarov* Ins. 434
 ✓ *Phanerochiderma Schrammen* Por. 6
 ✓ *Phanozestia Iredale* Moll. 84
 ✓ *Pharodes Wilson* Crust. 55
 ✓ *Phasmatocottus Bolin* Pisces 88
 ✓ *Phaunaus Lea* Ins. 270
 ✓ *Pheneps Darlington* Ins. 241
 ✓ *Phépsalostoma Meyrick* Ins. 353
 ✓ *Phezilbus Roewer* Arachn. 59
 ✓ *Philippinopterus P. I. Taylor* Mam. 85
 ✓ *Philoconcha Yamaguti* Crust. 55
 ✓ *Philopinna Yamaguti* Vermes 82
 ✓ *Phloeocetis Turner* Ins. 353
 ✓ *Phloeosinopsis Schedl* Ins. 274
 ✓ *Phoidagnostus Whitehouse* Arachn. 40
 ✓ *Phthiroides Oudemans* Arachn. 66
 ✓ *Phylacops Cooper & Kindle* Arachn. 40
 ✓ *Phylacozetes Grandjean* Arachn. 66
 ✓ *Phyratocosma Meyrick* Ins. 349
 ✓ *Piciella Borchmann* Ins. 256
 ✓ *Picoclerus Corporaal* Ins. 244
 ✓ *Picrocuma Hale* Crust. 41
 ✓ *Pictioneritina Iredale* Moll. 75
 ✓ *Pingia Chang* Amph. 34
 ✓ *Pinguimacoma Iredale* Moll. 120
 ✓ *Pintonema Travassos* Vermes 113
 ✓ *Piridium Patten* Prot. 94
 ✓ *Pirunipygus Roewer* Arachn. 61
 ✓ *Placanticheir Enderlein* Ins. 381
 ✓ *Placocystella Rennie* Echin. 29
 ✓ *Placophora Borgmeier* Ins. 382
 ✓ *Placovaranus Fejervary* Rept. 44
 ✓ *Plagioptychus Simpson* Mam. 66
 ✓ *Plakoosa de Laubenfels* Por. 7
 ✓ *Planagura Boetticher* Aves 101
 ✓ *Planoceroides Palombi* Vermes 77
 ✓ *Planoctena Dawydoff* Coel. 43
 ✓ *Platacantha Lindberg* Ins. 400
 ✓ *Platerycia Villeneuve* Ins. 385
 ✓ *Platiscala Iredale* Moll. 85
 ✓ *Platycalymene Shirley* Arachn. 40
 ✓ *Platycheiracra Enderlein* Ins. 389
 ✓ *Platypleon, v. Straelen* Crust. 37
 ✓ *Platytrombidium Thor* Arachn. 66
 ✓ *Plaumannia Lundblad* Arachn. 72
 ✓ *Plectotreta Ulrich & Cooper* Brach. 18
 ✓ *Plectotrophia Ulrich & Cooper* Brach. 17
 ✓ *Pleurophyllidiopsis Tchang-Si* Moll. 94
 ✓ *Pleurosoma Orfila* Ins. 332
 ✓ *Plicatounia Kobayashi & Susuki* Moll. 118
 ✓ *Pliodasina Enderlein* Ins. 366
 ✓ *Plionychia Enderlein* Ins. 388
 ✓ *Plocimas Enderlein* Ins. 365
 ✓ *Plumocolumetta de Laubenfels* Por. 11
 ✓ *Podallea Navás* Ins. 364
 ✓ *Podostraba Spaeth* Ins. 290
 ✓ *Poecilochela de Laubenfels* Por. 11
 ✓ *Pogonagalmia Enderlein* Ins. 388
 ✓ *Pogonodesmus Loomis* Arachn. 80
 ✓ *Pogonomelomys Rümmler* Mam. 76
 ✓ *Polycoelogastridium Reikhardt* Ins. 253
 ✓ *Polydesmopeltis Verhoeff* Arachn. 80
 ✓ *Polygonatium Schrammen* Por. 6
 ✓ *Polymorphinella Cushman & Hanzawa* Prot. 89
 ✓ *Polymorphinoides Cushman & Hanzawa* Prot. 89
 ✓ *Polyphemus Schrammen* Por. 6
 ✓ *Polyphleba Navás* Ins. 364
 ✓ *Polyplacognathus Stauffer* Vermes 135
 ✓ *Polypyge Schrammen* Por. 6
 ✓ *Pomiscala Iredale* Moll. 85
 ✓ *Ponderodictya Coryell & Malkin* Crust. 64
 ✓ *Pontia Paspalew* Coel. 20
 ✓ *Porobelba Grandjean* Arachn. 66
 ✓ *Poropoeoides Nowicki* Ins. 311
 ✓ *Porrhoiulus Lohmander* Arachn. 79
 ✓ *Porteroceras Shimizu & Obata* Moll. 139
 ✓ *Posthodiplostomum Dubois* Vermes 81
 ✓ *Poulsenia Resser* Arachn. 40
 ✓ *Poutawa Griffin* Pisces 72
 ✓ *Praebigotites Wetzel* Moll. 139
 ✓ *Pratylenchus Filipjev* Vermes 106
 ✓ *Pricetrema Ciurea* Vermes 84
 ✓ *Pristipagia Iredale* Moll. 120
 ✓ *Pristoternus d'Orchymont* Ins. 242
 ✓ *Probolichas Phleger* Arachn. 40
 ✓ *Probolops Delo* Arachn. 40
 ✓ *Proboveria Chatton & Lwoff* Prot. 97
 ✓ *Priscaeculus Jacot* Arachn. 66
 ✓ *Procrassiphiala Verma* Vermes 81
 ✓ *Proeutropius Fowler* Pisces 76
 ✓ *Profimbriaria Wolffhügel* Vermes 92
 ✓ *Progalbanites Spath* Moll. 140
 ✓ *Proheptoconus Bordas* Mam. 66
 ✓ *Prolecehodiplostomum Dubois* Vermes 81
 ✓ *Pronotonyx Ward* Crust. 35
 ✓ *Propemurchisonia Gregorio* Moll. 73
 ✓ *Propeschelobates Jacot* Arachn. 66
 ✓ *Prophalonia Rebel* Ins. 442
 ✓ *Prorhaphidophora Chopard* Ins. 444
 ✓ *Prostomiopsis Freidrich* Vermes 93
 ✓ *Protachaeta Enderlein* Ins. 385
 ✓ *Protadelaide David & Tillyard* Arachn. 34

- ✓ *Protophomia Meyrick* Ins. 349
 ✓ *Proteremoplax Enderlein* Ins. 385
 ✓ *Proterodiplostomum Dubois* Vermes 81
 ✓ *Prothaumalea Enderlein* Ins. 372
 ✓ *Protitanops Stock* Mam. 67
 ✓ *Protopladorchis Willey* Vermes 89
 ✓ *Protofucellia Séguy* Ins. 388
 ✓ *Protohalecium Chapman & Thomas*
 Coel. 24
 ✓ *Pruvotaplysia Engel* Moll. 94
 ✓ *Psammaletes Pate* Ins. 299
 ✓ *Psammestus Reikhardt* Ins. 253
 ✓ *Psammotoxa de Laubenfels* Por. 11
 ✓ *Psaronia Enderlein* Ins. 388
 ✓ *Psaroniella Enderlein* Ins. 388
 ✓ *Pselaphochir Enderlein* Ins. 366
 ✓ *Psaphidocera Enderlein* Ins. 389
 ✓ *Psephosyllogus Schrammen* Por. 6
 ✓ *Pseudalea Turner* Ins. 337
 ✓ *Pseudancistropterus Voss* Ins. 271
 ✓ *Pseudanuretes Yamaguti* Crust. 55
 ✓ *Pseudapatemon Dubois* Vermes 81
 ✓ *Pseudapriona Breuning* Ins. 283
 ✓ *Pseudattila Zimmer* Aves 90
 ✓ *Pseudechinosoma Hustache* Ins. 271
 ✓ *Pseudengaeus Clark* Crust. 37
 ✓ *Pseudeniaca Masi* Ins. 309
 ✓ *Pseudergasilus Yamaguti* Crust. 55
 ✓ *Pseuderythropterus Coifmann* Crust. 40
 ✓ *Pseudeskimoceras Shimizu & Obata*
 Moll. 140
 ✓ *Pseudhemistomum Szidat* Z. Vermes 82
 ✓ *Pseudhepomidion Breuning* Ins. 283
 ✓ *Pseudoacanthochiton Šulc* Moll. 72
 ✓ *Pseudobixadus Breuning* Ins. 283
 ✓ *Pseudobrimus Breuning* Ins. 283
 ✓ *Pseudobulweria Mathews* Aves. 77
 ✓ *Pseudocalamosternus Balthasar* Ins. 261
 ✓ *Pseudocanonidea Borchmann* Ins. 256
 ✓ *Pseudococheromorpha Breuning* Ins. 283
 ✓ *Pseudocolpocephalum Qadri* Ins. 420
 ✓ *Pseudocryptocoeloma Ward* Crust. 34
 ✓ *Pseudocymus Van Duzee* Ins. 401
 ✓ *Pseudocyplanus Bernhauer* Ins. 234
 ✓ *Pseudocythereis Jennings* Crust. 64
 ✓ *Pseudodiachipteryx Burgeon* Ins. 228
 ✓ *Pseudodierogenium Fahringer* Ins. 319
 ✓ *Pseudodihammus Breuning* Ins. 283
 ✓ *Pseudoechinochasmus Verma* Vermes
 85
 ✓ *Pseudoeskimoceras Shimizu & Obata*
 Moll. 133, 140
 ✓ *Pseudofilaria Sandground* Vermes 116
 ✓ *Pseudogagrella Redikorzev* Arachn. 61
 ✓ *Pseudohecamede Hendel* Ins. 394
 ✓ *Pseudohyria F. K. Morris* Moll. 118
 ✓ *Pseudolipeurus Carriker* Ins. 420
 ✓ *Pseudolisania Kobayashi* Arachn. 40
 ✓ *Pseudomegalovalvata Kožov* Moll. 78
 ✓ *Pseudometopides Breuning* Ins. 283
 ✓ *Pseudomyicola Yamaguti* Crust. 56
 ✓ *Pseudomysidetes Tattersall* Crust. 40
 ✓ *Pseudoneodiplostomum Dubois* Vermes
 81
 ✓ *Pseudonortonia Giordani-Soika* Ins. 303
 ✓ *Pseudoperotis Obenberger* Ins. 251
 ✓ *Pseudophilopterus Carriker* Ins. 420
 ✓ *Pseudopolyconites Milovanović* Moll.
 124
 ✓ *Pseudopomatoceros Holly* Vermes 30
 ✓ *Pseudopompilia Fahringer* Ins. 316
 ✓ *Pseudoporania Dons* Echin. 24
 ✓ *Pseudopotamorites Forsslund* Ins. 360
 ✓ *Pseudopsellonus Balogh* Arachn. 53
 ✓ *Pseudopungtungia Mori* Pisces 75
 ✓ *Pseudoremus Koch* Ins. 232
 ✓ *Pseudoschwagerina Dunbar & Skinner*
 Prot. 89
 ✓ *Pseudosepharia Laboissière* Ins. 288
 ✓ *Pseudostixis Breuning* Ins. 283
 ✓ *Pseudostrandiella Fahringer* Ins. 319
 ✓ *Pseudothecadactylus Brongersma* Rept.
 41
 ✓ *Pseudotrivia Schilder* Moll. 84
 ✓ *Pseudotupolichas Phleger* Arachn. 40
 ✓ *Pseudovelleda Breuning* Ins. 283
 ✓ *Pseudozelota Breuning* Ins. 283
 ✓ *Pseudypera Voss* Ins. 271
 ✓ *Psilaubaea Enderlein* Ins. 385
 ✓ *Psilobyrza Drake & Hambleton* Ins. 402
 ✓ *Psilokempia Enderlein* Ins. 368
 ✓ *Psiloplastinx Enderlein* Ins. 389
 ✓ *Psilotripheba Enderlein* Ins. 382
 ✓ *Psilozia Enderlein* Ins. 366
 ✓ *Psychidosmicra Blanchard* Ins. 309
 ✓ *Ptenotaenia Enderlein* Ins. 395
 ✓ *Pterochaelys Ter-Minasyan* Ins. 264
 ✓ *Pterocolpura Blöte* Ins. 400
 ✓ *Ptericoptomimus Melzer* Ins. 284
 ✓ *Pterygiodesmus Loomis* Arachn. 80
 ✓ *Ptilonyssoides Vitzthum* Arachn. 66
 ✓ *Ptychopleura Kobayashi* Arachn. 40
 ✓ *Pudentiscala Iredale* Moll. 85
 ✓ *Puercolestes Reynolds* Mam. 83
 ✓ *Pulchrostrongylus Travassos* Vermes
 113
 ✓ *Puncticolletes Noskiewicz* Ins. 294
 ✓ *Punctolira Ulrich & Cooper* Brach. 18
 ✓ *Pungent Thorne & Swanger* Vermes
 105
 ✓ *Punica Pallary* Moll. 101
 ✓ *Putapacyathus Bedford & Bedford* Por.
 14
 ✓ *Pycnocalyptra Schrammen* Por. 6
 ✓ *Pycnoidocoscinus Bedford & Bedford*
 Por. 14
 ✓ *Pyrgoella Cushman & White* Prot. 90
 ✓ *Pyricythereis Howe* Crust. 64
 ✓ *Pytheilla de Laubenfels* Por. 11
 ✓ *Pyxiprimitia Swartz* Crust. 64
 ✓ *Quadropedia Aldrich & Jones* Rept. 47

- ✓ *Quantonica Iredale* Moll. 83
 ✓ *Quasillites Coryell & Malkin* Crust. 64
 ✓ *Quendreda Iredale* Moll. 110
 ✓ *Querciclona de Laubenfels* Por. 11
 ✓ *Querilhacia Roewer* Arachn. 55
 ✓ *Quinqueserialis Skwortzow* Vermes 88
 ✓ *Quisilo Milne* Ins. 360
 ✓ *Quisquicia Loomis* Archn. 81
 ✓ *Quissa Milne* Ins. 360
 ✓ *Quixilla de Laubenfels* Por. 11
 ✓ *Quizeiona de Laubenfels* Por. 11

Rachispodina Enderlein Ins. 390
Radiocondyla Iredale Moll. 118
Ramia Gregorio Bry. 35
Ramoses de Laubenfels Por. 11
Randilea Roewer Arachn. 59
Raoa de Laubenfels Por. 11
Raphidostoma Cockerell Ins. 297
Raphiglossoides Giordani Soika Ins. 304
Raspaciona Topsent Por. 11
Rastrineobola Fowler Pisces 74
Reacalymene Shirley Arachn. 40
Rebusum Gregorio Moll. 110
Rectacirsa Iredale Moll. 85
Rectoeponides Cushman & Bermúdez Prot. 90
Redicirce Iredale Moll. 122
Redlichaspis Kobayashi Arachn. 40
Regozara Iredale Moll. 118
Relegamoria Iredale Moll. 89
Renotus Guignot Ins. 230
Repometra Clark Echin. 28
Repratella Sjöstedt Ins. 437
Reticunassa Iredale Moll. 88
Retiometra Clark Echin. 28
Rhabdium Schrammen Por. 6
Rhabdomyia Borgmeier Ins. 382
Rhabdopygella Roewer Arachn. 59
Rhacodiaptomus Kiefer Crust. 56
Rhaeboza Enderlein Ins. 366
Rhagostira Borchmann Ins. 256
Rhaibogria Borchmann Ins. 256
Rhaphidograptus Bulman Coel. 25
Rhaphiocerina Lindner Ins. 377
Rhapishisma Knight Moll. 74
Rhaptagnostus Whitehouse Arachn. 40
Rhectognathus Pate Ins. 298
Rhegmoclemina Enderlein Ins. 366
Rhenopterus Störmer Arachn. 42
Rhexoza Enderlein Ins. 366
Rhinediaptomus Kiefer Crust. 56
Rhinophyllis Meryck Ins. 354
Rhizoperthodes Lesne Ins. 243
Rhogostomium Schrammen Por. 6
Rhombedonium Schrammen Por. 7
Rhomboporella Bassler Bry. 36
Rhopaliscus Schrammen Por. 7
Rhopalophion Seyrig Ins. 316
Rhopochilus Enderlein Ins. 390

 ✓ *Rhyacophilites Piton* Ins. 442
 ✓ *Rhynchohydracarus Lundblad* Arachn. 73
 ✓ *Rhyncholimnochares Lundblad* Arachn. 73
 ✓ *Rhychonelloidella Muir-Wood* Brach. 23
 ✓ *Rhynchospio Hartman* Vermes 129
 ✓ *Rhynchotritoma Arrow* Ins. 239
 ✓ *Rhyncothura Carriker* Ins. 421
 ✓ *Rhysostrophia Ulrich & Cooper* Brach. 18
 ✓ *Rhytidoderma Schrammen* Por. 8
 ✓ *Rhytidonaia Haas* Moll. 118
 ✓ *Ribullata Sjöstedt* Ins. 437
 ✓ *Richterarges Phleger* Arachn. 40
 ✓ *Richina Coryell & Malkin* Crust. 64
 ✓ *Ridgeworthia Verma* Vermes 81
 ✓ *Ringiculadda Iredale* Moll. 94
 ✓ *Ristia Gagarin* Ins. 324
 ✓ *Riukiarina Verhoeff* Arachn. 81
 ✓ *Roeweriella Kratochvil* Arachn. 54
 ✓ *Roseoporella Spriestersbach* Coel. 21
 ✓ *Rossiensiceras Gérard & Contaut* Moll. 140
 ✓ *Rotylenchus Filipjen* Vermes 106
 ✓ *Rudderina Coryell & Malkin* Crust. 64
 ✓ *Rugitela Muir-Wood* Brach. 29
 ✓ *Rymcobites Fleutiaux* Ins. 247

 ✓ *Saemundssonina Timmermann* Ins. 421
 ✓ *Saffordoceras Ulrich & Foerste* Moll. 141
 ✓ *Sagittabariulus Fowler* Pisces 74
 ✓ *Salpingorhiza Klug* Prot. 92
 ✓ *Saltoeuna Iredale* Moll. 119
 ✓ *Samacar Iredale* Moll. 107
 ✓ *Samotragus Sickenberg* Mam. 72
 ✓ *Saracenella Franke* Prot. 90
 ✓ *Sargassocarcinus Ward* Crust. 32
 ✓ *Sarrorhina Villeneuve* Ins. 386
 ✓ *Sarobela Turner* Ins. 337
 ✓ *Saxilaga Scott* Pisces 70
 ✓ *Saxostrea Iredale* Moll. 115
 ✓ *Scaecocandra Meyrick* Ins. 349
 ✓ *Scapellirhynchia Muir-Wood* Brach. 24
 ✓ *Scantiletta de Laubenfels* Por. 12
 ✓ *Scapsipedoides Chopard* Ins. 433
 ✓ *Scenetes Malloch* Ins. 389
 ✓ *Schaderthalis Hundt* Arachn. 41
 ✓ *Scharfenbergia Oudemans* Arachn. 67
 ✓ *Schellenbergia Oudemans* Arachn. 67
 ✓ *Schevadera Borchmann* Ins. 256
 ✓ *Schevogria Borchmann* Ins. 257
 ✓ *Schizopilus Seyrig* Ins. 316
 ✓ *Schizostylus Delo* Arachn. 41
 ✓ *Schoutedenia Michaelsen* Vermes 132
 ✓ *Schoutedenomyia Kröber* Ins. 378
 ✓ *Schwartzella Leroux* Vermes 113
 ✓ *Scolecocalanus Farran* Crust. 56
 ✓ *Scorteecia Caporiacco* Arachn. 53
 ✓ *Scotolemoniscus Roewer* Arachn. 55

- ✓ *Scotolemops Roewer* Arachn. 55
✓ *Scribroporella Spriesterbach* Por. 5
✓ *Scyphiodus Stauffer* Vermes 135
✓ *Scythropites Rebel* Ins. 442
✓ *Seelyoceras Ulrich & Foerste* Moll. 141
✓ *Selencasta Roewer* Arachn. 59
✓ *Selencula Roewer* Arachn. 59
✓ *Selenotoca Myers* Pisces 81
✓ *Semicypraca Schilder* Moll. 84
✓ *Semnolocha Meyrick* Ins. 354
✓ *Senoculifer Balogh* Arachn. 52
✓ *Sepedonophis H. M. Smith* Rept. 46
✓ *Sericopsothrips Hood* Ins. 417
✓ *Serripetraliella Stach* Bry. 38
✓ *Sesostranus Roewer* Arachn. 59
✓ *Sesostrellus Roewer* Arachn. 60
✓ *Sespemys Wilson* Mam. 73
✓ *Seuthesplus Roewer* Arachn. 60
✓ *Sevillia Weller* Arachn. 41
✓ *Seydelia Fahringer* Ins. 316
✓ *Shairia Maulik* Ins. 289
✓ *Shamshera Maulik* Ins. 289
✓ *Shantungoceras Shimizu & Obata* Moll. 141, 143
✓ *Shoemakerella Pirlet* Crust. 47
✓ *Shuichengoceras Yin* Moll. 141
✓ *Shumardoceras Ulrich & Foerste* Moll. 141
✓ *Sibylia Oudemans* Arachn. 67
✓ *Sigaretornus Iredale* Moll. 79
✓ *Sigmatocia de Laubenfels* Por. 12
✓ *Sigmatoxella de Laubenfels* Por. 12
✓ *Sigmocoscinus Bedford & Bedford* Por. 14
✓ *Sigmocyathus Bedford & Bedford* Por. 14
✓ *Sigmoifungia Bedford & Bedford* Por. 14
✓ *Silesiaster Schwarzbach & Zimmermann* Echin. 26
✓ *Simplomeris Verhoeff* Arachn. 79
✓ *Sinanodelphis Makiyama* Mam. 65
✓ *Sinochaitophorus Takahashi* Ins. 411
✓ *Sinocephemera Ping* Ins. 444
✓ *Sinomela Strand* Ins. 285
✓ *Sinupetraliella Stach* Bry. 38
✓ *Siphonomyza Enderlein* Ins. 396
✓ *Sira Enderlein* Ins. 391
✓ *Siridomyza Enderlein* Ins. 396
✓ *Sisyroctenis Meyrick* Ins. 354
✓ *Skaphion Gaede* Ins. 344
✓ *Skrjabinus Bhalerao* Vermes 88
✓ *Smaragdista Iredale* Moll. 75
✓ *Smudigoides Crosby & Bishop* Arachn. 49
✓ *Snartia Oudemans* Arachn. 67
✓ *Solenagnostus Whitehouse* Arachn. 41
✓ *Solenomyza Enderlein* Ins. 396
✓ *Solephyma Maulik* Ins. 289
✓ *Solvaclathrus Iredale* Moll. 85
✓ *Sonoga Roewer* Arachn. 60
✓ *Soperia Komp* Ins. 370
✓ *Sorghothrips Priesner* Ins. 417
✓ *Sosteamorphus Hinton* Ins. 241
✓ *Soucron Crosby & Bishop* Arachn. 49
✓ *Soudokia Vimmer* Ins. 366
✓ *Soudinus Crosby & Bishop* Arachn. 49
✓ *Souessa Crosby & Bishop* Arachn. 49
✓ *Souessoula Crosby & Bishop* Arachn. 49
✓ *Sougambus Crosby & Bishop* Arachn. 49
✓ *Soudas Crosby & Bishop* Arachn. 49
✓ *Soulgas Crosby & Bishop* Arachn. 49
✓ *Spacekia Strand* Ins. 245
✓ *Speleognathus Womersley* Arachn. 67
✓ *Spermanthrax Meyrick* Ins. 354
✓ *Sphaeractis Wetzel* Prot. 92
✓ *Sphaeragnostus Cooper & Kindle* Arachn. 41
✓ *Sphaeropegma Schrammen* Por. 8
✓ *Sphaerotarsus Womersley* Arachn. 67
✓ *Sphecops Orfila* Ins. 332
✓ *Sphenocidium Chapman & Thomas* Coel. 25
✓ *Sphenotrigonia Rennie* Moll. 107
✓ *Sphincterella de Laubenfels* Por. 7
✓ *Sphincterodiplostomum Dubois* Vermes 81
✓ *Spinogadus Smirnov* Pisces 78
✓ *Spinohenricia Hedding* Echin. 23
✓ *Spinovina Coryell & Malkin* Crust. 65
✓ *Spiranilla Vokes* Moll. 89
✓ *Spirifella Milordovich* Brach. 25
✓ *Spironucleus Lavie* Prot. 94
✓ *Spissitydeus Iredale* Moll. 94
✓ *Sporadopyge Schrammen* Por. 7
✓ *Sporodinium Gonnert* Prot. 93
✓ *Stellasteropsis Dollfus* Echin. 24
✓ *Stemtonoceras Ulrich & Foerste* Moll. 141
✓ *Stenelaphus Linsley* Ins. 279
✓ *Stenogrylloides Chopard* Ins. 444
✓ *Stenolabus Heinrich* Ins. 316
✓ *Stenoluperus Ogloblin* Ins. 288
✓ *Stenophylliella Mosely* Ins. 360
✓ *Stenophyllina Mosely* Ins. 360
✓ *Stenoporella Bassler* Bry. 35
✓ *Stensiöina Brotzen* Prot. 90
✓ *Stephanoceras Colbert* Mam. 70
✓ *Stephanoceras Colbert* Mam. 70
✓ *Stereogaster Van Dyke* Ins. 272
✓ *Stereoplasmocera Kobayashi* Moll. 142
✓ *Stichocibicides Cushman & Bermúdez* Prot. 90
✓ *Stichocotyle Faust & Tang* Vermes 79
✓ *Stictostroma Parks* Coel. 21
✓ *Stigmasophronia Hartig* Ins. 354
✓ *Stigmatoptera Hartig* Ins. 354
✓ *Stiraulax Enderlein* Ins. 388
✓ *Stiropomyza Enderlein* Ins. 396
✓ *Stirops Enderlein* Ins. 396
✓ *Stizambia Enderlein* Ins. 394
✓ *Stlegicottus Bolin* Pisces 88
✓ *Stomacrypolus Enderlein* Ins. 396

- ✓ *Strandiana Lallemand* Ins. 405
- ✓ *Strandiata Breuning* Ins. 284
- ✓ *Strandissa Oberberger* Ins. 252
- ✓ *Streplulites Coryell & Malkin* Crust. 65
- ✓ *Striacoceras Flower* Moll. 142
- ✓ *Striatoceras Shimizu & Obata* Moll. 137, 142
- ✓ *Stromerichthys Weiler* Pisces 68
- ✓ *Stromerosuchus Kühn* Rept. 40
- ✓ *Strongylaspis Spaeth* Ins. 290
- ✓ *Strongyliceus Fage & Simon* Arachn. 50
- ✓ *Stygopholcus Kratochvil* Arachn. 47
- ✓ *Stylicletodes Lang* Crust. 56
- ✓ *Styloceria Enderlein* Ins. 383
- ✓ *Styloceylonius Verhoeff* Arachn. 81
- ✓ *Styphlidius Penecke* Ins. 269
- ✓ *Styracosceles Hubbell* Ins. 434
- ✓ *Suarezina Théry* Ins. 252
- ✓ *Subalveolina Reichel* Prot. 90
- ✓ *Submeloeogonius Pliginskii* Ins. 258
- ✓ *Subpenhsioceras Shimizu & Obata* Moll. 142
- ✓ *Subsphyroceras Shimizu & Obata* Moll. 141, 142
- ✓ *Subvaginoceras Shimizu & Obata*, Moll. 132, 142
- ✓ *Suensonia Bernhauer* Ins. 232
- ✓ *Sulcoarcus Hsiung* Prot. 97
- ✓ *Sunda Pruthi* Ins. 409
- ✓ *Swargia Maulik* Ins. 289
- ✓ *Synaleurodicus Solomon* Ins. 412
- ✓ *Synamphichaeta Villeneuve* Ins. 386
- ✓ *Syndyomita Lavie* Prot. 94
- ✓ *Synecitonides Reichensperger* Ins. 236
- ✓ *Synnautes Thompson* Ins. 421
- ✓ *Syntermitopone Wheeler* Ins. 307
- ✓ *Syntermioxenia Schmitz* Ins. 382
- ✓ *Syntrophopsis Ulrich & Cooper* Brach. 18
- ✓ *Syspacephalus Resser* Arachn. 41
- ✓ *Systrophidia Cockerell* Ins. 297
- ✓ *Tablis de Laubenfels* Por. 12
- ✓ *Taboga de Laubenfels* Por. 12
- ✓ *Tachinoplesius Bernhauer* Ins. 236
- ✓ *Tachinosyrphus Hull* Ins. 383
- ✓ *Tachycampa Silvestri* Ins. 440
- ✓ *Tachyophis Mertens* Rept. 45
- ✓ *Taeniacanthodes Wilson* Crust. 56
- ✓ *Taiwanella Tarakuwa* Arachn. 76
- ✓ *Taiwatheronia Sonan* Ins. 316
- ✓ *Talaspus Roewer* Arachn. 60
- ✓ *Talocodakia Iredale* Moll. 119
- ✓ *Tamasia Mosely* Ins. 361
- ✓ *Tanakura Hatai* Brach. 29
- ✓ *Tangaroasaurus Benham* Rept. 38
- ✓ *Tanyrhinus Farran* Crust. 56
- ✓ *Taphinellina Maulik* Ins. 289
- ✓ *Tapinaspis Spaeth* Ins. 290
- ✓ *Tarazeuxix Iredale* Moll. 88
- ✓ *Taschorema Mosely* Ins. 361
- ✓ *Tasimia Mosely* Ins. 361
- ✓ *Tasmaniosoma Verhoeff* Arachn. 81
- ✓ *Tasmanocephalus Kobayashi* Arachn. 41
- ✓ *Tasmanthrus Mosely* Ins. 361
- ✓ *Tateiwaia Makiyama* Moll. 81
- ✓ *Taurocera Lindner* Ins. 377
- ✓ *Tavaniothia Iredale* Moll. 88
- ✓ *Tavoybia Roewer* Arachn. 60
- ✓ *Tedaniphorbas de Laubenfels* Por. 12
- ✓ *Tegestria Roewer* Arachn. 55
- ✓ *Teichaxinella de Lausenfels* Por. 12
- ✓ *Teleopterina Berg* Pisces 67
- ✓ *Teleotelson Verhoeff* Arachn. 76
- ✓ *Tellinota Iredale* Moll. 121
- ✓ *Teltus Speijer* Arachn. 44
- ✓ *Temialma Lea* Ins. 273
- ✓ *Temnosira Enderlein* Ins. 391
- ✓ *Tencateia Oudemans* Arachn. 67
- ✓ *Tengelinia Roewer* Arachn. 60
- ✓ *Tenuisentis Van Cleave* Vermes 118
- ✓ *Tepidatys Iredale* Moll. 94
- ✓ *Teratochila Drake & Poor* Ins. 402
- ✓ *Termitodonia Cameron* Ins. 236
- ✓ *Termitoloemus Baranov* Ins. 388
- ✓ *Termitophilomyia Schmitz* Ins. 382
- ✓ *Termitopone Wheeler* Ins. 307
- ✓ *Tremitoscrofa Schmitz* Ins. 382
- ✓ *Tessarelasma Withers* Crust. 66
- ✓ *Tesserocephalus Schedl* Ins. 275
- ✓ *Tesuquea Klots* Ins. 354
- ✓ *Tetecus Roewer* Arachn. 60
- ✓ *Tethytinea de Laubenfels* Por. 12
- ✓ *Tetrachaetodon Weber & de Beaufort* Pices. 81
- ✓ *Tetracleidus Mueller* Vermes 78
- ✓ *Tetrahydrachna Lundblad* Arachn. 70
- ✓ *Tetralichas Phleger* Arachn. 41
- ✓ *Tetralobula Ulrich & Cooper* Brach. 18
- ✓ *Tetranodoceras Flower* Moll. 142
- ✓ *Tetraripis Lundblad* Ins. 403
- ✓ *Tetrasacculus Stewart* Crust. 65
- ✓ *Tetylenchus Filipjev* Vermes 106
- ✓ *Teuconoma Meyrick* Ins. 349
- ✓ *Thacana Fleutiaux* Ins. 247
- ✓ *Thalyseurypon de Laubenfels* Por. 12
- ✓ *Tharsanthes Meyrick* Ins. 349
- ✓ *Thaumatoperyphus Netolitzky* Ins. 223
- ✓ *Thenopsynoecium Branson* Crust. 65
- ✓ *Therapsoprona Verhoeff* Arachn. 76
- ✓ *Thermocrates Meyrick* Ins. 354
- ✓ *Thomecola Roewer* Arachn. 60
- ✓ *Thomeomaizania Bequaert & Clench* Moll. 78
- ✓ *Thooce de Laubenfels* Por. 12
- ✓ *Thoracostira Borchmann* Ins. 257
- ✓ *Thorachohygrobates Lundblad* Arachn. 73
- ✓ *Thoracocyphus van Emden* Ins. 273
- ✓ *Thyridium Schrammen* Por. 7
- ✓ *Thyrscocyptera Enderlein* Ins. 386
- ✓ *Tibestia Peyerimhoff* Ins. 279

- Tibiominettia Hendel* Ins. 392
Timanodictya Nikiforova Bry. 36
Timberlakiella Compere Ins. 310
Tinamicola Carriker Ins. 421
Tisrone de Laubenfels Por. 12
Tiznatzinia Simpson Mam. 66
Toeplitzella Deichmann Coel. 30
Tofangocerina Kobayashi Moll. 142
Tollaspis Kobayashi Arachn. 41
Tomonotulus Arnold Ins. 302
Toquimia Ulrich & Cooper Brach. 21
Toralimysia Iredale Moll. 119
Torinista Iredale Moll. 74
Torramurex Iredale Moll. 88
Torreina Palmer Prot. 91
Torre-tassoella Koch Ins. 236
Tosastroma Yabe & Sugiyama Coel. 22
Toxadocia de Laubenfels Por. 12
Trachymuricea Deichmann Coel. 30
Trachysiphonella Enderlein Ins. 394
Trapezimeloë Pliginskii Ins. 258
Travassomyia de Souza Lopes Ins. 392
Traversodon von Huene Rept. 38
Tremaphorus Schrammen Por. 7
Trematodesmus Loomis Arachn. 81
Triasiglyphea v. Straelen Crust. 37
Tricephalobus Steiner Vermes 107
Trichodopeostus Carriker Ins. 421
Trichogryllus Chopard Ins. 444
Trichomolophilus Alexander Ins. 374
Trichomya Crickmay Moll. 126
Trichophylax Mosely Ins. 361
Trichopollenia Enderlein Ins. 388
Trichospolas Draudt Ins. 337
Trichostixis Breuning Ins. 284
Trichotritoma Arrow Ins. 239
Tricornina Bouček Crust. 65
Tricosepharia Laboissière Ins. 289
Tricyphoniscus Verhoeff Crust. 45
Trigonaphera Iredale Moll. 91
Trigoniodes Kobayashi & Susuki Moll. 107
Trilasia Karl Ins. 389
Trimacromera Enderlein Ins. 375
Trimerolichas Phleger Arachn. 41
Triopisopa Enderlein Ins. 396
Triplectidina Mosely Ins. 361
Tripolphepeza Enderlein Ins. 392
Trisaurus Aldrich & Jones Rept. 47
Trissodon Prell Ins. 263
Tristichothyrsus Enderlein Ins. 382
Tritanypeza Enderlein Ins. 392
Tritoechia Ulrich & Cooper Brach. 16
Trituroides Chang Amph. 34
Trixiceps Villeneuve Ins. 386
Trochorhinus Broom Rept. 38
Troglomysis Stammer Crust. 40
Tropidorbis Iredale Moll. 79
Trupetostroma Parks Coel. 22
Trypaulites Delo Arachn. 41
Trypespongia de Laubenfels Por. 13
Tryssetus Roewer Arachn. 56
Tsadsea Roewer Arachn. 60
Tubilibairdia Swartz Crust. 65
Tumata de Laubenfels Por. 12
Tundabia Roewer Arachn. 60
Tunkia Bedford & Bedford Por. 14
Turriculina Gregorio Moll. 91
Tuspulla Roewer Arachn. 60
Tutankhamen Rathbun Crust. 32
Tylanira Ball Ins. 405
Typestus Roewer Arachn. 60
Typhonestra Jeannel Ins. 229
Typhlophilus Lal Vermes 88
Tyzzeria Allen Prot. 95
Uhmannia Spaeth Ins. 289
Uliczka de Laubenfels Por. 12
Ulophysema Brattström Crust. 66
Ulosa de Laubenfels Por. 12
Ulotingis Drake & Hambleton Ins. 402
Ulotomostethus Forsius Ins. 321
Ulrichella Bouček Crust. 65
Ünerus DeLong Ins. 407
Uplexoa de Laubenfels Por. 12
Urocyclops Maneval Ins. 308
Utubius Uvarov Ins. 437
Uagocia de Laubenfels Por. 12
Valedictyum Por. 12
Valentis de Laubenfels Por. 12
Valvatorbis Bequaert & Clench Moll. 79
Vandarawella Roewer Arachn. 60
Vanderbiltella Fowler Pisces 74
Vaughanina Palmer Prot. 91
Velacumantus Iredale Moll. 81
Velledopsis Breuning Ins. 284
Ventalium Gregorio Moll. 113
Ventomnestia Iredale Moll. 94
Vernonia Guimarães Ins. 421
Vernotriton Iredale Moll. 84
Verticoceras Flower Moll. 143
Vimmeria Kratochvíh Ins. 366
Vindhyanella Sakni Brach. 29
Virgella Gregorio Moll. 85
Viriosana DeLong Ins. 407
Vltavina Bouček Crust. 65
Volupicuna Iredale Moll. 119
Volvifustrellaria Brydone Bry. 38
Walcottoceras Ulrich & Foerste Moll. 143
Waldoschmittia de Laubenfels Por. 12
Walterhornia Horn Ins. 222
Waltharandtia de Laubenfels Por. 12
Walzia Oudemans Arachn. 68
Waterhouseia Malloch Ins. 395
Wattonithyris Muir-Wood Brach. 28
Welleraspis Kobayashi Arachn. 41
Wetmoreus de Laubenfels Por. 12
Wuda Cheesman Ins. 317
Wutinoceras Shimizu & Obata Moll. 143

- ✓ *Xantheunostus Alluand* Ins. 225
- ✓ *Xenaleyrodes Takehashi* Ins. 412
- ✓ *Xenelasma Ulrich & Cooper* Brach. 17
- ✓ *Xenelmis Hinton* Ins. 241
- ✓ *Xenelmoides Hinton* Ins. 241
- ✓ *Xenimyza Hendel* Ins. 396
- ✓ *Xenocassis Spaeth* Ins. 290
- ✓ *Xenocera Borchmann* Ins. 257
- ✓ *Xenocolpura Blöte* Ins. 401
- ✓ *Xenocystites Bassler* Echin. 29
- ✓ *Xenogena Borchmann* Ins. 257
- ✓ *Xerophaeoba Uvarov* Ins. 437
- ✓ *Xenopternis Jordan* Ins. 276
- ✓ *Xenorthis Ulrich & Cooper* Brach. 14
- ✓ *Xystridura Whitehouse* Arachn. 42
- ✓ *Xytopsaga de Laubenfels* Por. 12
- ✓ *Xytopsibis de Laubenfels* Por. 12
- ✓ *Xytopsoocha de Laubenfels* Por. 13
- ✓ *Xytopsues de Laubenfels* Por. 13
- ✓ *Yadoa Roewer* Arachn. 60
- ✓ *Yasumatsuia Strand* Ins. 346
- ✓ *Yatsengina Semichatov* Brach. 25
- ✓ *Ysila de Laubenfels* Por. 13
- ✓ *Ysiphonia de Laubenfels* Por. 13
- ✓ *Yukonaspis Kobayashi* Arachn. 42
- ✓ *Yvesiorbas de Laubenfels* Por. 13
- ✓ *Zactinothrips Hood* Ins. 417
- ✓ *Zeliszskella Delo* Arachn. 42
- ✓ *Zetekispongia de Laubenfels* Por. 13
- ✓ *Zetekopsis de Laubenfels* Por. 13
- ✓ *Zeuglothrips Hood* Ins. 417
- ✓ *Zeunera Pilon* Ins. 444
- ✓ *Zoramscus Enderlein* Ins. 386
- ✓ *Zottea de Laubenfels* Por. 13
- ✓ *Zyzzya de Laubenfels* Por. 13

SECOND SUPPLEMENTARY LIST OF ABBREVIATIONS, WITH
TITLES, OF PERIODICAL PUBLICATIONS, CONTAINING
PAPERS DEALING WITH MATTERS OF ZOOLOGICAL
IMPORTANCE.

Since the issue of the last volume of the Zoological Record in November, 1936, some new periodicals have commenced publication, some have been revived and attention is called to a few older ones accidentally omitted from the complete List published in vol. lxxi of the Record in 1935.

It is therefore thought advisable to publish a list of these. As previously, the numbers following the titles correspond to those in the new edition of the "World List" issued in 1933. Where such a number is not given the periodical is a new venture. The letter in heavy type denotes the library where the periodical can be consulted.

The following are the library symbols used in this list :—

- N.** General Library of the Natural History Museum.
- Nz.** Zoological Library of the Natural History Museum.
- Ng.** Geological Library of the Natural History Museum.
- Nb.** Botanical Library of the Natural History Museum.
- Nm.** Mineralogical Library of the Natural History Museum.
- B.** British Museum (Bloomsbury).
- E.** Entomological Society.
- G.** Geological Society.
- I.** Imperial Institute of Entomology.
- L.** Linnean Society.
- M.** Royal Society of Medicine.
- R.** Royal Society.
- S.** Royal College of Surgeons.
- Sc.** Science Library, South Kensington.
- T.** Zoological Museum, Tring, Herts.
- T.D.** Tropical Diseases Library.
- U.** University College.
- V.** Royal College of Veterinary Surgeons.
- Z.** Zoological Society.

- Aberystwyth Studies*.—Aberystwyth Studies by members of the University College of Wales. Aberystwyth. [18b N.]
- Acta Biotheor. Leiden*.—Acta Biotheoretica. Leiden. [N.]
- Animadv. syst. Mus. zool. Inst. biol. Univ. Tomsk*.—Animadversiones systematicae ex Museo zoologico Instituti biologici Universitatis Tomskensis. [Nz.]
- Annu. Mus. zool. Univ. Napoli*.—Annuario de Museo Zoologico della R. Università di Napoli. [1535 Nz.]
- Ann. Sci. London*.—Annals of Science. A quarterly review of the history of science since the renaissance. London. [N.]
- Arch. chilenos Morf. Santiago*.—Archivos Chilenos de Morphologia. Santiago de Chile. [N.]
- Basteria, Leiden*.—Basteria: Tijdschrift van de nederlandse malacologische Vereeniging. Leiden [Printed at Lisse]. [Nz.]
- Beitr. naturk. Forsch. Südwestdeuts. Karlsruhe i.B.*—Beiträge zur naturkundlichen Forschung in Südwestdeutschland. Karlsruhe i.B. [N.]
- Ber. Schwyz. naturf. Ges. Einsiedeln*.—Berichte der Schwyz. Naturforschenden. Gesellschaft. Einsiedeln. [N.]
- Biol. Jaarb. Gent*.—Biologisch Jaarboek uitgegeven door het Natuurwetenschappelijk Genootschap Dodonaea te Gent [In Flemish]. [N.]
- Biol. Zh. Moscow*.—Biologicheskij Zhurnal. Moscow [formerly Journal de Biologie], [2977 N.]
- Bremer Beitr. Bremen*.—Bremer Beiträge zur Naturwissenschaft. Bremen. [N.]
- Bul. Soc. Nat. România București*.—Buletinul Societății Naturaliștilor din România. București. [N.]
- Bul. Soc. Române Géol.*—Buletinul Societății Române de Geologie. București. [Ng.]
- Bull. Assoc. Russe Rec. sci. d Prague*.—Bulletin de Association Russe pour les recherches scientifiques à Prague. [N.]
- Bull. Geol. Dep. Hebrew Univ. Jerusalem*.—The Geological Department, Hebrew University, Jerusalem. Bulletin. Jerusalem. [Ng.]
- Bull. Inst. sci. Biol. Géogr. Irkutsk*.—Bulletin de l'Institut Scientifique de Biologie et de Géographie à l'Université d'Irkoutsk. [N.]
- Bull. Shanghai Sci. Inst.*—Bulletin of the Shanghai Science Institute. Shanghai. [N.]
- Bull. Soc. franç. Micros.*—Bulletin de la Société Française de Microscopie. Paris. [N.]
- Bull. Soc. Hist. nat. Auvergne*.—Bulletin de la Société d'histoire naturelle d'Auvergne. Clermont-Ferrand. [5134 N.]
- Bull. Soc. Hist. nat. Creusot*.—Bulletin. Société d'Histoire naturelle du Creusot. Troyes. [N.]
- C.R. Congr. Sci. Bruxelles*.—Comptes Rendu. Congrès national des Sciences [Belge.]. Bruxelles. [N.]
- C.R. Séan. Inst. géol. Roum.*—Comptes Rendus des Séances. Institut Geologique de Roumanie. [Ng.]
- Com. Serv. geol. Portugal*.—Comunicações dos Serviços Geológicos de Portugal. Lisboa. [Ng.]
- Comm. Mus. Concepcion*.—Comunicaciones del Museo de Concepcion. Chile. [N.]
- Contr. Lab. Vertebr. Genetics Univ. Michigan*.—Contributions from the Laboratory of Vertebrate Genetics, University of Michigan. Ann Arbor. [Nz.]
- Folia Biotheoret. Leiden*.—Folia Biotheoretica. Leiden. [N.]

- Geol. Bull. Louisiana*.—Geological Bulletin. Published by Department of Conservation. Bureau of Scientific Research and Statistics. Minerals State of Louisiana. New Orleans. [9058 Ng.]
- J. Soc. Bibliogr. Nat. Hist. London*.—The Journal of the Society for the Bibliography of Natural History. London. [N.]
- K. norske vidensk. Selsk. Skr. Trondheim*.—Det kongelige norske videnskabers Selskabs Skrifter. Trondheim. [11864 N.]
- Malayan Nat. Singapore*.—The Malayan Naturalist. Singapore [formerly The Singapore Naturalist]. [12631e N.]
- Mammalia*.—Mammalia, morphologie, biologie, systématique des mammifères. Paris. [Nz.]
- Meddel. Sta. Växtskydds. Stockh.*—Statens Växtskyddsanstalt Meddelande. Stockholm. [Nz.]
- Mitt. Osterlande*.—Mitteilungen aus dem Osterlande. Altenburg (Thuringen). [14088 N.]
- N. Queensl. Nat. Cairns*.—North Queensland Naturalist. Cairns, Queensl. [N.]
- Nat. Sci. Bull. Univ. Amoy*.—The Natural Science Bulletin of the University of Amoy. Amoy, China. [N.]
- Palao trop. biol. Sta. Studies Tokyo*.—Palao [=Pelew Is.] Tropical Biological Station Studies. [N. Sc.]
- Pap. Nebr. Geol. Surv.*—Papers. Nebraska Geological Survey. [Ng.]
- Prace Kom. mat-przyr Tow. Przyj. Nauk*.—Prace Komisji Matematycznoprzyrodniczej Poznańskie Towarzystwo Przyjaciół Nauk. Poznań. [16447n N.]
- Proc. Coll. Field Cl. Exeter*.—Proceedings of the College Field Club and Natural History Society. Exeter. [16700a N.]
- Proc. Louisiana Acad. Sci.*—Proceedings of the Louisiana Academy of Sciences. Baton Rouge La. [N.]
- Proc. nat. Inst. Sci. India*.—Proceedings of the National Institute of Sciences of India. Calcutta. [N.]
- Rec. Auckland Inst. Mus.*—Records of the Auckland Institute and Museum. Auckland, N.Z. [N.]
- Rep. Inst. sci. Res. Manchoukuo*.—Report of the Institute of Scientific Research, Manchoukuo, Hsiching. [N.]
- Rev. argent. Entomol. B. Aires*.—Revista Argentina de Entomologia. Buenos Aires. [Nz.]
- Rev. univ. Santiago*.—Revista universitaria. Santiago de Chile. [18969a N.]
- Sci. Mem. M. Gorky Sta. Univ. Perm*.—Scientific Memoirs of the M. Gorky State University of Perm. [N.]
- Sci. Rep. Nat. Univ. Peking*.—The Science Reports of the National University of Peking (Cont. of Sci. Quarterly). Peiping. [N.]
- Sci. Rep. Univ. Chekiang*.—Science Reports of the University of Chekiang. Hangchow. [N.]
- Summary sci. Res. Work Inst. Plant Protect. Leningrad*.—Summary of the Scientific Research Work of the Institute of Plant Protection. Leningrad. [Nz.]
- Tanganyika Notes and Rec.*—Tanganyika Notes and Records. Dar es Salaam. [N.]
- Temminckia Leiden*.—Temminckia. A journal of systematic zoology. Lieden. [Nz.]
- Tenthredo Kyoto*.—Tenthredo. Acta Entomologica. Published by the Takeuchi Entomological Laboratory, Shinomyia. Yamashina, Kyoto. [Nz.]

- Trab. Inst. Biol. anim. Madrid.*—Trabajos del Instituto de Biología animal, Madrid. [21341 Nz.]
- Trans. Linn. Soc. New York.*—Transactions of the Linnaean Society of New York. [Nz.]
- Trav. Inst. scient. Biol. Tomsk.*—Travaux de l'Institut Scientifique de Biologie. Tomsk. [N.]
- Trav. Inst. Zool. Biol. Kiev.*—Travaux de l'Institut de Zoologie et Biologie. Académie des Sciences d'Ukraine. Kiev. [N.]
- Trav. Sta. biol. Karadagh.*—Travaux de la Station Biologique à Karadagh, Crimée. [N.]
- Tromsø Mus. Skr.*—Tromsø Museums Skrifter. Tromsø. [21793a N.]
- Verh. deutsch. wiss. Ver. Santiago de C.*—Verhandlungen des Deutschen Wissenschaftlichen Vereins zu Santiago de Chile. [22269 N.]
- Zool. Polon. Lwów.*—Zoologica Poloniae, Lwów. [Nz.]

